Bray to City Centre Core Bus Corridor Scheme

NTA Observations on the Proposed Scheme Submissions

May 2024

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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2.1 Introduction

This report provides a response to the submissions made to An Bord Pleanála ('the Board') in response to the application under Section 51 of the Roads Act 1993, as amended, for approval of the Bray to City Centre Core Bus Corridor Scheme ("the Proposed Scheme")

An overview of the submissions is provided in Section 2.2 below. The issues raised in the submissions on the Proposed Scheme, together with responses thereto are provided in Section 3 while responses to individual submissions on the Proposed Scheme are provided in Section 3.

Where the same issue is raised in a number of submissions, this report identifies the individuals who raised those issues and provides a composite response to each issue raised.

2.2 Overview of Submissions Received

A total of 216 submissions in response to the Proposed Scheme were received by the Board.

Each submission was individually numbered by the Board and this number system has been retained for ease of reference in this report.

In Table 2.1 and Table 2.2 below, the 216 submissions in response to the Proposed Scheme are broken down into groups either associated with a particular location along the Proposed Scheme or of a more general nature below.

Where applicable, for ease of reference and to avoid excessive repetition, the 216 submissions have been grouped by eleven geographic locations, individual dispersed locations, or submissions relating to the Proposed Scheme as a whole, for reporting purposes. Table 2.1 below sets out the location grouping by the number of submissions and the key issues raised.

Table 2.1: Summary of Key Issues Raised in Submissions by Geographic Location

Location	No. of submissions referencing this Location	Key Issues Raised
Donnybrook	9	• Loss of parking • Impact on businesses • Impact on Donnybrook Village
Beaver Row to Nutley Lane	2	• Impact on biodiversity and green spaces. • Issues with Proposed Scheme Design • Landscaping
Coláiste Eoin School	2	• Temporary Land Acquisition and Duration of Works • Impact on Access / Egress • Removal of trees
Patrician Villas	34	• Need for the new pedestrian link • Impact on biodiversity, loss of trees, screening, and climate • Impact on Air Quality, noise, screening and human Health • Safety, security, anti-social behaviour, and vandalism • Increase in traffic and parking in estate to access N11
Belmont Terrace	2	• Impact on Access / Egress • Issues with Proposed Scheme design

Location	No. of submissions referencing this Location	Key Issues Raised
		• Pedestrian Safety
South Park	6	• Need for the new pedestrian link • The Consultation Process • Safety, security, anti-social behaviour, and vandalism • Increase in traffic and parking in estate to access N11 Stillorgan Road • Impact on biodiversity, loss of trees and impact to protective mound
Shanganagh Vale	9	• Need for the new Pedestrian Entrance/Laneway • Safety, security, anti-social behaviour, and vandalism • The Consultation Process
N11 Stillorgan Road	13	• Removal of slip lanes for the junctions along the N11 Stillorgan Road section • Investment and intervention to improve bus reliability • Concern for Cyclists along the N11 Stillorgan Road • Additional pedestrian crossing at Patrician Vilas along the N11 Stillorgan Road
Shankill (General)	95	• Need for the Proposed Scheme • Impact to Environment • Impact to Shankill Village • Issues with Proposed Scheme Design • Impact on Cyclists and Pedestrians
Dublin Road, Bray	2	• Impact on Access / Egress • Loss of parking / Impact on business • Proposed junction arrangement
Castle Street	11	• Impact on Access / Egress • Loss of parking / Impact on business • Development of design / Route Options
Dispersed Locations	18	Various
Whole Scheme	13	Various

The location(s) referred to by each submission in response to the Proposed Scheme shown in Table 2.2 below.

Table 2.2: Location(s) Referred to by each Submission on the Proposed Scheme (by ABP Reference Number)

No	Location	No	Location	No	Location	No	Location
1	Dispersed Locations	56	Shankill (General)	111	Shankill (General)	166	Dispersed Locations
2	Shanganagh Vale	57	Patrician Villas	112	Shankill (General)	167	Shankill (General)

No	Location	No	Location	No	Location	No	Location
3	Patrician Villas	58	Whole Scheme	113	Patrician Villas	168	Patrician Villas
4	Shankill (General)	59	N11 Stillorgan Road	114	Belmont Terrace	169	N11 Stillorgan Road
5	Patrician Villas	60	Donnybrook	115	Shankill (General)	170	Donnybrook / Dispersed Locations
6	N11 Stillorgan Road	61	Castle Street	116	Castle Street	171	Dispersed Locations
7	Shankill (General)	62	Donnybrook	117	Shankill (General)	172	South Park
8	South Park	63	Whole Scheme	118	Patrician Villas	173	Shankill (General)
9	N11 Stillorgan Road	64	Whole Scheme	119	Patrician Villas	174	Shankill (General)
10	N11 Stillorgan Road	65	Whole Scheme	120	Shankill (General)	175	Dispersed Locations
11	Patrician Villas	66	South Park	121	Castle Street	176	Shankill (General)
12	N11 Stillorgan Road	67	Coláiste Eoin School	122	Shankill (General)	177	Shanganagh Vale
13	Patrician Villas	68	Shankill (General)	123	Shankill (General)	178	Beaver Row to Nutley Lane
14	Shankill (General)	69	Donnybrook	124	Patrician Villas	179	N11 Stillorgan Road
15	Shankill (General)	70	Patrician Villas	125	Shankill (General)	180	Shankill (General)
16	Shankill (General)	71	Dispersed Locations	126	Castle Street	181	Patrician Villas
17	Shankill (General)	72	Shankill (General)	127	Patrician Villas	182	Shankill (General)
18	Donnybrook	73	Shankill (General)	128	Castle Street	183	Beaver Row to Nutley Lane
19	Dispersed Locations	74	Shankill (General)	129	Donnybrook	184	Shankill (General) / Whole Scheme
20	South Park	75	Shankill (General)	130	Castle Street	185	Dispersed Locations
21	Dispersed Locations	76	Shankill (General)	131	Castle Street	186	Shankill (General) / Whole Scheme
22	Shankill (General)	77	Shankill (General)	132	Patrician Villas	187	Shankill (General)

No	Location	No	Location	No	Location	No	Location
23	Whole Scheme	78	Patrician Villas	133	Shankill (General)	188	Shankill (General)
24	Shankill (General)	79	Shankill (General)	134	Whole Scheme	189	Shankill (General)
25	Shankill (General)	80	Castle Street	135	Shankill (General)	190	Shankill (General)
26	Shankill (General)	81	Dispersed Locations	136	Shankill (General)	191	Shankill (General)
27	Shankill (General)	82	Shankill (General)	137	Donnybrook	192	Dispersed Locations
28	Shankill (General)	83	Shanganagh Vale	138	Shankill (General)	193	Shankill (General)
29	Shankill (General)	84	Shankill (General)	139	Castle Street	194	Shankill (General)
30	Shankill (General)	85	Shanganagh Vale	140	Castle Street	195	Shankill (General)
31	Dispersed Locations	86	Shankill (General)	141	Shankill (General)	196	Shankill (General)
32	Whole Scheme	87	Shanganagh Vale	142	Shankill (General)	197	Shankill (General)
33	Dispersed Locations	88	Shankill (General)	143	Patrician Villas	198	Coláiste Eoin School
34	Donnybrook	89	Shankill (General)	144	Shankill (General)	199	Donnybrook
35	Shanganagh Vale	90	Shankill (General)	145	Shankill (General)	200	Dispersed Locations
36	Whole Scheme	91	Shankill (General)	146	Patrician Villas	201	Donnybrook
37	Patrician Villas	92	Shankill (General)	147	South Park	202	N11 Stillorgan Road
38	Patrician Villas	93	Dublin Road, Bray	148	Patrician Villas	203	Belmont Terrace
39	Whole Scheme	94	Shankill (General)	149	Shankill (General)	204	Whole Scheme
40	Shankill (General)	95	Shankill (General)	150	Patrician Villas	205	Shankill (General)
41	Shankill (General)	96	Shankill (General)	151	Patrician Villas	206	Dispersed Locations
42	Shankill (General)	97	Whole Scheme	152	Patrician Villas	207	N11 Stillorgan Road

No	Location	No	Location	No	Location	No	Location
43	Castle Street	98	Shankill (General)	153	Shankill (General)	208	Shankill (General)
44	Patrician Villas/ South Park	99	N11 Stillorgan Road	154	Patrician Villas	209	Patrician Villas
45	Shankill (General)	100	Patrician Villas	155	Shankill (General)	210	Whole Scheme
46	Shankill (General)	101	Shankill (General)	156	Shankill (General)	211	Whole Scheme
47	Shanganagh Vale	102	N11 Stillorgan Road	157	Dispersed Locations	212	N11 Stillorgan Road
48	Patrician Villas	103	Shankill (General)	158	Patrician Villas	213	Shanganagh Vale
49	Shanganagh Vale	104	Shankill (General)	159	Shankill (General)	214	Dublin Road, Bray
50	Shankill (General)	105	Shankill (General)	160	N11 Stillorgan Road	215	Patrician Villas
51	South Park	106	Patrician Villas	161	Shankill (General)	216	Shankill (General)
52	Shankill (General)	107	Patrician Villas	162	Shankill (General)		
53	Dispersed Locations	108	Patrician Villas	163	Shankill (General)		
54	Shankill (General)	109	Shankill (General)	164	Shankill (General)		
55	Patrician Villas	110	Shankill (General)	165	Dispersed Locations		

Each geographic location mentioned in Table 2.1 and Table 2.2 above has a sub-section of Section 3 and the submissions relating to each geographic location are reported within that sub-section. Each sub-section provides a general Proposed Scheme description at this location, and then outlines and responds to common and non-common issues covered in all of the submissions relating to this location.

3. Response to Submissions on Proposed Scheme

3.1 Proposed Scheme at Donnybrook

3.1.1 Description of Proposed Scheme at this Location

At this location, a full cycle track and bus lane provision is provided in both directions along Morehampton Road. In places the cycle tracks are brought behind the tree line. This will impact several on-street parking bays between Wellington Place and Belmont Avenue. A 'No Right Turn' restriction has been added from Morehampton Road onto Auburn Avenue to reduce crossing point conflicts. From Mulberry Lane to Rampart Lane the northbound bus lane has been removed to allow for two reduced width segregated cycle tracks in both directions, while the southbound bus lane has been retained along this narrow section.

Signal Controlled Priority (SCP) at the Eglinton Terrace junction on Donnybrook Road will provide northbound bus priority over this length. The perpendicular parking spaces south of Mulberry Lane have been converted to parallel spaces, while the echelon parking spaces on the other side of the road have been retained.

From Eglinton Terrace southwards to Eglinton Road a dedicated bus lane, segregated cycle track, and general traffic lane are provided in each direction. The tie in for the proposed Dodder Greenway, designed and built by others, has been included in the design at the Eglinton Road junction on Donnybrook Road.

On Donnybrook Road between Eglinton Road and Anglesea Road in the southbound direction, there is a straight ahead and left-turn lane, a straight-ahead general traffic lane, a bus lane, and a cycle track provided. The northbound approach on the Stillorgan Road towards Beaver Row has a cycle track, bus lane, a combined left and ahead general traffic lane, and a right-turn lane to Ailesbury Road. Between Beaver Row and Eglinton Road there is a cycle track, bus lane, and a combined left and ahead traffic lane.

Coach laybys have been proposed at certain locations to reduce instances of loading coaches blocking the bus lane.

The Proposed Scheme design at Donnybrook is presented in the 02-General Arrangement Drawings Sheet 05, Sheet 06, Sheet 07 and Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.1, Figure 3.2, Figure 3.3 and Figure 3.4.

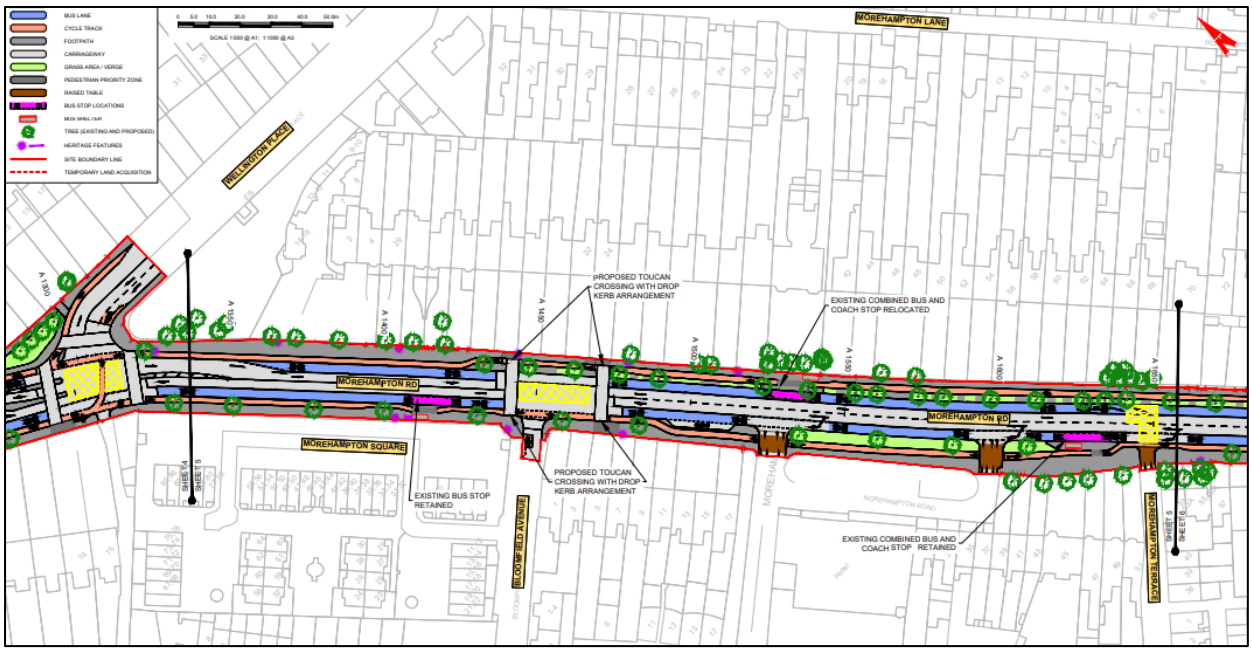


Figure 3.1: Extract from General Arrangement Drawings at Donnybrook (Sheet 05)

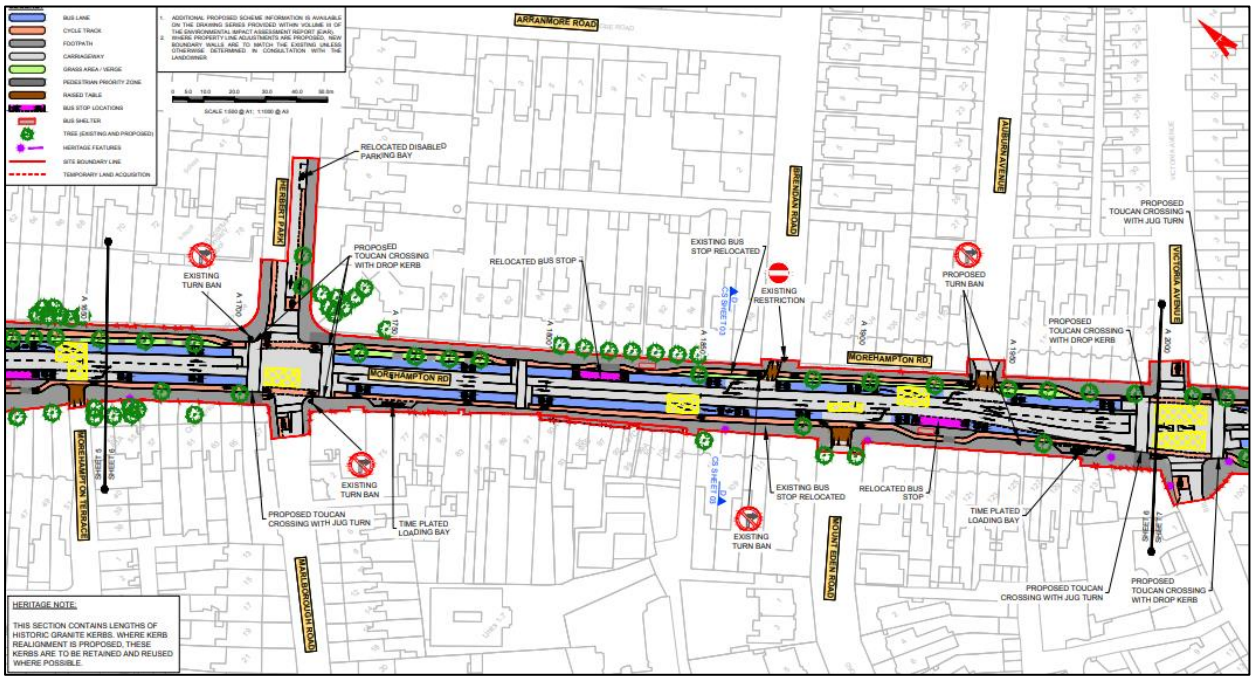


Figure 3.2: Extract from General Arrangement Drawings at Donnybrook (Sheet 06)

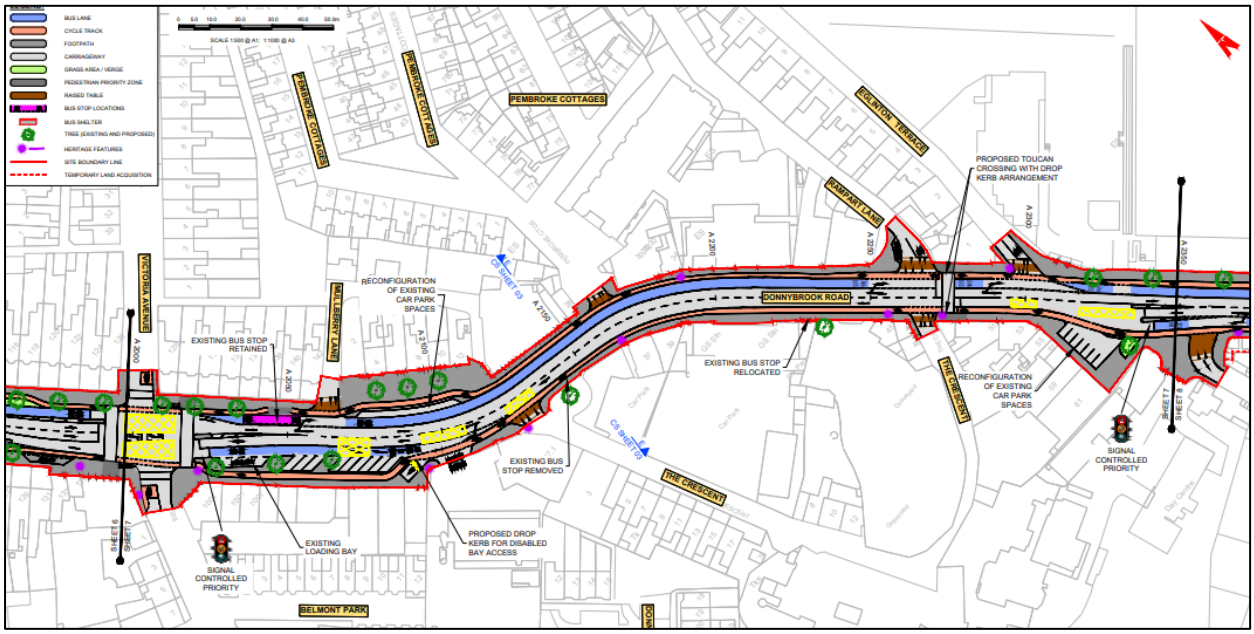


Figure 3.3: Extract from General Arrangement Drawings at Donnybrook (Sheet 07)

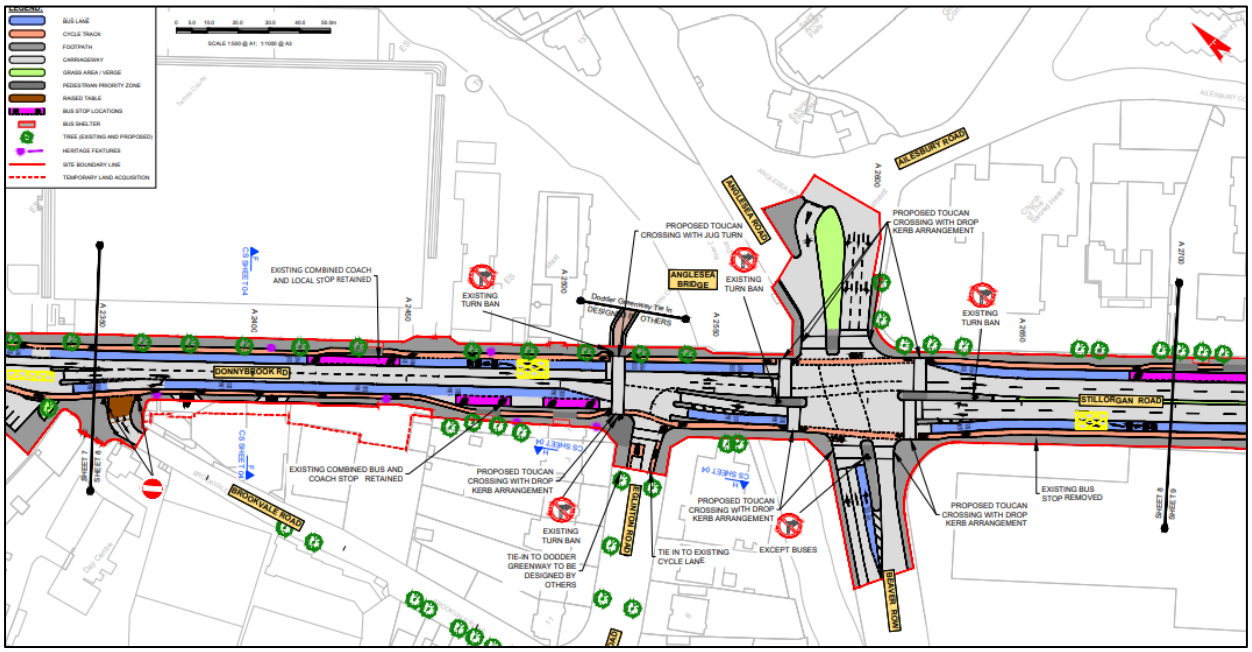


Figure 3.4: Extract from General Arrangement Drawings at Donnybrook (Sheet 08)

3.1.2 Overview of Submissions Received

Table 3.1 below lists the 9 individual submissions made in respect of the Proposed Scheme at Donnybrook.

Table 3.1: Submissions Made in Respect of at Donnybrook

No	Name	No	Name	No	Name
18	Bastille Realty Limited	62	Dr. Dermot Stokes	137	MOLA Architecture
34	Circle K Donnybrook	69	Elizabeth Ryder	199	Terroirs
60	Donnybrook Fair Limited	129	MCL Estates Ltd - First Stop	201	The Donnybrook Partnership

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

1) Justification for CPO
2) Access / Impact on Business
3) Loss of parking, cycle parking and alternate design proposal
4) Impact on Donnybrook village
5) Impact on pedestrians
6) Traffic calming

The submissions also raised some other specific issues which are listed below and described in the Other Issues Raised and Responses section below.

Other Issues Raised

1) Constitutional requirements of CPO
2) Proposed Trees
3) Impact on fuel pricing sign and underground drainage system

4) Objectives of Scheme and alignment with DCC Development Plan
5) Concerned regarding drafting errors in the Report
6) Lack on consultation with local residents
7) Proposed alternative design
8) Drainage
9) Noise
10) Route selection and design
11) Boundary treatment
12) Environmental impacts
13) Impact on footpath and cycle tracks
14) No impact on existing bottleneck in Donnybrook
15) Impact on development
16) OS mapping

3.1.3 Common Issues Raised and Responses

3.1.3.1 Justification for CPO

Summary of issue raised

A number of submissions raised concerns over the justification for the land acquisition. The submissions raised the concern that there was no justification for the inclusion of the lands in the CPO process and that excluding the lands from the CPO would not affect the NTA's ability to implement the Proposed Scheme.

Response to issue raised

As set out in Paragraph 2 of the statutory notice which was served, the CPO is *'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'*. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the *'precise details of the proposed construction works'* and all of *the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.*

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The Proposed Scheme design at Donnybrook is presented in the 02-General Arrangement Drawings Sheet 07 and 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.5 and Figure 3.6. The permanent and temporary land take required at this location is shown in the Deposit Maps, as shown in Figure 3.7 and Figure 3.8, and details listed in the CPO Schedule as part of the Compulsory Purchase Order information.

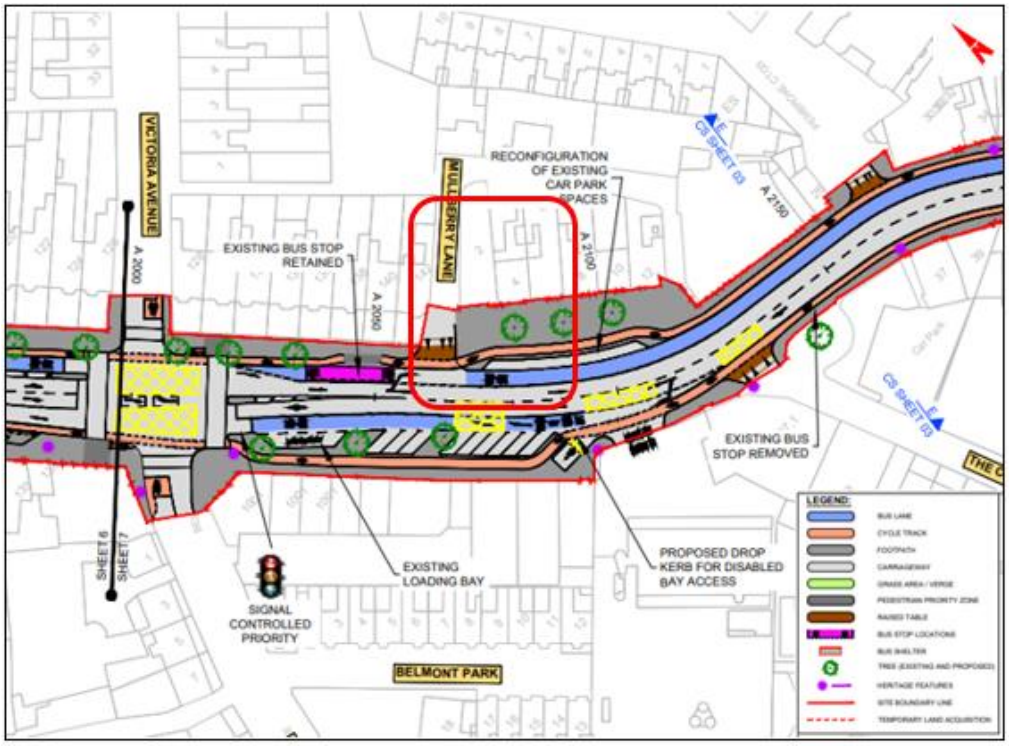


Figure 3.5: Extract from General Arrangement Drawings at 2 Donnybrook Road (Sheet 07)

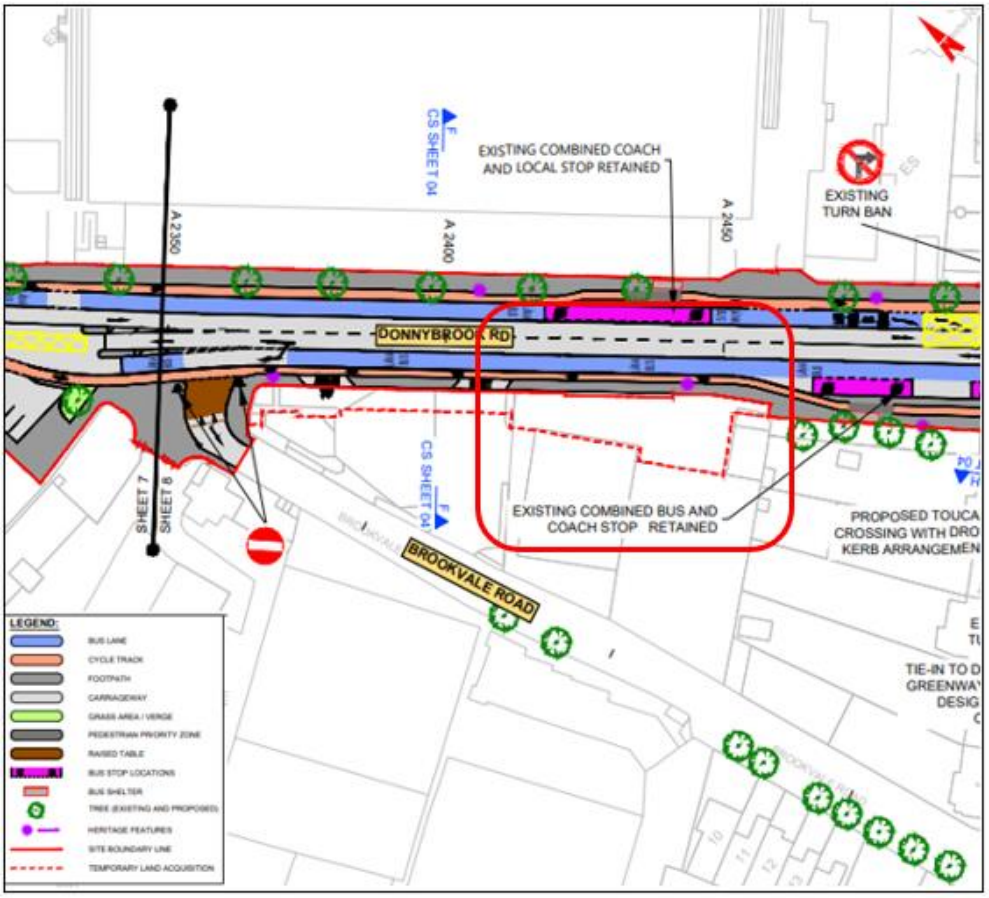


Figure 3.6: Extract from General Arrangement Drawings at Fast Fit in Donnybrook (Sheet 08)

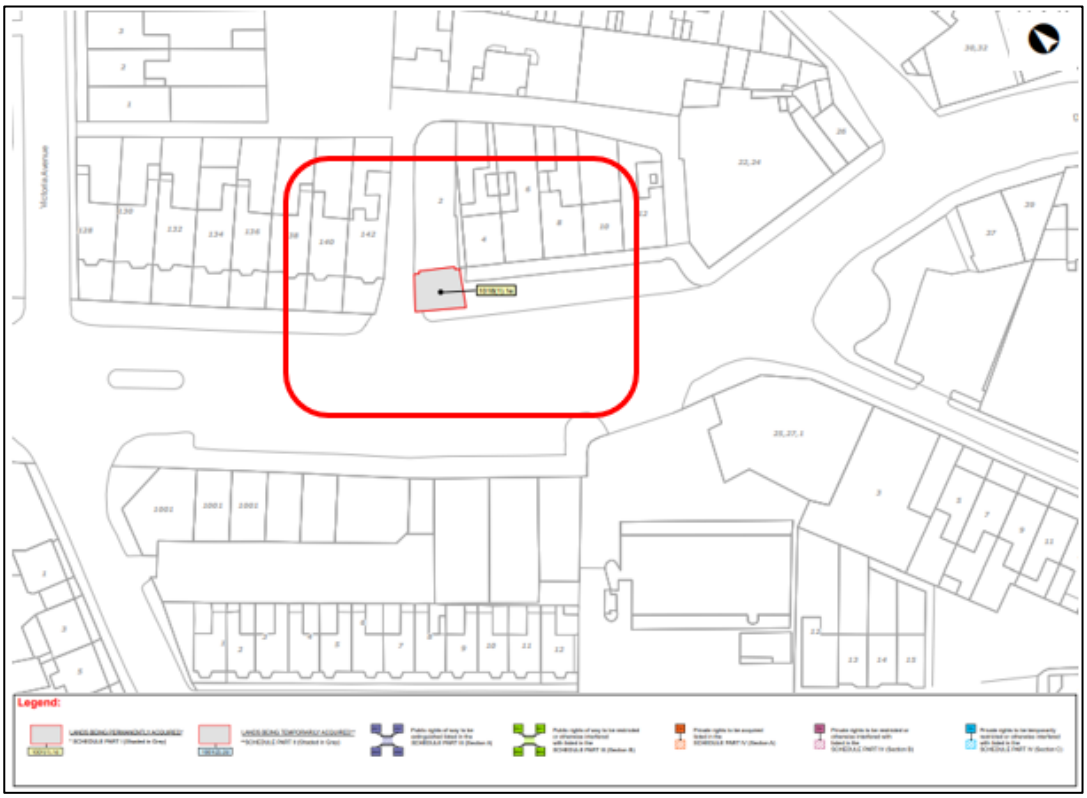


Figure 3.7: Extract from CPO Deposit Maps at 2 Donnybrook Road (Sheet 38)

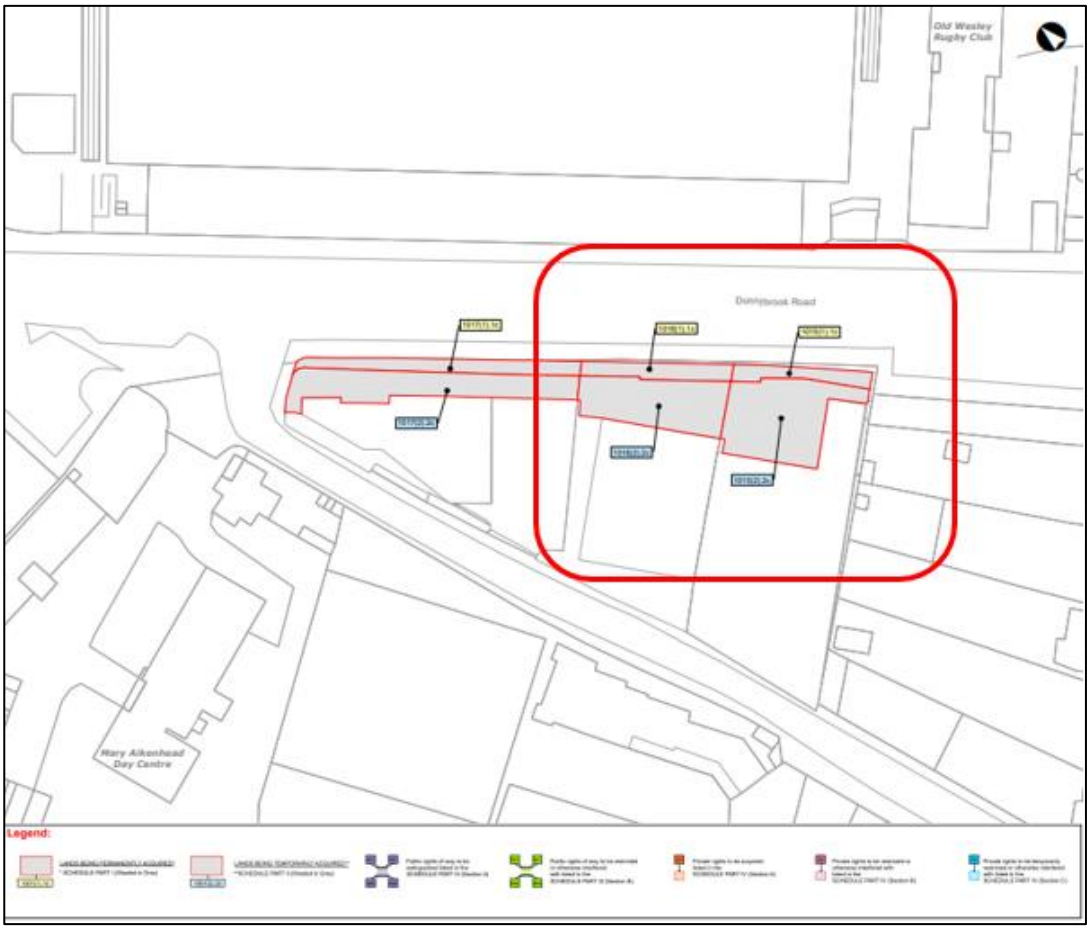


Figure 3.8: Extract from CPO Deposit Maps at Fast Fit in Donnybrook (Sheet 37)

As part of the Proposed Scheme, the permanent land take is required to allow for construction and achieve the BusConnects standard cross-section at these locations. The standard cross-section provided at this location is the optimum CBC cross-section which meets the CBC Design Guidelines Objectives in accordance with Section 2 (Figure 1) of the Preliminary Design Guidance Booklet for BusConnects Core

Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR. The Proposed Scheme typical cross-section at this location is shown in the 04-Typical Cross Sections Drawings Sheet 03 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and as shown in Figure 3.9.

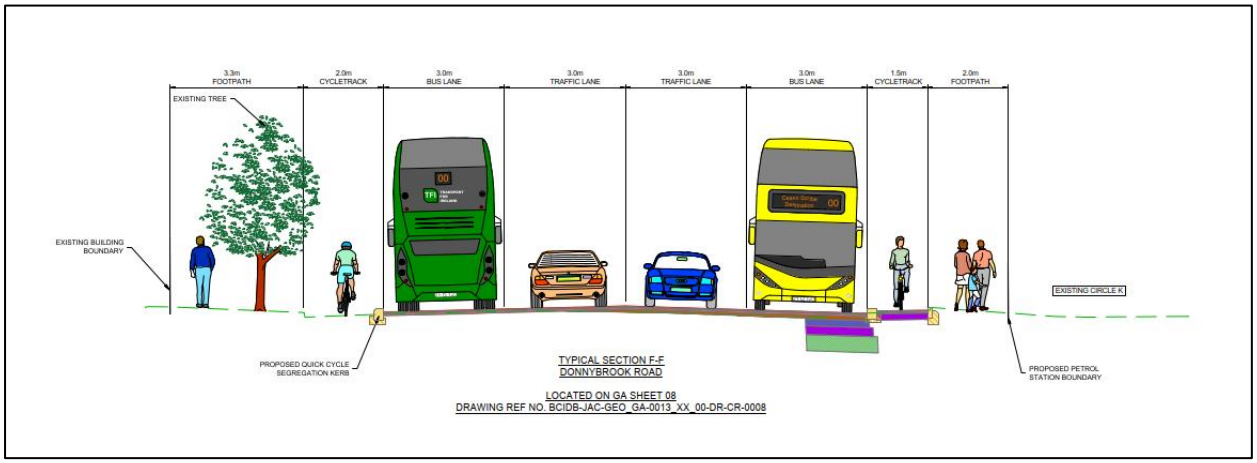


Figure 3.9: Extract from Typical Cross-section Drawing at Morehampton and Donnybrook (Sheet 03)

The existing carriageway will be widened on both sides on Donnybrook Road to allow for bus lane, cycle track and footpath in both directions.

Figure 3.9 shows the proposed cross section at No.2 Donnybrook Road. The existing road cross-section will be widened at No.2 Donnybrook Road to allow for an offline section of cycle track that runs behind the reconfigured parking spaces, and a proposed urban realm space to the front of No.2 to 12 Donnybrook Road. As noted in Section 17.3.2 of Chapter 17 (Landscape and Visual) in Volume 2 of the EIAR, the urban realm works will have *'higher quality materials, planting and street furniture provided to enhance the pedestrian experience'.* For safety reasons, where there is on-street parking and a cycle track proposed, the Preliminary Design Guidance Booklet in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR notes the following:

'The preferred location for raised adjacent cycle tracks is between the pedestrian footpath and any proposed parking spaces to provide additional protection for cyclists.'

At this location, the cycle track has been diverted to the back of the on-street parking spaces, adjacent to the pedestrian area. A parallel parking arrangement is proposed at this location, this limits the diversion required on the cycle track, and allows for the new urban realm area.

Figure 3.6 shows the proposed design at Fast Fit in Donnybrook. The existing road cross-section will be widened on the northbound side of Donnybrook Road, at Fast Fit, to allow for the full BusConnects typical cross-section, as shown in Figure 3.9.

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

At these locations specified in Figure 3.5 and Figure 3.6 above, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in the General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

With regards to the mention of the 'The Board to Clinton v. An Bord Pleanála (2007)IESC 19 ('Clinton')' with the Supreme Court mentioned in the objection, please note below.

As the Board will be aware, the legal principles which apply when an acquiring authority is considering whether and how to exercise a statutory power to compulsorily acquire lands were most recently set out by the Supreme Court in 2015 in Reid v Industrial Development Authority [2015] IESC 82. Those principles can be summarised as stating that in order for land to be compulsorily acquired, the acquiring authority (in this case, the NTA) must establish:-

a) that it is authorised by statute to acquire the land for the purpose for which it is sought to acquire it;

b) that the acquisition of the land is legitimately being pursued for that purpose;

c) that the acquisition of the land is necessary for that purpose; and

d) that the land to be acquired is the minimum possible required to advance the statutory purpose.

In that regard, the NTA is authorised by section 44 of the Dublin Transport Authority Act 2008 (as amended) to compulsorily acquire land for the purposes of providing public transport infrastructure. The NTA therefore has the requisite statutory authority to make the CPO for the Proposed Scheme for the purpose of providing public transport infrastructure, and the acquisition of the lands required for the Proposed Scheme is legitimately being pursued for that purpose.

The lands to be acquired from Bastille Realty are required for the purpose to achieve the Proposed Scheme objectives as referred above.

Further, the lands to be acquired from Bastille Realty are the minimum required for this purpose, as referred in the response above. Also, alternatives were considered and assessed during the design development phase, refer to response in Section 3.1.4.11 (Route Selection Options) and also Section 3.1.3.3 refer to 'Alternate Design at 2, Donnybrook' NTA are satisfied that reasonable alternatives have been considered to inform the Proposed Scheme.

The suggestion in this objection that excluding Bastille Realty's lands from the Compulsory Purchase Order for the Proposed Scheme would not affect the NTA's ability to implement the Proposed Scheme is therefore fundamentally incorrect.

The Supreme Court in Reid also reiterated that the impact on the right to private property must be justified or necessitated by the exigencies of the common good, echoing the earlier (2007) decision of the Supreme Court in Clinton v An Bord Pleanála [2007] IESC 19 (which earlier decision is mentioned in this objection), in which the Supreme Court found that the "acquiring authority must be satisfied that the acquisition of the property is clearly justified by the exigencies of the common good".

The Proposed Scheme is clearly being pursued for the common good and that is detailed throughout the EIAR and in particular in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR as presented in Section 3.9.3.1 of this report.

The significant benefits of the scheme are elaborated upon throughout the EIAR with a summary of the key benefits presented in Section 3.9.3.2 of this report. The benefits of the Proposed Scheme clearly demonstrate the common good of the Proposed Scheme as a whole. The impacts on individual property rights are therefore justified and necessitated by the exigencies of the common good.

It is clear therefore that, contrary to what is suggested in this objection, the Proposed Scheme is being pursued cognisant of and in accordance with the principles in relation to compulsory acquisition that were identified by the Supreme Court in the case of Reid v Industrial Development Agency [2015] IESC 82, and in the earlier decision of the Supreme Court in Clinton v An Bord Pleanála [2007] 4 IR 701.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.1.3.2 Access / Impact on Business

Summary of issue raised

Submissions raised concerns over the impact on businesses due to works. The issues were regarding access to premises during the construction phase of the Proposed Scheme (both vehicular and pedestrian), and viability of the operation of the businesses during the temporary land acquisition.

One submission claimed there was no certainty over the timeline and duration of the construction works impacting access to businesses at these locations.

One submission raised the concern that this area under CPO is utilised as outdoor seating and the loss of this seating area will negatively impact on revenue.

One submission raises concerns regarding business trade and a loss in profitability resulting from proposed CPO due to the loss in consumer base.

Response to issue raised

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) in Volume 2 of the EIAR:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

As stated in Section 5.10.1 of Chapter 5 (Construction) Volume 2 of EIAR, a CEMP has been prepared for the Proposed Scheme and is included as Appendix A5.1 in Volume 4 of this EIAR. Section 5.2.1.2 of Appendix A5.1 (CEMP) in Volume 4, Part 1 of 4, states that an objective of the Construction Traffic Management Plan is to ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme. The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled.

Table 5.2 in Section 5.3.1.2 of Chapter 5 (Construction) in Volume 2 of the EIAR provides details of the construction activities for Section 1b: Wellington Place to Donnybrook (Anglesea Road Junction), as shown in Table 3.2 below. The expected construction duration for the section will be approximately 15 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented Section 5.3.1.2.

Table 3.2: Extract from EIAR Chapter 5 (Construction) (Table 5.2)

Table 5.2: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300	■	■	■	■	■							
Section 1b	15 months	1,300		■	■	■	■	■						
Section 2a	15 months	5,800		■	■	■	■	■						
Section 2b	12 months	5,700	■	■	■	■								
Section 3a	12 months	1,270					■	■	■	■				
Section 3b	9 months	500							■	■	■			
Section 3c	18 months	1,800					■	■	■	■	■	■		
Section 4a	12 months	300								■	■	■	■	
Section 4b	9 months	400										■	■	■
Section 4c	9 months	350								■	■	■		

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4, Part 3 of 4 of the EIAR, of which the below commercial businesses are included as follows:

- Donnybrook Fair in 89 Morehampton Road is entry number 88;
- Terroirs Ltd in 103 Morehampton Road is entry number 95;
- MOLA Architecture in 2 Donnybrook Road is entry number 110;
- Circle K Donnybrook in Donnybrook Road is entry number 130; and
- Fast Fit in Ever Ready Centre, Donnybrook Road is entry number 131.

With respect to the assessment of land take impacts on the above listed commercial businesses in Chapter 10 (Population) Volume 2 of EIAR, only Circle K, First Stop and Fast Fit in the Ever Ready Centre are assessed as having the potential for significant impacts, with the assessment stating that they '*are expected*

to experience a Negative, Significant, Short-Term land take effect during the Construction Phase'. Those potential impacts will reduce following the completion of construction at those locations, with the assessment not identifying a potential significant impact on either of those businesses during the Operational Phase.

The remainder of businesses noted above were not assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in the aforementioned sections. The impact of land take on commercial receptors across the Donnybrook community area as a whole is considered *Negative, Not Significant to Slight and Short-Term* during the Construction Phase and *Negative, Not Significant and Long-Term* during the Operational Phase.

As per Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4, Part 3 of 4 of the EIAR, numerous case studies have been done to understand the impact of similar schemes on that of local businesses. It was found in Ireland, that businesses have a tendency to overestimate the impact of cars on their business. For example, a survey undertaken of businesses on Henry Street showed that they perceived 40% of customers arrived by bus whereas the actual percentage was 49%. Another example was businesses perceiving that 6% of customers would walk to Henry Street whereas the actual percentage was 19%.

The conclusion from these studies in Section 2 of this report states:

'*Evidence from studies in Ireland and internationally suggest that reductions in the numbers of car journeys to the shops should not lead to a reduction in footfall as traders typically overestimate the importance of cars. Many shoppers are already arriving using sustainable transport options and therefore should be quick to take advantage of new transport options. There may be some disruption to business during the construction phase, however once the new routes are open, footfall should return to normal and may in fact rise.'*

Additionally, research was undertaken for shoppers of Henry Street and Grafton Street to understand how much was typically spent in shops by people arriving by different modes of transport. On average, it was found that car spending was more per trip. However, due to the frequency of visits by bus, bike and walking, the average spend was higher.

The conclusion for this in Section 2 – The Impact on Local Businesses states:

'*There is strong international evidence to suggest that the proposed improvements will lead to further increases in the use of sustainable transport. This should, in turn, more than compensates for reductions in visits by car users. Whilst spend per visitor may fall slightly, the overall spend rises due to the increased overall footfall. This effect should occur as soon as the new proposed routes open with shoppers choosing to make even more use of sustainable transport decisions. Whilst there is limited evidence of the impact during the construction work, none of the evidence suggested an increase in business insolvency or a departure of businesses from the area during construction works.'*

Figure 3.10 below shows the Deposit Map with extent of the permanent land acquisition, up to the front face of the building/pillars. The NTA acknowledge that there is existing seating outside of Donnybrook Fair, recessed behind the front face of the pillars.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

Figure 3.10: Extract from CPO Deposit Maps at Donnybrook Fair, 89 Morehampton Road (Sheet 39)

3.1.3.3 Loss of Parking, Cycle Parking and Alternate Design

Summary of issue raised

Submissions raised the concern that the removal of public on street parking along Morehampton Road will result in the loss of customers as the inconvenience will likely cause them to go elsewhere.

One submission raised the concern that the side street parking referenced in Section 6.3.2.5 of Chapter 6 (Traffic &Transport) in Volume 2 of the EIAR is already in heavy local demand, with access restricted due to existing right turn restrictions off Morehampton Road, coming from either direction.

One submission raised the concern that there is an oversupply and unsubstantiated concentration of proposed bike racks at Donnybrook as part of the Proposed Scheme. They also raised the concern of limited information regarding the detail of the proposed bike racks, with no racks shown in the Photomontages (e.g. Photomontage 24b, Figure 17.2 of Volume 3, Part 3 of 3).

One submission raised the concern that there was inaccurate information in the EIAR. Section 6.4.6.1.2.4 notes the 15 no. commercial (business) parking spaces include: '*three adjacent to R138 Donnybrook Road southbound carriageway between Mulberry Land and The Crescent (MOLA Architecture).'* The submission notes that there is sufficient room for 4 no. cars to park at this property and not 3. Also raised was the concern to the impact on these 15 no. spaces having been assessed collectively.

This submission suggests an alternative design at this location, retaining the parking spaces and using the approach taken at the existing parking spaces outside Café Nero, to the south, where parking is accessed across the cycle track.

Response to issue raised

Loss of Parking

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives and provide high quality public transport, cycling and walking facilities through the Proposed Scheme.

The impact on parking and loading is detailed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Section 6.4.6.1.2.4 states the following for Section 1 Lesson Street to Donnybrook:

'The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to the proposed route (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.'

Specifically in relation to disabled parking spaces, loading bays and parking spaces at Morehampton and No.2 Donnybrook Road, Section 6.4.6.1.2.4 states:

- '*There is currently one disabled parking space located on R138 Morehampton Road to the south of the Herbert Park junction. It is proposed to relocate the disabled space to Herbert Park approximately 140m from the existing location. The impact is thus considered to be Negative, Slight and Long-term;*

- *There is currently one loading / unloading bay along R138 Morehampton Road to the north of the R138 Morehampton Road / Victoria Avenue junction. The existing bay provides space for two vehicles. It is proposed to formalise the loading / unloading bay which results in the reduction of one space. Additionally, it is proposed to provide an additional loading / unloading bay along R138 Morehampton Road to the south of the R138 Morehampton Road / Herbert Park / Marlborough Road junction which will provide space for two vehicles. The change is considered to have a Negligible impact;*

- *There are currently 15 commercial (business) parking spaces located along R138 Donnybrook Road. Of the 15 spaces, 12 spaces are adjacent to the northbound carriageway between Eglinton Road and Brookvale Road (six at Fast Fit and six at First Stop) and three are adjacent to R138 Donnybrook Road southbound carriageway between Mulberry Lane and The Crescent (MOLA Architecture). It is proposed to remove a total of ten spaces (three spaces at MOLA Architecture, five spaces at Fast Fit and two spaces at First Stop). The impact of this loss is considered to be Negative, Moderate and Long-term.'*

Section 6.4.6.1.2.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Table 6.26 reports that '*the proposed amendments to parking / loading along R138 Morehampton Road will result in a loss of 41 spaces'*. Where parking is removed, the impact varies between negligible and moderate. The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.

Section 6.4.6.1.1.4 states:

'This qualitative assessment has also taken into account nearby parking, which is defined as alternative parking locations along side roads within 200 – 250m of the Proposed Scheme.'

Section 6.3.2.5 goes on to state:

'There are a number of side streets which can be used by local residents and visitors / businesses throughout this section. In total there are approximately 230 parking spaces on streets surrounding R138 Leeson Street Lower, R138 Sussex Street and R138 Leeson Street Upper, approximately 455 parking spaces on streets surrounding R138 Morehampton Road and approximately 229 parking spaces on streets surrounding R138 Donnybrook Road.'

With regards to the restrictions on right turns off Morehampton Road, with enforced banned right turns, there are alternative routes that can be used. Section 6.4.6.2.8.4 of Chapter 6 (Traffic & Transport) in the EIAR, the traffic modelling shows how the traffic is redistributed along R138 Morehampton Road, and data in Table 6.62 shows that *'there is a traffic reduction of -586 combined flows during the PM Peak hour along R138 Morehampton Road'.*

The restricted movement traffic signs for the Proposed Scheme specifically along the R138 Morehampton Road are shown in the 02-General Arrangement Drawings Sheet 09 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and can be seen in Figure 3.11.

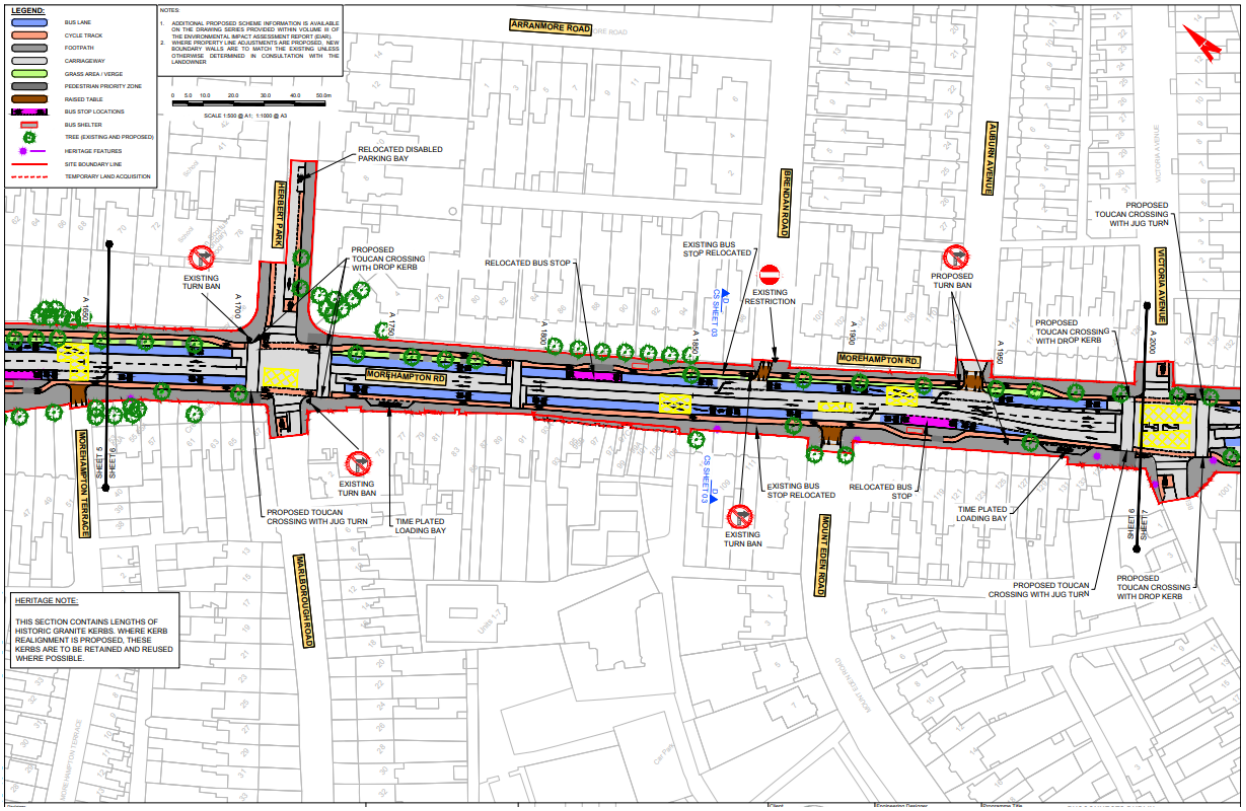


Figure 3.11: Extract from General Arrangement Drawings along R138 Morehampton Road (Sheet 09)

Figure 3.11 also shows that the implementation of restricted movements help achieve the objectives of the Proposed Scheme.

In relation to the number of parking spaces recorded at No. 2 Donnybrook Road, Section 6.4.6.1.2.4 of Chapter 6 in Volume 2 of the EIAR states:

'There are currently 15 commercial (business) parking spaces located along R138 Donnybrook Road. Of the 15 spaces, 12 spaces are adjacent to the northbound carriageway between Eglinton Road and Brookvale Road (six at Fast Fit and six at First Stop) and three are adjacent to R138 Donnybrook Road southbound carriageway between Mulberry Lane and The Crescent (MOLA Architecture). It is proposed to remove a total of ten spaces (three spaces at MOLA Architecture, five spaces at Fast Fit and two spaces at First Stop). The impact of this loss is considered to be Negative, Moderate and Long-term.'

The assessment of the informal parking spaces has been carried out on the basis of standard parking bay width of 2.5m.

Cycle Parking

With regards to the cycling infrastructure, Section 6.4.6.1.2.2 states:

'*Overall, it is anticipated that there will be a Positive, Moderate and Long-Term effect to the quality of the cycling infrastructure along Section 1 of the Proposed Scheme, during the Operational Phase. A detailed breakdown of the assessment along each section can be found in Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.*

The findings of the cycling assessment aligns with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to 'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

As noted in Section 4.6.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, bike racks will generally be provided, where practicable, at bus stops and key additional locations as noted in the Landscaping General Arrangement drawings in Volume 3 of this EIAR and in accordance with the cycle parking provision shown in the bus stop arrangements shown in Appendix A4.1 (Preliminary Design Guidance Booklet (PDGB) for BusConnects Core Bus Corridors) in Volume 4 Part 1 of 4 of the EIAR.

The photomontages are interpretations of the 2D design of the Proposed Scheme incorporating design information from a number of 2D design drawings of the proposals including the General Arrangement drawings, the Landscaping General Arrangement drawings, the Traffic Signs and Road Markings drawings, the Street Lighting Drawings, and the Junction Systems Design drawings (all accompanying Chapter 4 in Volume 3 of the EIAR). Every effort has been made during the compilation and review of the photomontages to ensure that they are an accurate reflection of the proposals at the locations shown. Any omission of bike racks is not intentional, and information on the 2D maps and drawings of the design are accurate. The impact assessments presented in the EIAR have been completed based on the totality of the information available on the design. The NTA is therefore satisfied that the information presented in the photomontages does not change the findings and conclusions of the impact assessments under the EIAR documents.

Alternate Design at No 2 Donnybrook Road

One submission proposes an alternative design at No. 2 Donnybrook Road, shown in Figure 3.12, retaining the parking bays and using the approach taken at the existing parking spaces outside No.55 to 61 Donnybrook Road, to the south, shown in Figure 3.13, where parking is accessed across the cycle track.

In order to achieve the Proposed Scheme objectives along this section of the corridor, the proposed design at this location is as described in paragraph 4.5.1.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR.

'From Mulberry Lane to Rampart Lane the northbound bus lane has been removed to allow for two reduced width segregated cycle tracks in both directions, while the southbound bus lane has been retained along this narrow section. Signal Controlled Priority at the Eglinton Terrace junction on Donnybrook Road will provide northbound bus priority over this length. The perpendicular parking spaces south of Mulberry Lane have been converted to parallel spaces, while the echelon parking spaces on the other side of the road have been retained.'

The suggested alternative design relates to an off-street carpark arrangement with a single point of access and egress across the cycle track at Café Nero and references the location shown in the 02-General Arrangement Drawings Sheet 07 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.12.

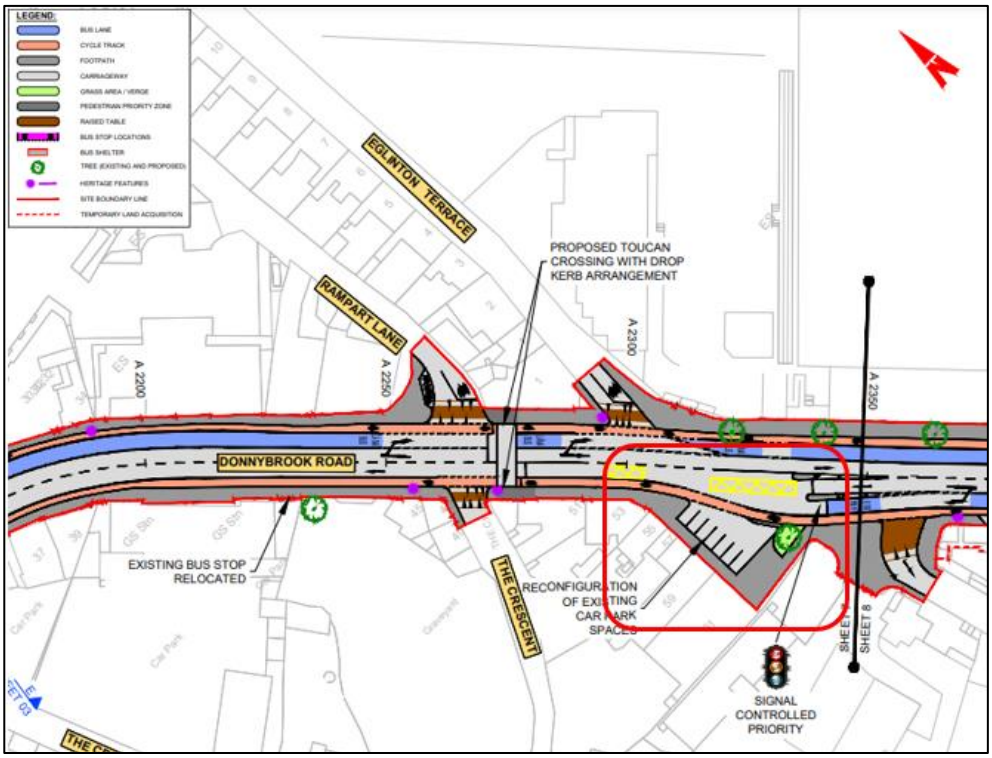


Figure 3.12: Extract from General Arrangement Drawings at No.55 to 61 Donnybrook Road (Sheet 07)

The Proposed Scheme design at No. 2 Donnybrook Road is presented in the 02-General Arrangement Drawings Sheet 07 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.13 below. The arrangement at No. 2 Donnybrook Road relates to on-street parallel parking, so cannot be designed with the same rational as at the Café Nero site. For safety reasons, where

there is on-street parking and a cycle track proposed, as described in the Preliminary Design Guidance Booklet in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR: *'the preferred location for raised adjacent cycle tracks is between the pedestrian footpath and any proposed parking spaces to provide additional protection for cyclists.'* At this location, the cycle track has been diverted to the back of the on-street parking spaces, adjacent to the pedestrian area. A parallel parking arrangement is proposed at this location, this limits the diversion required on the cycle track, and allows for a proposed urban realm area.

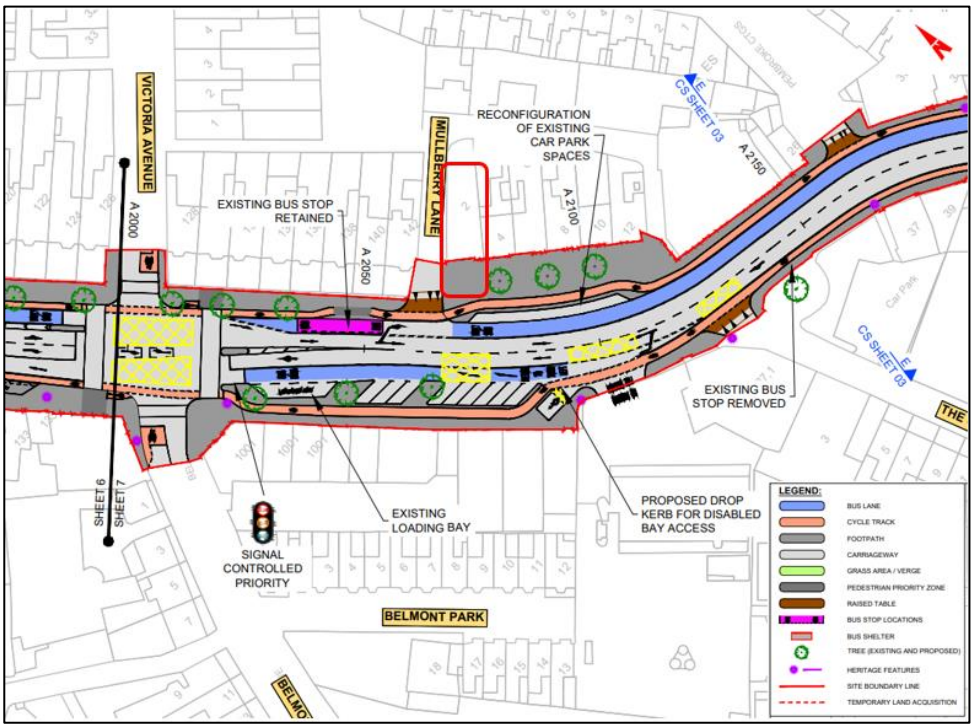


Figure 3.13: Extract from General Arrangement Drawings at No. 2 Donnybrook Road (Sheet 07)

As noted in Section 17.5.2.1.20 of Chapter 17 (Landscape (Townscape) and Visual) in Volume 2 of the EIAR, Photomontage View 24b: As Proposed shows '*the proposed view from Donnybrook Road at The Crescent, looking north-west. The primary changes are to the road arrangement, however, an area of car parking to the right (north) side of the road is removed and replaced with urban realm enhancements, including new tree planting which helps to green the streetscape. There is a positive change to visual amenity.'*

Image 4.8 in Section 4.5.1.8.5 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines the landscape and urban realm proposals at this location, as shown in Figure 3.14.

'The retail area near Mulberry Lane is proposed to be enhanced with an extended area of concrete paving slabs and blocks with granite kerbs. New street trees are proposed with raised seating surrounds. 'Driveway' style crossover in concrete setts increase the priority for pedestrians. Parking provision decreases and is switched from perpendicular to parallel to the carriageway, allowing the cycle path to be routed to the inside away from the opening of car doors.'

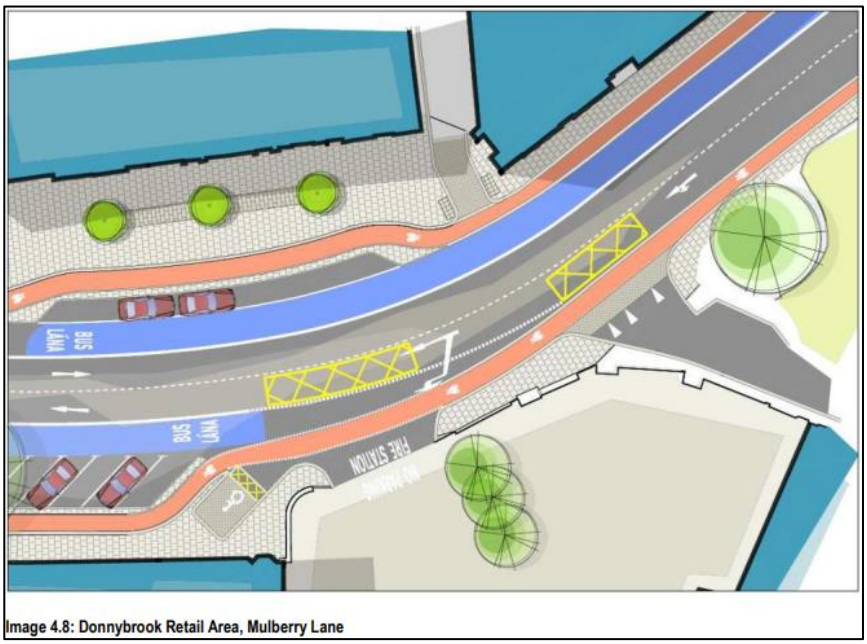


Image 4.8: Donnybrook Retail Area, Mulberry Lane

Figure 3.14: Extract from EIAR Chapter 4 at Donnybrook Retail Area, Mulberry Lane (Image 4.8)

3.1.3.4 Impact on Donnybrook Village

Summary of issue raised

A number of submissions raised concerns over the impact of the Proposed Scheme on Donnybrook Village. One submission raised the concern that the Proposed Scheme would bisect the village with what would be the new N11, and that this would significantly inhibit its functioning as a village. One submission raised a concern about the demographic profile of the area. They noted that there are a large cohort of older citizens, and the large number of schools in the area that creates a particularly intense traffic load and pattern.

One submission noted that the removal of 20 no. designated parking spaces on Morehampton Road would have a long-term impact on the life of Donnybrook, its villages and its traders.

They also noted that closing off options for right-hand turns, except where there is an additional lane to allow it, will seriously increase traffic congestion.

Response to issue raised

The methodology for the assessment of community impacts is outlined in Section 10.2.4.1 of Chapter 10 (Population) in Volume 2 of the EIAR.

Section 10.6.2 of Chapter 10 states:

'As outlined within Section 10.4.4 and summarised in Table 10.15 the Proposed Scheme will deliver positive impacts in terms of accessibility to community facilities and commercial businesses for pedestrians, cyclists and bus users during the Operational Phase. The Proposed Scheme is also expected to benefit individuals and businesses whose workers live along the corridor. Retail and leisure businesses along the route could gain a double benefit from both increased sales and improved staff productivity (see Appendix A10.2 in Volume 4 of this EIAR).

These improvements will help to achieve the aims and objectives of the Proposed Scheme by providing an attractive alternative to the use of private vehicles and promoting a modal shift to walking, cycling and public transport, allowing for greater capacity along the corridor to access residential, community and commercial receptors. As discussed in Appendix A10.2 in Volume 4 of this EIAR, the Proposed Scheme will also ensure the connection of people with essential services such as healthcare facilities and jobs (EY 2021).

In order to accommodate the Proposed Scheme and to ensure it can be readily utilised by sustainable modes of transport, localised significant impacts from permanent land take are expected on a small number of properties. Negative (not significant) impacts are expected on private vehicles travelling in the surrounding road network. However, the design of the Proposed Scheme, which is a result of a detailed design iteration process, ensures that the surrounding road network will have the capacity to accommodate

the redistributed traffic during the operation whilst still achieving the aims and objectives of the Proposed Scheme.

Accordingly, it is concluded that the Proposed Scheme will deliver strong benefits for users of sustainable modes of transport, with positive accessibility and amenity impacts for community areas in the study area and align with specific objectives identified in Section 10.1.'

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 of the EIAR outlines the assessment of the economic impact of the proposed bus corridors, including an assessment of the impact on local business (Section 2 of the report). Refer to Section 3.1.3.2 for response specifically on Access / Impact on Business. On the impact on town centres, which would be applicable to Donnybrook village, it states:

'*By creating easy access to local village centres and reducing the level of car traffic in these areas, more people will be attracted to the area and also spend a longer amount of time in each visit. As a consequence, this is likely to have a positive impact on all local businesses along the routes, regardless of size or location. It will also create a nicer atmosphere and a greater sense of community. This impact will be rapidly felt and communities should begin to benefit as soon as the new infrastructure works have been completed*.'

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the potential landscape and visual impacts of the Proposed Scheme during both the Construction and Operational Phases. The assessment considers the impact on the overall character of the study area, the impacts on streetscape elements and visual impacts.

Section 17.7 states, in part:

'As described in Chapter 3 (Consideration of Reasonable Alternatives) of this EIAR and noted in Section 17.4.1.2 of this Chapter, the Proposed Scheme has been subject to an iterative design development process which has sought insofar as practicable to avoid or reduce negative impacts, including townscape and visual impacts.'

'The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compounds, return of temporary acquisition areas, and for replacement or additional tree and other planting where feasible along the Proposed Scheme.'

It also states, in part:

'There will be positive long-term effects for sections of streetscape most notable for areas in Donnybrook and Bray. The Proposed Scheme will also provide for a reduction in the car-centric design of the townscape with an enhanced experience for pedestrians and cyclists through measures such as provision of raised crossing points to side junctions, paving schemes which indicate pedestrian priority and aid in reducing traffic speeds, and shorter or more direct crossing points at junctions.'

Section 17.4.4.1.1 specifically describes the Operational Phase impact on the character of the Leeson Street to Donnybrook (Anglesea Road Junction) section where it notes that the '*Operational Phase of the Proposed Scheme will not alter the overall townscape character along this section of the Proposed Scheme, but there will be localised changes to streetscape amenity*', going on to rate the significance of impact as Negative, Moderate and Short-Term, becoming Positive, Slight / Moderate and Long-Term over time as the changes to the streetscape become established.

In relation to the concern around intense traffic loading in the area, Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.2.8.3 notes that the Local Area Model (LAM) indicates that during the 2028 Opening Year scenario, there are reductions in general traffic noted along the Proposed Scheme during the AM Peak Hour. Along Donnybrook Road there is a reduction of 304 combined flows during the AM Peak Hour in the 2028 Opening Year.

Section 6.4.6.2.8.4 notes that the LAM indicates that during the 2028 Opening Year scenario, there are key reductions in general traffic noted along the Proposed Scheme during the PM Peak Hour. Along Donnybrook Road there is a reduction of 920 combined flows during the PM Peak Hour in the 2028 Opening Year.

The reduction in flows in both the AM and PM Peak Hours is attributed to the Proposed Scheme associated modal shift and implementation of bus priority measures. The reduction in general traffic flow has been determined as an overall potential; *'Slight to Profound, Positive, and Long-Term impact on the direct study area'.*

In relation to the increased traffic due to turning restrictions, there are alternative routes that can be used. Section 6.4.6.2.8.4 notes that the traffic modelling shows how the traffic is redistributed along R138 Morehampton Road, and data shows that; *'there is a traffic reduction of -586 combined flows during the PM Peak hour along R138 Morehampton Road'.*

Refer to response to Section 3.1.3.3 in this report for further information on the Loss of Parking.

3.1.3.5 Impact on Pedestrians

Summary of issue raised

A number of submissions raised concerns over the safety of pedestrians during the Construction Phase of the Proposed Scheme, and also the impact of the overall works on pedestrian facilities.

One submission noted the small bus stops with limited space for passenger waiting, in particular Leeson Street where there are both local and coach stops.

One submission proposes that a pedestrian crossing on Morehampton Road at the junction with Brendan Road would be crucial with the amount of school children crossing the road at the bus stop and also residents.

One submission raised a concern in relation to the proposal of a number of toucan crossings. It noted Leeson Street Bridge as an example location where a toucan crossing does not work well as pedestrians are more likely to take chances crossing.

Response to issue raised

Section 5.8.1 of Chapter 5 (Construction) of Volume 2 of this EIAR notes the following:

'*The measures set out in Section 8.2.8 of the Traffic Signs Manual (DTTAS 2019) will be implemented, wherever practicable, to ensure the safety of all road users, in particular pedestrians (including able-bodied pedestrians, wheel-chair users, mobility impaired pedestrians, pushchair users) and cyclists. Therefore, where footpaths or cycle facilities are affected by construction, a safe route will be provided past the works area, and where practicable, provisions for matching existing facilities for pedestrians and cyclists will be made. Where this is not practicable, pedestrians will be directed to use the footpath on the opposite side of the road, crossing at controlled crossing points.'*

As stated in Section 5.1:

'A Construction Environmental Management Plan (CEMP) has also been prepared and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to the commencement of the Construction Phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval.'

Section 5.10.1.1, Construction Traffic Management Plan (CTMP), goes on to state:

'The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CTMP the manner in which it is intended to effectively implement all the applicable mitigation measures identified in this EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála, should they grant approval.'

Section 5.2 of the Construction Environmental Management Plan (CEMP) included in EIAR Volume 4 Appendix A5.1, contains the Construction Traffic Management Plan (CTMP). Section 5.2.1.2 of this document outlines the objectives of the CTMP as follows:

- *'Outline minimum road safety measures to be undertaken, including site access/egress locations, during the works;*
- *Provide measures that respond to all road user needs including public transport, pedestrians, cyclists and vehicular traffic;*
- *Ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme;*

- *Demonstrate to the NTA, the appointed contractor and suppliers, the need to adhere to the relevant guidance documentation for such works; and*

- *Identify objectives and measures for inclusion in the management, design and construction of the Proposed Scheme to control the traffic impacts of construction insofar as it may affect the environment, local residents and the public in the vicinity of the construction works.'*

Section 4.6.2.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR notes the following:

'The desirable minimum width for a footpath is 2.0m. This width should be increased in areas catering for significant pedestrian volumes where space permits. DMURS (Government of Ireland 2013) defines the absolute minimum footpath width for road sections as 1.8m based on the width required for two wheelchairs to pass each other. Building for Everyone: A Universal Design Approach (NDA 2020), defines acceptable minimum footpath widths at specific pinch points as being 1.2m wide over a two-metre length of path.'

NTA are satisfied that safety of pedestrians during the Construction Phase of the Proposed Scheme, and also the impact of the overall works on pedestrian facilities will be managed through the CTMP.

With regards to the Shared Landing Bus Stop, Section 4.6.4.5.2 of Chapter 4 notes the following about Shared Bus Stop Landing Area Bus Stops *'Where space constraints do not allow for an Island Bus Stop, an option consisting of a Shared Landing Area Bus Stop is proposed. It is designed to reduce conflict between cyclists and stopping buses by ramping cyclists up to footpath level where they continue through the stop. The cycle track will also be narrowed when level to the footpath and tactile paving provided to prevent pedestrian / cyclist conflict.'* An example of a Shared Landing Area Bus Stop is shown in Image 4.17 presented in Section 4.6.4.5.2 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.15.

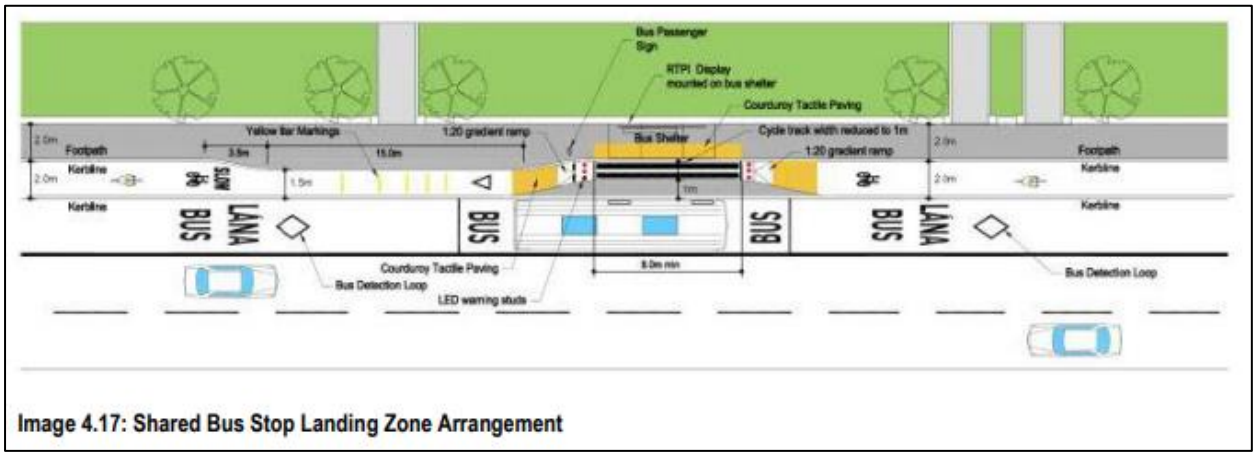


Figure 3.15: Extract from EIAR Chapter 4, Shared Bus Stop Landing Zone Arrangement (Image 4.17)

Section 4.5.1.4, Table 4.5, also notes that the existing and proposed bus stops and coach stops on Leeson Street will not have any proposed bus shelter, allowing more space on the footpath for pedestrians.

With regards to the suggestion of an additional pedestrian crossing being required at the junction of Morehampton Road and Brendan Road, the existing pedestrian crossing at Donnybrook Fair is proposed to be retained as it is located at the end of the row of shops and is in close proximity to the southbound bus stop at Chainage 1800. There is also a newly proposed pedestrian crossing located at the northern arm of the junction of Morehampton Road and Belmont Avenue / Victoria Ave, in close proximity to the northbound bus stop at Chainage 2000. The two pedestrian crossings are located within a distance of 200m is deemed sufficient to meet the pedestrian desire line at this location. The Proposed Scheme design at the junctions of Morehampton Road and Brendan Road is presented in the 02-General Arrangement Drawings Sheet 06 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.16.

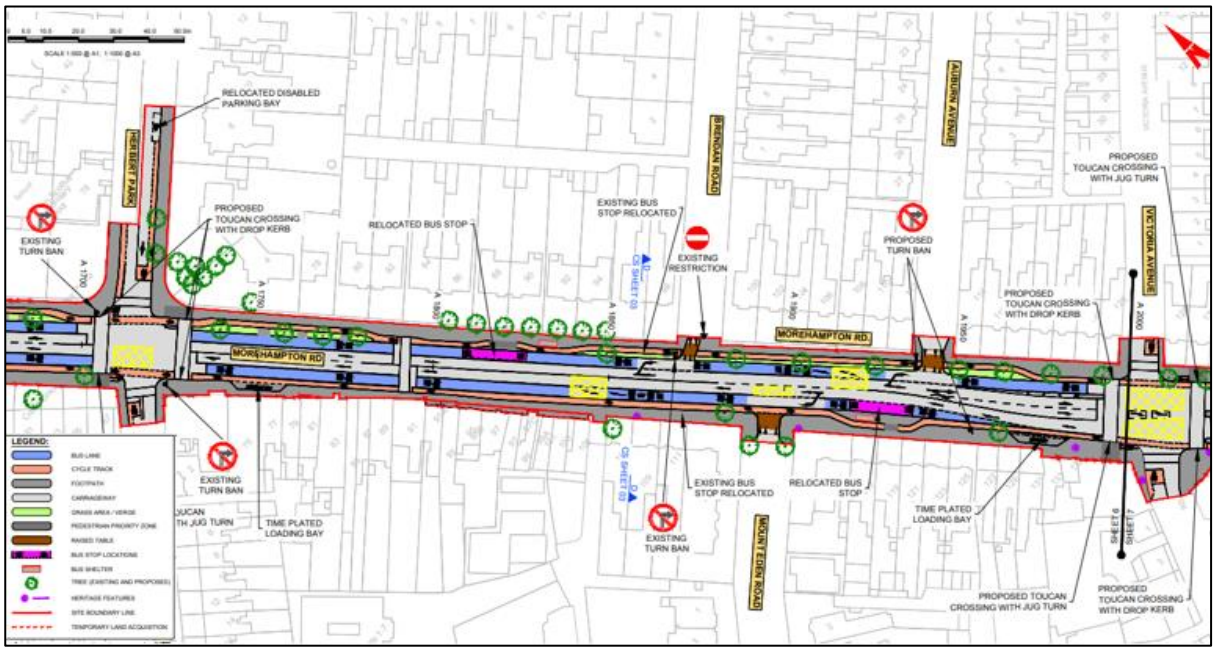


Figure 3.16: Extract from General Arrangement Drawings at Brendan Road (Sheet 06)

In relation to the provision of toucan crossings throughout the Proposed Scheme, these are pedestrian crossings that have been widened to allow cyclists and pedestrians to share crossing space and cross the road at the same time. This creates a safe, controlled, crossing location for both cyclists and pedestrians.

3.1.3.6 Traffic Calming

Summary of issue raised

A number of submissions raised the issue of traffic calming requirements, to decrease traffic volumes in Donnybrook, without strangling village life. Measures such as lower speed limits, flashing speed limit signs, ramps and school safety zones were proposed.

One submission proposed that traffic calming measures should also be put in place for cycles lanes as the power of electric bikes and aggressive cyclists are a major issue.

Response to issue raised

The Proposed Scheme design along Donnybrook Road is presented in the 02-General Arrangement Drawings Sheet 10 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.17.

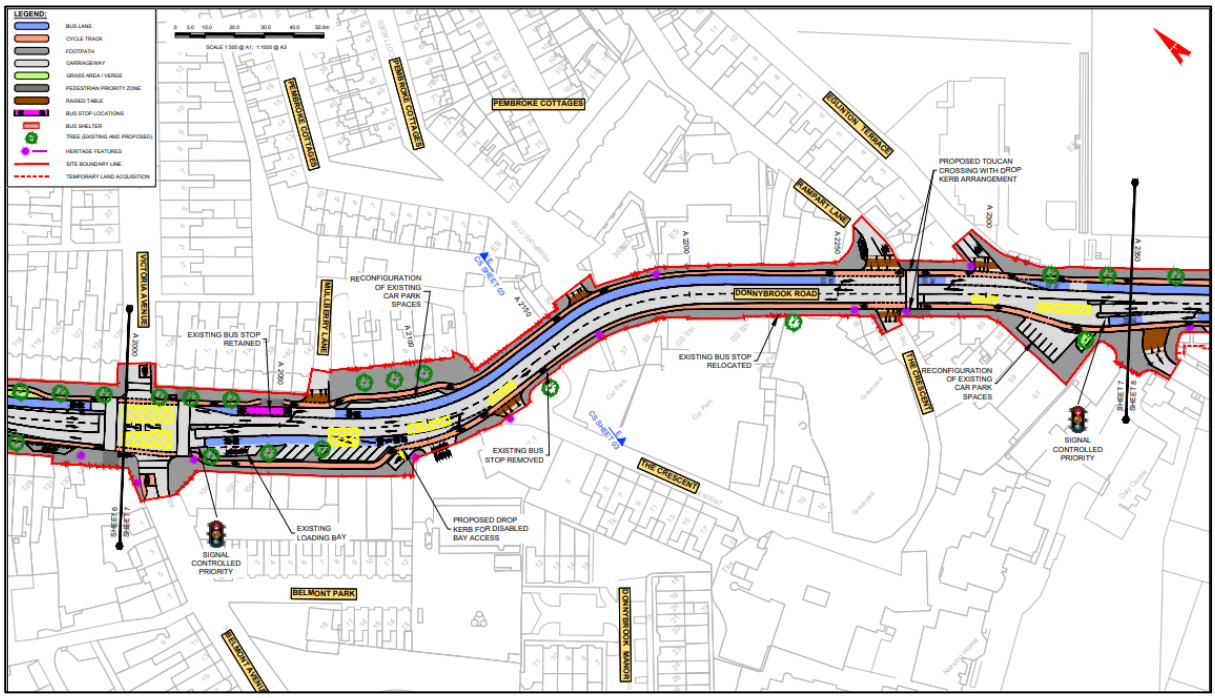


Figure 3.17: Extract from General Arrangement Drawings along Donnybrook Road (Sheet 10)

Traffic Calming Measures

The Proposed Scheme is designed in line with the Proposed Scheme objective to ensure bus priority, safe infrastructure for cycling and pedestrians and that the public realm is carefully considered in the design and development of transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

There are a number of traffic calming measures that have been implemented in the Proposed Scheme that will reduce speeds including improved junction layouts with reduced corner radii, narrow carriageway lane widths, raised table crossings on side roads, proposed speed limit reductions (e.g. Shankill village).

Figure 3.17 shows that priority junctions with raised tables are proposed along Donnybrook Road, this will encourage slow vehicular speeds and help maximise control at intersections. Traffic signals provide more active control for all users including active travel, public transport, and traffic which will assist operational efficiency.

Speed Limit

The existing speed limit on this section of Morehampton and Donnybrook Road is 50km/h. The Proposed Scheme does not include any changes to this existing speed limit and no safety concerns relating to traffic speed have been identified during the design development. It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not highlight any safety issues with the existing speed limit at this location.

The Proposed Scheme design along this section provides for bus lane, traffic lane, segregated cycle track and pedestrian footpath. Signal Control Priority has been employed at certain locations where full segregated bus lane provision has not been possible due to space constraints.

In considering proposals for the introduction of reduced speed limit along sections of the CBCs i.e. 30kph, the primary reference document has been the DTTAS Guidelines for Setting and Managing Speed Limits in Ireland. This document provides guidance to Local Authorities, and other practitioners, in making bye-laws in relation to the setting and management of speed limits in Ireland. Specific guidance is provided in relation to the legislative processes involved in setting speed limits, which will not be discussed in this note, as well as detailed guidance on the various scenarios in which special speed limits should be considered.

The default speed limit within a built-up area is 50kph.

The DTTAS guidance states that:

'The immediate response to road safety issues at particular locations should not be the introduction of a Special Speed Limit that is lower than the default speed limit. Engineering measures should be investigated and/or implemented and only supplemented by a Special Speed Limit if necessary.'

Consideration has been given to the above guideline and the existing speed limit of 50kph is considered to be appropriate in the Donnybrook section.

Cycling Infrastructure

The aim and objectives of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor (Reference Chapter 1 (Introduction) in Volume 2 of the EIAR, Section 1.2 Aim and Objectives).

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

The proposed scale of the BusConnects CBC Infrastructure Works will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. With proposals of this scale, it is critical that the overall design approach matches the stated ambition and can achieve a longevity that such investment deserves. With this in mind, the NTA set about developing 'Design Principles' for the project. These principles would complement existing documents and standards such as the National Cycle Manual and Design Manual for Urban Roads Standards (DMURS). The PDGB was developed to outline the agreed design principles and to enable consistency of design.

Documents such as the National Cycle Manual and DMURS continue to serve the engineering and development industry well and over the past 7-10 years and have played an important role in allowing Ireland to follow international best practice. The PDGB, like all guidance documents, was developed to be cognisant of the everchanging nature of society, including commuting patterns and behaviours.

The typical protected junction layout is presented in Image 16 of Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR and shown in Figure 3.18 below, offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm.

The Protected Junction layout will encourage cyclists to slow down as they ramp down and advance cyclists stop lines are provided. All this will encourage calming measures for cyclists.

Other benefits to this junction design include:

- Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- Raised and protected cycle track approaching junction;
- Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- Improved right-turning safety; and
- Improved sight lines for left turning traffic.

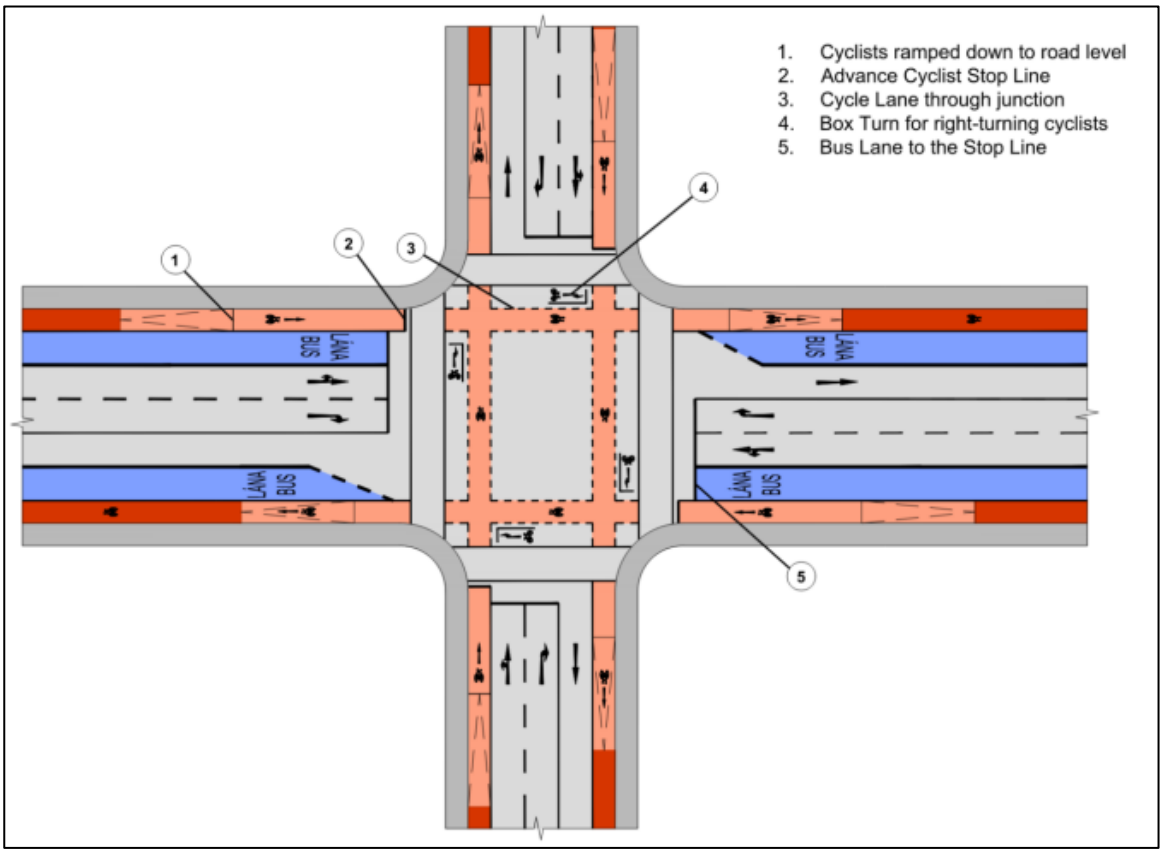


Figure 3.18: Typical Junction Layout from BusConnects Design Guidance Booklet (Image 16 from PDGB)

3.1.4 Other Issues Raised and Responses

3.1.4.1 Constitutional requirements of CPO

Summary of issue raised

One submission referred the Board to commentary by Douglas Hyde B.L. from the Irish Planning & Environmental Law Journal Vol. 29, Number 3 (page 78) in respect of the rationality test as to whether or not a CPO is in breach of a constitutional requirement. This test is intended to be an objective assessment of the balance between the objective to be achieved by the CPO and the impact on the owner of the land proposed to be compulsorily acquired.

Response to issue raised

As stated by Douglas Hyde B.L in the Irish Planning & Environmental Law Journal (Vol. 29, Number 3, page 7

> *"There is a constitutional and legal onus on the applicant/developer (that is, the NTA, in the case of the BusConnects Dublin CBC scheme) to make the case that adverse impacts are the minimum necessary; the Board must be satisfied that the NTA has included in the EIAR an adequate description of the features of the project and/or measures envisaged in order to avoid, prevent or deduce and if possible offset likely significant adverse effects on the environment; the Board must satisfy itself that the NTA properly discharged the function of generation and assessment of an appropriate range of reasonable, viable alternatives"*

The submission makes an assertion that the proposed scheme would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property due to lack of design put forward as part of the Planning application.

The lands are being acquired for the purposes of the Bray to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 (Introduction) in Volume 2 of the EIAR. They are also explained below in response to this submission.

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

Powers of NTA and Statutory basis for the CPO Application

It is a function of the NTA under Section 44(1)(a) of the Dublin Transport Authority Act 2008 (as amended) (the "**2008 Act**") to "*secure the provision of, or to provide, public transport infrastructure*", which includes the provision of the Bray to City Centre Core Bus Corridor Scheme.[1]

In that regard, and as set out in Section 1.4 of Chapter 1 (Introduction) of the EIAR, the NTA has decided in accordance with Section 44(2)(b) of the 2008 Act that the functions in relation to securing the provision of public transport infrastructure should be performed by the NTA.

Section 44(6) of the 2008 Act goes on to provide as follows in relation to the exercise of these functions by the NTA:-

> *"(6) Where—*
>
> *a) a decision is made by the Authority under subsection (2)(b) or (5)(a) for the performance of a particular function otherwise than through a public transport authority or statutory body, or*
>
> *b) the Authority is performing its function of securing the provision of public transport infrastructure in accordance with subsection (2)(e),*
>
> *the following provisions have effect—*
>
> *(i) the Authority shall be empowered (notwithstanding any other enactment) to perform the function, including the acquisition of land for that purpose, and to do any other thing which arises out of or is consequential on or is necessary for the purposes of or would facilitate the performance of the function,*
>
> *(ii) for the purpose of paragraph (a) or (b), land may be acquired by agreement or by means of a compulsory purchase order made by the Authority in accordance with Part XIV of the Act of 2000,*
>
> *(iii) the provisions of any enactment concerned (other than Section 178 of the Act of 2000) apply in relation to the performance of the function subject to such modifications as may be necessary and as if the Authority was named in such enactment in each place where a public transport authority body entitled to exercise the function is named, …"*

Therefore, under Section 44(6) of the 2008 Act, the NTA is empowered to acquire lands by agreement or by means of a compulsory purchase order in accordance with Part XIV of the Planning and Development Act 2000 (as amended) (the "**2000 Act**"), for the purposes of performing its function of providing public transport infrastructure (and in this instance providing the Bray to City Centre Core Bus Corridor Scheme), and such compulsory purchase order may, by virtue of Section 10(4)(d) of the Local Government (No. 2) Act 1960 (as amended), authorise the NTA to extinguish a public right of way.

Section 44(7) of the 2008 Act goes on to provide that the 2000 Act applies to a compulsory acquisition of land under, for example, Section 44(6) of the 2008 Act, as if it were an acquisition under Part XIV of the 2000 Act and for that purpose a reference to a local authority shall be read as a reference to the NTA.

[1] *"public transport infrastructure" is defined in section 2 of the 2008 Act as "infrastructure constructed or provided, or proposed to be constructed or provided, in connection with the provision of public passenger transport services, which includes but is not limited to railway infrastructure, metro railway infrastructure, light railway infrastructure, bus infrastructure, rolling stock, buses, busways, bus lanes, bus garages, cycleways, cycle and pedestrian facilities, interchange facilities or such other class of infrastructure, facility, building or vehicle, whether of the same kind as the aforementioned or not, which the Authority has prescribed to be public transport infrastructure under section 44(13)"*

Section 213 of the 2000 Act is contained in Part XIV of the 2000 Act and is referenced on the face of the CPO for the Proposed Scheme. Section 213(1) of the 2000 Act provides that *'the power conferred on a local authority* [to be read as the NTA by virtue of Section 44 of the 2008 Act] *shall be construed in accordance with this section"*.

Section 213(2) of the 2000 Act states:-

> '*A local authority* [to be read as the NTA by virtue of Section 44 of the 2008 Act] *may, for the purposes of performing any of its functions (whether conferred by or under this Act, or any other enactment passed before or after the passing of this Act),… do all or any of the following:-*
>
> *(i) acquire land, permanently or temporarily, by agreement or compulsorily,*
>
> *(ii) acquire, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land,*
>
> *(iii) restrict or otherwise interfere with, permanently or temporarily, by agreement or compulsorily, any easement, way-leave, water-right or other right over or in respect of any land or water or any substratum of land, and the performance of all or any of the functions referred to in subparagraphs (i), (ii) and (iii) are referred to in this Act as an "acquisition of land".*

Section 213(4) of the 2000 Act states:-

> *'a local authority may be authorised by compulsory purchase order to acquire land for any of the purposes referred to in subsection (2) of this section and Section 10 (as amended by Section 86 of the Housing Act, 1966) of the Local Government (No. 2) Act, 1960, shall be construed so as to apply accordingly and the references to "purposes" in Section 10 (1)(a) of that Act shall be construed as including purposes referred to in subsection (2) of this section".*

Having regard to the provisions of Section 213 of the 2000 Act, reference is therefore correctly made on the face of the CPO for the Proposed Scheme to *"Section 10 of the Local Government (No. 2) Act, 1960 as substituted by Section 86 of the Housing Act, 1966 as amended by Section 6 and the Second Schedule of the Roads Act, 1993"*.

Further, Section 10 of the *Local Government (No. 2) Act, 1960* (the "**1960 Act**") operates, for example, to apply the provisions of Section 76 of the Housing Act 1966 (the "**1966 Act**"), and the Third Schedule thereto. Therefore, reference is correctly made on the face of the CPO for the Proposed Scheme to Section 76 of the 1966 Act and the Third Schedule thereto, and the processes and procedures set out in Section 76 of the 1966 Act and the Third Schedule to the 1966 Act have, accordingly, been followed by the NTA in submitting the CPO for the Proposed Scheme to An Bord Pleanála (the "**Board**") for confirmation. Indeed, the statutory notice which was served on the objector is that required by Article 4(b) of the Third Schedule to the 1966 Act.

Finally, reference is also correctly made on the face of the CPO for the Proposed Scheme to Section 184 of the *Local Government Act 2001 (as amended)* (the "**2001 Act**"), given that Section 184 of the 2001 Act clarifies the rights referenced in Section 213(2)(a) of the 2000 Act (referenced above), as including any easement, way-leave, water right or other right to which Section 213(2)(a) applies granted by or held from the local authority acquiring the land [the reference to local authority here should, by virtue of Section 44 of the 2008 Act, be read as a reference to the NTA].

Purpose of the CPO of the Land

Please refer to response Section 3.1.3.1 in this report for further information on the Justification for CPO which notes details of the proposed works and cross-section required for the CPO of the Proposed Scheme at the location of No.2 Donnybrook Road.

Proposed Scheme Details

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 1 notes details for the Proposed Scheme at Donnybrook.

The design details are also shown in Chapter 4 (Proposed Scheme Description) Part 1 and Part 2 of 3 Figures in Volume 3 of the EIAR.

Chapter 5 (Construction) in Volume 2 of the EIAR describes the construction activities along the Proposed Scheme.

Additionally, the Preliminary Design Report and the associated Appendices of the PDR, part of Supplementary information, also gives description of the design details of the Proposed Scheme.

The design of the Proposed Scheme has been developed to a stage where all potential environmental impacts can be identified, and a fully informed environmental impact assessment has been carried out.

EIAR Assessment

The Environmental Impact Assessment Report (EIAR) has assessed the impacts of the Proposed Scheme in each of the assessment chapters and summarised the predicted significant residual impacts in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR. As described in Chapter 1 (Introduction) in Volume 2 of the EIAR, the EIAR for the Proposed Scheme has been prepared in accordance with the requirements of the EIA Directive and all applicable Irish legislation, as well as 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency in 2022.

Please refer to response Section 3.1.4.13 and Section 3.9.3.10 in this report for further information on the EIAR.

Constitutional Rights

In addition to the lawfulness of the proposed compulsory acquisitions (as coming within the powers of the NTA as outlined above), the acquisitions are considered proportionate. In this latter regard, the courts have established that the power conferred to compulsorily acquire land must be exercised in accordance with the requirements of the constitution, including respecting the property rights of the affected landowner. The confirming authority (being the Board) must be satisfied that the acquisition of the property is clearly justified by the exigencies of the common good.

Accordingly, in applying the proportionality test, the NTA did (in making the Bray to City Centre Core Bus Corridor Compulsory Purchase Order 2023) ensure, and the Board should (in confirming the CPO) ensure that:

1) there is a need that advances the common good which is to be met by the acquisition of the lands in question;

2) the particular property is suitable to meet that need;

3) any alternative methods of meeting the need have been considered; and

4) that the landowner is entitled to be compensated.

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR sets out how there is significant evidence to satisfy the requirement that there is a need that advances the common good. It is axiomatic that the acquisition of land and rights over land will result in interference with the use of those lands by owners/leases/occupiers. However, such interference is proportionate to the legitimate aim being pursued in the interests of the common good.

Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR, the NTA considered the reasonable alternatives to meet the need in accordance with the requirements of the EIA Directive which requires "a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of environmental effects"

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 in Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR provides a detailed summary of this, with further details provided in the Preferred Route Option Report provided in the Supplementary Information submitted with the application for the Proposed Scheme. In terms of alternative solutions, Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the

environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. Section 3.3 in Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR set out that design development and assessment work was carried on this section of the Proposed Scheme. The design development in Donnybrook to inform the Proposed Scheme is documented in Section 6.5 of the Preferred Route Option Report, part of Supplementary Information.

Please refer to response in Section 3.1.4.11 in this report for further information on Route Selection and Land Acquisition, covering the alternatives considered and design development to inform the Proposed Scheme.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.1.4.2 Proposed Trees

Summary of issue raised

One submission raised the concern that the Photomontage 24b was misleading with respect to proposed trees at this location. The proposed 3 no. Tilla Cordata grow to between 20 to 40 metres in height, which is not shown.

The concern was raised that the missing or misleading information available implies that the EIAR fails to adequately consider all potential impacts. The submission also raises the concern that this species of tree is inappropriate for this location as they would overshadow the adjacent buildings and visually dominate the local public realm area.

Response to issue raised

The photomontages as included in Figure 17.2 in Volume 3, Part 3 of 3 of the EIAR intend to show the existing arrangement and a visual representation of the Proposed Scheme from the same viewpoint.

Photomontage View 24b – Proposed, as shown in Figure 3.19 below, shows three proposed trees within the urban realm space in front of No.2 to No.12 Donnybrook Road.

Figure 3.19: Extract from Photomontage View 24b – Proposed

The photomontages are interpretations of the 2D design of the Proposed Scheme incorporating design information from a number of 2D design drawings of the proposals including the General Arrangement drawings, the Landscaping General Arrangement drawings, the Traffic Signs and Road Markings drawings, the Street Lighting Drawings, and the Junction Systems Design drawings (all accompanying Chapter 4 in Volume 3 of the EIAR). Every effort has been made during the compilation and review of the photomontages to ensure that they are an accurate reflection of the proposals at the locations shown.

Section 17.2.4.8.3.3 of Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR states, in part:

'The intent is to provide a best-fit presentation which assists in illustrating the principal effects of the Proposed Scheme at a stage c. 10 to 15 years post completion of construction.'

The impact assessments presented in the EIAR have been completed based on the totality of the information available on the design. The NTA is therefore satisfied that the information presented in the photomontages does not change the findings and conclusions of the impact assessments under the EIAR documents.

The planting strategy has been developed to meet the objectives of the Proposed Scheme and the needs of the Dublin City Tree Strategy and the Dublin Biodiversity Action Plan. The strategy aims to influence the local environment to improve amongst others: air quality; stormwater runoff; health and well-being; and habitat provision.

Section 4.6.12.3.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR states the following:

'*The planting strategy has been developed to meet the needs of the Dublin City Tree Strategy (DCC 2015a) and the Dublin City Biodiversity Action Plan (DCC 2015b) as follows:*

- *Where possible the initial conservation of existing biodiversity has been considered;*
- *Opportunities have been identified to enhance biodiversity through green infrastructure;*
- *Promote the role of street trees planting consistent with the recommendations of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 (Dún Laoghaire-Rathdown County Council 2022) and Dublin City Tree Strategy (DCC 2015a); and*

- *Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit.'*

Section 14.6.5 of the Preliminary Design Report part of Supplementary Information provides list of the tree species proposed in the planinng strategy of the Proposed Scheme. Section 14.6.5 goes on to state:

'The proposed tree species, sizes and spacings are indicative of the design intent and subject to availability and further ground investigation at detail design stage.'

3.1.4.3 Impact on fuel pricing sign and underground drainage within temporary land take

Summary of issue raised

One submission raises concerns regarding the impact to the MID totem fuel pricing sign and their underground forecourt drainage system at the Circle K in Donnybrook within the temporary land take.

Response to issue raised

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which includes enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in 02 – General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states, in part:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state within Section 5.5.3.2 that:

'The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

In relation to the Circle K site at Donnybrook, Section 5.3.1.2 it states:

'Construction works will be required at the Circle K property, in Donnybrook to facilitate the Proposed Scheme. These works will include potential alteration of the forecourt canopy to reduce its overhang over the footpath, reconfiguration of the parking provision and landscaping works. In addition, one of the fuel pumps would be inoperable for the duration of works at Section 1b (15 months).'

The NTA acknowledges the close liaison with Circle K that has been in place during the planning and design stage of the Proposed Scheme. There have been several communications with Circle K, Donnybrook (emails/ phone calls/ MS Teams meetings) with regards to the impact to the Circle K at Donnybrook.

During these discussions NTA received topographical survey information from Circle K to carry out an assessment on the impact to the petrol station. NTA noted that the distance from the nearest pump to the Proposed Scheme site boundary (back of Proposed Scheme footway) would become 3.6m approx. The existing parking and signage areas will be reconfigured, and the layout would be developed in more detail as part of the accommodation works agreement process. Also, NTA currently do not believe that we are not impacting the underground tank infrastructure and also surface drainage.

Section 5.10.2 also states that:

'Mitigation and monitoring measures have been identified as environmental commitments and overarching requirements which shall avoid, reduce or offset potential impacts which could arise throughout the Construction Phase of the Proposed Scheme. These mitigation and monitoring measures which are relevant to the Construction Phase of the Proposed Scheme are detailed in Chapter 6 to Chapter 21, and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) and in Appendix A5.1 CEMP in Volume 4 of this EIAR.'

Also, Section 5.3.1.2 of Chapter 5, further notes that:

'However, the Circle K Donnybrook site has received planning permission to be redeveloped as apartments, and it is currently anticipated that construction of these is due to commence in 2024. In this eventuality (i.e. Circle K no longer in operation and the site redeveloped), the Proposed Scheme would then tie in to the proposed redevelopment.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

3.1.4.4 Objectives of Proposed Scheme and alignment with DCC Development Plan

Summary of issue raised

One submission raised the concern that, while the Proposed Scheme is compatible with the Dublin City Development Plan's emphasis on walking, cycling and public transport, it suggests the core objective of the Proposed Scheme is to take a very large number of people through Donnybrook, not to Donnybrook, and that this is difficult to reconcile with key elements of the Dublin City Development Plan and, in particular;

- the 15 minute city model;
- the identification in the plan of key urban villages, including Donnybrook.

The concern is in relation to the degree to which the proposals do or do not align with and/or do not sufficiently reflect local population, commercial, service and traffic patterns and how the planned bus corridor project might be amended in order to better meet and match these factors.

Response to issue raised

Section 1.2 of Chapter 1 (Introduction) in Volume 2 of the EIAR states the aim and objective of the Proposed Scheme as:

'The aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The objectives of the Proposed Scheme are to:

- *Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;*
- *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;*
- *Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;*
- *Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;*
- *Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and*
- *Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.*

The planning and design of the Proposed Scheme has been guided by this aim and these objectives, with the need for the Proposed Scheme described in detail in Chapter 2 (Need for the Proposed Scheme) of

this EIAR. The outcomes achieved from delivering the Proposed Scheme will be:

- *An attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity;*
- *To facilitate a transport infrastructure network that prioritises walking and cycling and a mode shift to public transport; and*
- *To support increased economic and social potential through integrated land-use and transport planning to reduce the time burden of travel.'*

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets the Proposed Scheme objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the predicted impacts of the population (includes all community and economic assessment topics) during the operation of the Proposed Scheme.

Section 10.6.2 states:

'As outlined within Section 10.4.4 and summarised in Table 10.15 the Proposed Scheme will deliver positive impacts in terms of accessibility to community facilities and commercial businesses for pedestrians, cyclists and bus users during the Operational Phase. The Proposed Scheme is also expected to benefit individuals and businesses whose workers live along the corridor. Retail and leisure businesses along the route could gain a double benefit from both increased sales and improved staff productivity (see Appendix A10.2 in Volume 4 of this EIAR).'

It goes on to state:

'These improvements will help to achieve the aims and objectives of the Proposed Scheme by providing an attractive alternative to the use of private vehicles and promoting a modal shift to walking, cycling and public transport, allowing for greater capacity along the corridor to access residential, community and commercial receptors. As discussed in Appendix A10.2 in Volume 4 of this EIAR, the Proposed Scheme will also ensure the connection of people with essential services such as healthcare facilities and jobs (EY 2021).

In order to accommodate the Proposed Scheme and to ensure it can be readily utilised by sustainable modes of transport, localised significant impacts from permanent land take are expected on a small number of properties. Negative (not significant) impacts are expected on private vehicles travelling in the surrounding road network. However, the design of the Proposed Scheme, which is a result of a detailed design iteration process, ensures that the surrounding road network will have the capacity to accommodate the redistributed traffic during the operation whilst still achieving the aims and objectives of the Proposed Scheme.

Accordingly, it is concluded that the Proposed Scheme will deliver strong benefits for users of sustainable modes of transport, with positive accessibility and amenity impacts for community areas in the study area and align with specific objectives identified in Section 10.1.'

The 15-minute city model is an urban planning concept in which most daily necessities and services, such as work, shopping, education, healthcare, and leisure can be easily reached by a 15-minute walk, bike ride, or public transit ride from any point in the city.

The Proposed Scheme will provide segregated cycling facilities where possible. These high-quality cycle tracks will be typically 2m in width where practical, offering a high level of service and help to reduce dependency on private car use for short journeys. Along the route, improvements and enhancements will be made to footways and pedestrian crossings.

Table 2.12 of Chapter 2 (Need of the Scheme) in Volume 2 of the EIAR notes the alignment of the Proposed Scheme with the Dublin City Development Plan 2022-28 with regards to the 15-minute City model:

'The Proposed Scheme aligns with 15-minute objective as it will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport. It will reduce bus journey times which will in

turn reduce fuel usage and it will promote active travel through enhanced cycle and pedestrian infrastructure.

The Proposed Scheme will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor. Along the route of the Proposed Scheme, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings. Additional landscaping and outdoor amenities will be provided to improve the local urban realm.

The Proposed Scheme will bring greater accessibility to the City Centre and other strategic areas for people to avail of housing, jobs, amenities, and services.'

3.1.4.5 Concerns regarding drafting errors in report

Summary of issue raised

One submission raised the concern regarding drafting errors in the report. The submission noted that Auburn Avenue is repeatedly referred as Aubrey Road, and sentences referring to 'parking provided' which makes no sense. The submission goes on to query the accuracy of the analysis.

Response to issue raised

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR does contain a single erroneous reference to Aubrey Road, when it should state Auburn Avenue. This can be seen in Section 6.4.6.1.2.4, where the typographical error of *'parking provided'*, as highlighted, also occurs within the same sentence. This should state *'parking provision',* not *'parking provided'.* This typographical error occurs twice within the same sentence and is not repeated anywhere else in Chapter 6. The section in question should state the following with the corrections in bold:

'*There are currently 35 designated paid parking spaces on R138 Donnybrook Road predominately between Brendan Road and The Crescent. It is proposed to remove 14 spaces across two locations: opposite* **[Auburn Avenue]** *where parking* **[provision]** *is removed and adjacent to Mulberry Lane where parking* **[provision]** *is reduced. The impact is thus considered to be Negative, Slight and Long-term*'.

This exact same error is then repeated in Section 6.6.2.2.3 in Appendix A6.1 (Transport Impact Assessment Report) in Volume 4 Part 1 of 4 of the EIAR. All other references to Auburn Avenue within Chapter 6 and its Appendices are correct. It should be noted that there is also an Aubrey Park within Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) of the Proposed Scheme, with all references to that road being correct within Chapter 6 and its Appendices.

NTA is satisfied that this does not change the findings and conclusions of the impact assessments.

3.1.4.6 Lack of consultation with local residents

Summary of issue raised

One submission raised the concern that the residents near the bus corridor have not been consulted or informed about the Proposed Scheme.

Response to issue raised

In May 2017 the NTA launched the BusConnects Programme and then in June 2018 published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of Core Bus Corridor Routes across Dublin.

Since the commencement of the non-statutory period of the CBC Infrastructure Works, there has been a total of three rounds of non-statutory public consultation.

The term "non-statutory" is used to describe the public consultation which occurred from [2018 to 2022] because this consultation process with the public and interested stakeholders was undertaken by the NTA on a voluntary basis and was not required by law. The purpose of this process was to inform the public and stakeholders of the evolution of the proposal from an early stage and to seek feedback on the design proposals.

This is in contrast with the statutory consultation period which ran from 15 August 2023 to 10 October 2023 during which an opportunity was provided to members of the public (as well as certain prescribed bodies) to make submissions to An Bord Pleanála in accordance with Section 51 of the Roads Act 1993 (as amended).

First Round of Non-Statutory Public Consultation – The first round of non-statutory public consultation on the Emerging Preferred Route Options was from November 2018 until March 2019 divided into three phases. The reason it was divided into three phases was primarily due to the fact that the BusConnects Infrastructure team carried out all aspects of the first round without external design service providers having been appointed at that stage. Moreover, the BusConnects Infrastructure team sought to gain maximum engagement from the public from the commencement of the CBC Infrastructure Works to raise awareness, establish relationships and gain immediate insight and knowledge of the issues at an early stage.

It was also important that at the start of the non-statutory consultation that considerable time and resources were dedicated by the BusConnects Infrastructure team to initiate contact with potential impacted properties. Each of the potentially impacted property owners were offered the opportunity to meet with members of the BusConnects Infrastructure team on a one-to-one basis which meant a significant amount of resources had to be dedicated to this process.

Second Round of Non-Statutory Public Consultation – The non-statutory public consultation for the Preferred Route Options ran from March 2020 to April 2020 as Ireland entered the first lockdown due to the Covid-19 pandemic. The consultation continued in deference to the number of online submissions received during this period. A number of public facing elements of the consultation were cancelled in line with Government health guidelines, however, all other elements of the consultation including online versions of the brochures, supporting documentation were available. Other communication tools including the Freephone, email and digital aspects remained active for submissions to be received.

Third Round of Non-Statutory Public Consultation – This round of non-statutory public consultation for the Preferred Route Options from November 2020 to December 2020 was added due to the disruption caused to the second-round consultation process. It was important that further engagement was facilitated to communicate design development changes prior to concluding the determination of the Preferred Route Options. Methods had emerged whereby traditional public information events could be replaced by virtual online alternatives to offset the restrictions that continued associated with the Covid-19 Pandemic. Accordingly, all elements of the public consultation and stakeholder engagement were conducted virtually or online in line with the Government health guidelines.

Public Consultation Part 1 of 2 and Part 2 of 2 (Supplementary Information) – This report summarises the consultation process of the Proposed Scheme during the design development process. Additional Public Consultation Reports are also provided under the Preferred Route Options Report Appendix B and C, also part of Supplementary Information.

Section 1.6 in Chapter 1 (Introduction) in Volume 2 of the EIAR, provides details of the various stages of public consultation process. These include details of community forums and resident group meetings held at each stage of the public consultation.

3.1.4.7 Provision for turning cyclists

Summary of issue raised

One submission raises the concern that the provision for cyclists is very weak at a number of key junctions, for example inbound cyclists wishing to turn right at Nutley Lane. They have also noted that it is very difficult to know how one is to cross, other than dismounting and walking across the pedestrian crossing. If there's to be more cycling there needs to be better thinking, analysis, and design of such junctions.

Response to issue raised

With regards to the point raised regarding proposed junctions being challenging for cyclists, refer to response in Section 3.1.3.6 on Traffic Calming under 'Cycling Infrastructure' and also note below.

The junction types set out in the in Appendix A4.1 (Preliminary Design Guidance Booklet (PDGB)) in Volume 4 Part 1 of 4 of the EIAR directly align to the Proposed Scheme core aims and objectives.

The typical protected junction layout as described above and shown in Figure 3.18 has been adopted at the Nutley Lane junction. This provides improved right-turning safety for cyclists as outlined in the (PDGB).

3.1.4.8 Suggested Alternative Design

Summary of issue raised

This submission proposes an alternative design at this location of a two-way cycle lane from Wellington Close along Pembroke Park or through the west side of Herbert Park and on through east Herbert Park to join the Dodder cycle way, instead of the proposed plan, which requires removal of parking and reducing footpath widths.

Response to issue raised

NTA notes the alternate proposal suggested at this location, which would consist of a two-way cycle lane from Wellington Close along Pembroke Park or through the west side of Herbert Park and on through east Herbert Park to join the Dodder cycle way.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives.

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR provides a detailed summary of this, with further details provided in the Preferred Route Option Report, including Appendix L (the UCD to City Centre Bus Corridor – Route Options Assessment Study Report), provided in the Supplementary Information submitted with the application for the Proposed Scheme.

Section 5.2.1.2 of the Preferred Route Options Report, part of Supplementary Information notes, *'From the previous Route Options Assessment Study Report for the City Centre to UCD scheme, the sifting process for the Section 1 (Lesson Street to UCD) study area resulted in one feasible route, namely Leeson Street (Upper & Lower), Morehampton Road, Donnybrook Road, and the R138 Stillorgan Road. This ties in with the E Spine corridor from the BusConnects Network Redesign proposals.'*

Figure 3.20 shows an extract from Chapter 3 (Consideration of Reasonable Alternatives) Volume 2 of EIAR route options remaining after the Stage 1 Shifting in Section 1 (Lesson Street to UCD) of the Proposed Scheme. Various options were assessed as part of this single route, to accommodate bus lanes, traffic lane, cycle tracks and footpaths and these are discussed in Section 3.3.2.1 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR.

Image 3.11: Section 1 Route Options Remaining After Stage 1 Sifting (UCD to City Centre (St. Stephen's Green) CBC Feasibility and Options Report (NTA 2018))

Figure 3.20: Extract from EIAR Chapter 3 (Figure 3.11 Section 1 Route Options Remaining after Stage 1 Sifting)

In order to achieve these objectives, it is essential to enhance pedestrian and cyclists' safety, as well as providing priority to bus movement over general traffic movements, particularly at road junctions, including segregating cyclist from general traffic wherever practicable.

The GDA Cycle Network Plan 2013 was key in assessing the cycling infrastructure along the Proposed Scheme. The GDACNP 2013 proposed a network of cycle links throughout the GDA, categorised as follows:

- Primary Routes: Main cycle arteries that cross the urban area and carry most cycle traffic;
- Secondary Routes: Link between principal cycle routes and local zones;
- Feeder Routes: Cycle routes within local zones and/or connections from zones to the network
- levels above;
- Inter-Urban Routes: Links the towns and city across rural areas and includes the elements of the
- National Cycle Network within the GDA; and
- Green Route Network: Cycle routes developed predominately for tourist, recreational and leisure purposes but may also carry elements of the utility cycle route network above. Many National Cycle Routes will be of this type.

The GDA Cycle Network Plan 2013 references that '*Lesson Street* to *Donnybrook is a Primary Route of the GDA Cycle Network Plan*'. Segregated cycling facility already existing along this section which have been improved as part of the Proposed Scheme. Segregated cycling infrastructure along the Morehampton and Donnybrook Roads will provide a safe direct route along the Proposed Scheme corridor connecting City to Donnybrook to Stillorgan and further Shankill and Bray.

Image 2.1 in Section 2.2.1.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and shown in Figure 3.21 below shows the extract from the GDA CNP 2013 highlighting the Primary Route S01/ N10, which runs along the Proposed Scheme.

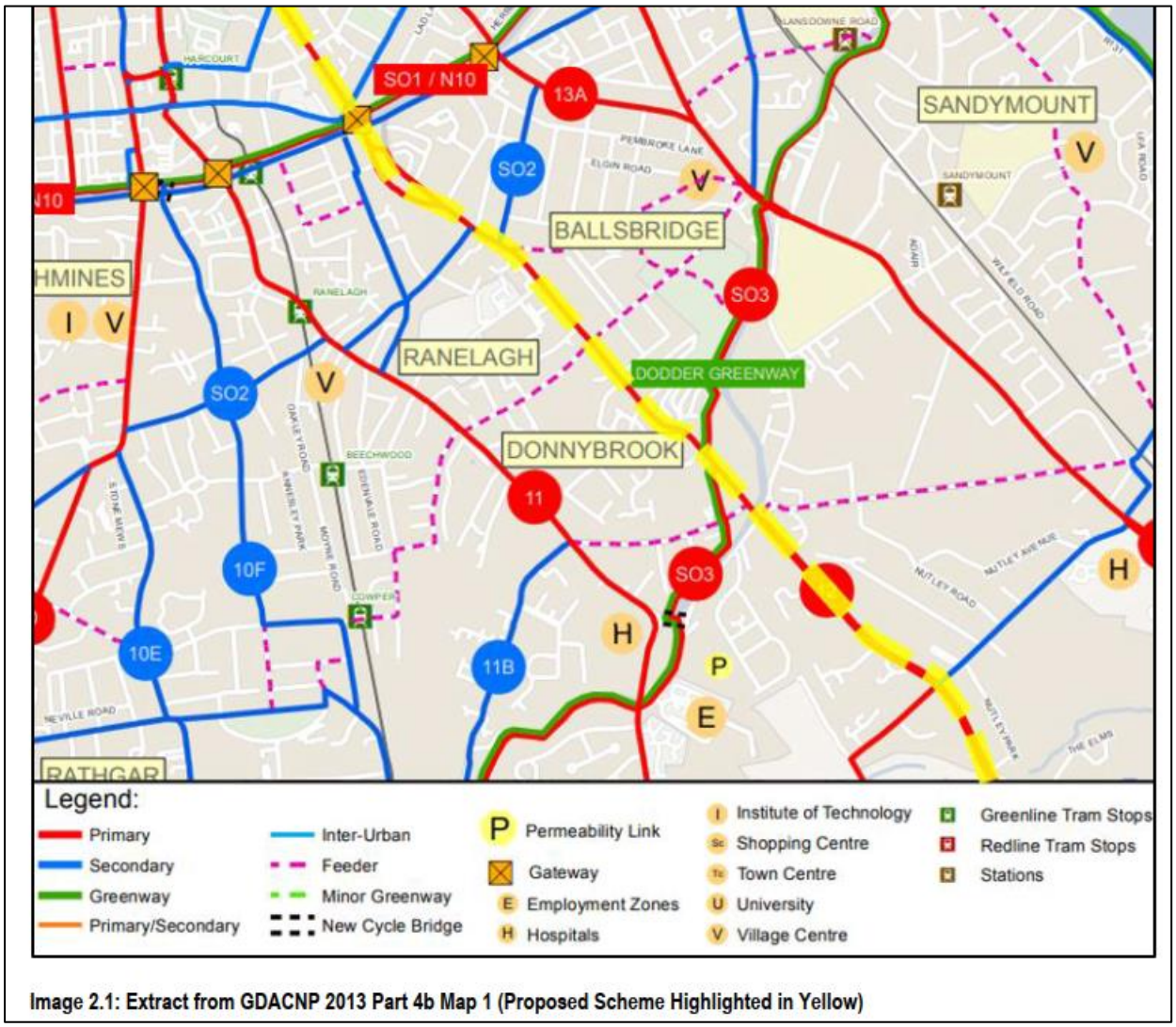


Image 2.1: Extract from GDACNP 2013 Part 4b Map 1 (Proposed Scheme Highlighted in Yellow)

Figure 3.21: Extract from EIAR Chapter 2 showing GDA CNP 2013

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the proposals and the proposed design takes them into consideration. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and Section 4.6.6.3 states the following planning application, in relation to cycling schemes, has been granted.

- ***'Dodder Greenway**: Plans are being developed by DCC for the Dodder Greenway, which will interface with the Proposed Scheme in the Donnybrook area. Coordination has taken place with DCC on the potential integration opportunities, which includes a toucan crossing at the tie-in with the proposed greenway at the Eglinton Road junction.'*

Hence, the Proposed Scheme at this location is deemed to be more advantageous route for cyclists as compared to the alternative offline cycle route proposed by the submission. The Proposed Scheme will provide a safe direct route along the Proposed Scheme corridor connecting City to Donnybrook to Stillorgan and further Shankill and Bray and is in accordance with the GDA Cycle Network.

3.1.4.9 Drainage

Summary of issue raised

One submission raises a concern in relation to the drainage implications associated with the works on the public road, in that they may negatively impact their retained property and parking areas.

Response to issue raised

Section 4.6.15 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the approach taken to drainage design for newly paved areas. In particular, the principal objectives of the drainage design are described in Section 4.6.15.4 as follows:

- *'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance. Unless informed otherwise via hydraulic models, drainage structures for existing paved areas are assumed to have been designed with a return period of no flooding in 1:5 years;*
- *A SuDS drainage design has been developed for all newly paved areas in accordance with the SuDS hierarchy set out in the Drainage Design Basis. SuDS are provided to ensure no increase on existing runoff rates from new or existing paved areas;*
- *Due to the largely impermeable nature of soils across Dublin, infiltration rates were assumed to be zero for calculating the required attenuation volumes of any SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will need to be completed so that infiltration rates can be considered in a future design stage;*
- *All runoff from road pavement or any other paved areas is collected in a positive drainage system. Over-the-edge discharges are not permitted; and*
- *Narrow filter drains or fin drains are not expected for inner city roads.'*

Section 13.4.1.1 in Chapter 13 (Water) in Volume 2 of the EIAR states:

'The drainage design includes principles relating to Sustainable Drainage Systems (SuDS). A SuDS drainage design has been developed as a first preference and in accordance with the SuDS hierarchy as described in the SuDS Manual C753 (CIRIA 2015) (hereafter referred to as the SuDS Manual). The SuDS Manual recommends that when considering SuDS solutions, the preferred approach is a hierarchy whereby runoff using source control solutions (e.g. pervious surfacing) are considered first. Where source control is not possible or cannot fully address an increase in runoff from a development, residual flows are then managed using site controls (e.g. bioretention / infiltration basins). If this is not practical or residual flows remain above existing runoff rates, regional controls (e.g. oversized pipes) are used. SuDS provide the dual benefits of controlling flows and treating water quality. In areas where the catchment is proposed to remain unchanged as no additional impermeable areas are proposed, the design consists of relocating existing gullies (where possible) to new locations.'

The Proposed Scheme primarily involves the reallocation of existing road space. Where additional impermeable areas are proposed, a SuDS strategy has been developed to ensure that there will be no increase in existing runoff rates. This is the appropriate surface water management strategy for the Proposed Scheme.

A Flood Risk Assessment was undertaken for the Proposed Scheme and is included as Appendix A13.2 in Volume 4 Part 3 of 4 of the EIAR. Supplementary information is also provided in Appendix K Drainage Design Basis Document of the Preliminary Design Report. The Proposed Surface Water Drainage works are presented in the 11-Proposed Surface Water Drainage Works drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR and shown below in Figure 3.22.

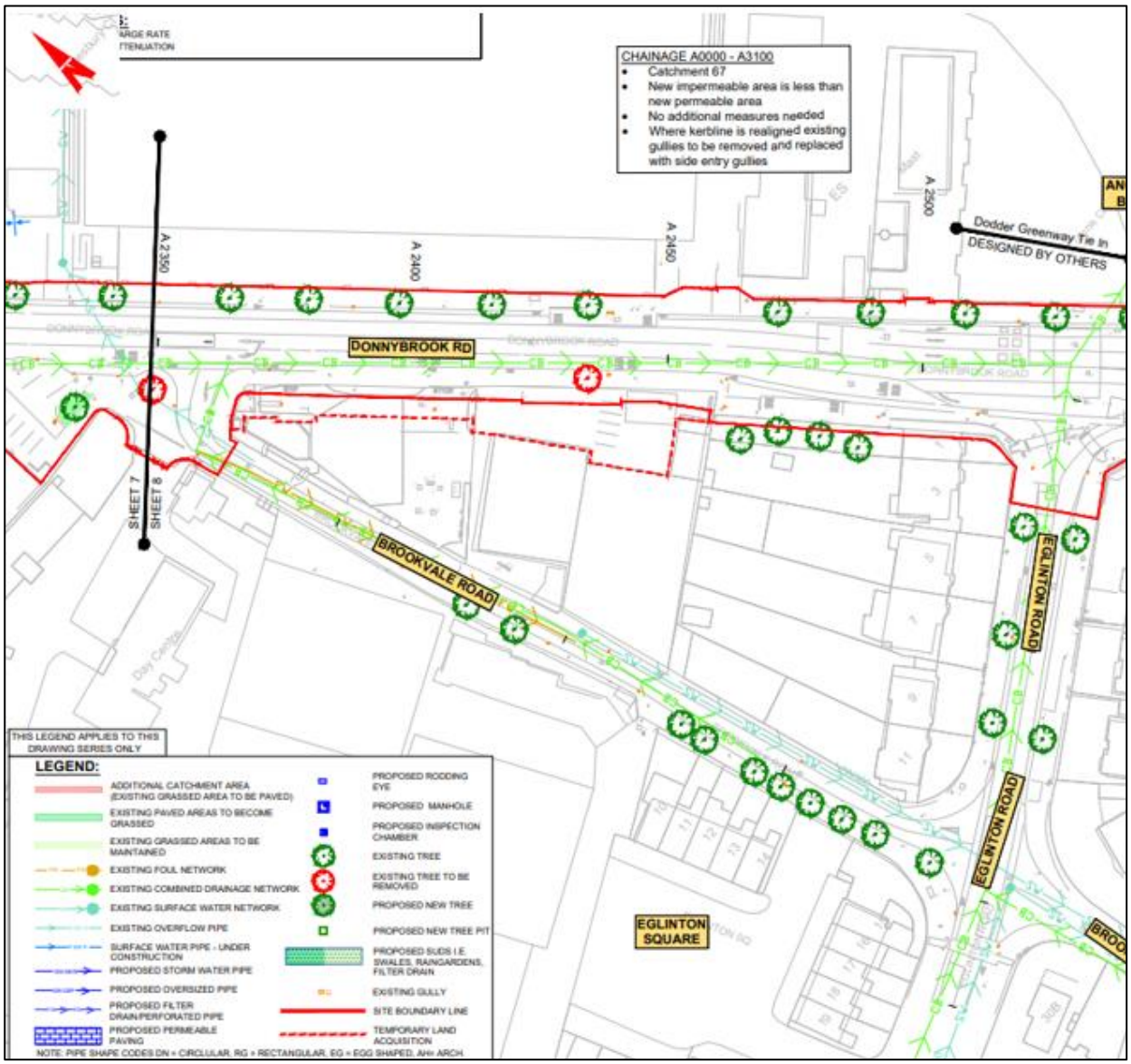


Figure 3.22: Extract from Proposed Surface Water Drainage Works Drawings (Sheet 08)

3.1.4.10 Noise

Summary of issue raised

One submission raises the issue that inadequate information has been provided regarding the mitigation measures that are being proposed to control increased noise pollution from the intensive bus corridor.

Response to issue raised

Regarding the noise impact of the Proposed Scheme, Section 9.4.4.1 in Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR provides details of the assessment undertaken for the Operational Phase of the Proposed Scheme in respect of the potential noise and vibration impacts associated with altered traffic flows, realigned traffic lanes and displaced traffic flows.

Section 9.4.4.1.1.5 states that:

'Along the majority of roads off the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to be Indirect, Positive, Moderate and Short to Medium-Term impact to Indirect, Negative, Slight to Moderate and Short to Medium-Term impact (Table 9.17) for the majority of roads due to the negligible to low volume of additional traffic added once the Proposed Scheme becomes operational.' It goes on to state that *'There are a small number of roads in the overall study area where there are potential initial significant impacts. These are defined as roads with a daytime traffic noise level above 55 dB LAeq,16hr and an increase in noise level greater than 3 dB.'* Table 9.47 lists these roads and the section of Donnybrook Road at the location of the Fast Fit is not included in Table 9.47.'

Section 9.5.2.1 summarises the change in road traffic noise in the Operational Phase as follows:

'The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'

In respect of electric buses, as discussed in Section 9.4.4.1.1.4, during the proposed Opening Year (2028), the NTA forecast is for 94% of the city bus fleet to be EVs or HEVs. For the Design Year (2043), the city bus fleet is forecast to be 100% electric. The operation of electric and hybrid buses will eliminate ICE noise from buses accelerating, decelerating, and idling at bus stops which is the dominant noise source.

In addition, the characteristic of noise from EVs is subjectively less intrusive compared to those with ICE's and is masked to a much greater extent by surrounding road traffic. It is noted the bus stops along the Proposed Scheme will be used by other bus operators which may not transition to EV and HEVs over the same period as the city bus fleet. The volume of these buses along the Proposed Scheme will, however, be significantly less than the city bus fleet and hence, noise levels associated with these areas will not generate significant noise levels over the prevailing noise environment.

Section 9.5.2 of Chapter 9 (Noise and Vibration) describes the mitigation measures required during the Operational Phase of the Proposed Scheme to mitigate potential noise impacts. With respect to the change in traffic noise it states the following:

'The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'

With respect to construction traffic noise impacts, as noted in Figure 9.3, a noise impact of Not Significant is forecast along Donnybrook Road in the vicinity of Fast Fit.

The EIAR contains a comprehensive set of mitigation measures to minimise Construction Phase impacts, including noise impacts. Construction noise mitigation measures are set out in Chapter 9 and Chapter 22 (and are also summarised in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 in the EIAR).

Section 9.5.1.1 states that:

'The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228–1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.' It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 (BSI 2014a)'*

Section 9.5.1.1 also states that:

'BS 5228–1 includes guidance on several aspects of construction site practices, which include, but are not limited to:

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1. states that:

'The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.9: and Table 9.12).'

[Note - Table 9.9 of Section 9.2.4.1 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 sets out the proposed working hours and states:

'It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state:

'The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.46), other construction activities will be scheduled to not result in significant cumulative noise levels'.

In summary the noise abatement measures set out in the EIAR that the appointed contractor will be required to put in place to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 will result in appropriate and adequate mitigation measures in respect of construction noise impact at this location during construction.

3.1.4.11 Route Selection and Land Acquisition

Summary of issue raised

One submission raises the concern that the route has been designated with an excessive acquisition and queried the design process.

Response to issue raised

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR provides a detailed summary of this, with further details provided in the Preferred Route Option Report, including Appendix M (the Bray to City Centre CBC Feasibility and Options Report, December 2017), provided in the Supplementary Information submitted with the application for the Proposed Scheme.

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the reasonable alternatives studied and the main reasons for the selection of the proposed Bray to City Centre Core Bus Corridor Scheme, taking into account the effects on the environment. It considers the alternatives at three levels:

- Strategic Alternatives;
- Route Alternatives; and
- Design Alternatives.

The reasonable alternatives studied which are relevant to the Proposed Scheme and its specific characteristics are described in the subsequent sections of this Chapter. The strategic alternatives involved study of the following:

- GDA Transport Strategy 2016 – 2035
- GDA Cycle Network Plan (NTA 2013)
- Bus Rapid Transit – Core Network Report (NTA 2012);
- Review of the DART Expansion Programme (2015);
- BRT Alternative

- Metro Alternative
- Light Rail Alternative
- Demand Management Alternative
- Technological Alternative
- Route Alternatives

GDA Cycle Network Plan was key in assessing the cycling infrastructure along the Proposed Scheme. Section 2.2 of the Preferred Route Options Report, part of Supplementary Information notes the following on the GDA CNP:

'The Greater Dublin Area Cycle Network Plan (the 'GDA Cycle Network Plan') was adopted by the NTA in early 2014 following a period of consultation with the public and various stakeholders. This plan forms the strategy for the implementation of a high-quality, integrated cycle network for the GDA.

There are a number of primary (Routes 12, 12A, S01, S03, S04, S05), secondary (Routes C7, S01a, S02, 13E/N5, S04, S06, 13C, 13G), Inter Urban (Route D4) and Greenway (Dodder Greenway) cycle routes identified either running along or crossing the Proposed Scheme.

During the earlier assessment process which identified the EPR Option, the provision of these cycle routes was considered at all stages. Therefore, as part of the options assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for the required cycling infrastructure, where practicable, to the appropriate level and quality of service (as defined by the NTA National Cycle Manual) required for primary and secondary cycle routes.

It is noted that in preparing the GDA Transport Strategy (2022 - 2042) the NTA also carried out a review of the GDA Cycle Network Plan. This review culminated in the preparation of the 2022 Greater Dublin Area Cycle Network which was published alongside the GDA Transport Strategy (2022 - 2042). With respect to the Proposed Scheme, the 2022 Greater Dublin Area Cycle Network is broadly aligned with the 2013 GDA Cycle Network Plan.

Section 3.3 of Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR, goes on to state the following on the Route Alternatives:

'Following on from the strategic alternatives considered earlier, this section sets out the route alternatives which were considered as part of the process to establish the Proposed Scheme. Development of the Proposed Scheme has evolved in the following stages:

1) *Feasibility and Options Reports were concluded in December 2017 and March 2018 (two reports associated with the Proposed Scheme (Bray to UCD CBC in December 2017 and UCD to City Centre (St. Stephen's Green) CBC in March 2018)), setting out the initial route options and concluding with the identification of the combined Emerging Preferred Route;*

2) *A first round of non-statutory Public Consultation was undertaken on the Emerging Preferred Route from 26 February 2019 to 31 May 2019;*

3) *Development of Draft Preferred Route Option (May 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder and community engagement and the availability of additional design information, the design of the Emerging Preferred Route evolved with further alternatives considered;*

4) *A second round of non-statutory Public Consultation was undertaken on the draft Preferred Route Option from 4 March 2020 to 17 April 2020. Due to the introduction of COVID-19 restrictions, some planned in-person information events were cancelled, leading to a decision to hold a third consultation later in the year;*

5) *A third round of non-statutory Public Consultation was undertaken on the updated draft Preferred Route Option from 4 November 2020 to 16 December 2020; and*

6) *Finalisation of Preferred Route Option. Informed by feedback from the overall public consultation process, continuing stakeholder engagement and the availability of additional design information, the Preferred Route Option, being the Proposed Scheme, was finalised.*

Alternative route options have been considered in a number of areas during the iterative design of the Proposed Scheme, such as the location of offline cycle routes and the road layout in constrained locations. The iterative development of the Proposed Scheme has also been informed by a review of feedback and new information received during each stage of public consultation and as data, such as topographical surveys, transport and environmental information was collected and assessed. In addition, the potential for climate impact was considered in all phases of the design process for the Proposed Scheme. As the design progressed climate was indirectly affected in a positive way by refining the design at each stage through reducing the physical footprint of the Proposed Scheme coupled with the inclusion of technological bus priority measures.

Key environmental aspects have been considered during the examination of reasonable alternatives in the development of the Preferred Route Option for the Proposed Scheme. Environmental specialists have been involved in the iteration of key aspects of the Proposed Scheme with the engineering design team. The following key environmental aspects were considered:

- ***Archaeological, Architectural and Cultural Heritage** – There is the potential for impacts on archaeological, architectural and cultural heritage when providing CBC infrastructure. The assessment had regard to Recorded Monuments and Protected Structures, Sites of Archaeological or Cultural Heritage and on buildings listed on the National Inventory of Architectural Heritage adjacent to the corridor;*
- ***Flora and Fauna** – The provision of the CBC could have negative impacts on flora and fauna, for example, through construction of new infrastructure through green field sites;*
- ***Soils and Geology** – Construction of infrastructure necessary for the provision of the CBC has the potential to negatively impact on soils and geology. For example, through land acquisition and ground excavation. There is also the potential to encounter ground contamination from historical industries;*
- ***Hydrology** – The provision of CBC infrastructure may include aspects (for example structures) with the potential to impact on hydrology;*
- ***Landscape and Visual** – Provision of CBC infrastructure has the potential to negatively impact on the landscape and visual aspects of the area, for example, by the removal of front gardens or green spaces or the altering of streetscapes, character and features;*
- ***Noise, Vibration and Air** – Provision of CBC infrastructure (e.g. the construction activities), has the potential to negatively impact on noise, vibration and air quality along a scheme. For example, through construction works;*
- ***Land Use and the Built Environment** – This criterion assesses the impact of each option on land use character, and measured impacts which would prevent land from achieving its intended use, for example through land acquisition, removal of parking spaces or severance of land; and*
- ***Climate** – Construction works involve negative GHG emissions impacts, while operational efficiencies of public transport, walking and cycling through modal shift from car usage has the potential to reduce GHG impacts.'*

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 in Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR provides a detailed summary of this, with further details provided in the Preferred Route Option Report, including Appendix L (the UCD to City Centre Bus Corridor – Route Options Assessment Study Report), provided in the Supplementary Information submitted with the application for the Proposed Scheme.

Section 5.2.1.2 in the Preferred Route Options Report notes:

'From the previous Route Options Assessment Study Report for the City Centre to UCD scheme, the sifting process for the Section 1 (Lesson Street to UCD) study area resulted in one feasible route, namely Leeson Street (Upper & Lower), Morehampton Road, Donnybrook Road, and the R138 Stillorgan Road. This ties in with the E Spine corridor from the BusConnects Network Redesign proposals.'

Figure 3.23 shows an extract from Preferred Route Options Report, part of Supplementary Information presents the Emerging Preferred Route in Section 1 (Lesson Street to UCD) of the Proposed Scheme.

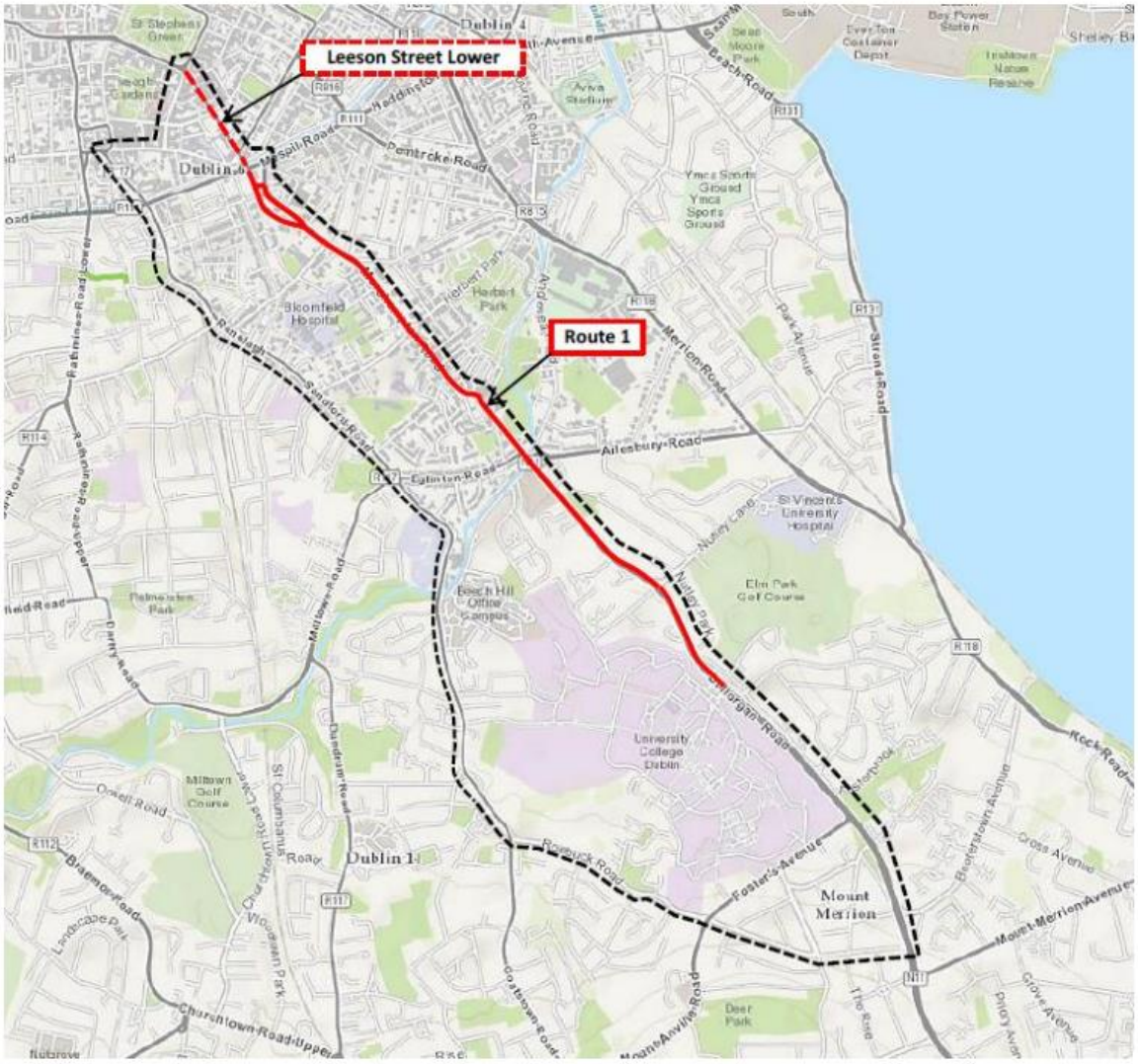


Figure 5.1: Previous UCD to City Centre Route Options Assessment Study Report Viable Route Options for Section 1

Figure 3.23: Extract from Preferred Route Options Report (Figure 5.1 EPR Route Option in Section 1)

Section 3.3.2 in Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR outlines the Stage 2 – Route Options Assessment. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options. The Section 1 route in Figure 3.23 was then subdivided into five segments for further development. These segments are shown in Figure 3.24 below. The sections relevant to the Donnybrook area of the Proposed Scheme are:

- Section 1B (Donnybrook Road / Anglesea Bridge to Rampart Lane);
- Section 1C (Donnybrook Road / Rampart Lane to Pembroke Cottages); and
- Section 1D (Morehampton Road / Pembroke Cottages to Appian Way).

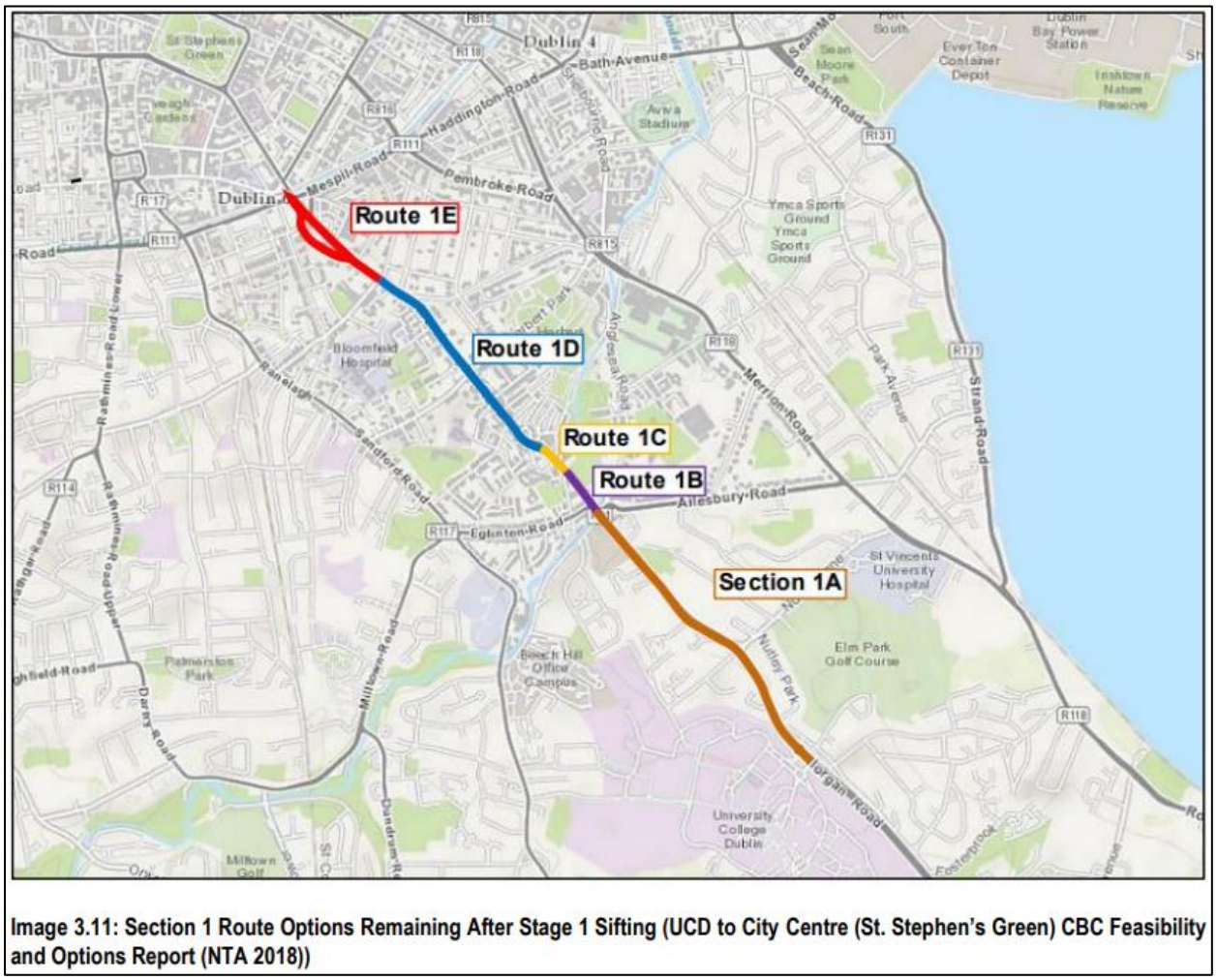


Image 3.11: Section 1 Route Options Remaining After Stage 1 Sifting (UCD to City Centre (St. Stephen's Green) CBC Feasibility and Options Report (NTA 2018))

Figure 3.24: Extract from EIAR Chapter 3 (Figure 3.11 Section 1 Route Options)

Section 3.3.2.1 in Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR summarises the assessment of these sub-sections 1A to 1E. Sections 1B, Section 1C and Section 1D assessments state:

*'**Segment 1B** runs along Donnybrook Road from Anglesea Bridge to Rampart Lane. Three scheme options were assessed for this segment, Option 1B1, Option 1B2 and Option 1B3:*

- *Option 1B1 would include cyclists and buses sharing the bus lanes both inbound and outbound throughout the section. This would require the reduction of outbound traffic lanes from two to one;*
- *Option 1B2 would include segregated cycle and bus facilities on the inbound carriageway, with cyclists and buses sharing the lane on the outbound carriageway. This would also require the reduction of outbound traffic lanes from two to one, but also require land take and impact a loading bay and some parking; and*
- ***Option 1B3 would include segregated cycle and bus facilities both inbound and outbound.** This would also require the reduction of outbound traffic lanes from two to one, but also require land take and impact a loading bay and some parking.*

The assessment concluded that, while Option 1B3 would be the most expensive due to the quantity of land take required, it scores higher under the Transport Reliability and Quality; Cycle Network Integration; and Road Safety sub-criteria due to the full segregation of buses and cyclists in both directions. Option 1B1 scored higher under the Flora and Fauna; Landscape and Visual; and Land Use Character sub-criteria as a result of its lesser impact on trees, footpaths and parking. Despite this, Option 1B3 scored highest and was selected to form part of Route 1.

***Segment 1C** runs along Donnybrook Road from Rampart Lane to Pembroke Cottages. Two scheme options were assessed for this segment, Option 1C1 and Option 1C2:*

- ***Option 1C1 would provide adequate bus and cycle facilities through reduced carriageway design widths.** This option would provide one traffic lane and one shared bus / cycle lane in each direction, avoiding the need to demolish existing footpaths and / or buildings; and*

- *Option 1C2 would involve full segregated bus and cycle facilities in both directions through widening of the carriageway. This option would require demolition of existing buildings.*

The assessment concluded that Option 1C2 scored higher under the Transport Reliability and Quality; Cycle Network Integration; and Road Safety sub-criteria due to the provision of full bus and cycle segregation. However Option 1C1 scored higher under the Capital Cost; Land Use Integration; and Landscape and Visual sub-criteria as it does not require any demolition of the existing buildings. Therefore Option 1C1 scored highest and was selected to form part of Route 1.

***Segment 1D** runs along Morehampton Road from Pembroke Cottages to Appian Way. Two scheme options were assessed for this segment, Option 1D1 and Option 1D2:*

- *Option 1D1 would provide full bus and cycle facilities in both directions, with cycle lanes running adjacent to the carriageway. This would require the removal of the existing trees that line the carriageway, but the parking along the road would be preserved; and*
- ***Option 1D2 would provide full bus and cycle facilities in both directions, with the cycle lanes running between the footpath and the existing trees**. This would result in the preservation of more of the trees, however most parking spaces along this segment would be removed.*

The assessment concluded that Option 1D2 scored higher under the Land Use Integration; Flora and Fauna; and Landscape and Visual sub-criteria due to the better preservation of the existing trees and the streetscape. Therefore, Option 1D2 scored highest and was selected to form part of Route 1.'

Section 3.4.1 of Chapter 3 (Reasonable Alternative) in Volume 2 of the EIAR details the development of the Draft Preferred Route Option, noting: *'Following the completion of the public consultation in relation to the Emerging Preferred Route, various amendments were made to the scheme proposals to address a number of the issues raised in submissions, including incorporating suggestions and recommendations from local residents, community groups and stakeholders, and / or arising from the availability of additional information. These amendments were incorporated into the designs and informed a draft Preferred Route Option.'*

The Preferred Route Option was divided into four 'sections', with Section 1 (St. Stephen's Green to UCD), the relevant section for Donnybrook.

Section 3.4.1.1 in Chapter 3 (Consideration of Alternatives) in Vol 2 of the EIAR goes on to note that three areas of Section 1 were identified for re-examination. One of the three was Section 1C – Eglinton Terrace to Belmont Avenue.

Section 3.4.1.1.2 in Chapter 3 (Reasonable Alternative) in Volume 2 of the EIAR outlines the assessment of this section:

'*Section 1C – Eglinton Terrace to Belmont Avenue.*

In addition to the Emerging Preferred Route option (1C1), there were four new options considered (1C3, 1C4, 1C5 and 1C6). All of these follow the same route as the Emerging Preferred Route.

Route Option 1C3 (northbound bus lane with southbound queue relocation) would include a northbound bus lane for the entire section with no junction at Eglinton Terrace, only a pedestrian crossing. For southbound buses there would be a Signal Controlled Bus Priority junction at Belmont Avenue as the cross-section width only allows for one outbound lane. There would be cycle lanes included in both directions but they may need to reduce to 1.8m at pinch points.

Route Option 1C4 (queue relocation each side) would provide no dedicated north or southbound bus lanes through the section. Buses would receive Signal Controlled Priority from junctions at Belmont Avenue (southbound) and Eglinton Terrace (northbound). Full 2m cycle provision would be possible through the section.

Route Option 1C5 (southbound bus lane with northbound merge of bus lane) would provide a continuous southbound bus lane, while the northbound bus lane would merge with the northbound general traffic to pass the pinch point. This would require buses and general traffic to merge before progressing through the narrow section before the bus lane would restart past The Crescent. This option would provide a segregated northbound cycle track after The Crescent, and no segregated southbound cycle track, with cyclists having to share the bus lane.

Route Option 1C6 (southbound bus lane with northbound queue relocation) *would have a continuation of the southbound bus lane through the midway bend, with a single general traffic lane only in the northbound direction between Eglinton Road and The Crescent. Northbound bus priority would be provided through a Signal Controlled Bus Priority junction at Eglinton Terrace. Segregated cycle tracks would be provided in both directions.*

As with the selection of the Emerging Preferred Route options, each route option was evaluated using a multi-criteria assessment with one of the primary criteria being 'Environment', under which there was a number of subcriteria which each route option was considered against comparatively.

All five options were assessed as performing the same under the Environment criteria, as well as under the Accessibility and Social Inclusion criteria.

Both Option 1C3 and 1C6 scored the highest across the assessment criteria, with both options including a full bus lane in one direction and Signal Controlled Priority in the other. Due to the alignment and the land available, an overall greater length of bus lane can be achieved in Option 1C6, as the northbound bus lane can restart sooner than the southbound bus lane could under Signal Controlled Priority. Therefore 1C6 was brought forward into the Preferred Route Option.'

Option 1C6 is the Preferred Route Option (Proposed Scheme) at this location and presented in the Preferred Route Option drawing Appendix of the Preferred Route Options Report and Proposed Scheme as presented in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 in the EIAR in the General Arrangement Drawings.

The Emerging Preferred Route Option is shown in Appendix N of the Preferred Route Options Report, as part of the Supplementary Information.

Appendix L (UCD to City Centre Core Bus Corridor - Feasibility and Options Report) in the Preferred Route Options Report, as part of the Supplementary Information, summarises the assessment of route options in Bray.

NTA is satisfied that various alternatives have been assessed for the Proposed Scheme in Section 1 of the Proposed Scheme, in particular Morehampton Road and Donnybrook Road.

The Proposed Scheme cross-section and subsequent land acquisition have been considered and deemed necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively, as presented in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 in the EIAR in the General Arrangement Drawings in Figure 3.1, Figure 3.2, Figure 3.3 and Figure 3.4 in Section 3.1 Proposed Scheme Description.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

3.1.4.12 Boundary treatment

Summary of issue raised

One submission noted that there is no detail in relation to the boundary treatment either temporary or permanent.

Response to issue raised

Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The Proposed Fencing and Boundary Treatment is presented in 07-Fencing and Boundary Treatment drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.25. As indicated, a wall is proposed at this location and the existing entrance/exit will also be maintained on a like for like basis.

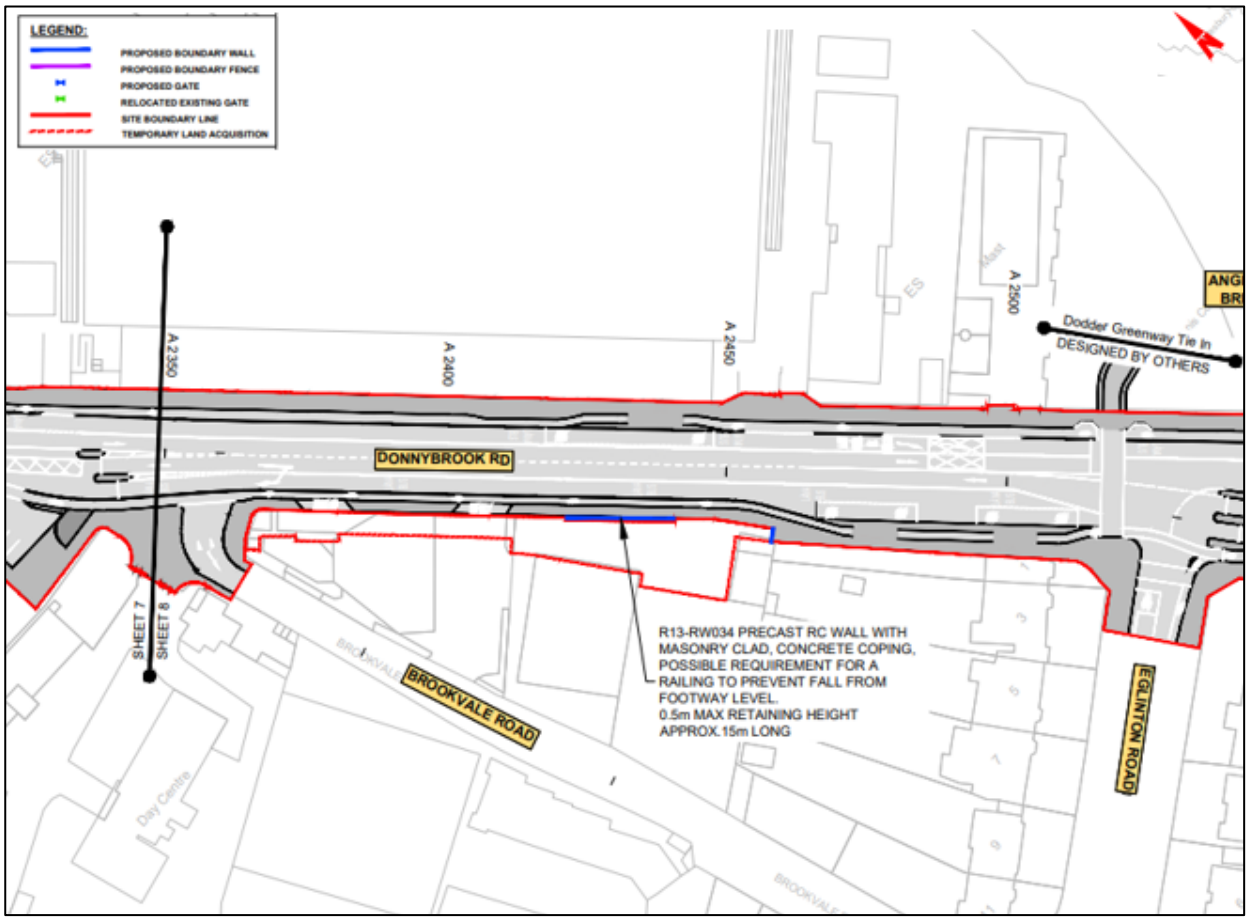


Figure 3.25: Extract from Fencing and Boundary Treatment Drawings (Sheet 08)

3.1.4.13 Environmental Impacts

Summary of issue raised

One submission noted that there is a lack of clarity around what the total environmental impact will be of the Proposed Scheme including the environmental impact and upfront carbon footprint for the Construction Phase. The owners have a concern in relation to the design of the Proposed Scheme and the route that has been chosen.

Response to issue raised

A full and comprehensive Environmental Impact Assessment Report has been prepared to fully assess and present the impacts of the Proposed Scheme. Chapter 1 (Introduction) in Volume 2 of the EIAR describes the EIA Process (Section 1.5) outlining all requirements for the completion of an EIAR in accordance with the EIA Directive (Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment) and Section 50 of the Roads Act 1993, as amended by S.I. No. 279/2019 - European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019.

An overview of the EIAR and its main findings are included in the Non-Technical Summary in Volume 1 of the EIAR. Mitigation and monitoring measures have been proposed where potential significant impacts have been identified for each environmental topic, with these measures compiled in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR, with the Construction Phase measures also replicated within Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR. A summary list of all predicted significant residual impacts is provided in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR.

Refer to Section 3.9.3.10 (Adequacy of Environmental Assessment) later in this report for additional detail on the approach to and adequacy of the EIAR for the Proposed Scheme.

Specifically in relation to the carbon footprint of the Construction Phase, Section 8.8.1 of Chapter 8 (Climate) in Volume 2 of the EIAR states:

'*The Proposed Scheme is estimated to result in total Construction Phase GHG emissions of 15,652 tonnes embodied CO_2eq for materials over a 36-month period, equivalent to an annualised total of 0.014% of Ireland's non-ETS 2020 target and 0.087% of the 2030 Transport Emission Ceiling. The embodied carbon emissions associated with the Construction Phase of the Proposed Scheme will be short-term and temporary in nature. Nevertheless, the impact on CO_2eq emissions, after mitigation, …due to the embodied carbon associated with the Construction Phase of the Proposed Scheme will be Negative, Minor and Short-Term.*'

3.1.4.14 Impact on footpath / cycle tracks

Summary of issue raised

One submission noted that there is a lack of clarity in relation to the impact of the Proposed Scheme on footpaths and cycle paths.

Response to issue raised

Section 4.6.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines the preferred widths of the mainline cross-section. 2.0m is a desirable minimum width for footpaths, with 1.2m being a minimum width at pinch points over a 2m length of the path. The minimum nominal width is 1.8m. It notes that:

'The cross-sectional design of the mainline has been developed to achieve the desirable width criteria contained within the PDGB wherever reasonably practicable.'

Section 4.5.1.5 notes the proposed cycling provision in the Leeson Street to Donnybrook (Anglesea Road Junction) section as;

- *'Segregated cycle track provided in each direction running adjacent to the direction of vehicle travel, which in some locations passes behind the roadside tree line; and*
- *Signal-controlled crossings provided at all junctions through a combination of parallel pedestrian / cycle crossings and shared toucan crossings.*

These cycle tracks follow the 2013 Greater Dublin Area Cycle Network Plan (GDACNP) (NTA 2013) Primary Route number 12 (also a Primary Route under the new GDACNP 2022 (NTA 2022a)). There are existing cycle lanes in both directions along the majority of this section of the Proposed Scheme, however these will be reconfigured and upgraded to the arrangement set out in the PDGB (including 120mm upstand kerb between cycle track and traffic lane).'

A tie-in is provided to a Secondary Route within the GDACNP 2022 at the Fitzwilliam Place / Adelaide Road / Leeson Street Lower junction, at the Grand Parade / Mespil Road / Leeson Street Upper junction, at the Appian Way / Leeson Street Upper junction, at the Waterloo Road / Leeson Street Upper junction, and at the Wellington Place / Leeson Street Upper junction. A tie-in is also provided to the Grand Canal Greenway route at the Wilton Terrace / Leeson Street Lower junction, and to the Dodder Greenway route at and across from the Eglinton Road / Donnybrook Road junction.'

At the First Stop in Donnybrook, the cross-section proposed will include footpaths, segregated cycle tracks, bus lanes and traffic lanes in both directions.The Proposed Scheme design at First Stop is presented in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.26.

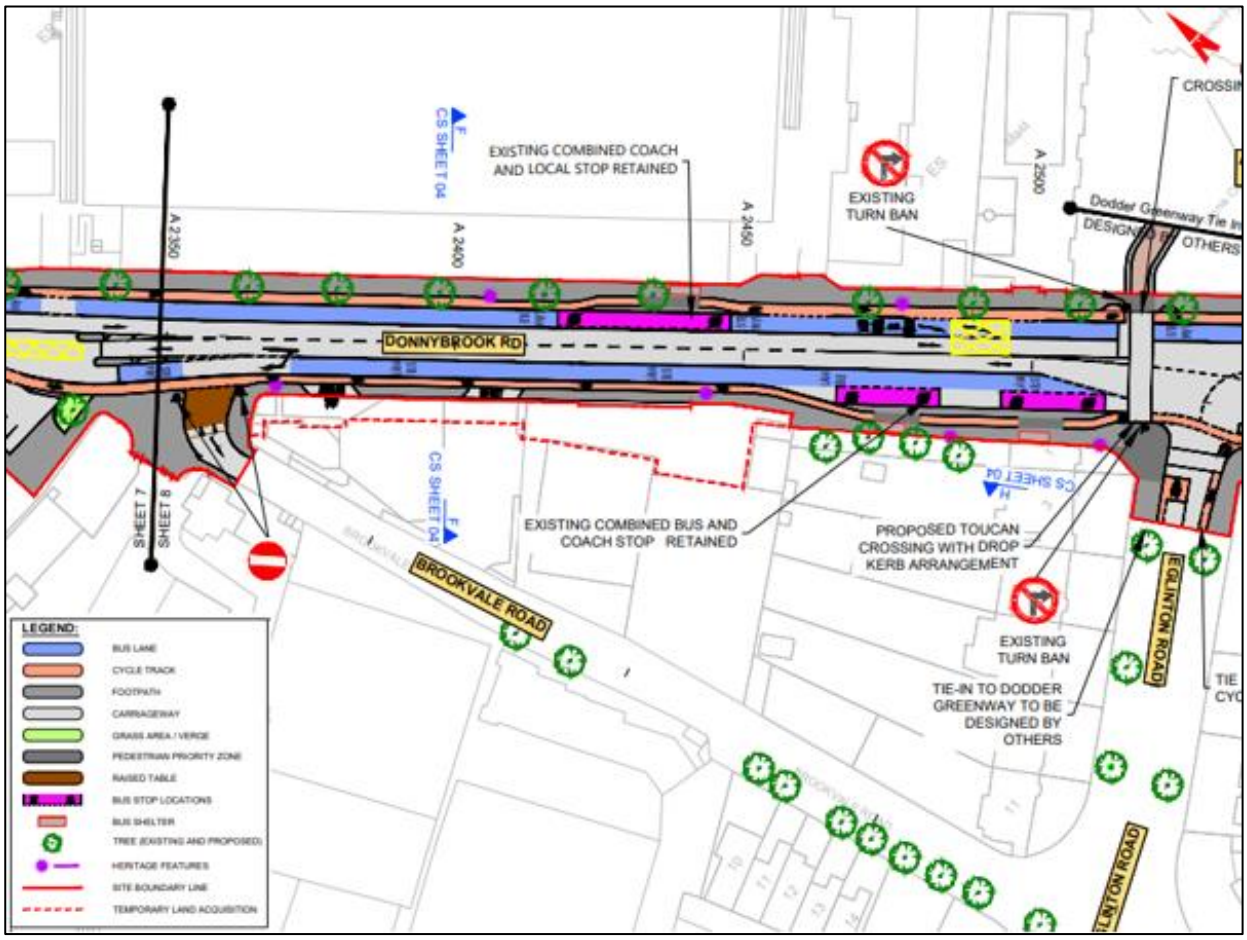


Figure 3.26: Extract of General Arrangement Drawings at First Stop in Donnybrook (Sheet 08)

Section 6.4.6.1.2.1 below, of Chapter 6 (Traffic &Transport) in Volume 2 of the EIAR notes:

'*The key infrastructure changes to pedestrian links along Section 1 of the Proposed Scheme are summarised as follows:*

- *Increased footpath width, crossing width, and pedestrian directness;*
- *Increased provision of priority crossings across side streets with raised tables; and*
- *Provision of signalised pedestrian crossings on all arms at R138 Leeson Street Lower / Hatch Street Lower junction, R138 Leeson Street Lower / Fitzwilliam Place junction, R138 Sussex Road / Sussex Terrace junction, R138 Leeson Street Upper / Dartmouth Road junction, R138 Leeson Street Upper / Appian Way junction, R138 Leeson Street Upper / Wellington Place junction, R138 Morehampton Road / Bloomfield Avenue junction and R138 Donnybrook Road / Belmont Avenue junction.*

The assessment of the qualitative impacts on the walking infrastructure for Section 1 of the Proposed Scheme are summarised in Table 6.22, along with the accompanying sensitivity for each junction and the resultant significance of effect. A detailed breakdown of the assessment at each junction can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

Table 6.22: Section 1 - Significance of Impact for Pedestrian Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R138 Donnybrook Road / Belmont Avenue 4-Arm Priority Junction	A1980 - A2020	F	A	High	High	Positive Profound
R138 Donnybrook Road / Mulberry Lane 3-arm Priority Junction	A2060 - A2070	E	B	Medium	High	Positive Very Significant
R138 Donnybrook Road / The Crescent 3-arm Priority Junction	A2100 - A2130	E	C	Medium	High	Positive Very Significant
R138 Donnybrook Road / Pembroke Cottages 3-arm Priority Junction	A2160 - A2170	D	C	Low	High	Positive Moderate
R138 Donnybrook Road / The Crescent 4-arm Priority Junction	A2250 - A2280	D	C	Low	High	Positive Moderate
R138 Donnybrook Road / Eglinton Terrace 3-Arm Priority Junction	A2290 - A2300	C	B	Low	High	Positive Moderate
R138 Donnybrook Road / Brookvale Road 3-Arm Priority Junction	A2350 - A2370	D	B	Medium	High	Positive Very Significant
R138 Donnybrook Road / Eglinton Road 3-Arm Signalised Junction	A2520 - A2550	F	B	High	Medium	Positive Very Significant

The contents of Table 6.22 demonstrates that the Proposed Scheme will have a long-term positive impact on the quality of the pedestrian infrastructure along Section 1.

The LoS during the Do Minimum scenario ranges between B and F with 31 of the 32 impacted locations being rated as C or lower. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.17. During the Do Something scenario, 24 of the 32 impacted locations along this section achieve the highest A / B ratings, with seven locations receiving a C rating and one location increasing from F to D. This is because of the proposed improvements to the existing pedestrian facilities in the form of additional crossing locations, increased pedestrian directness, provision of traffic calming measures to reduce vehicle speeds, improved accessibility and increased footpath and crossing widths. All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities.

Overall, it is anticipated that there will be a Positive, Significant and Long-term effect to the quality of the pedestrian infrastructure along Section 1 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.'

In relation to proposed cycling infrastructure, Section 6.4.6.1.2.2 notes:

'The key cycling improvements along Section 1 of the Proposed Scheme can be summarised as follows:

- *Proposed 1.25 to 2.0m wide cycle track, with on both sides of R138 Leeson Street Lower, R138 Leeson Street Upper, R138 Sussex Road, R138 Morehampton Road and R138 Donnybrook Road to replace the existing cycle lanes and combined bus and cycle lanes between R138 Leeson Street Lower / R138 St. Stephens Green Junction to the R138 Donnybrook Road / R815 Anglesea Road Junction;*
- *Introduced link to the proposed Dodder Greenway at the Eglinton Road junction;*
- *Updated layouts incorporated for the junctions with Appian Way, Waterloo Road, Wellington Place, Herbert Park, Belmont Avenue, Eglinton Road and Anglesea Road to accommodate revised cycle layouts, revised pedestrian crossings, and revised kerb lines where necessary; and*
- *Proposed provision of continuous cycle bypasses at all bus stops.*

Table 6.23 outlines the cycling qualitative assessment along Section 1, with the overall Do Minimum LoS and the Do Something LoS and the description of impact.

Table 6.23: Section 1 Cycling Impact During Operational Phase

Location	Chainage	DoMinimum LoS	DoSomething LoS	Magnitude of Impact	Sensitivity	Significance of Impact
R138 Leeson Street Lower: R138 St Stephen's Green to R111 Grand Parade	A0 - A600	B	B	Negligible	High	Not Significant
R138 Leeson Street Upper / Sussex Road: R111 Grand Parade to Burlington Road	A600 - A1000	C	B	Low	Medium	Positive Moderate
R138 Leeson Street Upper: Burlington Road to Wellington Place	A1000 - A1300	D	B	Medium	Medium	Positive Significant
R138 Morehampton Road: Wellington Place to Herbert Park	A1300 - A1700	B	A	Low	Medium	Positive Moderate
R138 Morehampton Road / Donnybrook Road: Herbert Park to Belmont Avenue	A1700 - A2000	C	B	Low	High	Positive Moderate
R138 Donnybrook Road: Belmont Avenue to R815 Anglesea Road	A2000 - A2600	C	B	Low	High	Positive Moderate
Section Summary		**C**	**B**	**Low**	**High**	**Positive Moderate**

Table 6.23 demonstrates that the Proposed Scheme will have a permanent positive impact on the quality of the cycle infrastructure along Section 1 of the Proposed Scheme. The significance of the impacts range from not significant to positive significant, demonstrating that the Proposed Scheme will create enhancements for cyclists.

During the DoSomething scenario, i.e. following the development of the Proposed Scheme the LoS rating increases to a B. This is due to the proposed improvements to the existing cycling facilities along this stretch of cycle route, in the form of improved segregation, and junction treatment. Most junctions receive a final B rating in the DoSomething LoS, with one receiving an A, whilst they range from B to D in the DoMinimum LoS.

Overall, it is anticipated that there will be a Positive, Moderate and Long-Term effect to the quality of the cycling infrastructure along Section 1 of the Proposed Scheme, during the Operational Phase. A detailed breakdown of the assessment along each section can be found in Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

The findings of the cycling assessment aligns with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to 'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable'.'

3.1.4.15 No impact on existing bottleneck in Donnybrook

Summary of issue raised

One submission raised the concern that no amount of road-widening through CPOs will solve the acute bottleneck that occurs at former Kiely's Public House and continues south through the village.

Response to issue raised

The Proposed Scheme between Mullberry Lane and Rampart Lane (Donnybrook section) is presented in the 02-General Arrangement Drawings Sheet 07 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.27.

The proposed design at this location is tight section running along Donnybrook Village with built up infrastructure on both sides of the carriageway.

The Proposed Scheme design along Donnybrook Road involves the prioritisation of People Movement through maximising sustainable modes by providing cycle tracks on both sides of Donnybrook Road. By making space for improved cycle infrastructure can significantly benefit sustainable modes and encourage greater use of these modes. Bus lanes are provided in the outbound direction and bus priority in the city bound direction is achieved through signal control priority. Through the provision of improved cycling and pedestrian facilities and bus priority measure along Donnybrook Road all road users get better equitable choices and associated more efficient use of the road space for People Movement.

The proposed design provides for cycle track in both directions with reduced width of 1.5m as per the Section 5.3 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 of the EIAR Volume 4 Part 1 of 4. Desirable footpath width of 2.0m has been provided in this section in general. Table 4.3 (see Table 3.3 below) Chapter 4 Volume 2 of the EIAR notes the reduced cross-section in the Donnybrook section of the Proposed Scheme.

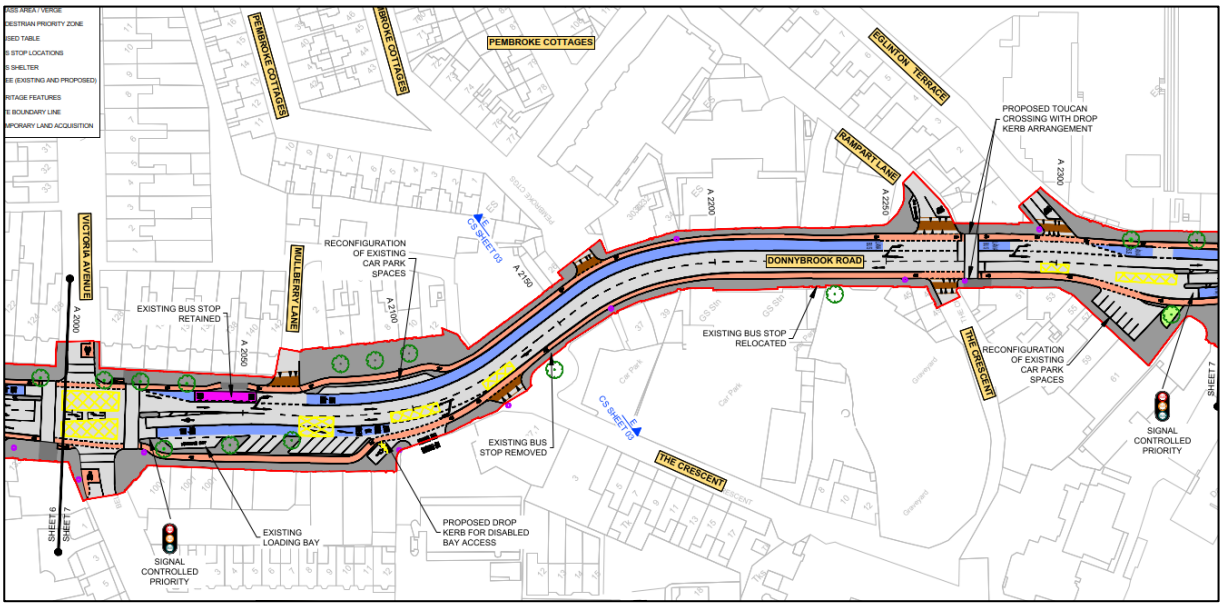


Figure 3.27: Extract from General Drawing Arrangement at Donnybrook Road (Sheet 07)

Table 3.3: Extract from Chapter 4 of the EIAR (Table 4.3)

Table 4.3: Reduced Standard Cross Sections on Section 1 of the Proposed Scheme

Location	Design Element	DMURS	Design	Justification
B10 – B75	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m – 1.75m	Cycle track narrows to between 1.5m – 1.75m over a length of 60m behind combined bus and coach stop to reduce cyclist speed.
A535 – A560	Footpath (northbound)	2.0m	1.5m	Footpath narrows locally to 1.5m at pinch point on Leeson Street canal bridge. Ties in to existing.
A640 – A690	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 40m behind bus stop and coach stop to reduce cyclist speed.
A1015 – A1050	Cycle Track (southbound)	2.0m	1.5m	Cycle track narrows locally to 1.5m over a length of 10m to tie into existing kerbs and avoid impacting trees.
A1615 – A1690	Cycle track (both directions)	2.0m	Varies Approx. 1.5m – 2m	Cycle track narrows locally to 1.8m over a length of 30m southbound to tie into existing kerbs, and narrows locally to 1.5m over a length of 40m northbound on approach to and behind combined bus stop to reduce cyclist speed.
A1730 – A1790	Cycle track (both directions)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 60m northbound and southbound to tie into existing kerbs.
A1790 – A1840	Footpath (northbound)	2.0m	1.8m	Footpath narrows to 1.8m over a length of 50m due to space constraints.
A1790 – A1910	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 150m to tie into existing kerbs.
A1910 – A2000	Cycle track (both directions)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 40m southbound to tie into existing kerbs, and narrows to 1.5m over a length of 90m northbound on the approach to and behind combined bus stop to reduce cyclist speed.
A2025 – A2045	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 20m due to space constraints.
A2115 – A2250	Cycle track (both directions)	2.0m	Varies Approx. 1.3m – 1.75m	Cycle track narrows to 1.5m over a length of 135m southbound and 60m northbound to tie into existing kerbs. Cycle track narrows at pinch points to between 1.3 – 1.5m width.
A2115 – A2310	Footpath (both directions)	2.0m	Approx. 1.5m	Various pinch point locations along Donnybrook Road.
A2310 – A2360	Cycle Track (southbound)	2.0m	1.5m	Cycle Track narrows locally to avoid impacting existing tree.

Section 6.4.6.2.8.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR notes that the Local Area Model (LAM) indicates that during the 2028 Opening Year scenario; *'there are reductions in general traffic noted along the Proposed Scheme during the AM Peak Hour. Along Donnybrook Road there is a reduction of 304 combined flows during the AM Peak Hour in the 2028 Opening Year'.*

Section 6.4.6.2.8.4 notes that the LAM indicates that during the 2028 Opening Year scenario; *'there are key reductions in general traffic notes along the Proposed Scheme during the PM Peak Hour. Along Donnybrook Road there is a reduction of 920 combined flows during the PM Peak Hour in the 2028 Opening Year'.*

The reduction in flows in both the AM and PM Peak Hours is attributed to the Proposed Scheme associated modal shift and implementation of bus priority measures. The reduction in general traffic flow has been determined as an overall potential; '*Slight to Profound, Positive, and Long-Term impact on the direct study area*'. As a result, there would be an improvement on the impacts of the existing bottleneck that would occur at former Kiely's Public House and through the village.

3.1.4.16 Impact on Development

Summary of issue raised

One submission requests clarity on the design and layout of a proposed bus stop adjacent to the permitted residential development ABP Ref: 307267-20, nearing completion, at the corner of Eglinton Road and Donnybrook Road. The submission notes that the Donnybrook Partnership supports the principle of BusConnects adjacent to the development on Eglinton Road and Donnybrook Road which will enhance the accessibility and improve the opportunities for more rapid and sustainable public transport in the area.

Response to issue raised

The support for the Proposed Scheme is noted and welcomed by the NTA.

The Proposed Scheme design at the location of the private development on Eglinton Road is presented in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.28.

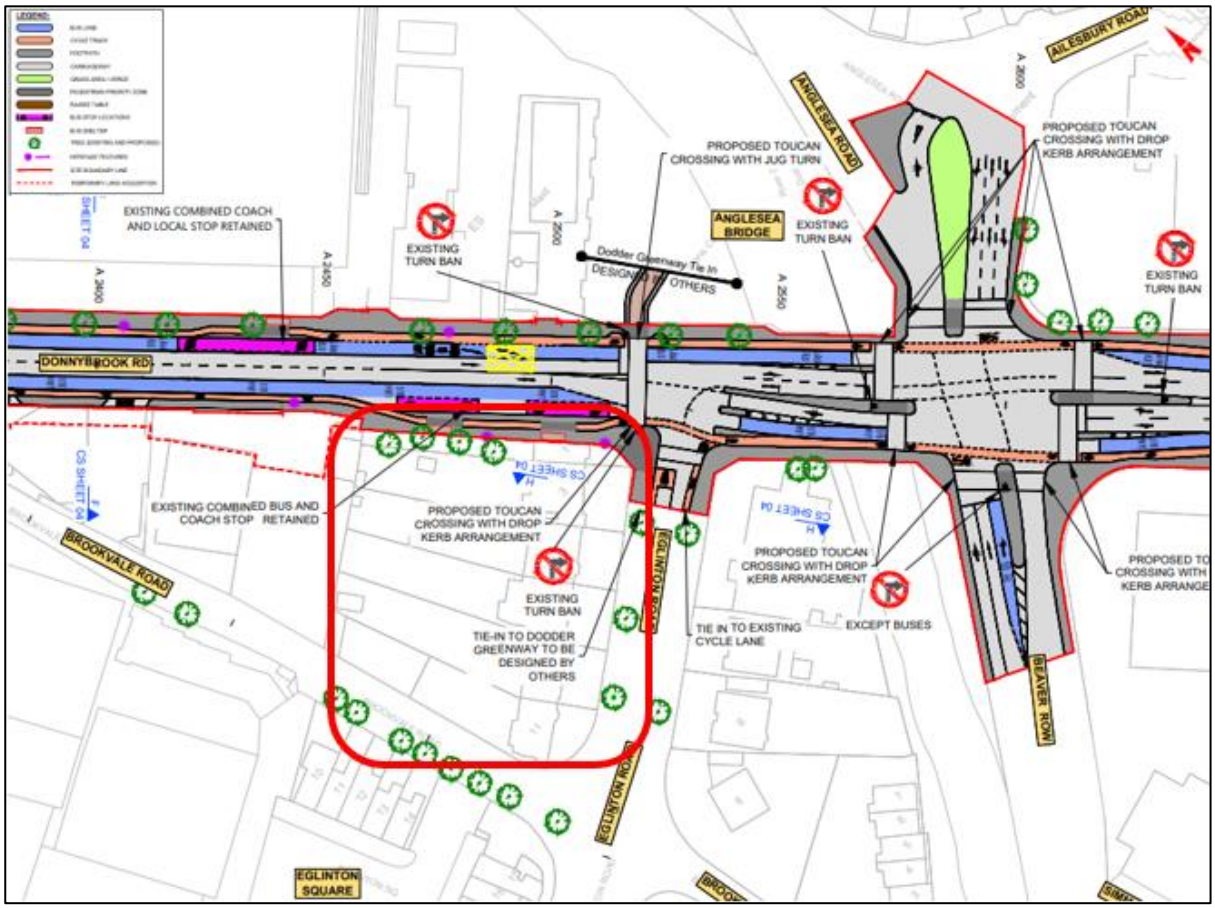


Figure 3.28: Extract from General Arrangement Drawings at Private Development (Sheet 08)

Figure 3.29 shows an excerpt of the CPO Deposit Maps, as part of the Compulsory Purchase Order information indicating that there is no permanent or temporary land take proposed at this location, and therefore no impacts to the new development.

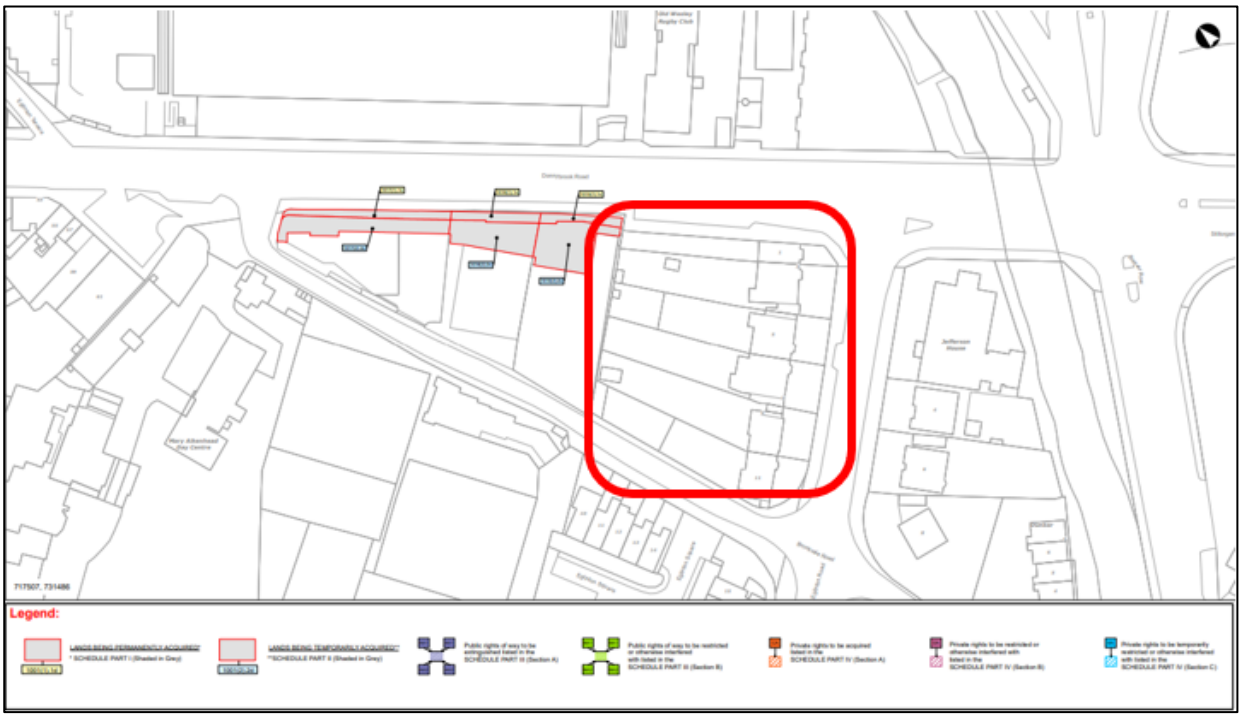


Figure 3.29: Extract from CPO Deposit Map at Private Development (Sheet 37)

In relation to the layout of the bus stops adjacent to the private development, Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, outlines the detail of the various bus stop types proposed. At the location of the development at Eglinton Road, the existing combined coach and bus stop has been retained, as noted on the General Arrangement Drawing in Figure 2.25.

Table 4.5 of Section 4.5.1.4 specifies layby bus stop types at Eglinton Road for bus and coach a new bus shelter proposed for each.

Section 4.6.4.5.4 on Layby Bus Stops notes:

'Layby bus stops can provide an effective solution for coaches with long dwell times at bus stops, allowing other buses to pass the stopped bus. In these cases, and where space has permitted, a separate layby bus stop has been proposed. An example of a Layby Bus Stop is shown Image 4.18.

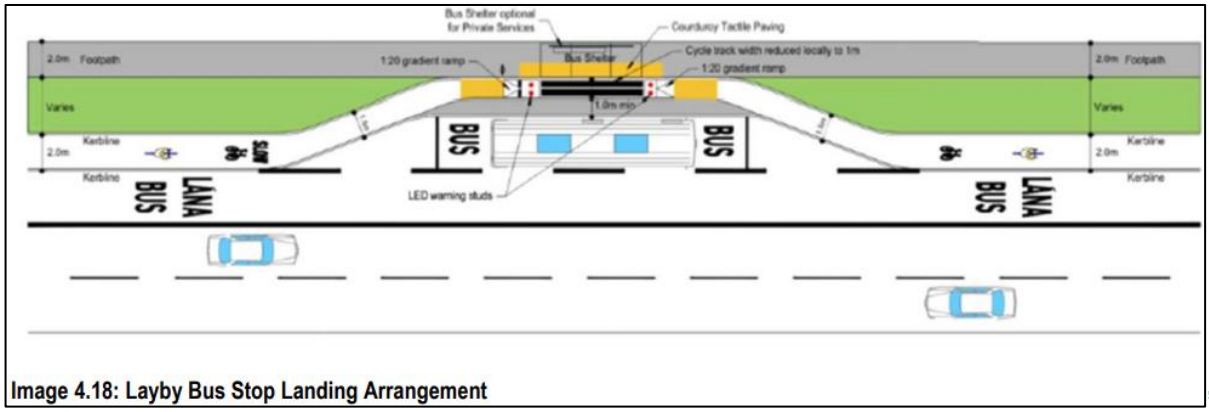


Image 4.18: Layby Bus Stop Landing Arrangement,

Section 4.6.4.5.5 on Bus Stop Shelters notes:

'As a general policy, shelters will be provided at all bus stops on the Proposed Scheme. This will improve the comfort of passengers waiting for a bus during poor weather, as well as providing shade on sunny days. In some locations, such as those designated as Architectural Conservation Areas, it may however not be appropriate to provide a bus shelter in front of a building of heritage value to minimise visual impact.'

3.1.4.17 OS mapping

Summary of issue raised

One submission raised the issue that the OS map which forms the underlay of the layout plan shows the previous layout of dwellings prior to the redevelopment of the site. They have requested this is updated to show the Proposed Scheme currently at an advanced stage of construction.

Response to issue raised

The General Arrangement drawings are displayed on Ordnance Survey mapping which is regularly updated by Ordnance Survey Ireland. Whilst the designs are displayed on this mapping, up-to-date and detailed topographical survey of all areas within the proposed site boundary has been undertaken to inform the design development.

The NTA is aware of the proposed development at this location and has taken this into consideration in the development of the Proposed Scheme. Location of development in question is shown in Figure 2.25 in the earlier response above. Section 4.6.6.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines a number of infrastructure projects that are planned within the vicinity of the Proposed Scheme which will interface with the proposals. This includes the development in question at Eglinton Road.

- *'1, 3, 5, 7, 9 and 11 Eglinton Road: Planning permission for a residential development of 94 no. apartments and a ground floor café (at around chainage A2500 of the Proposed Scheme). Vehicular access will be provided from Brookvale Road into basement levels. The Planning Application has been granted;'*

The Deposit Maps, as shown in Figure 3.29 in the earlier response above, shows that there is no permanent or temporary land take required at this location.

3.2 Proposed Scheme at Beaver Row to Nutley Lane

3.2.1 Description of Proposed Scheme at this Location

The existing lane configuration is maintained on the Stillorgan Road between the Beaver Row / Anglesea Road junction and Foster's Avenue, apart from the southbound on-slip at Belfield, where a continuous bus lane is now provided from the slip road to the Stillorgan Road. To achieve this, the existing southbound bus lane on the Stillorgan Road has been truncated and will require coaches, buses, and taxis using it to merge with the adjacent general traffic lane as they pass under the Belfield flyover.

The northbound approach on the Stillorgan Road towards Beaver Row has a cycle track, bus lane, a combined left and ahead general traffic lane, and a right-turn lane to Ailesbury Road. Between Beaver Row and Eglinton Road there is a cycle track, bus lane, and a combined left and ahead traffic lane.

The Proposed Scheme design between Beaver Row and Nutley Lane is presented in the 02-General Arrangement Drawings Sheets 08-11 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.30, Figure 3.31, Figure 3.32, and Figure 3.33.

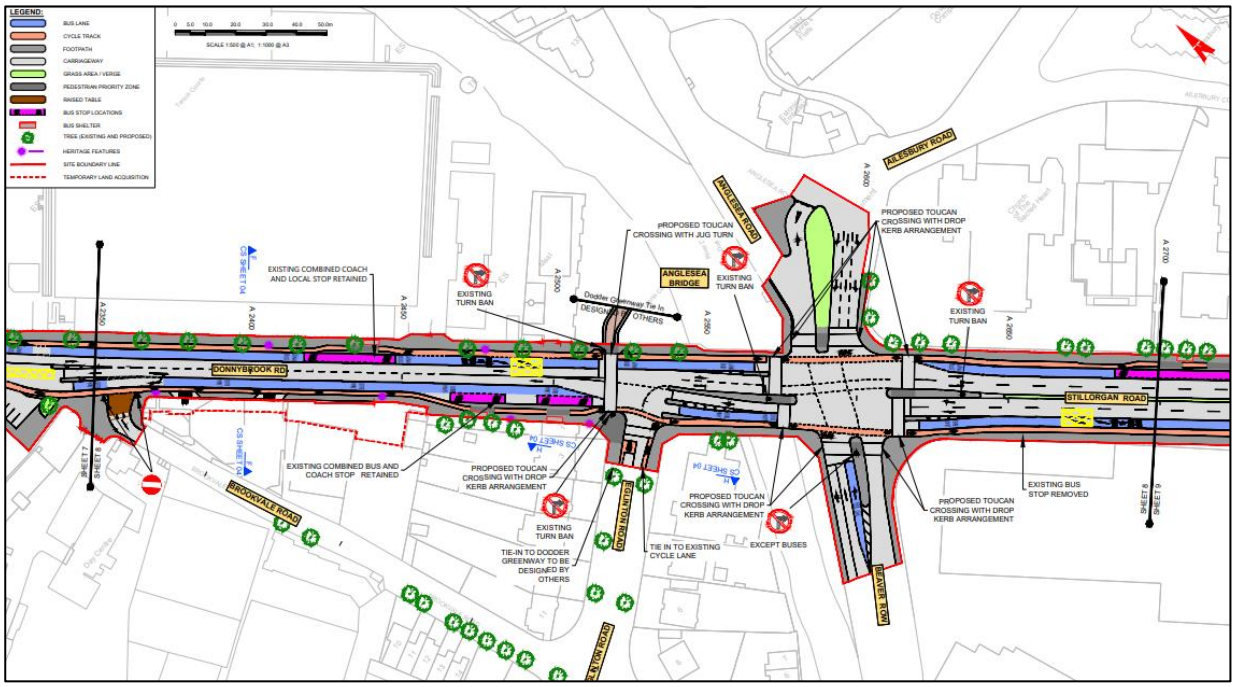


Figure 3.30: Extract from General Arrangement Drawings at Beaver Row to Nutley Lane (Sheet 08)

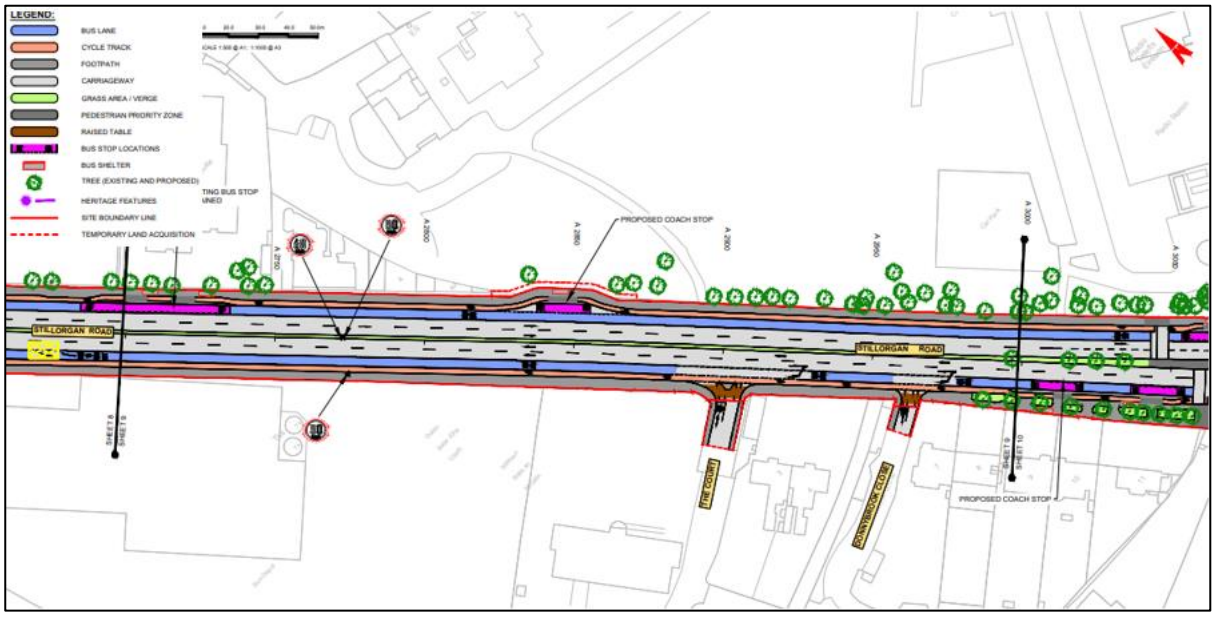


Figure 3.31: Extract from General Arrangement Drawings at Beaver Row to Nutley Lane (Sheet 09)

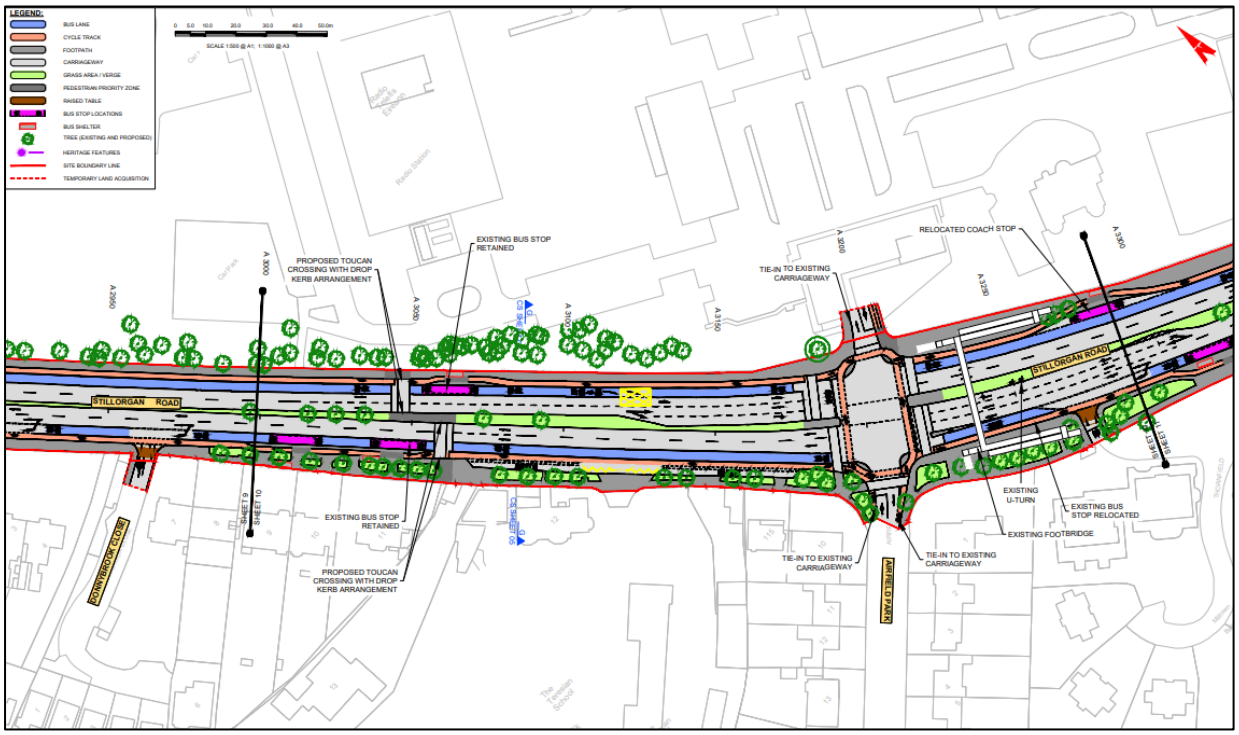


Figure 3.32: Extract from General Arrangement Drawings at Beaver Row to Nutley Lane (Sheet 10)

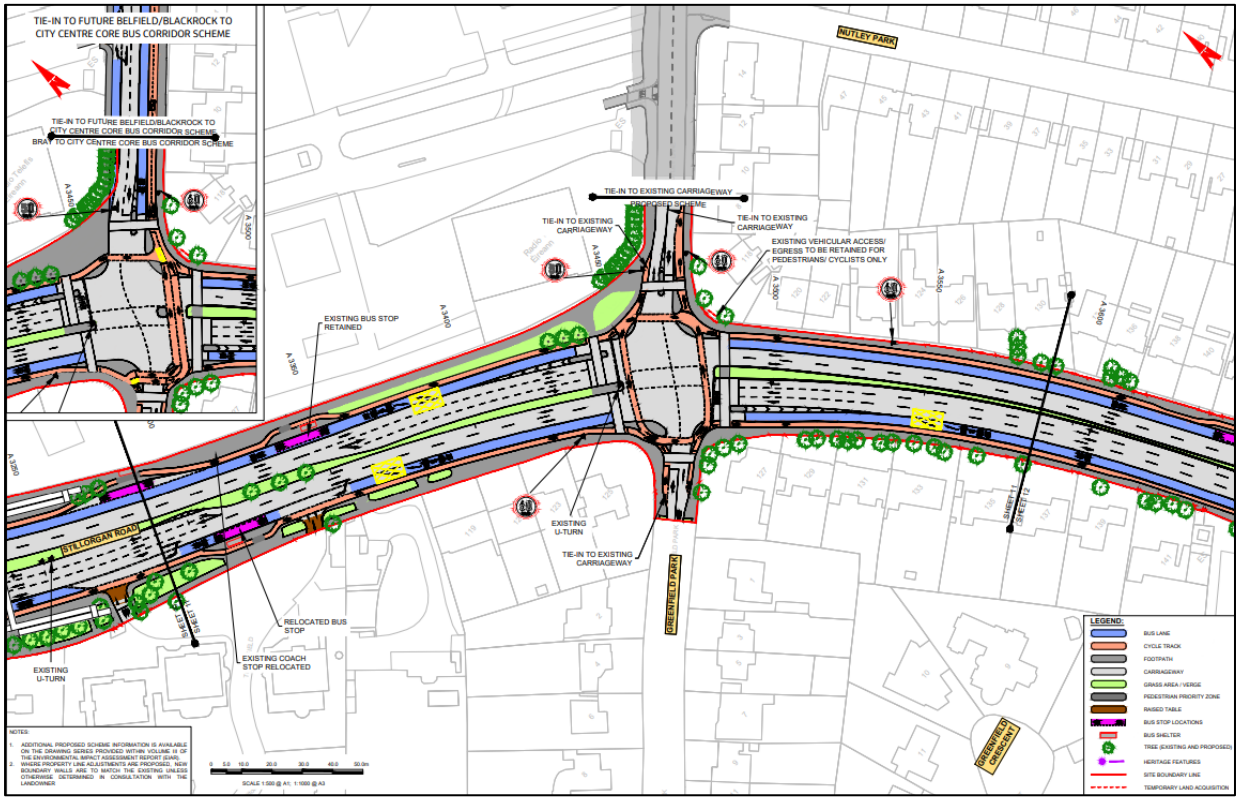


Figure 3.33: Extract from General Arrangement Drawings at Beaver Row to Nutley Lane (Sheet 11)

3.2.2 Overview of Submissions Received

Table 3.4 below lists the 2 individual submissions made in respect of the Proposed Scheme between Beaver Row and Nutley Lane.

Table 3.4: Submissions Made in Respect of Beaver Row to Nutley Lane

No	Name	No	Name	No	Name
178	Ruth Stewart and Sean Schoales	183	Shamrock Hill Mgmt.		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

3.2.3 178 - Ruth Stewart and Sean Schoales

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Impact on biodiversity, green space, street trees and public amenity
2) Proposed improvements to Proposed Scheme design
3) Landscaping

3.2.3.1 Impact on biodiversity, green space, street trees and public amenity

Summary of issues raised

a) The submission notes that the Proposed Scheme provides the improvements to cycle route, bus lane and footpaths at the expense of biodiversity, green space, street trees and public amenity, while private car infrastructure is unaffected. The submission notes that this seems to go against the stated aims of Dublin City Council's Tree Strategy, Dún Laoghaire Rathdown Council's Urban Forestry Strategy and the National Biodiversity Action Plan, whose first objective is to 'Adopt a Whole Government Approach to Biodiversity'.

   The submission notes that the project has missed the opportunity to be more ambitious in relation to the environmental and sustainability aspirations of the proposals, which would result in the improvement of quality of the road for user well-being. The submission proposes the provision of additional street trees to remove carbon from the air, the reduction in removal of existing trees, the planting of dense hedging in the centre medians to improve road acoustics, the introduction of further soft landscaping zones for improved biodiversity corridors.

b) The submission suggests reducing the speed limit to 30kph in this section would improve the environmental condition on the road while having minimal impact on the destination time of the vehicles due to the present density of traffic.

Response to issues raised

a) Impact on biodiversity, green space, street trees and public amenity.

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the Proposed Scheme. Section 4.6.12 describes the approach to the design with respect to landscape and urban realm. Specifically with respect to the softscape design, Section 4.6.12.3 states the following:

'*Soft landscape design proposals include the following components that provide mitigation for loss of trees, ecological benefits and visual enhancements to the urban realm:*

- *New tree planting;*
- *Native hedgerows;*
- *Native planting;*
- *Ornamental planting;*
- *Amenity grass areas; and*
- *Species-rich grasslands.*

Attenuation ponds and SuDS treatments are proposed throughout the length of the route. Tree loss is kept at a minimum in areas where these drainage and SuDS treatments have been provided and mitigation planting has been considered where tree losses do occur. Where required and is feasible, multiple tree pits are to be integrated and linked together as SuDS system.'

With respect to the planting strategy, Section 4.6.12.3.1 states the following:

'*The planting strategy has been developed to meet the needs of the Dublin City Tree Strategy (DCC 2015a) and the Dublin City Biodiversity Action Plan (DCC 2015b) as follows:*

- *Where possible the initial conservation of existing biodiversity has been considered;*
- *Opportunities have been identified to enhance biodiversity through green infrastructure;*
- *Promote the role of street trees planting consistent with the recommendations of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 (Dún Laoghaire-Rathdown County Council 2022) and Dublin City Tree Strategy (DCC 2015a); and*
- *Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit.'*

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect to the impacts on habitats it states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively.

Trees

Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR describes the comprehensive tree survey undertaken in order to assess the impacts of the Proposed Scheme and provides a detailed overview of the proposed tree losses in order to facilitate the construction of the Proposed Scheme. Table 2 of Appendix A17.1 summarising the total removals is shown in Table 2.5 below where the majority of trees / hedges to be removed have been assessed as Category C which are of low arboricultural quality. Of these proposed removals, Appendix A17.1 also states that:

'*A total of 41 trees are recommended for removal and replacement irrespective of the proposed development, due to severe physiological or structural decline that means they cannot realistically be retained in the context of current land use for longer than 10 years, or due to a high likelihood of failure that poses an unacceptable risk to persons to property*'.

Table 2. Summary of tree removals by quality.

	Category A	Category B	Category C	Total
Trees	29	121	209	**359**
Groups	1	14	26	**41**
Hedges	0	0	10	**10**
Total	**30**	**135**	**245**	**410**

The Landscape General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 in Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme. These proposed quantities to be planted are as below:

- 551 trees;
- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;

- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

As outlined in Table 14-1 of the Preliminary Design Report provided in the Supplementary Information, the proposals represent a net increase of 192 individual trees along the Proposed Scheme (an approximately 14% increase), and a net decrease of approximately 15,093m^2 in woodland planting (an approximately 9% decrease). A robust alternatives assessment was undertaken throughout the design process to identify the optimum scheme and to avoid / minimise potential environmental impacts, including impacts on trees and woodland as far as reasonably practicable. Therefore, the proposed tree losses are limited to only where required to deliver a scheme which fulfils the Proposed Scheme objectives.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below:

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.*

Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.

The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.'

As summarised in Table 17.9 of Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, the Construction Phase impact on trees and vegetation is predicted to be Negative, Very Significant, Short-Term. As summarised in Table 17.10, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Moderate / Significant, Long-Term.

Chapter 8 (Climate) in Volume 2 of the EIAR has assessed the climate impact as a result of both the construction and operation of the Proposed Scheme. Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of 'Land Use Change', with the assessment described in Section 8.3.4.1.2 as:

'*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'. During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as; '*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate the two construction compounds. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be a negligible impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

The NTA notes also notes the comment on the planting at central median and verge and other locations. Section 4.6.12 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the landscape and urban realm design approach and principles. Section 4.6.12.5.2 describes central median planting, stating:

'*Central median planting varies depending on the context of the landscape character and road. Dual carriageways or wide roads to the edge of settlements are more likely to have wider central medians where*

tree planting and grass verges can be found. A combination of tree and shrub or species-rich grassland is possible to create a formalised corridor of planting within a wide section of road'.

The landscaping design is based on a landscape and character analysis undertaken, as described in Section 4.6.12.1 of Chapter 4, stating the following:

'*The landscape and urban realm proposals are derived from analysis of the existing urban realm, including existing character, any heritage features, existing boundaries, existing vegetation and tree planting, and existing materials. For each section of the route, the design took a broad overview of typical dwelling age and style, extents of vegetation and tree cover. The predominant mixes of paving types, appearance of lighting features, fencing, walls, and street furniture was considered. The purpose of this analysis was to assess the existing character of the area and how the Proposed Scheme may alter this. The outcome of the analysis allowed the designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route. Where possible, a SuDS approach has been taken to assist with drainage along the route*.'

Chapter 17 (Landscape (Townscape & Visual) in Volume 2 of the EIAR also references raised tables and changes / improvements to paving as a potential benefit of the Proposed Scheme, stating the following in Section 17.4.4.2.10:

'*The Proposed Scheme also provides for a reduction in the car-centric design of the townscape with a substantially enhanced experience for pedestrians and cyclists through measures such as provision of raised crossing points to side junctions, paving schemes which indicate pedestrian priority and aid in reducing traffic speeds, and shorter or more direct crossing points at junctions.*'

With respect specifically to acoustics, Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. A baseline noise survey was undertaken for the Proposed Scheme, with attended surveys undertaken at 24 locations and unattended surveys undertaken at five locations along the whole Proposed Scheme as shown in Figure 9.2 in Volume 3, Part 3 of 3 of the EIAR. The results of the survey are described for each section of the Proposed Scheme in Section 9.3.2 of Chapter 9, and in Appendix A9.1 (Noise & Vibration Survey) in Volume 4 Part 2 of 4 of the EIAR.

Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively. As stated in Section 9.4.4.1.1.5:

'*Along the Proposed Scheme, a Direct, Positive, Moderate and Short to Medium-Term impact to a Direct, Negative, Slight and Short to Medium-Term impact is calculated (Table 9.16). This is as a result of a reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, a bus gate, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths*'.

Section 9.4.4.1.1.6 outlines that this assessment is a worst-case as follows:

'*For the roads assessed…the majority of the fleet type is comprised of cars and LGVs. Given the same power type (ICE) has been assumed for both the Do Minimum and Do Something scenarios, the relative change in traffic noise remains the same for these roads, irrespective of the vehicle power.*

The range of traffic noise levels calculated along these roads have the potential to be lower during the future year scenarios as a result of the conversion from ICE to EVs and HEVs, particularly along residential roads with speeds lower than 30km/hr. In addition, an overall reduction in engine noise will occur at junctions and roundabouts. The calculated traffic noise level for these roads is therefore considered a robust analysis and to be worst-case.

Along the Proposed Scheme the fleet type is a mixture of buses, cars, LGVs with a portion of HGVs. The change in noise levels is determined to be Neutral to Positive and Moderate along the Proposed Scheme for both the Opening Year (2028) and the Design Year (2043) due to reduced overall traffic volumes. Given the same fleet type (ICE) has been assumed for both the Do Minimum and Do Something scenarios, the relative change in traffic noise remains the same for these roads irrespective of the vehicle power type.

Notwithstanding, it is likely that a further reduction in overall noise level will occur along the Proposed Scheme due to the transition towards a full EV and HEV bus fleet. This reduction will occur irrespective of the Proposed Scheme. An overall reduction in engine noise from buses will occur at junctions, roundabouts

and bus stops. The calculated traffic noise level assuming ICEs for all fleet is therefore considered a robust analysis and to be worst-case.'

b) Reduced speed limit 30kph

The Proposed Scheme does not include any changes to the existing speed limit, except the Dublin Road in Section 3 of the Proposed Scheme in Shankill between Stonebridge Road junction to Olcovar junction, as no safety concerns relating to traffic speed have been identified during the design development. It is further noted that the Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not highlight any safety issues with the existing speed limit along the Proposed Scheme.

In considering proposals for the introduction of reduced speed limit along sections of the CBCs i.e. 30kph, the primary reference document has been the DTTAS Guidelines for Setting and Managing Speed Limits in Ireland. This document provides guidance to Local Authorities, and other practitioners, in making bye-laws in relation to the setting and management of speed limits in Ireland. Specific guidance is provided in relation to the legislative processes involved in setting speed limits, which will not be discussed in this note, as well as detailed guidance on the various scenarios in which special speed limits should be considered.

The default speed limit within a built-up area is 50kph. The DTTAS Guidelines notes that where the default speed is not considered appropriate, then special speed limits should be considered. 30kph is one such special speed limit.

The DTTAS guidance states that:

'The immediate response to road safety issues at particular locations should not be the introduction of a Special Speed Limit that is lower than the default speed limit. Engineering measures should be investigated and/or implemented and only supplemented by a Special Speed Limit if necessary.'

DTTAs further states that:

'Frequent changes of speed limits over short distances will have a negative effect on the operation of a road and may not lead to road safety benefits.'

In summary, a review of the relevant guidance has highlighted the following key points:

1. Engineering measures and road design, including the provision of cycle facilities, should be considered before proposing a special speed limit;
2. A special speed limit of 30kph should be considered in areas where the needs of vulnerable road users are deemed to take precedence over those of motorists;
3. The place context and movement function of the street should inform the determination of the design speed and as such the speed limit;
4. A large speed differential between cyclists and traffic in shared lanes should be avoided.

Consideration has been given to the above guideline and the existing speed limits have been maintained as part of the Proposed Scheme, except the reduced speed limit of 30kph on the Dublin Road, Shankill (Stonebridge Road junction to Olcovar junction).

The existing and proposed speed limits along the Proposed Scheme is documented in Table 4.5 of the Preliminary Design Report, part of Supplementary Information, as presented in Table 3.5.

Table 3.5: Extract from Preliminary Design Report (Table 4.5 Existing and Proposed Speed Limit)

Table 4-5 Existing and Proposed Speed Limits and Design Speeds

Chainage Reference	Road / Junction Name	DMURS Road Function	DMURS Place Context	Existing Speed Limit (km/h)	Proposed Design Speed (km/h)	Proposed Posted Speed Limit (km/h)
A0 to A450	Leeson Street Lower (from Earlsfort Terrace) to Leeson Street Lower (north of junction with Fitzwilliam Place)	Link	City Centre	30	30	30
A450 to A2770.	Leeson Street Lower (north of junction with Fitzwilliam Place) to Stillorgan Road (Outside Donnybrook Parish - Church of the Sacred Heart)	Link	City Centre, Neighbourhood	50	50	50
A2770 to A9400.	Stillorgan Road (Outside Donnybrook Parish - Church of the Sacred Heart) to Stillorgan Road (at N31 Mount Merrion Avenue)	Arterial	Neighbourhood	60	60	60
A5600 to A9400	Stillorgan Road (at N31 Mount Merrion Avenue) to N11 Stillorgan (north of junction with Westminster Road)	National	National Road	60	70	60
A9400 to A14110.	N11 Stillorgan (north of junction with Westminster Road) to South of Loughlinstown Roundabout	National	National Road	60 (bus lane), 80 (general traffic lane)	85	60 (bus lane), 80 (general traffic lane)
A14110 to A14750.	South of Loughlinstown Roundabout to Dublin Road (north of junction with Stonebridge Road)	Link	Suburb	50	50	50
A14750 to A15710.	Dublin Road (north of junction with Stonebridge Road) to Olcovar Junction	Link	Suburb / Neighbourhood	50	30	30
A15710 to A18500.	Dublin Road, Olcovar Junction to Lower Dargle Road (Bray)	Link	City Centre	50	50	50
A3900	UCD Bus Interchange	Local	Centre	30	30	30
A4000	Belfiled Interchange	Slip Road	Neighbourhood	50	50	50
A13150	Wytville Interchange	Slip Road	National Road	50 (Diverge) 60 (Merge)	50 (Diverge) 60 (Merge)	50 (Diverge) 60 (Merge)

3.2.3.2 Proposed improvements to Proposed Scheme design

Summary of issues raised

The submission raises issues with the following Proposed Scheme design proposals:

a) General Arrangement drawing Sheet 08 of 54.

The submission raised query that the existing turn ban at Donnybrook Church is incorrect, as this is currently allowed to allow access to and from the Church.

Concern raised on the removal of the bus stop opposite the church travelling towards the City Centre, as this is well used by residents of Beech Hill and Beaver Row.

Concern raised on absence of cycle infrastructure improved at Stillorgan Road / Anglesea Road / Beaver Row junction. The pedestrian crossing to the new Dodder Greenway is welcomed. The submission suggested to improve the traffic light sequencing at the Stillorgan Road / Anglesea Road / Beaver Row junction to prioritise pedestrians.

b) General Arrangement drawing Sheet 10 of 54.

The submission raised query that the existing U-turn noted at the turn into RTE is incorrect. There is currently a U-turn ban which is not close to the junction.

The submission raised query regarding the cycle path shown at Airfield Park which is a cul de sac. The submission also queried if there is a new pedestrian crossing proposed between 10 Airfield Park and RTE as this was not labelled.

The submission raised concern that if significant new traffic is proposed to enter the proposed residential development at the RTE junction, this should be taken account in the infrastructure and also suggest that the existing bus stop is not moved away from the bridge.

c) Typical cross section drawings Sheet 05 of 22.

The submission raises concern on the Proposed Scheme cross-section at this location. In most places the central median as proposed is too narrow for tree planting and in many cases it is proposed to remove trees by narrowing the median. This seems to take a car-centric approach instead of improving the environment for cyclists, pedestrians, and residents.

Response to issues raised

a) General Arrangement drawing Sheet 08 of 54.

Existing turning ban at the Donnybrook Church

The existing turning ban on the General Arrangement drawing sheet 08 refers to the traffic sign in the Bray bound direction, refer to Figure 3.34 below.

Figure 3.34: Existing View at Donnybrook Church (Image Source: Google)

Existing bus stop opposite to the Donnybrook Church

The existing bus stop opposite to the Donnybrook Church is proposed to be removed and alternate bus stop is located opposite to Energia Park, which is the existing combined bus and coach stop.

As noted in Section 4.6.4.5 of Chapter 4 (Proposed Scheme Description) of Volume 2 of the EIAR:

'To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.

- *The criteria for consideration when locating a bus stop are as follows:*
- *Driver and waiting passengers are clearly visible to each other;*
- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*
- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as part of the Preliminary Design Report and set out in Bus Stop Review Report, Appendix H, and specifically in Appendix H2 (Bus Stop Review Analysis), using the methodology as set out in Appendix H1 (Bus Stop Review Methodology) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where

appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis Appendix H2 notes the following in relation to the existing bus stops on Donnybrook Dublin Bus Depot at this section of the Proposed Scheme:

Bus Stop 772

'Bus Stop removed to improve overall journey times by increasing spacing. Existing stop close to next stop. Requested as part of public consultation as the existing cycle layout is not to standard.'

Donnybrook Road/ Beaver Row/ Anglesea Road Junction

The design at the Beaver Row/ Anglesea Road/ Donnybrook Road Junction is shown in 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.35 below.

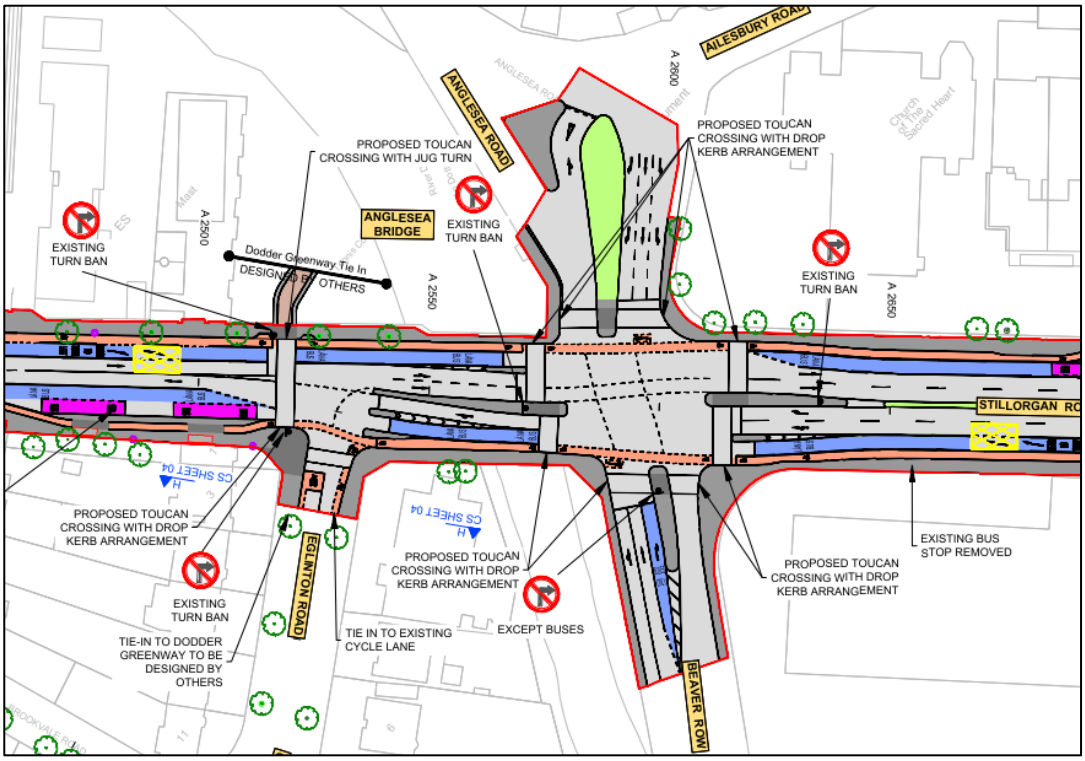


Figure 3.35: Extract from General Arrangement Drawings Beaver Row/ Anglesea Road/ Donnybrook Road Junction (Sheet 08)

On page 55 of the junction assessment presented in TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

'Pedestrian infrastructure has been improved with staggered crossings provided to central reserve islands. Options with single crossings were found to be in excess of 20m, creating and uncomfortable crossing experience for vulnerable pedestrians and also adding considerably to the intergreen time needed at the junction (which is already operating at capacity). Footpath built out on northbound side of Donnybrook Road and separate refuge island removed to reduce the number of pedestrian paths required to cross Beaver Row. Crossings have been adjusted to run perpendicular to junction to minimise crossing times.

Cycle lanes are provided through junction. Right turn cycle waiting areas provided to aid northbound and southbound cycle movements from Donnybrook Road onto Anglesea Road and Beaver Row. A fully protected cycle crossing arrangement was considered but not feasible without compromising bus priority through this pinch point.'

The signal phasing at the Beaver Row/ Anglesea Road / Donnybrook Road Junction is shown on page 56 and 57 of TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR. A 6-stage traffic signal phasing is proposed at this junction and can be seen in the extract from page 56 and 57 of the Junction Design Report in Figure 3.36 below.

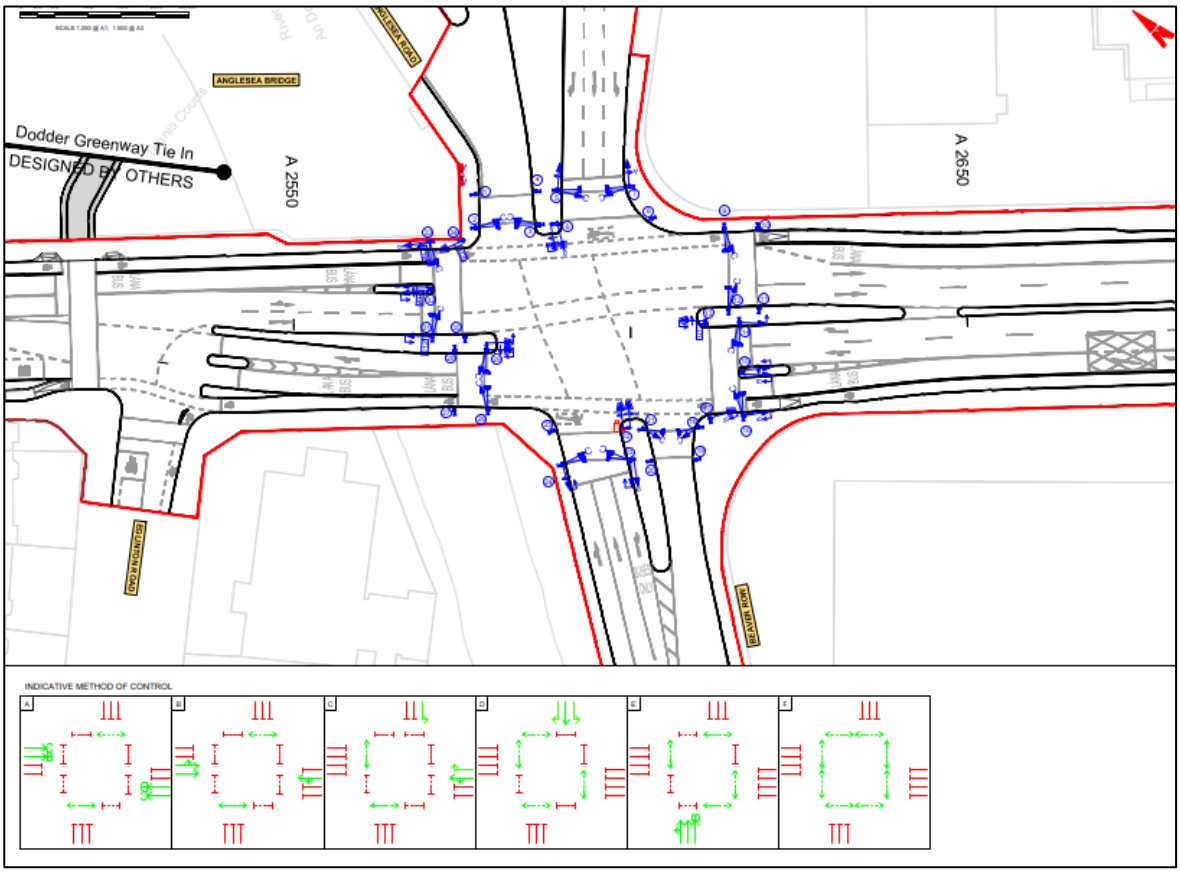


Figure 3.36: Extract from Junction Design Report (Page 56 and 57)

b) General Arrangement drawing Sheet 10 of 54.

Existing turning ban at the RTÉ

The existing turning bans are referenced in Chapter 4 08-Traffic Signs and Road Marking Drawings in Volume 3 of the EIAR. The existing and proposed traffic signs at RTÉ junction are presented in 08-Traffic Signs and Road Marking Drawings Sheet 10 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, as shown in Figure 3.37 which notes the existing U-turn ban in the city-bound direction. The existing turning ban can also be seen in the existing street view in Figure 3.38.

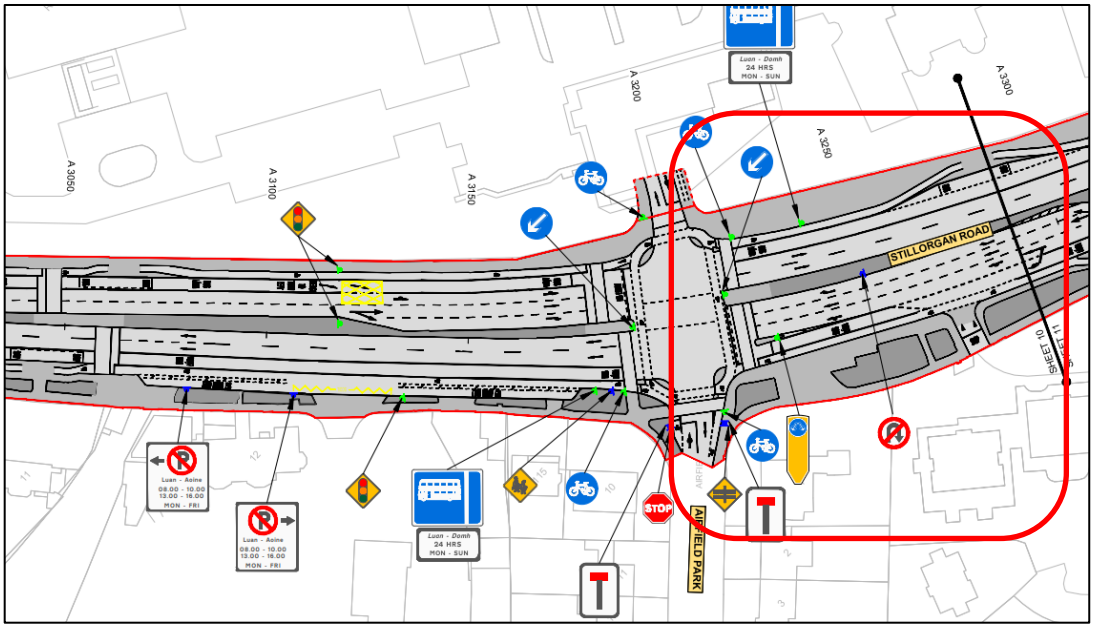


Figure 3.37: Extract from Traffic Signs and Road Marking Drawing (Sheet 10)

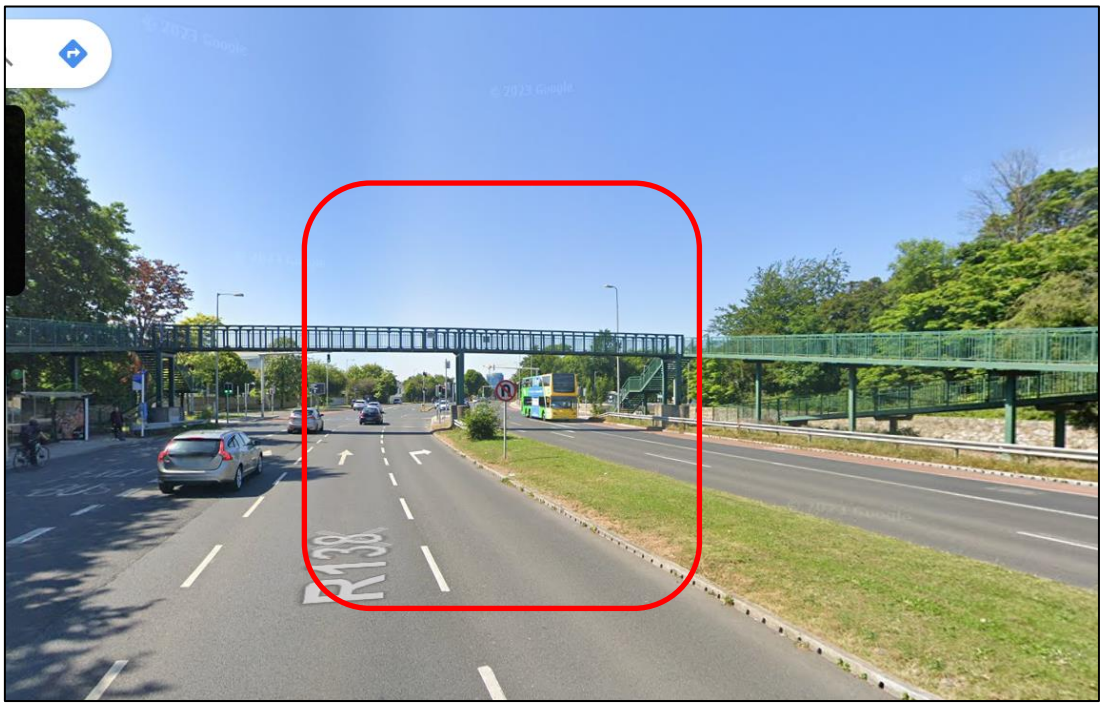


Figure 3.38: Street View at the RTÉ-junction city-bound direction (Image Source: Google)

RTÉ Junction and Cycle track connection at Airfield Park

The Proposed Scheme design at the RTÉ and Nutley Lane junction is presented in the 02-General Arrangement Drawings Sheet 10 and Sheet 11 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.39 and Figure 3.40.

A protected junction layout with full cycle crossing arrangement has been provided at the RTÉ junction. Cycle track connections has been provided at the Airfield Park arm to provide connectivity to the local residents of Airfield Park

Pedestrian crossings are located at the RTÉ junction and the Nutley Lane junction and are also shown in Figure 3.39 and Figure 3.40. Existing footbridge is retained at its current location. New pedestrian crossings have not been proposed between the RTÉ and Nutley Lane junction, as it was deemed that the two crossings at RTÉ and Nutley lane, along with the footbridge meets the pedestrian desire line in this 400m stretch of Stillorgan Road.

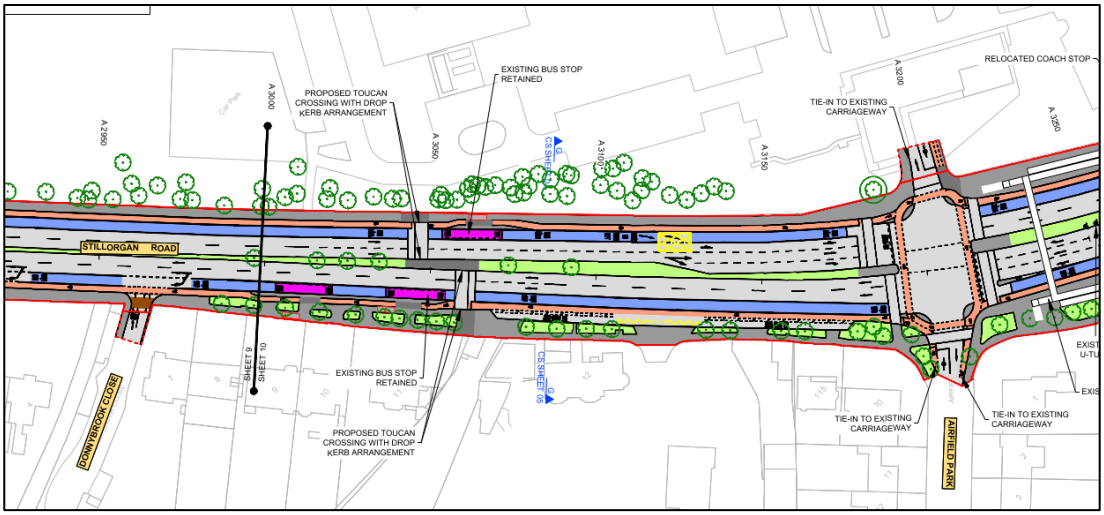


Figure 3.39: Extract from General Arrangement Drawings at the RTÉ Junction (Sheet 10)

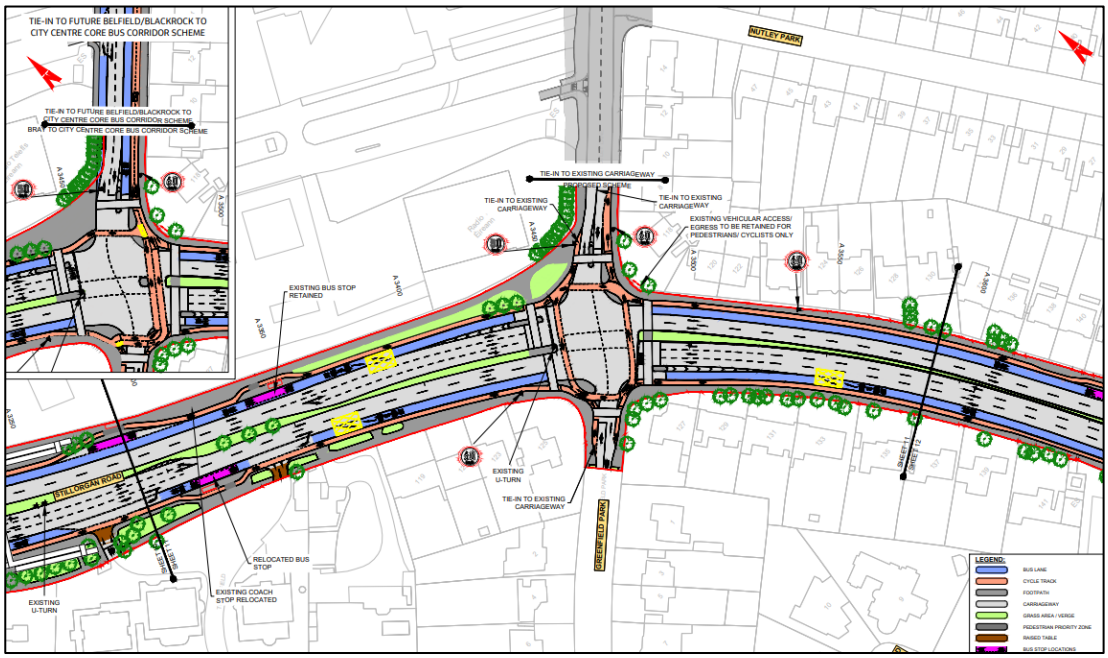


Figure 3.40: Extract from General Arrangement Drawings at the Nutley Lane Junction (Sheet 11)

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the proposals and the proposed design takes them into consideration. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and Section 4.6.6.3 states the following planning application, in relation to the RTÉ Campus Montrose:

'RTÉ Campus Montrose: A planning application was submitted for the construction of 611 apartments, three town houses, a childcare facility, two cafés, a change of use for the existing Mount Errol building for residents' facilities and a gym (at around chainage A2900 of the Proposed Scheme). The development also proposed 2.5 acres of landscaped publicly open space. This planning application was granted by An Bord Pleanála subject to various conditions. However, in March 2021, a High Court order overturned An Bord Pleanála's permission. The proposed development has been revisited and is currently at pre-planning stage. The proposed development is a mixed development and will consist of 675 housing dwellings, 200 bed hotel, 370sqm crèche, 450 sqm restaurant, 150sqm farm shop and ancillary residential amenity. Liaison has taken place with DCC and the developer ahead of their planning application for the proposed development. The Proposed Scheme design has been coordinated with the proposed development at Montrose, the bus top has been moved slightly north and impact on the trees has been minimised. A planning application has not been lodged at the time of writing this report;'

The junction design at RTÉ provides access to both RTÉ and the proposed Montrose development north of the RTÉ land, as shown in the Deposit Maps and CPO Schedule in Figure 3.41. Plot 1010(1).1a is the area of permanent land acquisition and Plot 1010(2).2a is the area of temporary land acquisition and 'CB' is the private right of way associated with this plot reference. The junction has been designed taking into consideration access to both RTÉ and Montrose development.

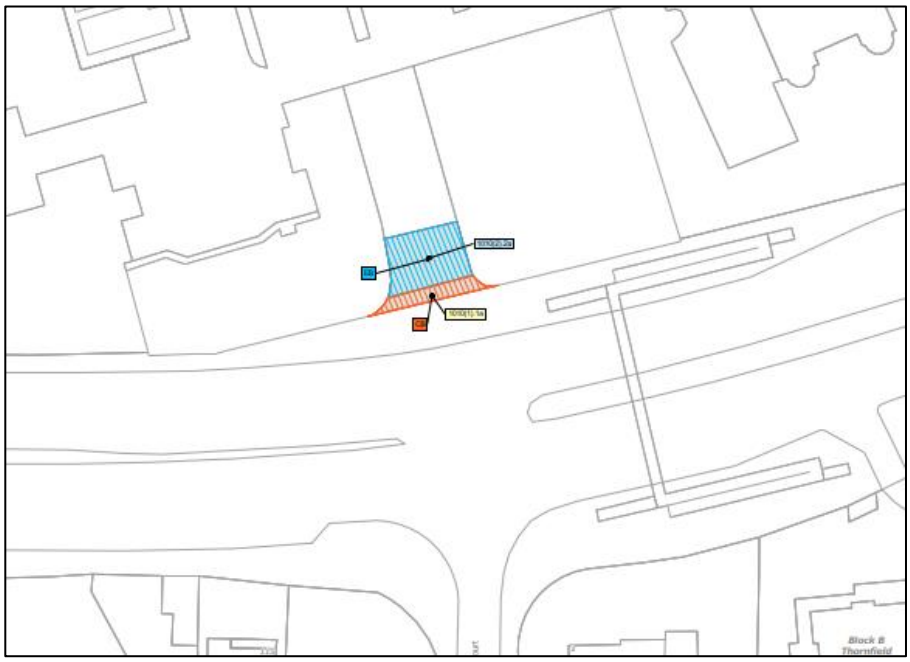


Figure 3.41: Extract from CPO Deposit Maps (Sheet 35)

c) Typical cross section drawings Sheet 05 of 22.

The proposed design is shown in Chapter 4 Volume 3, Part 1 of 3 of the EIAR in 02-General Arrangement Drawing and 05-Landscaping General Arrangement Drawings. The existing trees removed, existing trees retained, and new trees planted are presented in the 05-Landscaping General Arrangement Drawings Sheet 10 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.42. The existing trees at this location are retained.

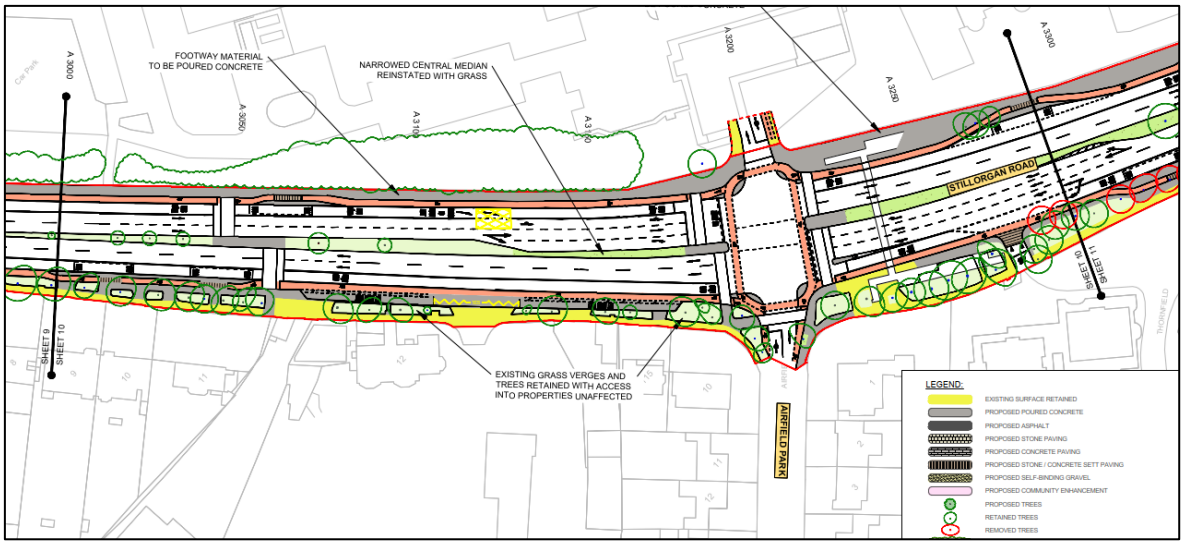


Figure 3.42: Extract from CPO Deposit Maps (Sheet 35)

Also, refer to response in 3.2.3.3 on Landscaping below.

3.2.3.3 Landscaping

Summary of issues raised

The submission raises issues with the following Proposed Scheme landscaping proposals:

- Removal of 5 no. mature trees, Landscaping Sheet 09.

  Five mature trees are shown to be removed on Sheet 09 of the Landscaping plans, but no alternative trees are proposed. This is likely to result in a reduction of environmental quality to the air, noise and landscape.

- Removal of significant mature trees, Landscaping Sheet 11.

  Significant mature trees are shown to be removed, on sheet 11 of the Landscaping plans, in order to move the bus stop and narrow the central meridian. No alternative trees are to be proposed in this area resulting in a loss of environmental, visual, air and acoustic quality.

Response to issues raised

Refer to response in Section 3.2.3.1 on Impact on biodiversity, green space, street trees and public amenity and also note below.

The Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, the removals at those locations outlined in the submission are as follows:

- The five trees referenced in Sheet 9 of the Landscape General Arrangement Drawings are hornbeam trees (Tree Numbers T0977-T0981) which have been categorised as Category B trees (moderate value and conservation) and are assessed as being semi-mature and in fair physiological condition. These require removal due to proposed narrowing of the central median;
- The trees referenced in Sheet 11 of the Landscape General Arrangement Drawings within the central median which will need to be removed to allow for narrowing of the median are assessed as follows:
  - A hornbeam tree (Tree Number T0905) which has been categorised as a Category C tree (low value and conservation) and is assessed as being semi-mature and in poor physiological condition; and
  - Four additional hornbeam trees in the central median (Tree Numbers T0906-T0909) which have been categorised as Category B trees (moderate value and conservation) and are assessed as being mature and in fair physiological condition.
- The trees referenced in Sheet 11 of the Landscape General Arrangement Drawings on the northbound side of the carriageway which will need to be removed to allow for a new bus stop at this location are assessed as follows:
  - A lime tree on the northbound side of the carriageway (Tree Number T0919) which has been categorised as a Category B tree (moderate value and conservation) and is assessed as being semi-mature and in fair physiological condition;
  - A lime tree on the northbound side of the carriageway (Tree Number T0924) which has been categorised as a Category B tree (moderate value and conservation) and is assessed as being early-mature and in fair physiological condition;
  - A lime tree on the northbound side of the carriageway (Tree Number T0928) which has been categorised as a Category C tree (low value and conservation) and is assessed as being semi-mature and in fair physiological condition; and
  - Two Norway maple ‘crimson king’ trees on the northbound side of the carriageway (Tree Numbers T0920 and T0921) which have been categorised as Category B trees (moderate value and conservation) and are assessed as being semi-mature and in fair physiological condition.

With respect to replacement of those lost trees, new tree and vegetation planting is proposed throughout the Proposed Scheme where space allows. Replacement planting may not always be possible in the immediate vicinity of areas of loss due to space constraints however as shown in the Landscape General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR there is a proposed area of planting (including new trees) on Sheet 11 at the corner of the Nutley Lane / Stillorgan Road junction, and a large quantity of proposed planting on Sheet 13 in and around UCD. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement Drawings (refer to Section 3.2.3.1 of this report).

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the visual impact of the Proposed Scheme during both the Construction and Operational Phases. With respect specifically to

Section 2 (Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout) of the Proposed Scheme, Section 17.4.4.1.2 describes the impact on townscape and streetscape character, stating the following:

'*The baseline townscape is of low / medium sensitivity and operation of the Proposed Scheme will involve generally minor changes along the existing major road infrastructure. There will be some localised substantial changes, most notably where the Proposed Scheme provides for a new bus interchange within UCD adjacent to the Belfield Interchange, and there will be some continuing effects from loss of trees removed from the existing sylvan setting of the entrance during the Construction Phase, although this is in line with the aims of the UCD Future Campus Masterplan. Other substantial changes are limited to between Stillorgan Road / Dublin Road (Oatlands) / Priory Drive junction and Stillorgan Road / Lower Kilmacud Road / Stillorgan Park Road junction, where there will have been removal of dense roadside planting during the Construction Phase which will reduce the screening effect between the busy road corridor and several properties. However, the Proposed Scheme provides adequate replacement planting at UCD and to the roadside locations which experienced vegetation loss, and the negative effects will be negated over the long-term... Additional tree planting will also be provided at several roadside locations and sections of median.*'

It goes on to rate the impact significance as follows:

'*The Operational Phase of the Proposed Scheme will not alter the overall townscape character but there will some limited localised changes to streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment will be low.*

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Slight and Short-Term, becoming Neutral, Slight and Long-Term.'

Section 4.6.12 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the landscape and urban realm design approach and principles. Section 4.6.12.5.2 describes central median planting, stating:

'*Central median planting varies depending on the context of the landscape character and road. Dual carriageways or wide roads to the edge of settlements are more likely to have wider central medians where tree planting and grass verges can be found. A combination of tree and shrub or species-rich grassland is possible to create a formalised corridor of planting within a wide section of road*'.

The landscaping design is based on a landscape and character analysis undertaken, as described in Section 4.6.12.1 in Chapter 4, stating the following:

'*The landscape and urban realm proposals are derived from analysis of the existing urban realm, including existing character, any heritage features, existing boundaries, existing vegetation and tree planting, and existing materials. For each section of the route, the design took a broad overview of typical dwelling age and style, extents of vegetation and tree cover. The predominant mixes of paving types, appearance of lighting features, fencing, walls, and street furniture was considered. The purpose of this analysis was to assess the existing character of the area and how the Proposed Scheme may alter this. The outcome of the analysis allowed the designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route. Where possible, a SuDS approach has been taken to assist with drainage along the route*.'

3.2.4 183– Shamrock Hill Management

The submission raises the concern that the existing layout of the junction is fit for purpose in its current condition and would not negatively impact or restrict the construction of the Bray to Dublin City Centre Bus Corridor Scheme, and that it should remain unchanged.

Summary of Issues Raised:

1) CPO of the land
2) Stop Line and Raised Table
3) Landscape
4) Indemnity

3.2.4.1 CPO of the land

Summary of issues raised

The submission makes an observation in respect to the lands to be acquired as part of the Proposed Scheme through Compulsory Purchase Order. Page 2 of the submission acknowledges that the works for which the CPO is purported to be necessary and have made few observations.

Response to issues raised

NTA notes and thanks the acknowledgement that the land under CPO is required for the purpose of the Proposed Scheme. As set out in paragraph 2 of the statutory notice CPO is: *'For the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.*

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Bray to City Centre Core Bus Corridor Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the *'precise details of the proposed construction works'* and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, in the General Arrangement Drawings Sheet 09 as shown in Figure 3.43.

The permanent and temporary land take required from the Developer's landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as part of the Compulsory Purchase Order information and as shown in Figure 3.44. Plot 1012(1).1a is the permanent land take and plot 1012(2).2a is the temporary land take.

The permanent land take is required for the construction of the raised table and road markings. Refer to response in Section 3.2.4.2 below on the raised table. The temporary land take is required for construction works and any boundary works or accommodation works and proposed ancillary works.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

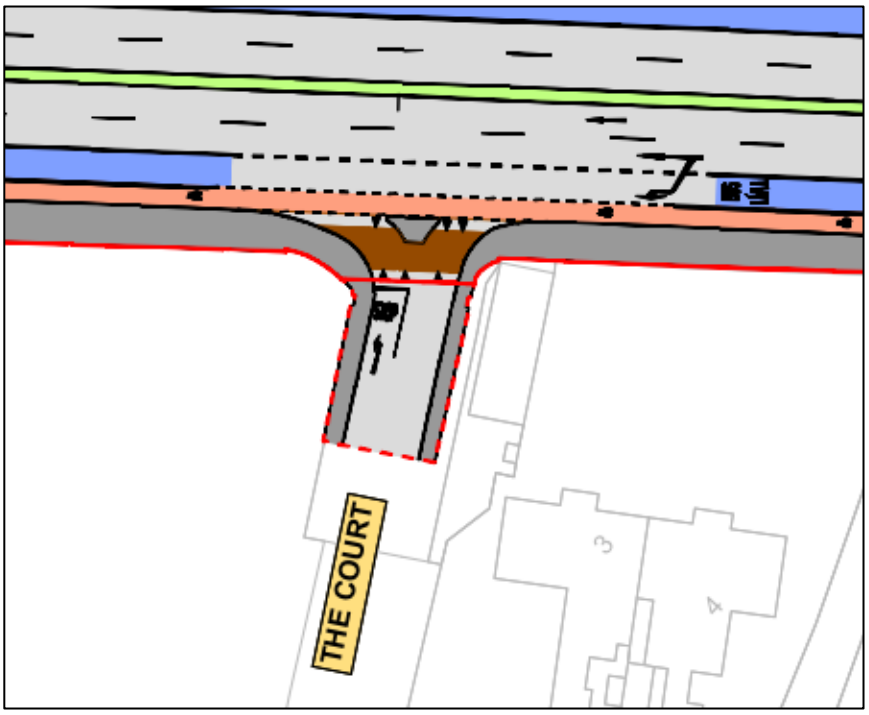


Figure 3.43: Extract from General Arrangement Drawings (Sheet 09)

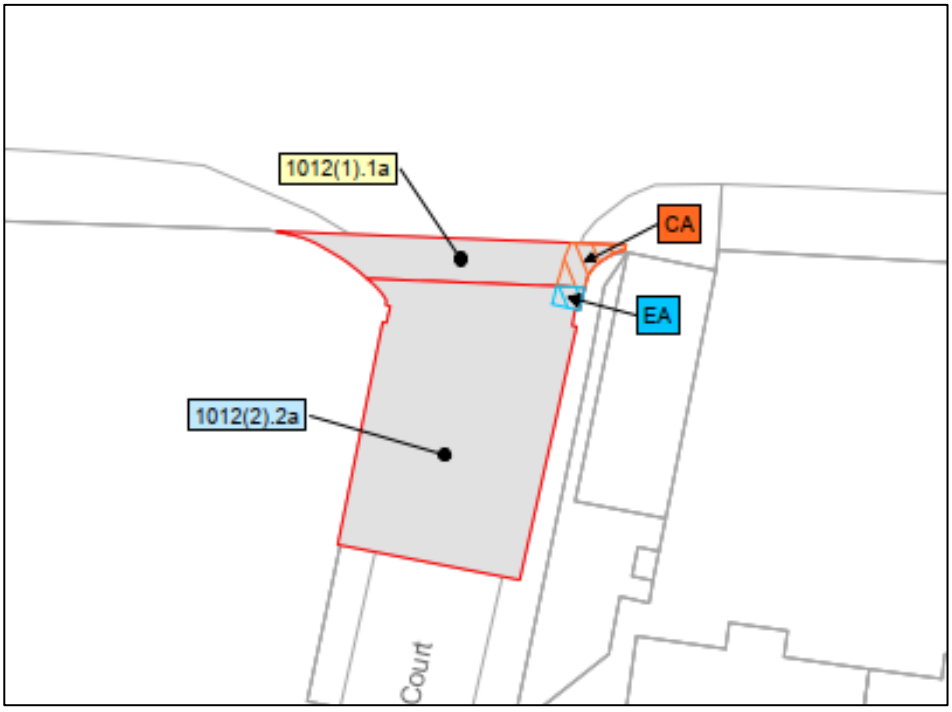


Figure 3.44: Extract from CPO Deposit Map (Sheet 36)

3.2.4.2 Stop Line Location / Raised Pedestrian Table

Summary of issues raised

The submission raised the concern that the proposed works would result in a traffic safety for vehicular access and egress from the Donnybrook Castle development. They noted that the location of the STOP line has no visibility splay to emerging vehicular traffic due to the obstruction posed by the lodge on the southern side of the entrance. The concern is raised that the proposed design is not in compliance with Chapter 4, Section 4.4.6 of Design Manual for Urban Roads Standards (DMURS) which advises that a visibility splay should be provided at junctions.

The submission raised the concern that the proposed raised table would constitute a significant impediment to the safe use of the junction by ingress and egress traffic and that the provision of this structure is a

disproportionate response to the need to facilitate pedestrian crossing requirements at this location. The concern is also raised that the circumstances cited in DMURS Chapter 4.4.7, for the provision of raised tables, do not prevail in this location, and that the provision of a courtesy crossing, as outlined in Chapter 4.3.2 of DMURS, would be sufficient in this location.

Response to issue raised

With regard to the Proposed Scheme, there are a number of measures that have been implemented that are likely to have a traffic calming effect. These include improved junction layouts with reduced corner radii, narrow carriageway line widths and raised table crossings on side roads. Raised table side entry treatments have been proposed along the Proposed Scheme, where practical to improve pedestrian and cycle facilities.

The intention in the proposed design is to provide raised tables at all junctions that are not signal controlled. A few very minor side streets are not shown on the General Arrangement drawings, but it is intended that they would be treated in the same way as all other side roads. These platforms are not required at private entrances which will have footpath crossings as indicated in the Preliminary Design Guidance Booklet for BusConnects.

Raised table treatments are provided on priority side roads where the stop/ yield line is located behind the raised table and footpath crossing to encourage a 'courtesy crossing' for pedestrians. The design of the raised table treatments for priority junctions has been undertaken in accordance with Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR.

'The key design features and considerations relating to this junction type are listed below:

- *The minor arm stop/yield line is located behind the raised table and footpath crossing to encourage a 'courtesy crossing' for pedestrians.*
- *Splayed kerbs provide a step change between the carriageway and cycle track and the cycle track and footpath.*
- *Cycle symbol markings are to be used on the cycle track across the junction.*
- *Consideration must also be given to cyclists crossing the mainline to enter or exit the side road. Where a significant demand is found for these movements then consideration should be given to provision of a signal crossing.*
- *Tactile paving may be required to alert visually impaired persons of the crossing point at busier side streets. However, the preferred arrangement is for the footpath to continue across the junction without a break and for pedestrian priority to be maintained (as shown in The National Cycle Manual on Page 136).*
- *There is the potential for conflict between turning traffic yielding to cyclists and buses continuing on the mainline.*
- *Consideration must also be given to cyclists crossing the mainline to enter or exit the side road. Where a significant demand is found for these movements then consideration should be given to signalising the junction.'*

Figure 30 in Section 8.1 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR, shows a typical layout of the raised table at priority junction, as seen in Figure 3.45 below.

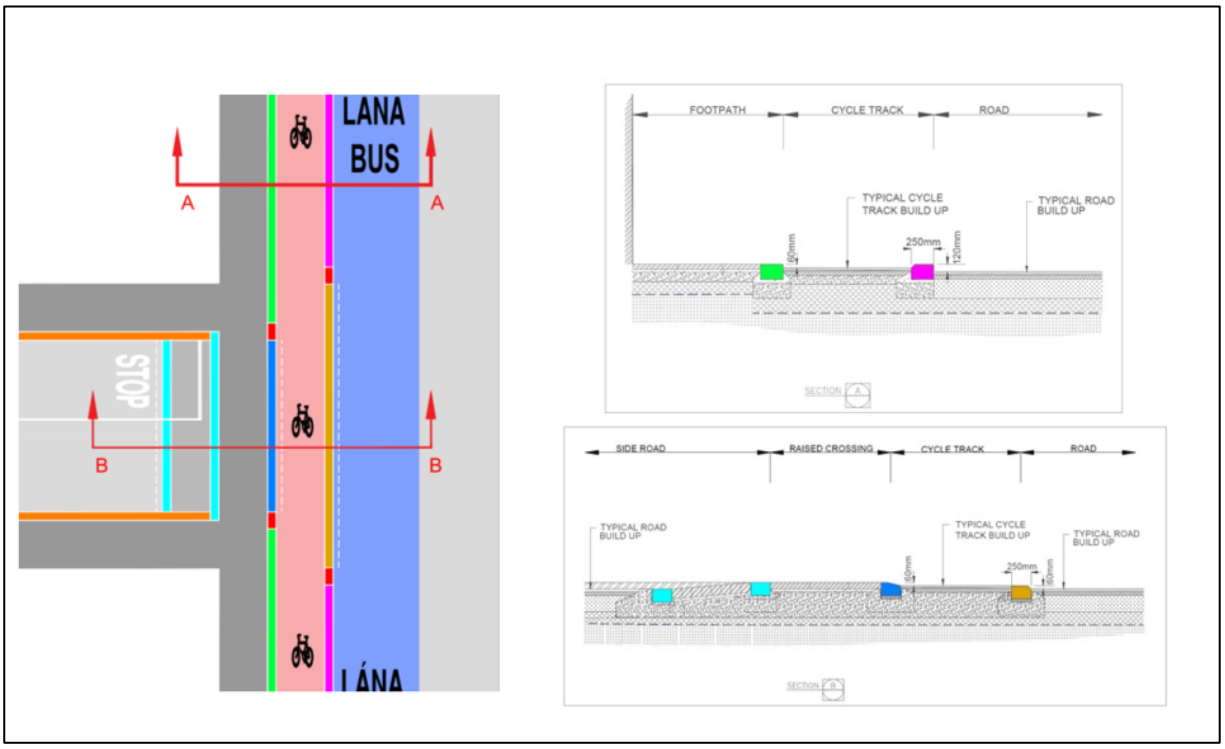


Figure 3.45: Extract from Preliminary Design Guidance Document (Figure 30)

Also, refer to response to Section 3.2.4.3 on Landscape.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with visibility at this junction.

3.2.4.3 Landscape

Summary of issues raised

The submission firstly notes that the layout of the raised pedestrian table in the Landscaping plans is not in agreement with the raised table layout in the General Arrangement plans. The concern is also raised that the partial renewal of surfaces at the entrance, with the proposal to retain the existing footpath to the south, but replace the footpath to the north and overlay pavement on the road, would have a negative impact on the appearance of the entrance to the development and detract from the value of the property.

Response to issues raised

The raised table treatment and STOP Line at this junction are shown consistently in the General Arrangement Drawings and the Landscaping Drawings. The raised table treatment and STOP Line is presented in the 02-General Arrangement Drawings Sheet 09 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.46. The raised table treatment and STOP Line is also presented in the 05-Landscaping General Arrangement Drawings Sheet 09 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.47.

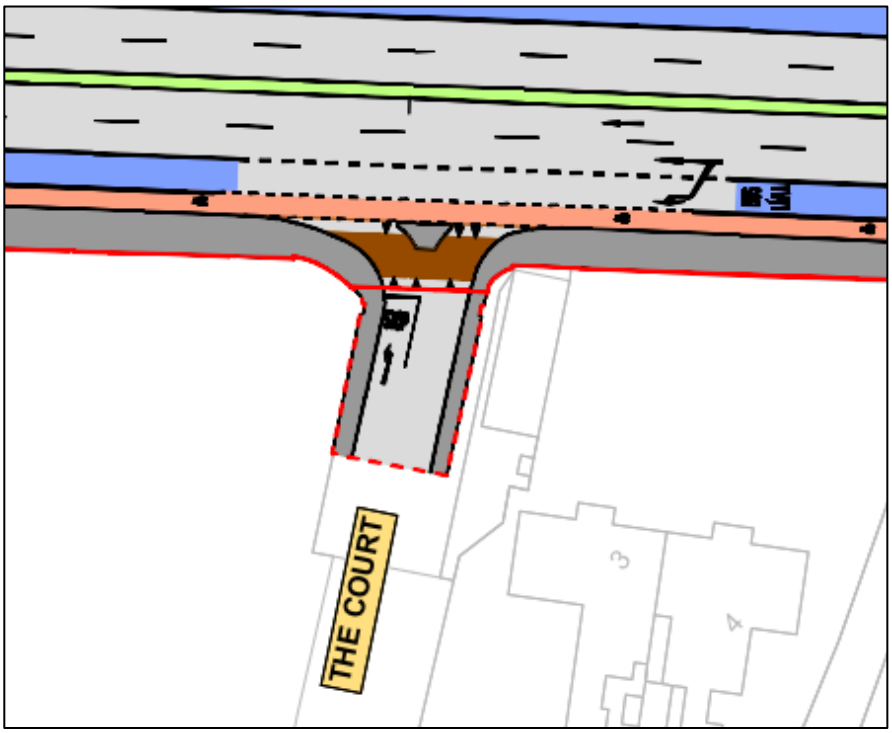


Figure 3.46: Extract from General Arrangement Drawings (Sheet 09)

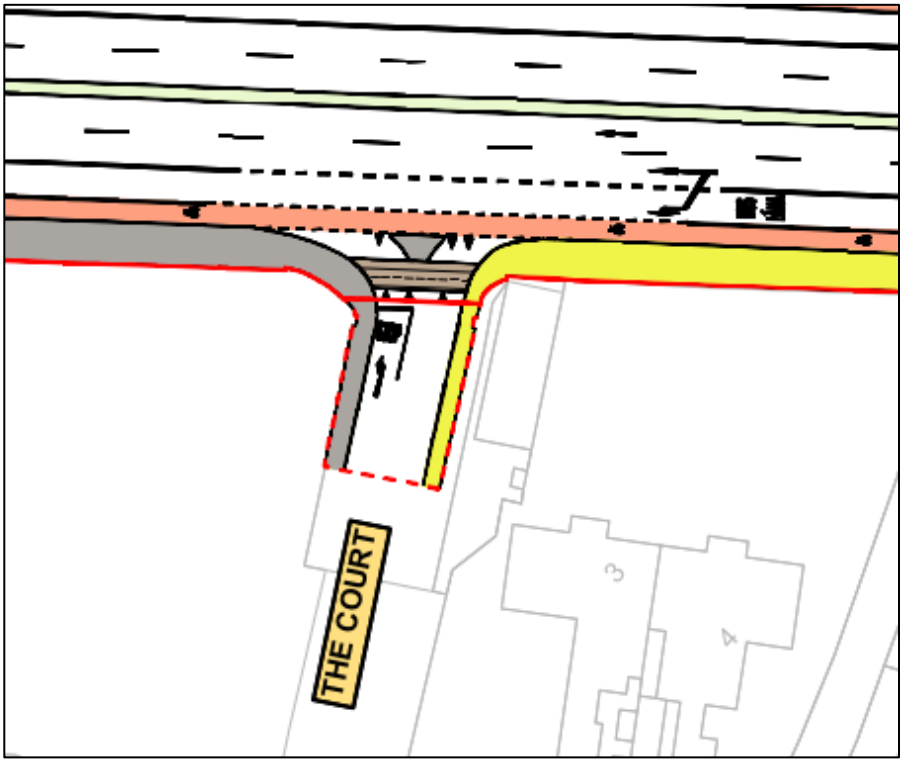


Figure 3.47: Extract from Landscaping General Arrangement Drawings (Sheet 09)

Section 14.5.2 of the Preliminary Design Report, as part of the Supplementary Information states:

'The proposed material typologies employed in the preliminary design are described as:

- ***Poured in situ concrete pavement** - Used extensively on existing footpaths. Concrete pavements can be laid without a kerb, can have neatly trowelled edges and textured surface for a clean, durable, slip resistant surface;*
- ***Asphalt footpath** - Widely used on existing footpaths and will tie in with other sections of public realm. Laid with a road kerb, can have a smooth finish or textured aggregate surface, provides a strong flexible slip resistant surface. Opportunities to retain good quality kerbs have been explored and tie-in points considered;*

- ***Precast concrete unit paving*** *- Either concrete paving slabs or concrete block, there is a very wide variety of sizes and colours available to provide an enhanced public realm. The use/reuse of granite kerbs where appropriate will further enhance the public realm. This type of material use is mostly employed in non-inner-city public realm enhancements;*

- ***Natural stone paving*** *- Employed for high quality urban realm areas, mostly in city centre locations. This typology represents natural stone surface treatments such as granite and are used to create enhanced public spaces for major urban realm interventions;*

- ***Stone or Concrete setts*** *- Proposed for distinguishing pedestrian crossing points either on raised table or at road level;*

- ***Self-binding gravel*** *- Proposed for pedestrian paths set away from the road expected to see less traffic. Used for natural areas, for example, paths through wildflower meadows. They provide a defined informal route as an alternative to asphalt or concrete; and*

- ***No change*** *- In addition to areas with proposed material changes, there were also areas identified where no change in materials would be required. For example, where pavement has recently been laid and is in good condition. The design also explores opportunities where good quality kerbs such as granite kerbs could be re-laid in the same location, which would have both cost and sustainability advantages.'*

The proposed paving finishes at this junction will allow retention of character of the existing surfacing.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the residual impact of Section 2 of the Proposed Scheme (in which the respondent's property is located) as Neutral, Slight and Long-Term as shown in the extract from Table 17.10 (see Table 3.6 below).

Table 3.6: Extract from Chapter 17 in Volume 2 of the EIAR (Table 17.10)

Townscape Receptor	Proposed Change	Baseline Townscape Sensitivity	Magnitude of Change	Significance & Quality of Townscape / Streetscape / Visual Effects / Impacts (at one year post-construction)	Significance and Quality of Townscape / Streetscape / Visual Effects / Impacts (at 15 years post-construction)
Townscape and Streetscape Character					
Section 1: Leeson Street to Donnybrook (Anglesea Junction) For proposed changes see Section 17.4.4.1.1		Very high	Medium	Negative Moderate Short-Term	Positive Slight / Moderate Long-Term
Section 2: Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout For proposed changes see Section 17.4.4.1.2		Low / Medium	Low	Negative Slight Short-Term	Neutral Slight Long-Term
Section 3: Loughlinstown Roundabout to Wilford Roundabout For proposed changes see Section 17.4.4.1.3		Very High	Very High	Negative Very Significant Short-Term	Negative Moderate Long-Term
Section 4: Bray North to Bray South (Wilford Roundabout to Fran O'Toole Bridge) For proposed changes see Section 17.4.4.1.4		High	Medium / High	Neutral Moderate / Significant Short-Term	Positive Moderate Long-Term

Chapter 17 also references raised tables and changes / improvements to paving as a potential benefit of the Proposed Scheme, stating the following in Section 17.4.4.2.10:

'*The Proposed Scheme also provides for a reduction in the car-centric design of the townscape with a substantially enhanced experience for pedestrians and cyclists through measures such as provision of raised crossing points to side junctions, paving schemes which indicate pedestrian priority and aid in reducing traffic speeds, and shorter or more direct crossing points at junctions.*'

3.2.4.4 Indemnity

Summary of issues raised

The applicant requested that they are indemnified against all future liability arising out of any acts of misfeasance in relation to the reinstatement/condition of the surface of the lands which are subject to temporary acquisition as a result of this project.

Response to issues raised

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Section 5.5.2.1 states, in part, the following:

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works.'

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2, in part, that:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation. These are matters that can be successfully addressed between the Shamrock Hill Management Company and the NTA, in the absence of any approval condition.

3.3 Proposed Scheme at Coláiste Eoin School

3.3.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor, it is proposed to provide a short section of new two-way cycle track connection southbound from Merrion Grove which will improve access from Coláiste Eoin / Coláiste Íosagáin to the N11 junction with Merrion Grove.

Between Merrion Grove and Lower Kilmacud Road it is proposed to provide a bus lane and two general traffic lanes plus a one-way segregated cycle track in each direction. A new dedicated footpath is to be provided between the Lower Kilmacud Road and the Old Dublin Road (Stillorgan), and the Old Dublin Road (Stillorgan) and Trees Road Lower junctions on both sides of the Stillorgan Road.

The existing road cross section at this location consists of two general traffic lanes in each direction. Bus lanes run in either direction after this point, with cycle lane and footpaths are provided on either side of the carriageway. There are currently no bus stops at this location.

The Proposed Scheme design at Coláiste Eoin is presented in 02-General Arrangement Drawings Sheet 16 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.48.

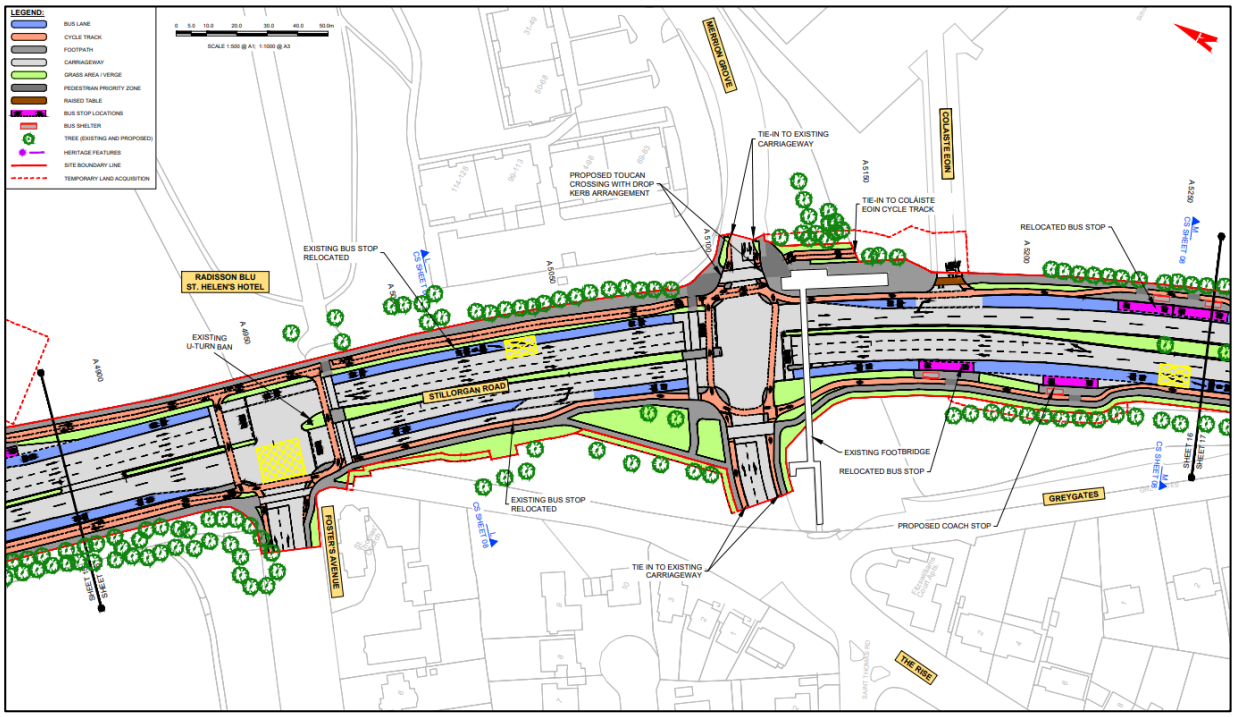


Figure 3.48: Extract from General Arrangement Drawings at Coláiste Eoin (Sheet 16)

3.3.2 Overview of Submissions Received

Table 3.7 below lists the 2 individual submissions made in respect of the Proposed Scheme at Coláiste Eoin School.

Table 3.7: Submissions Made in Respect of at Coláiste Eoin School

No	Name	No	Name	No	Name
67	Edmund Rice Schools Trust Limited	198	Teresa Deering		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

3.3.3 67 - Edmund Rice School Trust Limited

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Duration of works, concern on temporary land acquisition and access/ egress including impacts on All-weather Pitch and Car Parking Facility

2) Query on the tree removal

3.3.3.1 Duration of works and concerns on temporary land acquisition and access/egress

Summary of issue raised

This submission is primarily concerned with the extent of impact associated with temporary land acquisition which is included in the CPO. The respondent queried regarding the duration of temporary land acquisition.

The submission queried regarding the anticipated impact on pedestrian and vehicular access and egress to and from the school, expressing the necessity for continuous and uninterrupted access/egress for operation of the school and its amenities.

The submission queries whether the car parking facility behind the entrance to the property would be affected throughout the duration of the works.

The submission noted the all-weather pitch located to the south-east of the proposed land for temporary acquisition and questioned whether the pitch would remain unaffected throughout the duration of the works.

Response to issue raised

As set out in paragraph 2 of the Statutory Notice, which was served upon the objector, the CPO is *'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.* Further, on the face of the CPO itself, also indicates that it is *'for the purposes of facilitating public transport'.*

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Bray to City Centre Core Bus Corridor Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the *'precise details of the proposed construction works'* and all of the *'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.*

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The Proposed Scheme design at the location of Coláiste Eoin and Coláiste Íosagáin school are presented in 02-General Arrangement Drawings Sheet 16 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.49. As part of the BusConnects Bray to City Centre CBC works, permanent land take (a short strip shown in the CPO maps) is required to provide the two-way cycle track connection to the school.

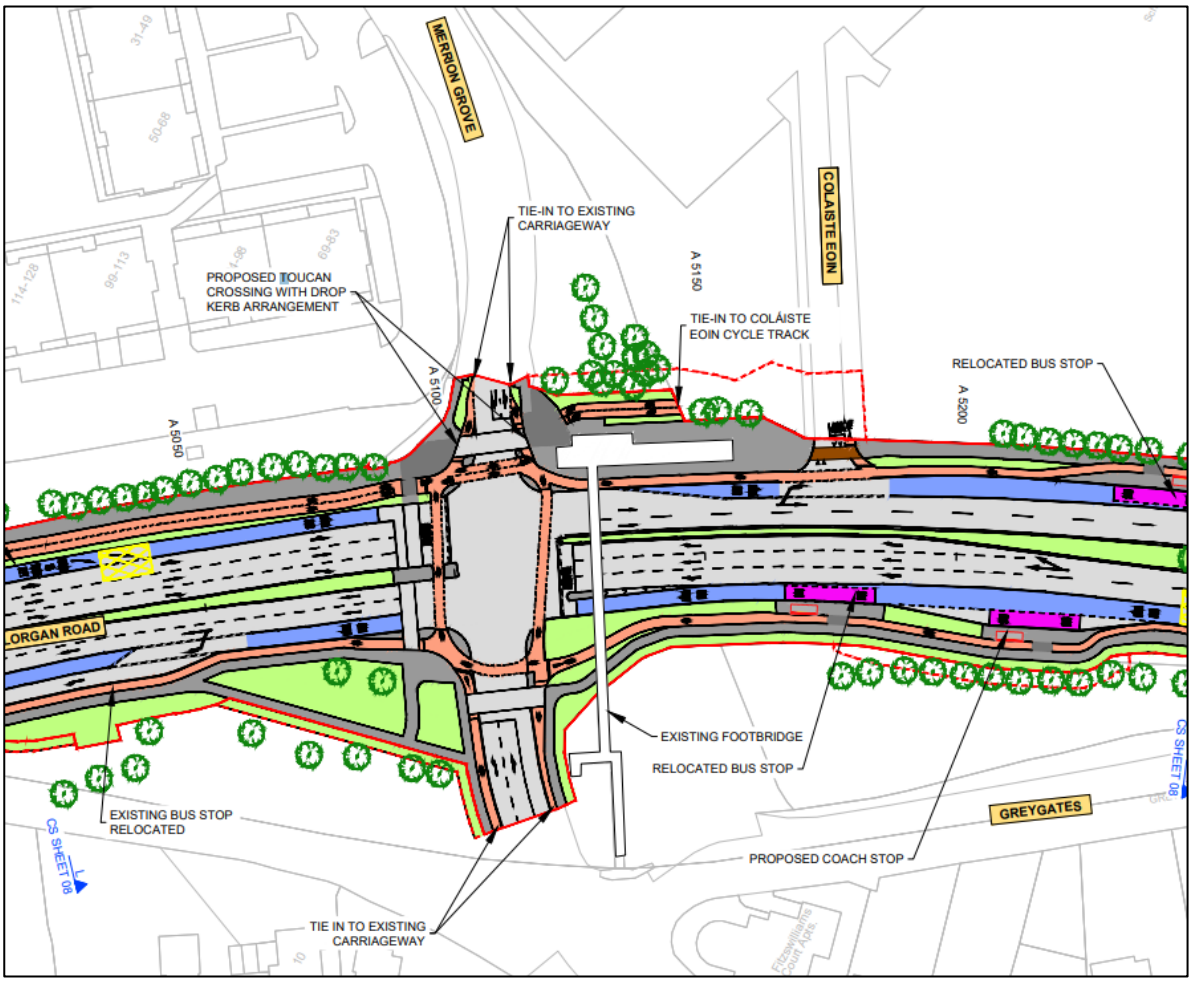


Figure 3.49: Extract from General Arrangement Drawings at Coláiste Eoin (Sheet 16)

The permanent and temporary land take required from the Edmund Rice Schools Trust Limited landholding which premises Coláiste Eoin and Coláiste Íosagáin school is shown in the Deposit Maps and details listed in the CPO Schedule, as part of the Compulsory Purchase Order information and is shown in Figure 3.50. Plot 1008(1).2i shows the temporary land take.

Figure 3.50: Extract from CPO Deposit Map

An indicative programme for the Proposed Scheme is provided in Table 5.2 of Chapter 5 (Construction) in Volume 2 of the EIAR and shown in Table 2.8 below. The programme identifies the approximate duration of works at each section. The total Construction Phase duration for the overall Proposed Scheme is estimated at approximately 36 months. However, construction activities in individual sections will have shorter durations as outlined in Section 5.3. The location of each section/sub-section along the Proposed Scheme is shown in Figure 5.1 in Volume 3, Part 3 of 3 of this EIAR.

Table 5.2 in Section 5.3.1.2 of Chapter 5 (Construction) in Volume 2 of the EIAR provides details of the construction activities for the Proposed Scheme, as shown in Table 3.8. Coláiste Eoin and Coláiste Íosagáin school is located in Section 2a: Donnybrook (Anglesea Road Junction) to Whites Cross (Leopardstown Road). The duration for construction works in Section 2a is 15 months, however, individual sections will have shorter durations. The duration of the works will vary from property to property, but access and egress will be maintained at all times and will be discussed with landowner in advance of the construction. At Coláiste Eoin/Coláiste Íosagáin, tie-in works will be carried out, including removal of a section of boundary wall, lowering of the boundary wall to 0.6m, relocation of a monument, and construction of an access gate.

Table 3.8: Extract from EIAR Chapter 5 (Construction) (Table 5.2 Construction Programme)

Table 5.2: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned back after construction, reinstated in the same condition as existing.

Figure 3.51 shows an extract of the Proposed Scheme and the permanent and temporary land take line with Aerial view.

Figure 3.51: Extract of the Design at Coláiste Eoin on Aerial View (Image Source: Maxar)

There will be some temporary disruption to the car parking during the construction works, however as mentioned in the Chapter 5 (Construction) in Volume 2 of the EIAR, Section 5.5.3.2 states:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

The all-weather pitch located to the south-east of the proposed land for temporary acquisition is outside the Proposed Scheme Site Boundary Line and Temporary Land Acquisition boundary and that the pitch would remain unaffected throughout the duration of the works.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

The NTA acknowledges the close liaison with Coláiste Eoin and Coláiste Íosagáin school that has been in place during the planning and design stage of the Proposed Scheme.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.3.3.2 Tree Removal

Summary of issue raised

The respondent has requested for clarity on the extent of tree removal within the land proposed to be temporarily acquired.

Response to issue raised

The Proposed Scheme landscape design at the location of Coláiste Eoin and Coláiste Íosagáin school are presented in 05-Landscaping General Arrangement Drawings Sheet 16 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.52 showing the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting.

As noted in the Landscaping General Arrangement Drawings, the existing trees within the permanent land take required for the construction of the 2-way cycle track will be removed. The removal of trees is required for the construction of the 2-way cycle track to the Coláiste Eoin and Coláiste Íosagáin school to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. This permanent land take is outside the Edmund Rice School Trust's landholding.

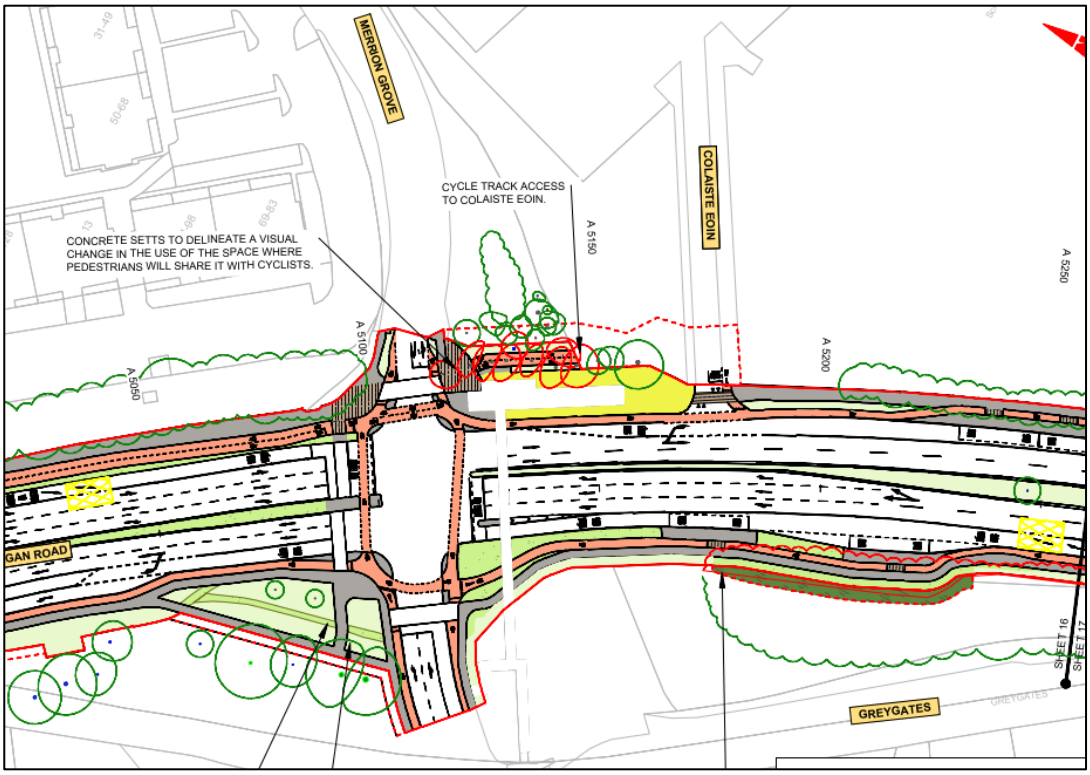


Figure 3.52: Extract of the Landscaping General Arrangement Drawings (Sheet 16)

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4, Part 4 of the EIAR. As per the Tree Schedule in that report, the removals at that location are as follows:

- Seven early mature to mature leylandii cypress trees (Tree Numbers T1583, T1589, T1592, T1593, T1597, T1598 and T1599) which have all been assessed as Category C1 trees (low value and conservation, mainly arboricultural);
- A semi-mature Norway maple tree (Tree Number T1590) which has been assessed as a Category C1 tree (low value and conservation, mainly arboricultural);
- A mature pine tree (Tree Number T1594) which has been assessed as a Category B1 tree (moderate value and conservation, mainly arboricultural); and
- Two semi to early mature ash trees (Tree Numbers T1602 and T1604) which have both been assessed as Category C1 trees (low value and conservation, mainly arboricultural).

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated, in parts below:

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition, and construction - Recommendations (BSI 2012). Works required within the root*

protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.

Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.

The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.'

As summarised in Table 17.9, the Construction Phase impact on trees and vegetation is predicted to be Negative, Very Significant, Short-Term. As summarised in Table 17.10, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Moderate / Significant, Long-Term.

3.3.4 198 - Teresa Deering

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Loss of Green Area

3.3.4.1 Loss of Green Area

Summary of issue raised

The submissions noted reservations regarding the removal of the green areas and associated shrubbery and bushes. The respondent noted that the removal of these elements would add to carbon emissions and that removal of them would have little impact in reducing bus times.

Response to issue raised

Chapter 8 (Climate) in Volume 2 of the EIAR has assessed the climate impact as a result of both the construction and operation of the Proposed Scheme. Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of *'Land Use Change'*, with the assessment described in Section 8.3.4.1.2 as:

'*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'.

During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as:

'*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate the two construction compounds. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be a negligible impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the visual impact of the Proposed Scheme during both the Construction and Operational Phases. With respect to Section 2 (Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout) of the Proposed Scheme, Section 17.4.4.1.2 describes the impact on townscape and streetscape character, stating the following:

'*The baseline townscape is of low / medium sensitivity and operation of the Proposed Scheme will involve generally minor changes along the existing major road infrastructure. There will be some localised substantial changes, most notably where the Proposed Scheme provides for a new bus interchange within UCD adjacent to the Belfield Interchange, and there will be some continuing effects from loss of trees removed from the existing sylvan setting of the entrance during the Construction Phase, although this is in*

line with the aims of the UCD Future Campus Masterplan. Other substantial changes are limited to between Stillorgan Road / Dublin Road (Oatlands) / Priory Drive junction and Stillorgan Road / Lower Kilmacud Road / Stillorgan Park Road junction, where there will have been removal of dense roadside planting during the Construction Phase which will reduce the screening effect between the busy road corridor and several properties. However, the Proposed Scheme provides adequate replacement planting at UCD and to the roadside locations which experienced vegetation loss, and the negative effects will be negated over the long-term... Additional tree planting will also be provided at several roadside locations and sections of median.'

It goes on to rate the impact significance as follows:

'*The Operational Phase of the Proposed Scheme will not alter the overall townscape character but there will some limited localised changes to streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment will be low.*

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Slight and Short-Term, becoming Neutral, Slight and Long-Term.'

The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.2.5.2, also demonstrates that the Proposed Scheme will deliver average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043 from the implementation of bus priority measures. The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM).

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.2.6 goes on to state:

'The findings of the Bus User assessment shows that the Proposed Scheme fully aligns with the aims and objectives of the CBC Infrastructure Works, to 'Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements.

The significance of impact on bus users of the Proposed Scheme has been appraised using a qualitative assessment, taking the changes in journey time and journey reliability metrics presented above into consideration. The Proposed Scheme is considered to deliver a Positive, Significant and Long-term impact overall.'

3.4 Proposed Scheme at Patrician Villas

3.4.1 Description of Proposed Scheme at this Location

The existing lane configuration on the N11 Stillorgan Road between Foster's Avenue and Wyattville Road has for the most part been retained. Junction designs along the route have been reviewed to remove left turn filter lanes crossing cycle lanes where possible.

Between Merrion Grove and Lower Kilmacud Road it is proposed to provide a bus lane and two general traffic lanes plus segregated cycle track in each direction. A new dedicated footpath is provided between the Lower Kilmacud Road and the Old Dublin Road (Stillorgan), and the Old Dublin Road (Stillorgan) and Trees Road Lower junctions on both sides of the Stillorgan Road. The new southbound footpath at this location will require an extension to the existing St Laurence's Park subway, where a new toucan crossing will also be provided across the Stillorgan Road. The slip road from the Stillorgan Road on to The Hill at Stillorgan is proposed to be closed.

The Proposed Scheme design at Patrician Villas is presented in the 02-General Arrangement Drawings Sheet 20 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.53.

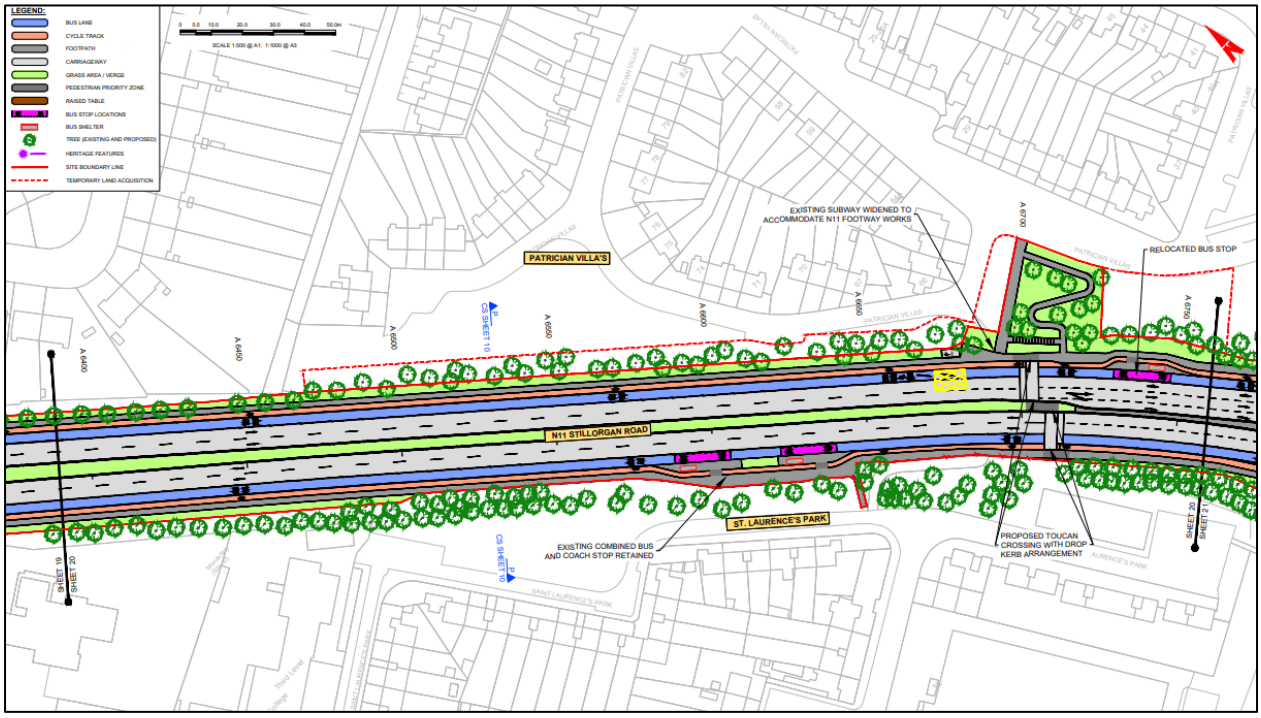


Figure 3.53: Extract from General Arrangement Drawings at Patrician Villas (Sheet 20)

Figure 3.54 below shows an aerial view of the location of the existing St Laurence's Park subway and pedestrian link into Patrician Villas.

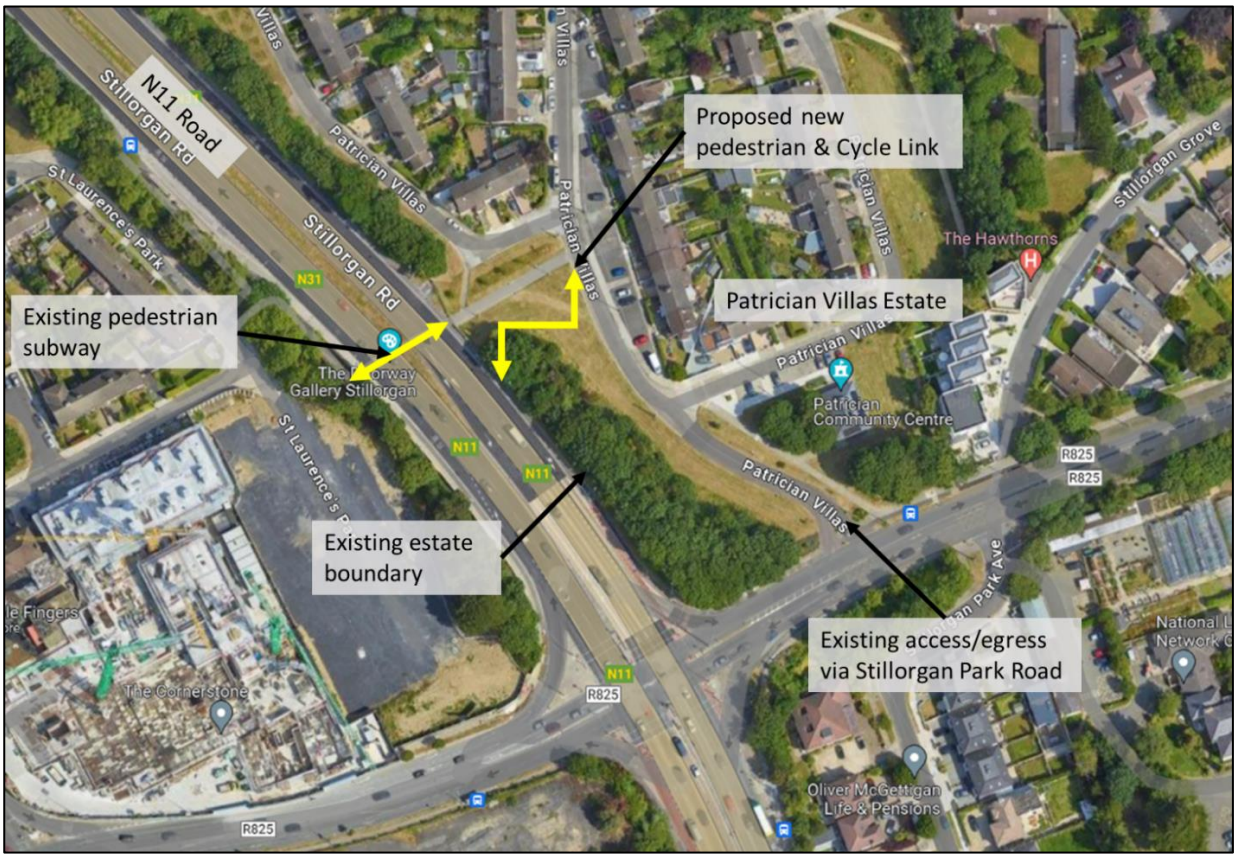


Figure 3.54: Location of Patrician Villas and Proposed new Pedestrian / Cyclist Link (Image Source: Google)

3.4.2 Overview of Submissions Received

Table 3.9 below lists the 34 individual submissions made in respect of the Proposed Scheme at Patrician Villas.

Table 3.9: Submissions Made in Respect of at Patrician Villas

No	Name	No	Name	No	Name
3	Alan Ashe	100	Jade Garcia Webber	148	Pam Robinson
5	Andrew McNamee & Fernanda De Sousa	106	Jo Armstrong	150	Patricia McKeever
11	Annie O'Gorman Weber	107	John Barron	151	Patrician Community Centre
13	Aoife & Ronan Hayes	108	John Cullen & Sandra Cullen	152	Patrician Residents Association
37	Cllr. Kate Ruddock	113	Kathleen Lee	154	Paul Cullen
38	Cllr. Martha Fanning	118	Louise O'Reilly & Others	158	Pauline Fogarty
44	Cllr. Marie Baker	119	Maeve Muckian	168	Rayna Connery & Owen Tighe
48	David & Joanne McKenna	124	Mark Anderson	181	Sean Leavy
55	Derek & Deirdre McCann	127	Maura Harmon	209	Violet Doherty
57	Dervila Cooke	132	Michael & Sophie Whelan	215	Yongjing Xie
70	Enda Gavin	143	Nuala Weber		

No	Name	No	Name	No	Name
78	Fiona Connor	146	Orla Cooke		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

1) Need for the new pedestrian link
2) Querying the consultation process
3) Need for new toucan crossing
4) Relocation of bus stop
5) Impact on biodiversity, loss of trees, screening and climate
6) Loss of Green/Community Space
7) Impact on Air Quality, noise, screening and human Health
8) Safety, security, anti-social behaviour, and vandalism
9) Visual impact / loss of privacy
10) Increase in traffic, parking in estate to access N11 and safety concerns

Other Issues Raised

1) Removal of Slip Road

3.4.3 Common Issues Raised and Responses

3.4.3.1 Need for the New Pedestrian Link

Summary of issue raised

Majority of the submissions state that the residents of Patrician Vilas express reservations regarding plans to provide a new pedestrian footpath link with concrete staircase and winding concrete ramp to provide access for pedestrians from the N11 to the residents of Patrician Vilas. Some stated objections to the extension of the underpass.

Some submissions noted that the existing provisions including a bus stop, the underpass, and a cycle lane are sufficient and that the proposed provisions are unnecessary. Other submissions expressed the view that the existing pedestrian accesses to Lower Kilmacud Road and St. Laurence's Park were sufficient.

A few submissions expressed that priority at Patrician Villas should be given to improvements to the existing underpass, rather than opening a new pedestrian link. Some submissions stated alternatives could include the provision of a cycleway along the northern edge of the green space at Patrician Villas, improvements to the existing ramp on the Stillorgan side of the underpass, and better lighting and furnishing within the underpass.

Response to issue raised

This response addresses the contention that the proposed pedestrian link is not necessary and was not investigated adequately.

Existing data

Section 10.2.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR includes the assessment of impacts on community amenity, land take and accessibility consisting of *'community areas'*, which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Kilmacud-Stillorgan, in which the Patrician Vilas is located.

Section 10.3.2.3 in Chapter 10 (Population) in Volume 2 of the EIAR provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 3.10 below.

Table 3.10: Extract from EIAR Chapter 10, Method of Travel to Work for Community Areas (Table 10.5)

Table 10.5: Method of Travel to Work for Bus, Train, Car and Foot / Bike (%)

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Westland Row	6%	15%	5%	45%	30%
University (Newman) Church	6%	11%	5%	51%	26%
Haddington Road	6%	22%	4%	53%	15%
Rathmines	10%	20%	8%	50%	12%
Donnybrook	11%	33%	3%	37%	15%
Merrion Road	12%	38%	10%	29%	12%
Booterstown	14%	47%	11%	18%	9%
Mount Merrion	13%	58%	3%	15%	11%
Blackrock	10%	46%	17%	16%	11%
Kilmacud - Stillorgan	11%	55%	12%	15%	7%
Newtownpark	13%	53%	10%	15%	9%
Foxrock	16%	60%	5%	10%	9%
Cabinteely	10%	64%	10%	8%	7%
Johnstown - Killiney	12%	64%	7%	9%	7%
Ballybrack - Killiney	6%	61%	16%	8%	9%
Loughlinstown	17%	59%	11%	9%	4%
Shankill	10%	60%	17%	6%	8%
Little Bray	12%	61%	8%	13%	7%
Bray	9%	52%	18%	14%	7%
Study Area Average	**11%**	**46%**	**9%**	**22%**	**11%**
County Dublin	**12%**	**54%**	**8%**	**17%**	**9%**

As can be seen in Table 3.10 above, of the 19 Community Areas assessed, Kilmacud-Stillorgan has a car mode share for travel to work trips of 55%. In addition, this mode share exceeds the average mode share for County Dublin as a whole. This is also highlighted in Section 11.3.4 of Chapter 11 (Human Health) in Volume 2 of the EIAR. Reference to the data for other community areas in Table 10.5 located along the N11 Road corridor, such as Booterstown and Newtownpark, highlights that they have lower travel by car percentage and higher travel by bus percentage, compared to Kilmacud-Stillorgan. These other areas generally have comparatively better permeability to the high frequency bus services along the N11 Road when compared to Kilmacud-Stillorgan. This data suggests that the prevalence of private car journeys within Kilmacud-Stillorgan may be linked to poorer access to public transport/ walking & cycling facilities.

Policy

The application documentation submitted to An Bord Pleanála demonstrates that the proposal for a new pedestrian and cyclist link between Patrician Villas and the new bus stops on the N11 Road is consistent with, and supports elements of, international policy, European Union (EU) law and policy, national policy, regional policy, and local policy.

At all policy levels, there are clear objectives to increase active travel and accessibility to public transport. In response to the submissions in relation to the creation of a new pedestrian and cycling link between Patrician Villas and the N11 Road, the details of how the proposed new link supports these different tiers of policy are provided in the paragraphs below.

International Policy, EU Law & Policy

Sections 2.3.1 and 2.3.2 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several international policies. In relation to the new link between Patrician Villas and the N11 Road, it supports particular aspects of the policies as described in Table 3.11 below.

Table 3.11: International Policy, European Union Law & Policy referenced in EIAR Chapter 2 supported by the Proposed Link

International Policy, EU Law & Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
United Nations 2030 Agenda	Section 2.3.1.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the 2030 Agenda aims to deliver a more sustainable, prosperous, and peaceful future for the entire world, and sets out a framework for how to achieve this by 2030. This framework is made up of 17 Sustainable Development Goals (SDGs) which cover the social, economic, and environmental requirements for a sustainable future. Section 2.3.1.1. notes that SDGs 9 and 11 are relevant to the Proposed Scheme as follows: Goal 9: '*Build resilient infrastructure, promote inclusion and sustainable industrialization and foster innovation'*; Target 9.1: '*Develop quality, reliable, sustainable, and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all.*' Goal 11: '*Make cities and human settlements inclusive, safe, resilient, and sustainable*'; Target 11.2: '*By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.*' Section 2.3.1.1 assesses that '*the need for the Proposed Scheme is supported by the goals and targets set out in the relevant SDGs. It will provide for enhanced walking, cycling and bus infrastructure, which will subsequently enable more efficient, safe and integrated sustainable transport movement along this corridor.*' **As part of the Proposed Scheme, the proposed link from Patrician Villas will provide for enhanced walking and cycling infrastructure from the Patrician Villas estate which will enable improved accessibility to sustainable transport and will reduce the distances to sustainable public transport for those in vulnerable situations, women, children, persons with disabilities and older persons.**
Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)	Section 2.3.2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how this EU strategy sets out a number of goals as to how people will move within and between cities in the future and explains how the strategy has identified 82 initiatives which have been categorised into 10 '*flagships.*' The flagship relevant to the Proposed Scheme is '*Flagship 3 – Making interurban and urban mobility more sustainable and healthy*'. This flagship states that: '*increasing the modal shares of collective transport, walking and cycling, as well as automated, connected and multimodal mobility will significantly lower pollution and congestion from transport, especially in cities and improve the health and well-being of people. Cities are and should therefore remain at the forefront of the transition towards greater sustainability.*' Section 2.3.2.1 assesses that '*the need for the Proposed Scheme is supported by the objectives of the EU's Sustainable and Smart Mobility Strategy through significant investment in cycle and pedestrian infrastructure, in addition to bus priority, along the route of the Proposed Scheme, thereby supporting and encouraging growth in active travel and sustainable public transport usage.*' **The proposed link from Patrician Villas will support and encourage growth in active travel and sustainable public transport usage.**
European Green Deal (EDG) 2019	Section 2.3.2.2 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the EDG indicated the European Commission adopted a

International Policy, EU Law & Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	communication entitled 'Sustainable and Smart Mobility Strategy – putting European transport on track for the future'. Section 2.3.2.2 states that *'this Strategy has the objective of 'accelerating the shift to sustainable and smart mobility' and requires that, '[t]he EU transport system and infrastructure will be made fit to support new sustainable mobility services that can reduce congestion and pollution, especially in urban areas.' It is noted that pollution is concentrated the most in cities and that a combination of measures is needed which includes 'improving public transport and promoting active modes of transport such as walking and cycling."* *'The Proposed Scheme is necessary, in conjunction with a range of other initiatives, to attain the objectives of the European Green Deal, through significant investment in cycle and pedestrian infrastructure, in addition to bus priority, thereby supporting and encouraging growth in active travel and sustainable public transport usage.'* **The proposed link from Patrician Villas will support and encourage growth in active travel and sustainable public transport usage.**

National Policy

Section 2.3.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several objectives of national policy. The specific element of the Proposed Scheme about which the submissions have been made to the Board, the new link between Patrician Villas and the Stillorgan Road, supports particular aspects of the policies as described in Table 3.12 below.

Table 3.12: National Policies referenced in EIAR Chapter 2 supported by the Proposed Link

National Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
Project Ireland 2040 – National Planning Framework (NPF) & National Development Plan (NDP) 2021-2030	Table 2.3 of Section 2.3.3.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the Proposed Scheme meets various National Strategic Outcomes (NSOs) of the NPF. Relevant NSOs in respect of the proposed new link to Patrician Villas include the following: **NSO1 Compact Growth** – EIAR Chapter 2 Table 2.3 assesses that *'the Proposed Scheme will support the creation of an attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity'* . Table 2.3 also states that *'The Proposed Scheme will bring greater accessibility to the City Centre and better connect communities and locations along its route for people to avail of housing, jobs, amenities and services.'* **The new direct link from Patrician Villas to the CBC along the N11 Road will improve the accessibility to the City Centre, and better connect communities and locations along its route, for the Patrician Villas residential area.** NSO4 Sustainable Mobility - Table 2.3 assesses that *'the Proposed Scheme will provide infrastructure to support a sustainable transport network that will facilitate a modal shift from private car usage to sustainable transport. It will reduce journey times and increase journey time reliability and increase the attractiveness of active travel and public transport for travel, which will in turn facilitate sustainable transport option alternatives to private car usage.* *The Proposed Scheme will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling),*

National Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.' Table 10.5 in Chapter 10 (Population) in Volume 2 of the EIAR shows that of the 11 Community Areas assessed along the Proposed Scheme corridor Kilmacud-Stillorgan has a car mode share for travel to work trips at 55%, compared to the average for the study area of 46%. It is also above the average value for County Dublin which is 54%. **The proposed link to the Patrician Villas estate will help facilitate a modal shift from car usage to sustainable transport (active travel and public transport).** **NSO8 Transition to a Low Carbon and Climate Resilient Society** - Table 2.3 assesses that *'the Proposed Scheme comprises transport infrastructure that supports the delivery of an efficient, low carbon and climate resilient public transport service. The primary objective of the Proposed Scheme therefore, through the provision of necessary bus, cycle, and walking infrastructure enhancements is the facilitation of modal shift from car dependency, and thereby contributing to an efficient, integrated transport system and a low carbon and climate resilient City in compliance with NSO8.* The Proposed Scheme will provide the advantage of segregated cycling facilities. *These high quality cycle tracks will be typically 2m in width offering a high level of service and help to reduce dependency on private car use for short journeys in compliance with the objectives of NSO8.'* **As well as providing a link for pedestrians to the new bus stops on the N11 Road, the new cyclist link will connect the estate to the enhanced cycle tracks along the N11 Road. This will help reduce dependency on private car use for short journeys, with an associated shift to active travel and public transport.** **NSO10 Access to Quality Childcare, Education and Health Services** – Table 2.3 assesses that *'the Proposed Scheme provides infrastructure to support the delivery of sustainable transport that will benefit the entire community in terms of greater accessibility, capacity and speed of service improvements. The infrastructure improvements are along key arterial routes which include many of Dublin's childcare, educational and health care services in compliance with the objectives of NS10.'* **The proposed link will improve the accessibility to the Stillorgan Road corridor, and the community services located along it.**
Draft National Investment Framework for Transport in Ireland	Section 2.3.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that *'the Department of Transport (DoT) has finalised the transport framework, the National Investment Framework for Transport in Ireland (hereafter referred to as NIFTI) (DoT 2021a) to ensure alignment with the policies of the NPF.'* Section 2.3.3.4 notes that the draft plan states that future transport planning will prioritise sustainable modes and *'…sets out a hierarchy of travel modes to be accommodated and encouraged when investments and other interventions are made. Sustainable modes, starting with active travel and then public transport, will be encouraged over less sustainable modes such as the private car*. *Active travel is the most sustainable mode of travel. Increasing the share of active travel can reduce the carbon footprint of the transport sector, improve air quality, reduce urban congestion, and bring about positive health impacts as a result of increased physical activity. The attractiveness of this mode is dependent on infrastructure — for example, dedicated footpaths, segregated cycle lanes and*

National Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	the quality and priority of road crossing points all impact upon the number of people engaging in active travel.' **The proposed link and associated works support the above hierarchy of sustainable modes by encouraging active travel from the Patrician Villas and the proposals are a good example of pieces of infrastructure (new pedestrian and cyclist link, aligned to a new signalised crossing of the N11, serving new bus stops) that support active travel and public transport.**
Smarter Travel – A Sustainable Transport Future: A New Transport Policy for Ireland 2009 - 2020	Section 2.3.3.7 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that *'the Department of Transport, Tourism and Sport (DTTAS) Smarter Travel - A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020 (hereafter referred to as Smarter Travel) (DTTAS 2009a) is the National planning policy document to deliver an integrated transport policy for Ireland as supported by Government. A SEA and Appropriate Assessment (AA) were carried out as part of Smarter Travel.'* Table 2.6 in Section 2.3.3.7 describes how the Proposed Scheme meets the 5 Key Goals of Smarter Travel. Relevant Key Goals in respect of the proposed new link to Patrician Villas include the following: *'Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport'* **The proposed link from Patrician Villas connecting to the new bus stop will make the bus transit experience more accessible for users of all abilities and ages. Provision and enhancement of cycling facilities along the Proposed Scheme, creating routes that are safe, accessible and attractive for people of all abilities and ages.** *'Reduce overall travel demand and commuting distances travelled by the private car'* **The proposed link aligns with the goal as it will promote a viable modal shift from private car to a more sustainable forms of transport. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.** *'Improve security of energy supply by reducing dependency on imported fossil fuels'* **The proposed link aligns with the goal as it is providing the infrastructure necessary to facilitate a viable modal shift to sustainable transport.**
Climate Action Plan 2023	Section 2.3.3.12 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that in regard to avoidance of travel and shift to more environmentally friendly modes, the Climate Action Plan (CAP) 2023 sets out that: *'Greater prioritisation and reallocation of existing road space towards public transport and active travel will be a key supporting element for the new DMS. This already forms a crucial element of the BusConnects programme in each of our five cities. It is also a key recommendation from the OECD's Redesigning Ireland's Transport for Net Zero report'.* Section 2.3.3.12 also describes how the Plan sets outs various '*Key Actions to Deliver Abatement in Transport for the Period 2023-2025*' which includes: *'Pedestrian enhancement plans developed for five metropolitan areas', 'Advance roll-out of 1,000 km walking/cycling infrastructure*', and *'Advance BusConnects programme in 5 cities'*.

National Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	The proposed link supports this by enhancing permeability, as well as connecting to high quality cycling routes along the CBC which will encourage greater uptake of active travel from the Patrician Villas estate. Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR states that *'the Proposed Scheme will however support the delivery of government strategies outlined in the 2023 CAP (DCCAE 2022) and the 2021 Climate Act by enabling sustainable mobility and delivering a sustainable transport system. The Proposed Scheme will provide connectivity and integration with other public transport services leading to more people availing of public transport, helping to further reduce GHG emissions.'* Section 8.8.2 goes on to state that *'it is concluded that the Proposed Scheme achieves the project objectives in supporting the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets. The Proposed Scheme has the potential to reduce CO_2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively. This has the effect of a reduction in total vehicle kilometres, a reduction in fuel usage, and increases to sustainable transport trips and modal share in accordance with the 2023 Climate Action Plan (CAP) (DCCAE 2022).* *It is concluded that, the Proposed Scheme will make a significant contribution to reduction in carbon emissions provided the measures outlined in the traffic optimisation and bus frequency resilience analysis are employed i.e. the service pattern and frequency of bus services are increased into the future to accommodate additional demand without having a significant negative impact on bus journey time reliability.'* **The proposed link to Patrician Villas provides improved connectivity to the public transport system for the residential estate and has the potential to reduce CO_2 emissions through the removal of unnecessary car trips from the road network and contribute towards the national target of a 50% reduction in emissions for the transport sector by 2030 as outlined as a target in the 2023 Climate Action Plan.** The NTA would like to acknowledge the recent approval of the Climate Action Plan 2024 on 21 May 2024. The NTA are satisfied that the newly approved plan does not change the overall assessment as described here and in the EIAR for the Proposed Scheme.

In addition to the national policies above referenced in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Department of Transport published the National Sustainable Mobility Policy in April 2022. By providing enhanced permeability for the Patrician Villas estate, the proposal to provide a new pedestrian and cyclist link between Patrician Villas and the N11 Road supports the following goals of the National Sustainable Mobility Policy.

Goal 3 - Expand availability of sustainable mobility in metropolitan areas

- *'Goal 3 aims to expand the capacity and availability of sustainable mobility in our five cities (Cork, Dublin, Galway, Limerick and Waterford). This will be done through improved walking, cycling, bus and rail infrastructure, improved transport interchange and expanded public transport services. Transformed active travel and bus infrastructure and services in all five cities is fundamental to achieving the targets of 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030.'*

As listed in Table 3.12 above in relation to the Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR, the proposed link to Patrician Villas provides improved connectivity to the public transport system for the residential estate and has the potential to reduce CO2 emissions through the removal of car trips from the

road network and contribute towards the national target 500,000 additional trips by walking, cycling and public transport per day by 2030.

Goal 7 - Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model

- *'Goal 7 aims to support enhanced permeability and ensure that the universal design principle and Hierarchy of Road Users model is used to inform future investment decisions to reduce inequalities, support a whole of journey approach, and prioritise sustainable mobility'.*

The proposed link at Patrician Villas provides enhanced permeability to the residential area and as noted in Section 6.4.6.1.2.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that:

'All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities.'

Regional Policy

Section 2.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several regional policies. The new link between Patrician Villas and the N11 Road supports particular aspects of the policies as described in Table 3.13 below.

Table 3.13: Regional Policies referenced in EIAR Chapter 2 supported by the Proposed Link

Regional Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
Transport Strategy for the Greater Dublin Area (GDA) 2016 – 2035	Section 2.3.4.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Section 3.6.1 of Appendix A2.1 in Volume 4, Part 1 of 4 describe how the need for the Proposed Scheme is supported by the GDA Transport Strategy. Section 3.6.2.1 of Appendix A2.1 assesses: *'The Proposed Scheme will provide the infrastructure necessary to deliver the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improve environmental performance. The Proposed Scheme design has been developed by NTA and takes account of policy objectives in the Implementation Plan.'* **The proposed link provides improved accessibility to the CBC along the N11 Road, which is an important component of the significantly enhanced bus network in this area.**
Greater Dublin Area Transport Strategy 2022-2042	Table 2.11 in Section 2.3.4.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the GDA strategy includes various measures that the Proposed Scheme will support. In respect of the proposed link between Patrician Villas and the N11 Road the following measures are directly relevant: *'Measure PLAN15 – Urban Design in Walking and Cycling Projects.'* **The proposed link meets this measure increasing the permeability accessibility of the Patrician Villas estate, thereby increasing accessibility to the core bus corridor and bus stops, as well as increasing accessibility for cyclists to the new cycle track and for pedestrians via a new Toucan crossing on the N11 Road.** *'Measure PLAN2 – The Road User Hierarchy'* **The proposed link aligns with this measure as it will help promote modal shift from private car to a more sustainable forms of transport. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.** *'Measure INT3 – Integration of all Modes in Transport Scheme'*

Regional Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	The proposed link aligns with this measure as it enhances the connection between the public transport network and the active travel network and thus encourages the use of these modes reducing reliance on the private car. Access to/from the residential area by car is unaffected by the Proposed Scheme.
Regional Spatial Economic Strategy (RSES) for the Eastern and Midland Region (EMR) 2019 – 2031	Section 2.3.4.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the RSES for the ERM contains the Dublin Metropolitan Area Strategic Plan (Dublin MASP) which includes various Regional Policy Objectives (RPOs) that the Proposed Scheme will support. **In respect of RPO 5.3 the proposed link between Patrician Villas and the N11 Road is directly relevant as it will support the increase of active travel modes and public transport use:** *'RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.'*

In addition to the above, Section 7.1.2 of the Transport Strategy for the Greater Dublin Area (2016-2035) sets out several principles under the heading Local Planning Principles, including:

'New development areas should be fully permeable for walking and cycling and the retrospective implementation of walking and cycling facilities should be undertaken where practicable in existing neighbourhoods, in order to a give competitive advantage to these modes;'

The proposed new link between Patrician Villas and the N11 Road is a good example of a retrospective piece of walking and cycling infrastructure which will increase permeability for walking and cycling and help to encourage active travel.

Local Policy

Section 2.3.5 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several local policies. The new link between Patrician Villas and the N11 Road supports particular aspects of the policies as described in Table 3.14 below.

Table 3.14: Local Policies referenced in EIAR Chapter 2 supported by the Proposed Link

Regional Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
Dún Laoghaire-Rathdown County Development Plan 2022 – 2028	Table 2.14 of Section 2.3.5.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the Dún Laoghaire-Rathdown County Development Plan includes a number of policies and objectives that the Proposed Scheme supports. In respect of the proposed link between Patrician Villas and the N11 Road the following are directly relevant: *'Policy Objective T5: It is a Policy Objective to expand attractive public transport alternatives to car transport as set out in 'Smarter Travel, A Sustainable Transport Future' and subsequent updates; the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035' and the NTAs 'Integrated Implementation Plan 2019-2024' and subsequent updates by optimising existing or proposed transport corridors, interchanges, developing new park and rides, taxi ranks and cycling network facilities at appropriate locations.'* *'The Proposed Scheme will provide the infrastructure required for an attractive public transport system that caters for different transport modes including walking, cycling and bus as alternatives to the private car. The Proposed*

Regional Policy	How the proposed link between Patrician Villas and N11 Road supports the policies identified in EIAR Chapter 2
	Scheme will enhance existing transport corridors and implement new cycling and pedestrian networks to cater for a variety of different users. Whilst the Proposed Scheme does not involve the development of new park and rides and taxi ranks it will provide for better transport connections throughout the area and therefore help better link existing facilities. The Proposed Scheme is therefore compliant with Policy Objective T5.' **The proposed new link between Patrician Villas and the N11 road provides improved integration between active travel and public transport modes.** *'Policy Objective T11: – It is a Policy Objective to secure the development of a high quality, fully connected and inclusive walking and cycling network across the County and the integration of walking, cycling and physical activity with placemaking including public realm permeability improvements.'* *'The Proposed Scheme will provide the infrastructure necessary for high quality, connected and inclusive walking and cycling routes across the Proposed Scheme corridor. Chapter 6 (Traffic & Transport) of the EIAR has considered permeability as part of the project.'* **The proposed new link provides improved permeability and is in accordance with the NTA's best practice guide referenced above.**

In addition to the above, Section 4.2.6.3 of the Stillorgan – LAP 2018-2024, includes the following policy: Objective MV5:

'*It is an objective of the Council ensure that all proposals for new roads, streets and residential layouts comply with the 'Design Manual for Urban Roads and Streets' (DMURS, 2013) which focuses on the needs of pedestrians, cyclists and public transport users*.'

Section 12.5.2 of the Dublin City Development Plan 2016 – 2022, includes the following policy:

'SN4: To have regard to the Department of Housing, Planning, Community and Local Government's Guidelines on Sustainable Residential Development in Urban Areas and its accompanying Urban Design Manual, 2010, the Guidelines on Local Area Plans and the related Manual, 2013 and the joint DTTS and DCLG's Design Manual for Urban Streets and Roads (DMURS), 2013 and the NTA's Permeability Best Practice Guide, 2015, in the making of sustainable neighbourhoods.'

The NTA's best practice guide referenced above specifically highlights that boundary walls around estates and within residential areas that prevent movement along natural desire lines can act as a barrier to permeability. The removal of a section of the boundary fence and treeline and the addition of the proposed new link between Patrician Villas and the N11 Road provides improved permeability at this location in accordance with the best practice guide.

Scheme Objectives

The objectives of the Proposed Scheme, included in Section 1.1 of the Non-Technical Summary in Volume 1 – Non-Technical Summary of the EIAR and included in Section 2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, support the various policies outlined above. Specifically, the proposal for a new link between Patrician Villas, together with the new bus stops on the N11 Road, supports the following stated objectives of the Proposed Scheme as highlighted, and described in detail, below:

- *'Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;'* - **The new link between Patrician Villas and the N11 Road facilitates a mode-shift from car-dependence**;
- *'Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements;'* **- The proposal to locate a new Bus Stop at this location in combination with creating the new link to Patrician Villas will enhance the**

opportunity for users to access the high-frequency and reliable bus services through the provision of bus lanes and other measures;

- *'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;'* **- the proposed new link will enhance the potential for cyclists from the Patrician Villas to access safe segregated cycling infrastructure on the N11 Road;**

- *'Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services;'* **- the proposed new link will provide improved sustainable connectivity improving accessibility.**

Section 10.4.4.1.2.2 in Chapter 10 (Population) in Volume 2 of the EIAR describes the impact of the Proposed Scheme on accessibility, and concludes that:

'On the whole, the community areas that are likely to experience Positive, Moderate and Long-Term impacts on access to community facilities, as a result of the reduction in general traffic, are those situated along the Proposed Scheme. These are University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, ***Kilmacud – Stillorgan****, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray.'*

In Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A10.2 in Volume 4, Part 3 of 4 - The Economic Impact of the Core Bus Corridors it sets out the manner in which the Proposed Scheme will bring positive impacts for businesses and individuals along the corridor, including encouraging more sustainable travel through increased bus patronage, walking and cycling. This is summarised on page 6 of the Executive Summary of the Appendix where it is highlighted that the improved infrastructure will encourage more walking and cycling, as road safety fears are often the main reason people do not cycle, and the new bus routes will provide improved access for all families, with those on low income or with disabilities, in particular, gaining through improved transport options and less need to spend on car travel. The positive impacts of the Proposed Scheme are further evidenced in Section 4 Community Health and Wellbeing, where the following conclusion is stated:

'Walking and cycling infrastructure developed as part of the proposed improvements should lead to an increase in the use of sustainable transport modes by offering new and safer alternatives to the use of private vehicles. These impacts will occur as soon as the new facilities are opened, and the evidence suggests that people should rapidly swap to new transport choices.'

The proposed link from Patrician Villas is an important piece of infrastructure that will support more sustainable travel at this location on the corridor.

Section 10.4.4.1.2.2. of Chapter 10 (Population) in Volume 2 of the EIAR also assesses that:

'*The significant improvement to the walking, cycling and bus facilities included within the Proposed Scheme will encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme. Improved accessibility is also expected to increase social cohesion within the local community as discussed further in Appendix A10.2 in Volume 4 of this EIAR (EY 2021*).'

The new link to Patrician Villas will allow the community to be better linked to the wider public transport, cycle network and walking routed in the area.

The application documentation provided to An Bord Pleanála establishes that the proposal for a new pedestrian and cyclist link between Patrician Villas and the N11 Road, connecting to the new bus stops and the toucan crossing on the N11 Road, is needed to provide improved permeability and accessibility to encourage increased active travel and public transport patronage at this location.

Existing Access to Sustainable Travel

As shown in Figure 3.55 and Figure 3.56 below, Image 2.11 from Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR provides an overview of the existing combined activity density scenario along the length of the of the Proposed Scheme. This identifies the Patrician Villas catchment as a medium density location based on the 2011 census data. Image 2.12 from Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR displays the Dublin Bus Patronage heat map along the length of the Proposed Scheme which also highlights reduction in Bus Patronage on the N11 Road in the vicinity of Patrician Villas relative to the other sections of the Proposed Scheme.

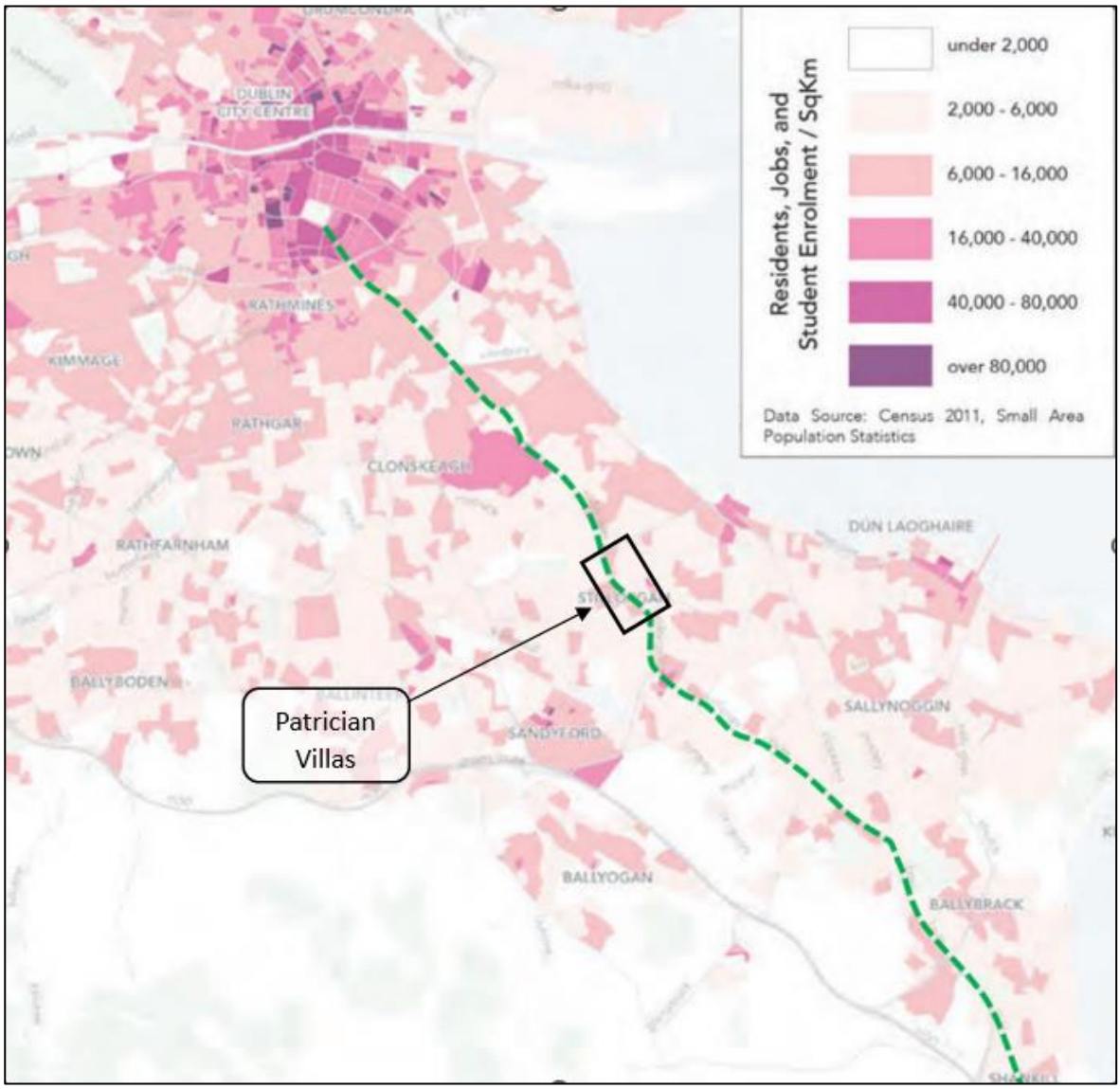


Figure 3.55: Extract from EIAR Chapter 2, Existing Combined Activity Density (Image 2.11)

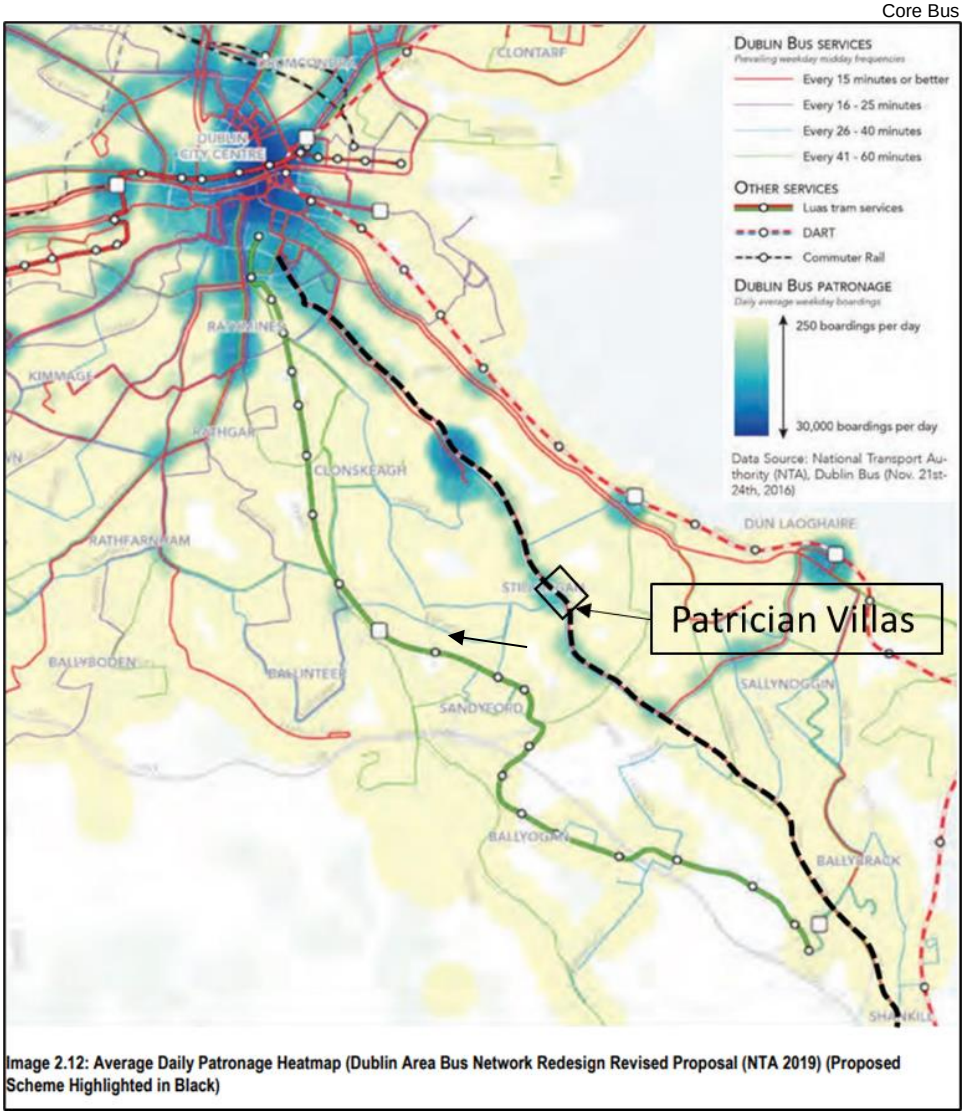


Image 2.12: Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal (NTA 2019) (Proposed Scheme Highlighted in Black)

Figure 3.56: Extract from EIAR Chapter 2, Dublin Bus Patronage Heat Map (Image 2.12)

This is further supported by Section 10.2.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR where it includes the assessment of impacts on community amenity, land take and accessibility consist of *'community areas'*, which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Kilmacud-Stillorgan.

Section 10.3.2.3 provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 2.10 above.

As can be seen from Table 2.10, of the 19 Community Areas assessed Kilmacud-Stillorgan is on the higher end of car mode share for travel to work trips at 55%. In addition, this mode share exceeds the average mode share for County Dublin as a whole. Other community areas in Table 10.5 located along the N11 Road corridor, such as Booterstown and Newtownpark, have lower travel by car percentage and higher travel by bus percentage, compared to Kilmacud-Stillorgan. These other areas generally have good permeability to the high frequency bus services along the N11 Road.

In comparison, as shown in Figure 3.57 below, the Patrician Villas estate is enclosed by a continuous boundary between the properties in the estate and the N11 Road. This prevents any direct access/egress and acts as a deterrent to achieving the required mode-shift away from private car use or residents in the estate.

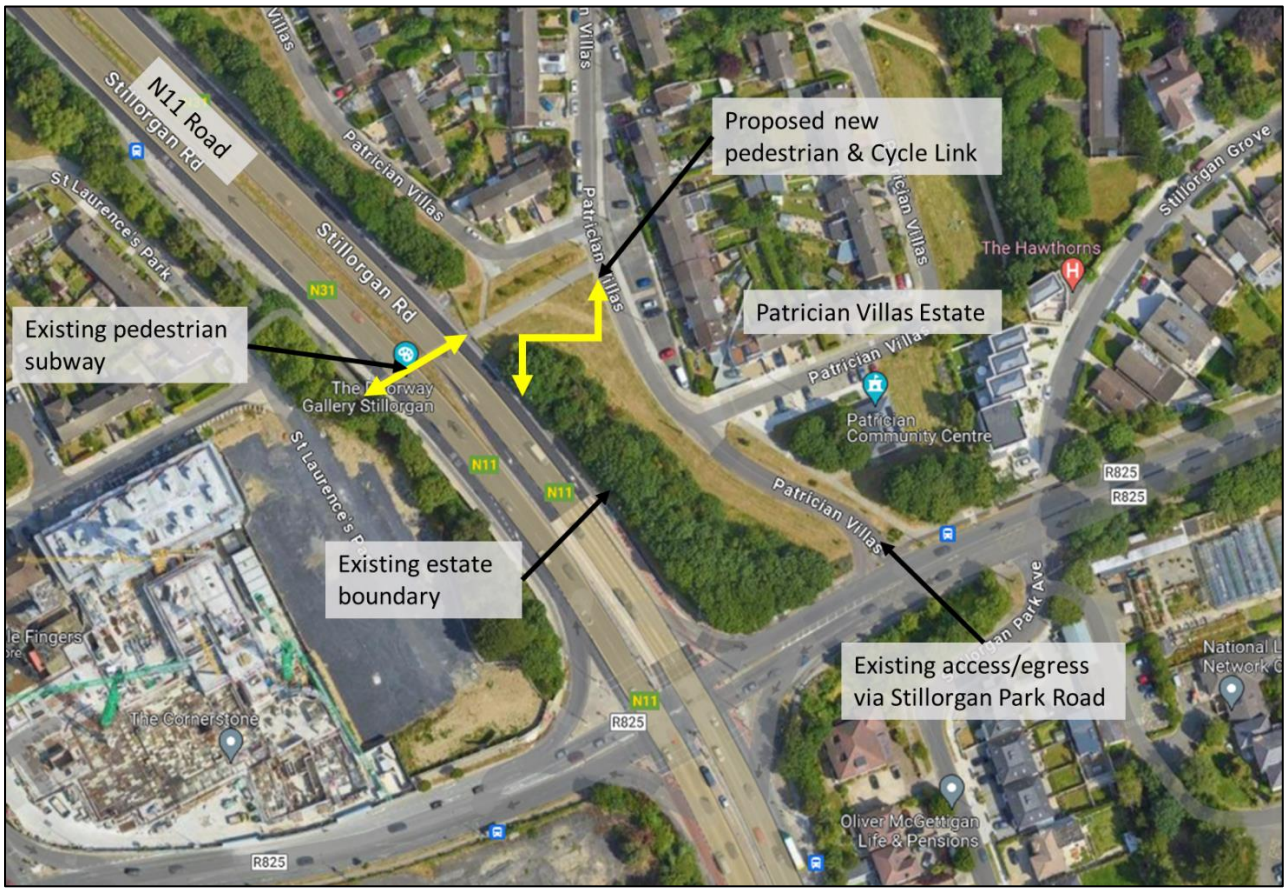


Figure 3.57: Location of Patrician Villas and Proposed new Pedestrian / Cyclist Link (Image Source: Google)

Overall need for the proposed pedestrian and cyclist link

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.2.4 provides an overall assessment of the Proposed Scheme and concludes that it will deliver a Positive, Very Significant and Long-term impact in terms of People Movement by sustainable modes. The Proposed Scheme will deliver significant improvements in people movement by sustainable modes along the Proposed Scheme corridor, particularly by bus, with reductions in car mode share due to the enhanced sustainable mode provision.

Section 6.4.3.2 also highlights that '*to limit the growth in car traffic, and to ensure that this demand growth is catered for predominantly by sustainable modes, a number of measures will be required, that include improved sustainable infrastructure and priority measures delivered as part of the NDP/GDA Strategy. In addition to this, demand management measures will play a role in limiting the growth in transport demand, predominantly to sustainable modes only. As a result, there will be only limited or no increases overall in private car travel demand. The Proposed Scheme will play a key role in this as part of the wider package of GDA Strategy measures*.'

The proposed link to Patrician Villas supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

In addition, the Dublin City Development Plan 2016-2022 includes policy '*MT11: To continue to promote improved permeability for both cyclists and pedestrians in existing urban areas in line with the National Transport Authority's document 'Permeability – a best practice guide*.'

As set out in Section 2.3.5.1, Table 2.12 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Dublin City Development Plan includes Policy SMT18:

'To continue to maintain and improve the pedestrian environment and strengthen permeability by promoting the development of a network of pedestrian routes including laneway connections which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice'.

The Proposed Scheme aligns with the objective as along the route, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings.

The NTA document: Permeability in Existing Urban Areas Best Practice Guide 2015 is referenced in the Dublin City Development Plan, as set out in Table 2.9, Section 2.3.5.1 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, The Introduction to this on page 1 states that the policy guidance has been developed; *'on how best to facilitate demand for walking and cycling in existing built-up areas. This relates to the retention and creation of linkages within the urban environment for people to walk and cycle from their homes to shops, schools, local services, places of work and public transport stops and stations.'*

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR outlines the policy context that underpins the Proposed Scheme as well as the regional and local transport need for the Proposed Scheme. Section 2.3.4.2 notes the following:

'As part of the 2016 GDA Transport Strategy, the Core Bus Network is to be developed to achieve a continuous priority for bus movement on sections of the Core Bus Network within the Metropolitan Area. This is to be achieved through enhanced bus lane provision, the removal of delays along the routes and to enable the bus to provide a faster mode of transport than the private car along these routes.'

'The need for the Proposed Scheme is supported by the GDA Transport Strategy in so far as it will provide infrastructure required to facilitate 'a continuous priority for bus movement on sections of the Core Bus network within the Metropolitan area.' The Proposed Scheme will realise the objectives of the GDA Transport Strategy by providing the enhanced bus lanes, removing 'bottlenecks' and making the bus a faster option to commuters than car-based transport. The GDA Transport Strategy 2016 – 2035 has now been replaced by the GDA Transport Strategy 2022-2042 (NTA 2022) which has now been adopted and this is reviewed in Section 2.3.4.3.'

'It is an objective of the 2019 Implementation Plan to build on the work already achieved in the GDA with respect to catering for greater bus movement. The intention set out in the 2019 Implementation Plan is to progress the development of the Core Bus Corridors (the CBC Infrastructure Works) to achieve, as far as practicable, continuous priority for bus movement. The need for the Proposed Scheme is supported by the 2019 Implementation Plan's stated aim to 'overhaul the current bus system in the Dublin region by (inter alia): • Building a network of new bus corridors on the busiest bus routes to make bus journeys faster, predictable, and reliable'. The Proposed Scheme will provide the infrastructure necessary to deliver the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improve environmental performance. The Proposed Scheme design has been developed by NTA and takes account of policy objectives in the Implementation Plan.'

Section 2.3.5.3 directly references the Dún Laoghaire-Rathdown County Development Plan 2022 – 2028 and outlines how the Proposed Scheme is compliant. The vision of the DLRCDP (DLRCC 2022) is to; '*embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations'*. The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county. Table 2.14 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR outlines the key transport policies relevant to Bus Improvements in the DLRCDP and how the Proposed Scheme meets the policy objectives T1, T3, T4, 75, T6, T11, T12, T13 and T23. The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022).

A 2m wide footpath is proposed along the N11 Stillorgan Road between Priory Drive to Lower Kilmacud Road Junction as part of the Proposed Scheme, as it was considered a desired pedestrian link based on the pedestrian movement along this stretch and is aligned with the local development plans.

The proposed toucan crossing will not only provide for pedestrians to access the bus stops on the N11 Stillorgan Road but also improve pedestrian movement from Patrician Villas to Stillorgan. The toucan crossing and bus stop at this location is considered desired for pedestrian movement along this local area and is aligned with the local development plans, in particular the DLRCC's Stillorgan Movement Plan and the proposed St Laurence's Park and Stillorgan Leisureplex development. There is a strong pedestrian desire line between Patrician Villas and Stillorgan and the new toucan crossing will provide better connectivity to the local communities and vulnerable users.

The existing underpass is proposed to be widened on the east side. The proposed steps and ramps at the end of the crossing considers the need of the vulnerable and accessibly requirements. Improvement

measures are proposed for the extension of the underpass as noted in the Structures Preliminary Design Report, Appendix F of Preliminary Design Report part of Supplementary Information. Consideration will be given to the painting and lighting in the interior of the underpass.

The existing central median has been reduced to the minimum width possible considering the constraint of existing utilities ESB HV line, in order the achieve widening to provide for the desirable traffic lane, footpath and cycle track width in the northbound direction.

The link proposed for Patrician Villas is a good example of this as the link and associated new bus stop and signalised crossing of the N11 Road will provide a much shorter walk for residents to the established retail area on the western side of the N11 Road.

Summary of Response

The preceding pages describe how the statutory application documentation comprehensively set out why the proposed link between Patrician Villas and the N11 Road is proposed and demonstrate the need for it. It is an important piece of infrastructure that supports the significant improvements in people movement by sustainable modes which are necessary at this location.

3.4.3.2 Public Consultation

Summary of issue raised

A number of submissions raised the issue of a lack of consultation, communication and engagement with residents, in particular those who believed their property is directly impacted by the Proposed Scheme. Some submissions noted that they were not invited to Public Consultations when plans affecting Patrician Villas were developed. Submissions also noted that when Site Notices were erected that the exact nature of works was not apparent.

Response to issue raised

The Public Consultation Report 2018-2022 provided in the Supplementary Information for the Proposed Scheme outlines the extensive public consultation and stakeholder engagement undertaken during that period, with three rounds of non-statutory public consultation undertaken.

Throughout the three rounds a number of consultation tools were used, including:

1) A dedicated website, launched in May 2017;
2) An individual brochure for the Proposed Scheme (updated at all 3 rounds);
3) Public information events (in person for first and second rounds, virtual for third round),
4) Community Forum events, to create a two-way communication process with representatives of local communities, (in person for first and second rounds, virtual for third round, average attendees 24);
5) Range of digital channels, including Twitter and Facebook;
6) Traditional published material;
7) Press and radio advertising;
8) Outdoor advertising;
9) Presentations; and
10) Infographics.

The public events took place in accessible venues chosen to maximise the level of local engagement and attendance where possible. These events allowed members of the public to speak directly and in detail with members of the BusConnects Infrastructure team about the proposals. These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

The following paragraphs provide more details of each of the three rounds on non-statutory consultation for the Proposed Scheme.

First non-statutory round of public consultation

The first non-statutory round of public consultation for the Bray to City Centre Core Bus Corridor Emerging Preferred Route Option (EPRO) occurred from 14th November 2018 to 31st May 2019.

The first Community Forum meeting for the Bray to City Centre Core Bus Corridor took place on 08 February 2019 at the Talbot Hotel, Stillorgan from 18.30 – 20.00 with approximately 85 representatives in attendance. A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 26 March 2019.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to lengthen the existing underpass/culvert to facilitate the proposed new footpath at Patrician Villas, see Figure 3.58 below.

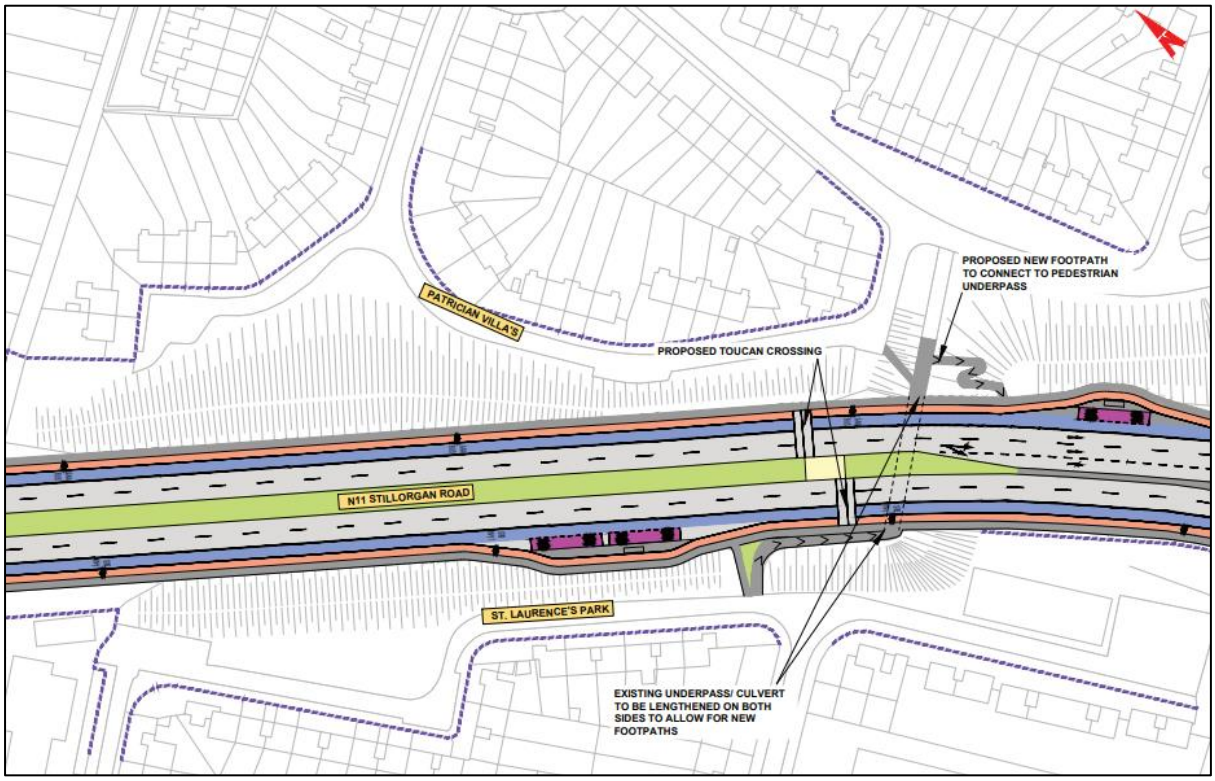


Figure 3.58: Extract from EPRO Drawings - First round of non-statutory consultation (Map 22: Emerging Preferred Route)

There were 1,225 submissions received relating to the Bray to City Centre Core Bus Corridor, with no comments recorded in relation to the proposal to lengthen the existing underpass/culvert to facilitate the proposed new footpath at Patrician Villas, nor the proposed signalised Toucan crossing on the N11.

Second non-statutory round of public consultation

A second Community Forum event was held at the Talbot Hotel, Stillorgan on 12 September 2019 from 18.30 – 20.00, with approximately 75 in attendance. This Community Forum was held in advance of the launch of second round of non-statutory public consultation. The meeting aimed to keep members updated on the design process between the first and second consultation.

In March 2020, the Draft Preferred Route Option (PRO) was published, and a second non-statutory round of public consultation commenced on 4 March 2020 and ran until 17 April 2020. The consultation was announced via press release and a media briefing that took place in the Alex Hotel, Fenian Street from 10.00 – 12.00.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to lengthen the existing underpass/culvert to facilitate the proposed new footpath at Patrician Villas, as well as the proposed signalised Toucan crossing on the N11, see Figure 3.59 below.

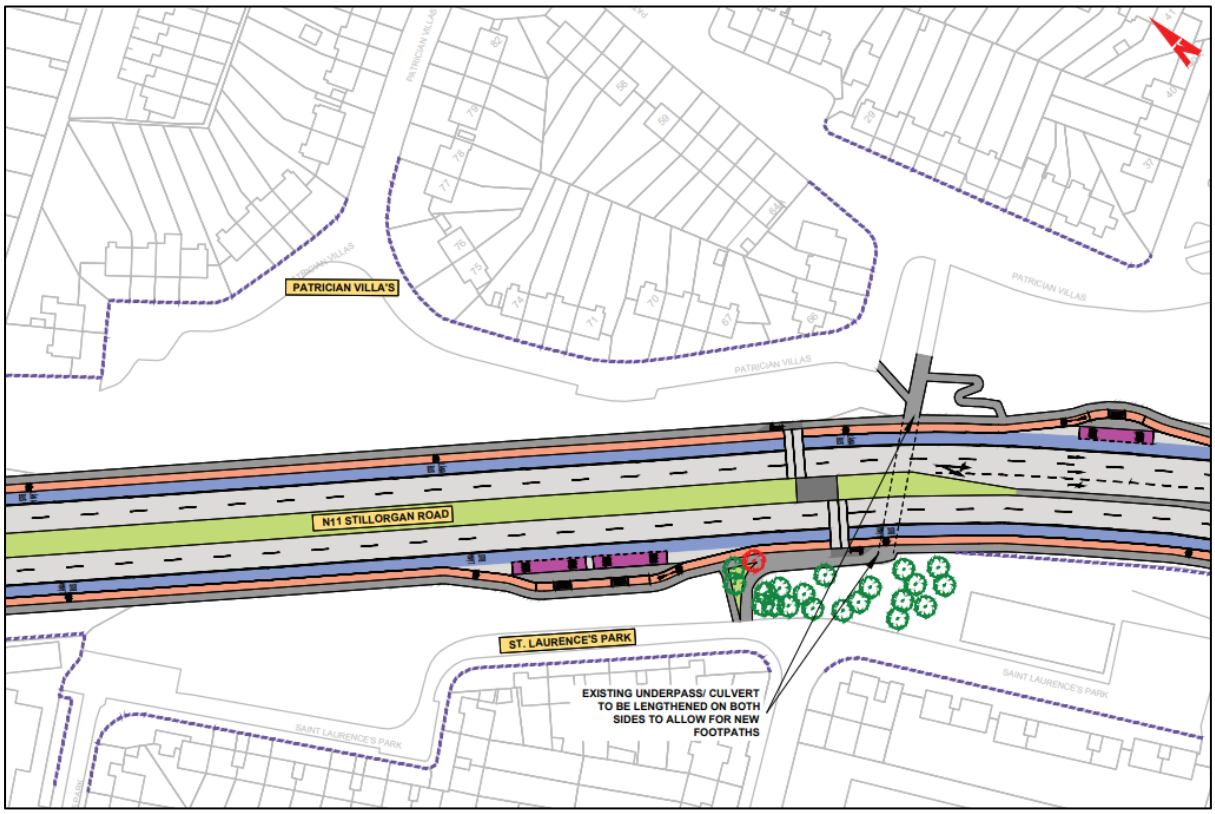


Figure 3.59: Extract from Draft PRO Drawings - Second round of non-statutory consultation (Map 22: Preferred Route)

A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 12 March 2020 from 11.30-19.30. Members of the public were invited to attend to review the changes made to the proposals since the first round of consultation in 2018/2019 and to discuss concerns and observations with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. 204 letters were prepared and delivered on 02 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no-longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Due to the COVID-19 pandemic, all events scheduled after 12 March 2020 were cancelled. In deference to the submissions we had already received, the decision was made not to cancel the consultation. Consequently, there were just 40 submissions received relating to the Bray to City Centre Core Bus Corridor, none of which related to the proposal to lengthen the existing underpass/culvert to facilitate the proposed new footpath at Patrician Villas, nor the proposed signalised Toucan crossing on the N11.

Third non-statutory round of public consultation

The third round of non-statutory public consultation took place from 4th November 2020 until 16th December 2020 on the updated Draft Preferred Route Option for the Proposed Scheme. The consultation was announced via press release, on the NTA website and on social media. Public representatives were made aware of the publication of the revised proposals via email. This email also contained information on Community Forums for TDs, Senators, and Councillors to assist in spreading awareness of the meetings. A briefing session was organized via Zoom to take place on 4 November 2020. Members of the Transport & Communications Networks Oireachtas Committee were separately made aware of the launch.

Due to the Covid-19 pandemic, which commenced with restrictions in March 2020 and continued throughout the second and third public consultation rounds, the BusConnects Infrastructure team developed online and virtual elements to assist the public in viewing and reading the proposals. Our primary virtual interactive tool during the final third phase of public consultation was the use of virtual consultation

rooms available through the BusConnects website. These rooms were online for a six-week period (24hrs x 7 days a week) and included the following:

- all Proposed Scheme materials available for perusal, such as the brochure, maps and all associated support documentation;
- an audio description of the brochure information; and
- a call back facility within the virtual rooms for any stakeholder to book a phone call back from a member of the BusConnects Infrastructure team for additional information or more detailed queries.

These Virtual Consultation Rooms replaced the more traditional Public Information Events due to the Covid restrictions on face-to-face interactions, typically used during non-statutory public consultation. Compared to the face-to-face Public Information Events utilised during the first and second rounds of Non-Statutory Public Consultation the numbers of the public that engaged increased significantly due to the online access available through this facility. Over the seven weeks of the consultation, 433 unique users visited the virtual information room for Bray to City Centre Core Bus Corridor.

In addition, a third, virtual, Community Forum meeting took place on 1st December 2020 with approximately 65 representatives in attendance.

The Proposed Scheme drawings in the consultation brochure highlighted a slightly revised arrangement for the proposal to lengthen the existing underpass/culvert to facilitate the proposed new footpath at Patrician Villas, as well as a slightly revised signalised crossing of the N11, see Figure 3.60 below.

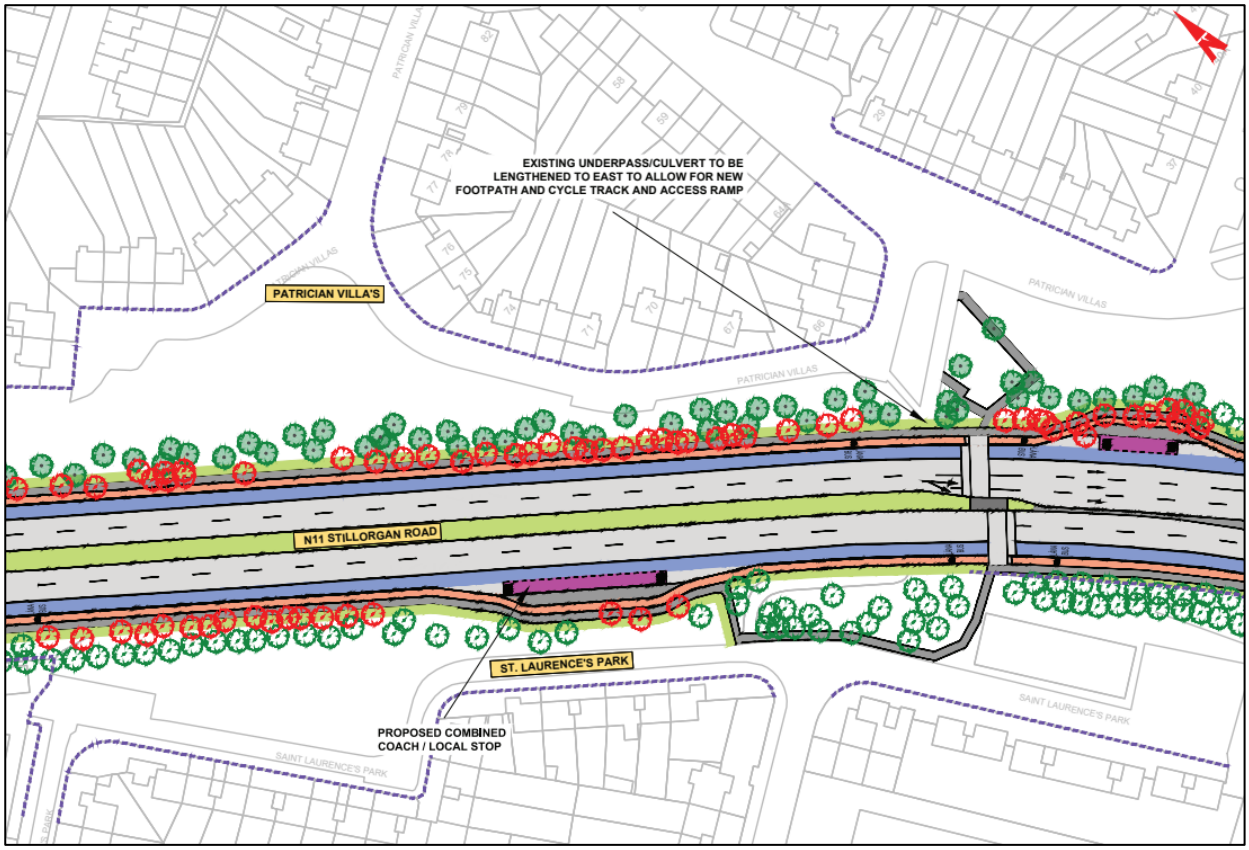


Figure 3.60: Extract from Updated Draft PRO Drawings - Third round of non-statutory consultation (Map 22: Preferred Route)

Advertisements detailing where interested parties could access further information on the CBC including viewing the proposals, making a submission, and attending information events were placed in local and national newspapers, online and in highly visible areas around the Greater Dublin Area. There were 572 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.

The public consultation submission reports provided as Appendices A and B to the Preferred Route Option Report, provided as part of the Supplementary Information, do not record any submissions made to the three rounds of non-statutory consultation in respect to the proposed link to Patrician Villas.

Statutory round of public consultation

As part of the statutory public consultation in addition to the notices required by statute to be published in the newspaper, public notices were also placed at 176 locations along the route of the Proposed Scheme so as to ensure that members of the public in the area who may not have noticed the statutory newspaper notice or whose lands were not being acquired and so were not part of the CPO process were informed of the Proposed Scheme, as shown in Figure 3.61 and Figure 3.62 below.

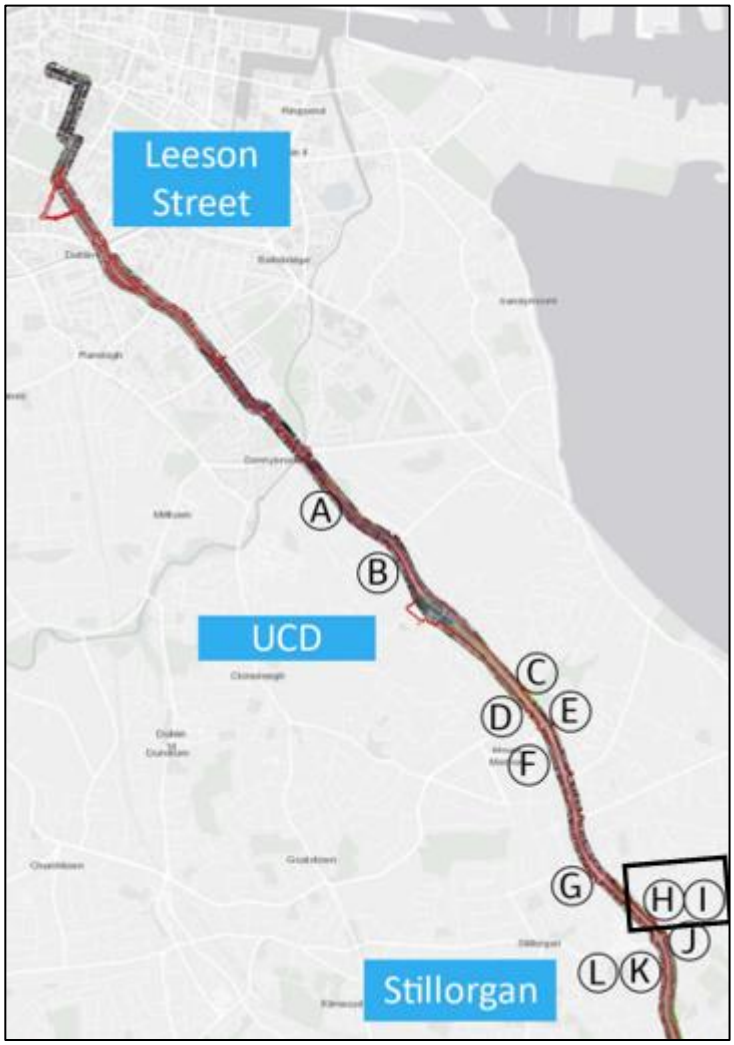


Figure 3.61: Extract from Site Notices Report - Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

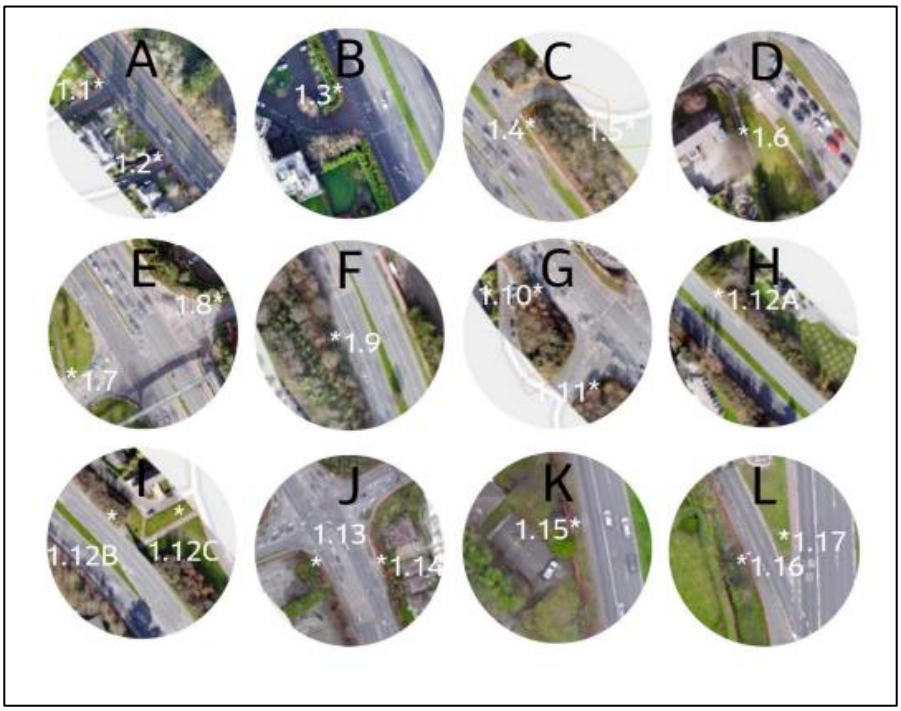
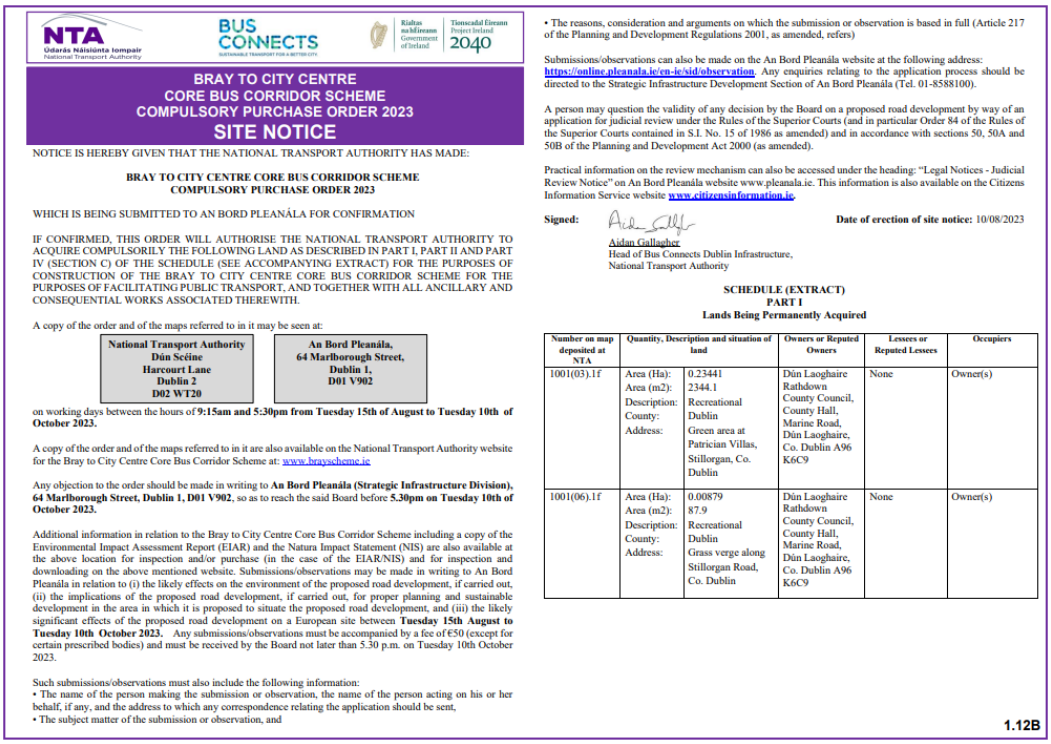


Figure 3.62: Extract from Site Notices Report - Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

Location H and I included site notices 1.12 A, 1.12B, and 1.12C, each comprising two A3 sized notices; site notices 1.12 A and 1.12B were erected on the Stillorgan Road side of the boundary fence to the green area, and site notice 1.12C was erected on the edge of the green area adjacent to the existing footpath leading to the underpass. The notices themselves are shown in Figure 3.63 and Figure 3.64, and their locations in Figure 3.65, Figure 3.66, and Figure 3.67.



NTA Údarás Náisiúnta Iompair National Transport Authority

BUS CONNECTS

Rialtas na hÉireann Government of Ireland | Tionscadal Éireann Project Ireland 2040

BRAY TO CITY CENTRE
CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023

SITE NOTICE

NOTICE IS HEREBY GIVEN THAT THE NATIONAL TRANSPORT AUTHORITY HAS MADE:

BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME COMPULSORY PURCHASE ORDER 2023

WHICH IS BEING SUBMITTED TO AN BORD PLEANÁLA FOR CONFIRMATION

IF CONFIRMED, THIS ORDER WILL AUTHORISE THE NATIONAL TRANSPORT AUTHORITY TO ACQUIRE COMPULSORILY THE FOLLOWING LAND AS DESCRIBED IN PART I, PART II AND PART IV (SECTION C) OF THE SCHEDULE (SEE ACCOMPANYING EXTRACT) FOR THE PURPOSES OF CONSTRUCTION OF THE BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME FOR THE PURPOSES OF FACILITATING PUBLIC TRANSPORT, AND TOGETHER WITH ALL ANCILLARY AND CONSEQUENTIAL WORKS ASSOCIATED THEREWITH.

A copy of the order and of the maps referred to in it may be seen at:

National Transport Authority
Dún Scéine
Harcourt Lane
Dublin 2
D02 WT20

An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

on working days between the hours of **9:15am and 5:30pm from Tuesday 15th of August to Tuesday 10th of October 2023.**

A copy of the order and of the maps referred to in it are also available on the National Transport Authority website for the Bray to City Centre Core Bus Corridor Scheme at: www.brayscheme.ie

Any objection to the order should be made in writing to **An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902**, so as to reach the said Board before **5.30pm on Tuesday 10th of October 2023.**

Additional information in relation to the Bray to City Centre Core Bus Corridor Scheme including a copy of the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) are also available at the above location for inspection and/or purchase (in the case of the EIAR/NIS) and for inspection and downloading on the above mentioned website. Submissions/observations may be made in writing to An Bord Pleanála in relation to (i) the likely effects on the environment of the proposed road development, if carried out, (ii) the implications of the proposed road development, if carried out, for proper planning and sustainable development in the area in which it is proposed to situate the proposed road development, and (iii) the likely significant effects of the proposed road development on a European site between **Tuesday 15th August to Tuesday 10th October 2023.** Any submissions/observations must be accompanied by a fee of €50 (except for certain prescribed bodies) and must be received by the Board not later than 5.30 p.m. on Tuesday 10th October 2023.

Such submissions/observations must also include the following information:
• The name of the person making the submission or observation, the name of the person acting on his or her behalf, if any, and the address to which any correspondence relating the application should be sent,
• The subject matter of the submission or observation, and
• The reasons, consideration and arguments on which the submission or observation is based in full (Article 217 of the Planning and Development Regulations 2001, as amended, refers)

Submissions/observations can also be made on the An Bord Pleanála website at the following address: https://online.pleanala.ie/en-ie/sid/observation. Any enquiries relating to the application process should be directed to the Strategic Infrastructure Development Section of An Bord Pleanála (Tel. 01-8588100).

A person may question the validity of any decision by the Board on a proposed road development by way of an application for judicial review under the Rules of the Superior Courts (and in particular Order 84 of the Rules of the Superior Courts contained in S.I. No. 15 of 1986 as amended) and in accordance with sections 50, 50A and 50B of the Planning and Development Act 2000 (as amended).

Practical information on the review mechanism can also be accessed under the heading: "Legal Notices - Judicial Review Notice" on An Bord Pleanála website www.pleanala.ie. This information is also available on the Citizens Information Service website www.citizensinformation.ie.

Signed: **Date of erection of site notice:** 10/08/2023

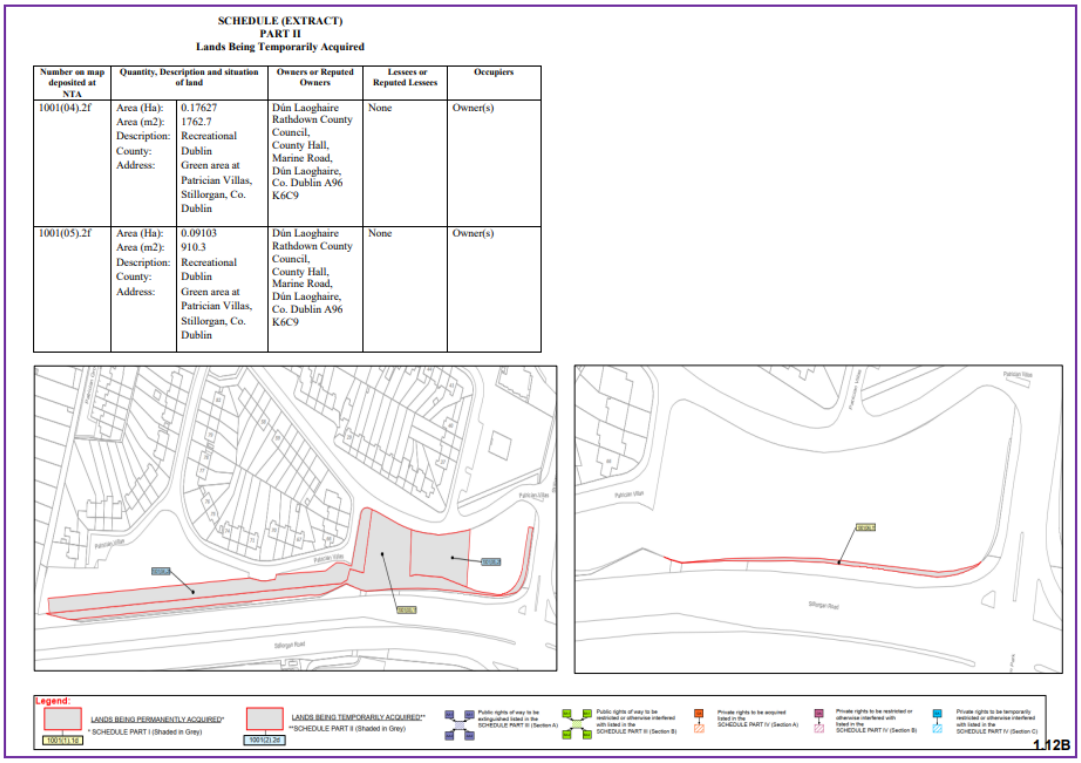
Aidan Gallagher
Head of Bus Connects Dublin Infrastructure,
National Transport Authority

SCHEDULE (EXTRACT)
PART I
Lands Being Permanently Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1001(03).1f	Area (Ha): Area (m2): Description: County: Address:	0.23441 2344.1 Recreational Dublin Green area at Patrician Villas, Stillorgan, Co. Dublin	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)
1001(06).1f	Area (Ha): Area (m2): Description: County: Address:	0.00879 87.9 Recreational Dublin Grass verge along Stillorgan Road, Co. Dublin	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)

1.12B

Figure 3.63: Extract from Site Notices Report - First A3 sheet of Non-statutory Site Notices 1.12 A, 1.12B, and 1.12C



SCHEDULE (EXTRACT)
PART II
Lands Being Temporarily Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1001(04).2f	Area (Ha): Area (m2): Description: County: Address:	0.17627 1762.7 Recreational Dublin Green area at Patrician Villas, Stillorgan, Co. Dublin	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)
1001(05).2f	Area (Ha): Area (m2): Description: County: Address:	0.09103 910.3 Recreational Dublin Green area at Patrician Villas, Stillorgan, Co. Dublin	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)

Figure 3.64: Extract from Site Notices Report - Second A3 sheet of Non-statutory Site Notices 1.12 A, 1.12B, and 1.12C

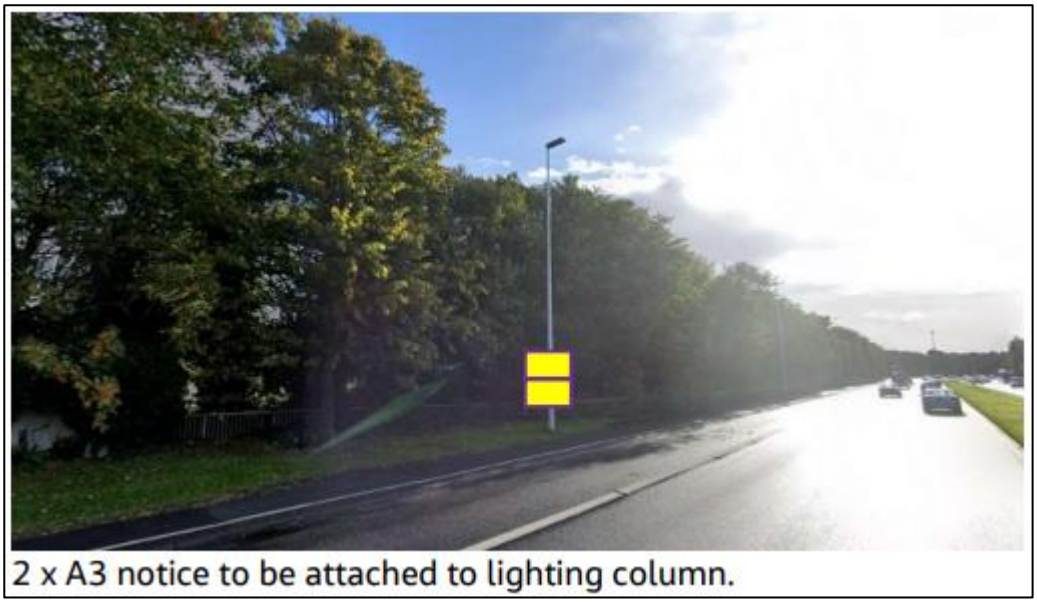


Figure 3.65: Extract from Site Notices Report - Site Notice Placement & Quantum - 1.12A

Figure 3.66: Extract from Site Notices Report - Site Notice Placement & Quantum - 1.12B

Figure 3.67: Extract from Site Notices Report - Site Notice Placement & Quantum - 1.12C

3.4.3.3 Need for New Toucan Crossing

Summary of issue raised

The majority of the submissions have raised concerns regarding the proposal to construct a Toucan crossing on the N11. Some submissions noted their satisfaction with the current underpass arrangement which allows for safe crossing of the N11.

A number of submissions noted that having vehicles stopping at the Toucan crossing 100m from the main junction would lead to more vehicle stoppages and traffic congestion along the N11.

Response to issue raised

As part of the Proposed Scheme a new toucan crossing is proposed at this location. The proposed toucan crossing will not only provide for pedestrians to access the bus stop but also improve pedestrian movement from Patrician Villas to Stillorgan. The proposed toucan crossing and bus stop at this location is considered desired for pedestrian movement along this local area and is aligned with the local development plans, in particular the DLRCC's Stillorgan Movement Plan and the proposed St Laurence's Park and Stillorgan Leisureplex development. There is a strong pedestrian desire line between Patrician Villas and Stillorgan and the new toucan crossing will provide better connectivity to the local communities and vulnerable users.

The proposed steps and ramps at the end of the crossing considers the need of the vulnerable and accessibly requirements.

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the proposals and the proposed design takes them into consideration. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and Section 4.6.6.3 states the following planning applications have been granted:

- *'St Laurence's Park: The proposed works include the demolition of 16 no. Maisonettes, two no. semi-detached houses and removal of prefabricated Library building. Dún Laoghaire-Rathdown County Council gives notice of in this proposal to construct a two-storey library building with gross area of 1,010sqm and 88 apartments. The development is at around chainage A6750 of the Proposed Scheme.'*

- *'Stillorgan Leisureplex: The development at around chainage A6750 of the Proposed Scheme will have a total of 232 Build-To-Rent apartment units. The development will provide for two retail units, four restaurant / café units, provision of a public plaza onto the corner of the Lower Kilmacud Road and the Old Dublin Road, public realm improvements, resident lounge area, communal kitchen and dining, co-working space, cinema, gym and concierge service. Vehicular access to the basements is from the he Lower Kilmacud Road and St Laurence's Park.'*

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR provides a description of the proposed pedestrian infrastructure assessment and notes a highly positive impact. Section 6.4.6.1.3.1 states the following:

'Provision of new mid-link pedestrian crossings along R128 Stillorgan Road between Dublin Road and R825 Stillorgan Park and to the north Knocksinna.'

Table 6.27 in Section 6.4.6.1.3.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the impacts on walking infrastructure for Section 2 of the Proposed Scheme, as shown in Table 3.15 below and the introduction of mid-block crossing at the N11 Stillorgan Road is considered 'High Positive' with 'Positive Profound' Impact.

Table 3.15: Extract from EIAR Chapter 6, Pedestrian Infrastructure at Patrician Villas (Table 6.27)

Table 6.27: Section 2 - Significance of Impact for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
N11 Stillorgan Road / Priory Drive / Old Dublin Road 4-arm Signalised Junction	A6220 - A6280	E	C	Medium	Medium	Positive Significant
N11 Stillorgan Road mid-link crossing	A6720	No existing facility	B	High Positive	High	Positive Profound
N11 Stillorgan Road / R825 Lower Kilmacud Road 4-arm Signalised Junction	A6800 - A6850	D	A	Medium	Medium	Positive Significant

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, in Section 6.4.6.2.8 it shows that there is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact which on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

3.4.3.4 Relocation of Bus Stop

Summary of issue raised

Some submissions have questioned whether the relocation of the Stillorgan Park Bus to facilitate an island-style bus-stop nearby is necessary. Submissions note that the bus-stop is proposed to be 120m away from the current location.

Response to issue raised

The existing combined coach and bus stop in the northbound direction is retained at its existing position as a coach stop. The existing bus stop in the southbound direction is relocated close to Patrician Villas / St Laurence's Park, where a new toucan crossing will also be provided across the Stillorgan Road.

The design of the toucan crossing and bus stop at this location is considered desirable for pedestrian movement along this local area and is aligned with the local development plans, in particular the DLRCC's Stillorgan Movement Plan and the proposed St Laurence's Park and Stillorgan Leisureplex development. There is a strong pedestrian desire line between Patrician Villas and Stillorgan and relocated bus stop will provide better connectivity to the local communities and vulnerable users.

As noted in Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR:

'To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.

The basic criteria that are considered when locating a bus stop are as follows:

- *Driver and waiting passengers are clearly visible to each other;*
- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*
- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as set out in Bus Stop Review Analysis in Appendix H.2 (using the methodology as set out in Appendix H.1) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis Appendix H.2 notes the following in relation to the existing bus stops on Donnybrook Dublin Bus Depot at this section of the Proposed Scheme:

Bus Stop 4571

'Moved to upstream of the Lower Kilmacud Rd junction to provide better linkages to community and new crossings of Stillorgan Road and to tie in with the Stillorgan Movement.'

'An island layout is proposed, this is the preferred layout for both cyclists/pedestrians.'

3.4.3.5 Impact on biodiversity, loss of trees, flooding, screening, and climate change

Summary of issue raised

The removal of mature trees has been raised as a concern throughout various submissions. Mature trees are noted as having grown for a half-century. Majority of the submissions note concern that the proposed works will include the removal of approximately 50% of the existing trees at Patrician Villas.

The submissions note the numerous benefits of such trees, namely: their function as a safety barrier, their ability to absorb dust, their ability to shield the estate from the wind, their function as a noise barrier, their ability to absorb water and mitigate against flooding, and their ability to absorb carbon dioxide.

The majority of the submissions note the contribution of trees to the local biodiversity and wildlife habitats. Respondents note concerns that the local biodiversity will be greatly disturbed by the proposal to remove trees. Some responses note the prevalence of birds, squirrels, and foxes which would be affected by disturbances to trees and hedgerows.

Some submissions note their concerns regarding the vulnerability to increased runoff and flooding potential given that trees would have previously delayed rain from reaching the ground as quickly.

The majority of the submissions noted that replacement of mature trees with saplings would take a large amount of time to restore the current ecological balance.

Response to issue raised

The Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Sheet 20 (Figure 3.68 below) shows the section of the Proposed Scheme at Patrician Villas, showing the proposed extent of tree removals and the proposed new trees to be planted (55 trees of mixed species and sizes proposed). There is a tag on Sheet 20 describing the tree removal there as follows:

'*Tree removal indicated between A6490 and A6770 assumes a 50% loss of trees. Trees on the north side of this belt should be retained where possible due to the screening function provided to residents on Patrician Villas Road. Approximately 1.8m of additional space is required to the back of the existing cycle track to facilitate the required widening. An arboricultural consultant to be present to oversee setting out and clearance work in order to retain as many existing trees as possible*.'

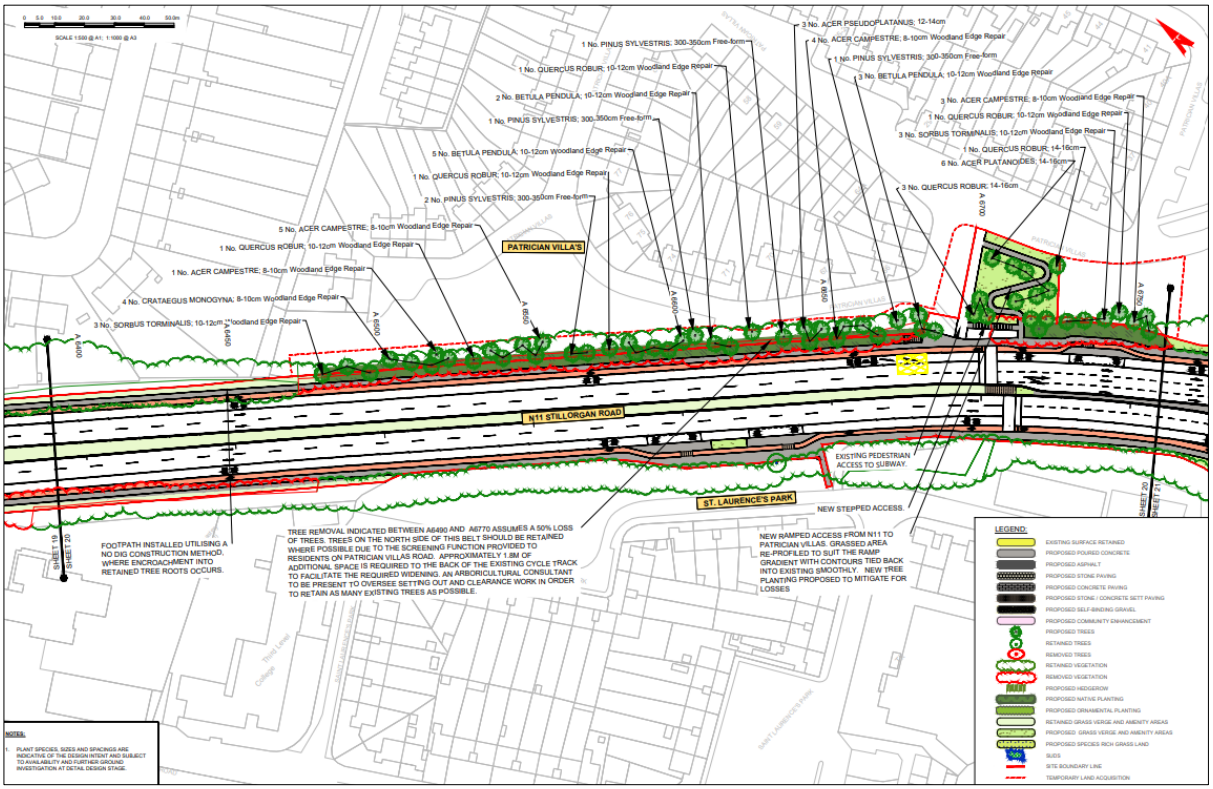


Figure 3.68: Extract from Lanscaping General Arrangements (Sheet 20)

There is also an additional tag on the drawing regarding the proposed ramp, stating the following:

'*New ramped access from N11 to Patrician Villas. Grassed area re-profiled to suit the ramp gradient with contours tied back into existing smoothly. New tree planting proposed to mitigate for losses*'.

As shown on Sheet 20, it is not proposed to remove the tree group as a whole, with only the roadside edge of the tree group to be removed to make space for the proposed road widening in that area. The residents of Patrician Villas will continue to be screened from the N11 by the remaining trees in that group, and the replacement trees proposed will strengthen that screen as they establish within the landscape.

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, it is proposed to undertake partial removal of a mature mixed species group (Tree Number G0775*P) which is described as a '*Mixed species group comprising sycamore, Norway maple and ash that extends to junction*', and has been assessed as a Category B2 group (of moderate value and conservation, mainly from a landscape perspective). The recommendations made in the Tree Schedule for this particular group are '*Remove c.2884m² to facilitate proposal and replace as good arboricultural practice*'.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on the habitats *'(mixed) broadleaved woodland'*, *'scattered trees and parkland'*, *'treelines'*, *'immature woodland'* and *'wet willow-alder-ash woodland'* the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 of Chapter 17 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below.

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.'*

'Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.'

'The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.'

As summarised in Table 17.9, the Construction Phase impact on trees and vegetation is predicted to be Negative, Very Significant, Short-Term. As summarised in Table 17.10, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Moderate / Significant, Long-Term.

With respect to the climate impacts of tree loss, Chapter 8 (Climate) in Volume 2 of the EIAR has assessed the climate impact as a result of both the construction and operation of the Proposed Scheme. Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of *'Land Use Change'*, with the assessment described in Section 8.3.4.1.2 as:

'*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'.

During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as:

'*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate the two construction compounds. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be a negligible impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

With respect specifically to flood risk, Appendix A13.2 in Volume 4, Part 3 of 4 of the EIAR describes the Flood Risk Assessment (FRA) which was undertaken for the Proposed Scheme in order to inform the drainage design. The Proposed Surface Water Drainage Works Drawings are also included in the EIAR in Volume 3, Part 2 of 3 (Number 11 of the figures accompanying Chapter 4), and the proposed drainage works are described in Section 4.6.15 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR. Specifically with respect to the drainage design, the following principles (as described in Section 4.6.15.4) were followed:

- *'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance. Unless informed otherwise via hydraulic models, drainage structures for existing paved areas are assumed to have been designed with a return period of no flooding in 1:5 years;*
- *A SuDS drainage design has been developed for all newly paved areas in accordance with the SuDS hierarchy set out in the Drainage Design Basis. SuDS are provided to ensure no increase on existing runoff rates from new or existing paved areas;*
- *Due to the largely impermeable nature of soils across Dublin, infiltration rates were assumed to be zero for calculating the required attenuation volumes of any SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will need to be completed so that infiltration rates can be considered in a future design stage;*
- *All runoff from road pavement or any other paved areas is collected in a positive drainage system. Over-the-edge discharges are not permitted; and*
- *Narrow filter drains or fin drains are not expected for inner city roads'.*

As noted above, a conservative approach has been taken with respect to the permeability of soils across the Proposed Scheme when calculating the required runoff attenuation volumes, therefore the NTA are satisfied that the proposed drainage design will attenuate any potential changes in run-off as a result of the

removal and replacement of the trees at this location. As stated above, where necessary, permeability tests will be completed in order to inform the future detailed design of the Proposed Scheme drainage.

With respect to the comments regarding the planting of saplings, as outlined above the proposed tree species and sizes for the area are detailed in the Landscape General Arrangement Drawings (Sheet 20) where 55 trees of varying size and species are proposed to repair the woodland and replace the tree losses in the area. The method used for repairing woodland edges and planting new blocks of native screening vegetation is to use whips and saplings which will establish more quickly and with greater long-term strength, although we accept the impact is not immediate. Detailed information about the proposed tree planting is provided in the Preliminary Design Report (included as part of the Supplementary Information for the Proposed Scheme).

As outlined in Table 14-1 of the Preliminary Design Report, the proposals represent a net increase of 192 individual trees along the Proposed Scheme (an approximately 14% increase), and a net decrease of approximately 15,093m^2 in woodland planting (an approximately 9% decrease). A robust alternatives assessment was undertaken throughout the design process to identify the optimum scheme and to avoid / minimise potential environmental impacts, including impacts on trees and woodland as far as reasonably practicable. Therefore, the proposed tree losses are limited to only where required to deliver a scheme which fulfils the Proposed Scheme objectives.

The Arboricultural Impact Assessment states in Paragraph 5.20 (under the heading of 'Mitigation & Improvements') with respect to the new tree planting that, '*This new planting should include a varied age and mix of tree species that are chosen with consideration to local site and environmental conditions, native environment, future use of the site, provision of ecosystem services and contribution that can be made to local communities. The aim should be to plant the 'right tree in the right place' to create a tree population that is both functional and resilient*'.

3.4.3.6 Loss of Community Green Space

Summary of issue raised

Some submissions have brought to attention the CPO of recreational green space to facilitate the extension of the underpass, the construction of the concrete ramp and staircase, along with the proposed footpath along the N11.

These submissions have noted that the existing green space is used by residents as a football area and that the construction of the pedestrian ramp would render such activities impossible. The green area also serves as a community space for the residents of Patrician Villas.

Response to issue raised

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the visual impact of the Proposed Scheme during both the Construction and Operational Phases. With respect to Section 2 (Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout) of the Proposed Scheme, Section 17.4.4.1.2 describes the impact on townscape and streetscape character, stating the following:

'*The baseline townscape is of low / medium sensitivity and operation of the Proposed Scheme will involve generally minor changes along the existing major road infrastructure. There will be some localised substantial changes, most notably where the Proposed Scheme provides for a new bus interchange within UCD adjacent to the Belfield Interchange, and there will be some continuing effects from loss of trees removed from the existing sylvan setting of the entrance during the Construction Phase, although this is in line with the aims of the UCD Future Campus Masterplan. Other substantial changes are limited to between Stillorgan Road / Dublin Road (Oatlands) / Priory Drive junction and Stillorgan Road / Lower Kilmacud Road / Stillorgan Park Road junction, where there will have been removal of dense roadside planting during the Construction Phase which will reduce the screening effect between the busy road corridor and several properties. However, the Proposed Scheme provides adequate replacement planting at UCD and to the roadside locations which experienced vegetation loss, and the negative effects will be negated over the long-term... Additional tree planting will also be provided at several roadside locations and sections of median.*'

It goes on to rate the impact significance as follows:

'*The Operational Phase of the Proposed Scheme will not alter the overall townscape character but there will some limited localised changes to streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment will be low.*

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Slight and Short-Term, becoming Neutral, Slight and Long-Term.'

Chapter 10 (Population) in Volume 2 of the EIAR describes the assessment of impact on community amenity and community land take during both the Construction and Operational Phases of the Proposed Scheme. Patrician Villas is located within the Kilmacud-Stillorgan community area for the purposes of the assessment. Section 10.4.4.1.1 describes the Operational Phase community amenity impact for the Kilmacud-Stillorgan community area as Negative, Not Significant and Short-Term, with Section 10.4.4.1.2.1 describing the community land take impact as Negative, Not Significant to Slight and Long-Term for Kilmacud-Stillorgan.

3.4.3.7 Impact on Air Quality, Noise, Screening & Human Health

Summary of issues raised

The majority of the submissions noted that increased noise is anticipated given the increased traffic congestion associated with the provision of a new toucan crossing.

Some submissions noted that having vehicles stopping at the Toucan crossing 100m from the main junction would lead to more vehicle stoppages. Respondents are concerned that this proposal will lead to more congestion along the N11 and are concerned with the potential for greater carbon emissions resulting in a lowering in air quality and a greater impact on human health.

Various submissions have highlighted that a loss of air quality owing to air pollution would have lasting effects on human health increasing the risk of lung conditions including asthma, bronchitis, and pneumonia. Residents also raised concerns regarding the health of children and babies in the womb.

Some submissions noted that the removal of sound absorbers such as trees and walls would contribute to an escalation of noise pollution. Respondents cited knock-on effects of loud noises such as annoyance, stress, high blood pressure, sleep disturbance, and adverse effects on cardiovascular and metabolic systems.

Response to issue raised

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR assesses the impact of the Proposed Scheme on traffic and transport as a result of the construction and operation of the Proposed Scheme. Robust traffic modelling was undertaken as part of the assessment as described in Chapter 6 and its accompanying Appendices (Appendix A6.1 to A6.4) in Volume 4 (Parts 1 and 2) of the EIAR. Modelling was carried out for both the Do Minimum and Do Something scenarios, for both the Opening Year (2028) and the Design Year (2043). With respect to the modelling of modal shift, Section 6.4.6.2.2 states that:

'*The same demographic assumptions (population, employment levels) are included in both the Do Minimum and Do Something scenarios. The bus network and frequency assumptions are also the same in both scenarios and are in line with the BusConnects bus network proposals. It is acknowledged, therefore, that the assessment is conservative in terms of the level of people movement that is predicted in the Do Something scenario*'.

The modelling assessed both the AM peak hour people movements and the PM peak hour people movements for both years, with the results as follows:

- Opening Year (2028):
    - A 49% reduction in the number of people travelling by car during the AM peak hour (Section 6.4.6.2.2.1); and
    - A 47% reduction in the number of people travelling by car during the PM peak hour (Section 6.4.6.2.2.2).
- Design Year (2043):
    - A 47% reduction in the number of people travelling by car during the AM peak hour (Section 6.4.6.2.2.3); and

- A 42% reduction in the number of people travelling by car during the PM peak hour (Section 6.4.6.2.2.4).

Chapter 6 also includes a general traffic assessment as described in Section 6.4.6.2.8, looking at the impacts along the Proposed Scheme as well as on adjacent roads which may experience traffic redistribution due to the reduction in capacity for general traffic along the route of the Proposed Scheme. This section of Chapter 6 states the following:

'*It should be noted that the Do Minimum and Do Something scenarios are based on the assumption that travel behaviour will remain broadly consistent over time and that car demand, used for this assessment, represents a reasonable worst-case scenario. It is possible that societal trends in the medium to long term may reduce car demand further due to the ongoing changes to travel behaviours and further shifts towards sustainable travel, flexibility in working arrangements brought on following COVID-19, and delayed car ownership trends that are emerging.*'

Overall, the findings of the general traffic assessment were that there would be reductions in general traffic flows along the Proposed Scheme resulting in a Positive, Significant and Long-Term impact. Therefore increased traffic congestion is not anticipated in the vicinity of Patrician Villas as a result of the Proposed Scheme.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at the N11 Stillorgan Road / Treesdale junction (Reference Number CBC0013ANML006), approximately 500m north-west of Patrician Villas (and approximately 50m from an existing pedestrian crossing) as shown in Figure 9.2 (Sheet 5) in Volume 3, Part 3 of 3 of the EIAR. This location would therefore be comparable to the noise conditions at Patrician Villas. The results of the survey for Section 2 of the Proposed Scheme are described in Section 9.3.2.2 as:

'*The noise survey results within this geographical section are dominated by road traffic noise from R138 Stillorgan Road and N11 Stillorgan Road / Bray Road, in addition to traffic along the surrounding road network and a small contribution from localised urban sources e.g. pedestrian movements*', with the average daytime noise level being measured at 66dB $L_{Aeq,T}$ and the average 24-hour noise level being measured at 71dB L_{den}.

Figures 9.4 and 9.5 in Volume 3, Part 3 of 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for both the Opening Year and Design Year giving an impact significance rating of Imperceptible / Positive for both the N11 in front of Patrician Villas and Stillorgan Park Road (Sheet 4 in both figures). The modelling does not predict any significant increase in traffic noise at Patrician Villas as a result of the operation of the Proposed Scheme.

It should be noted that vegetation is not generally relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening. As outlined previously, the existing trees at this location will be retained where possible with replacement planting proposed to replace any losses to the woodland in front of Patrician Villas. With respect to mitigation for traffic noise during the Operational Phase, Chapter 9 states that:

'*The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme*'.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. For the traffic assessment, the focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figures 7.3 to 7.8 in Volume 3, Part 3 of 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) during the Operational Phase (Figures 7.3 to 7.5). For Patrician Villas (Sheet 2 in each Figure), the modelling has found that the significance of the change will be Slight Beneficial with respect to NO_2, and Negligible for both PM_{10} and $PM_{2.5}$. The air quality assessment has found that the Operational Phase of the Proposed Scheme will not result in a significant increase in any of the pollutants associated with traffic in the vicinity of Patrician Villas.

Chapter 11 (Human Health) in Volume 2 of the EIAR has assessed the impact of the Proposed Scheme on human health, including as a result of air quality, noise and other pollutants. Section 11.4.4.2 describes the Operational Phase impacts associated with changes to noise and air quality, with Table 11.8 summarising all the potential Operational Phase Impacts on human health. With respect to air quality impacts, Table 11.8 states that the potential impact is '*Neutral and Long-Term – on the basis that negligible changes in air pollutant concentrations are anticipated from the Proposed Scheme*'. With respect to noise impacts, Table 11.8 states that the potential impact is:

'*Negative to Positive, Not Significant, Short to Long-Term for annoyance on the basis that there some locations of increased noise and some with decreased noise but very few with a perceptible change in traffic noise.*

Neutral for sleep disturbance on basis that redistribution of significant traffic volumes from Proposed Scheme will primarily be a daytime phenomenon.

Positive, Slight, Long-Term for cardiovascular risk on the basis that fewer people are likely to be exposed to higher levels of traffic noise with the Proposed Scheme.'

3.4.3.8 Safety, Security, Anti-Social Behaviour & Vandalism

Summary of issues raised

The majority of the submissions have highlighted concerns regarding the potential for increased security concern facing the residents of Patrician Villas. The submissions stated that they believed there was a risk of an increase in public order offences and / or anti-social behaviour, including loitering, littering, illegal dumping, and riding of scramblers/motorbikes, as well as a loss of security, in the residential estate as a result of the new pedestrian link through the Patrician Vilas green area.

The majority of those making submissions stated that they believed that the inclusion of the new pedestrian link would create a child safety issue with the potential for unsupervised children able to leave the estate and access the main N11 road.

Various submissions expressed concern regarding the potential for increased anti-social behaviour which would be exacerbated by the extension of the existing underpass.

Various submissions noted safety/ security concerns with increased pedestrian and vehicular activity as the bus users will use Patrician Villas as a short cut.

Response to issues raised

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 of the EIAR includes consideration of the impact of transport infrastructure on criminal activity and anti-social behaviour. The conclusion reached on page 25 is that:

'*The new infrastructure improvements should have a direct and immediate impact on crime along the corridors. It will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a direct deterrent to criminal activity and result in a reduction in crime. This in turn has been shown to encourage people onto the streets into the evening which will also support the nighttime economy in community centres*.'

Section 10.4.4.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR considers the impact of the Operational Phase of the Proposed Scheme on community amenity. For the Kilmacud-Stillorgan community area, in which Patrician Villas is located, the community amenity impact is assessed as a Negative, Not Significant and Short-Term during the first year of operation. Additional information in relation to the potential community impacts arising from crime and antisocial behaviour is set out in Appendix A10.2, which notes the following:

- *'Good infrastructure has also been shown to have a positive impact on levels of crime, particularly low level crimes such as theft and vandalism. There is evidence from a wide range of studies that redesigned public realm, especially those which are better lit and more visible, see significant reductions in the level of crime.'*
- *'A study from Los Angeles in the late 1990s discovered that the location and visibility of bus stops can have an impact on crime. Where bus stops were clearly visible, offered shelter to the user and were on streets with high levels of vehicle traffic, criminal activity was less*

common. In contrast, crime rates were found to be higher if the bus stop was at an intersection with an alley, next to off-licences, cashpoint services, vacant buildings or on-street parking, or in areas where there was a lot of graffiti and litter.'

The NTA document: Permeability in Existing Urban Areas Best Practice Guide 2015, supports this assessment. This policy guidance states that '*a higher number of pedestrians and cyclists in housing estates and neighbourhood centres also changes the perception of a place in terms of safety. Passive supervision, the mere presence of more people, makes the place safer. By maintaining or creating links for pedestrians and cyclists, this enhanced safety can be provided*'. The document goes on to state that '*If people have a higher tendency to walk and cycle around their neighbourhood, they are more likely to meet each other. Often it is these meetings which give a sense of community more than formal arrangements and a greater sense of community is often cited as a key requirement in addressing many anti-social behaviour problems in Irish urban areas*.' This is directly applicable to the proposed link to Patrician Villas for pedestrians and cyclists.

This Best Practice Guide also includes a case study from Dargle Wood, Knocklyon which is relevant to the new link to Patrician Villas. The case study notes that proposals for the permeability link at Knocklyon through Dargle Wood open space '*generated considerable concern in the immediately adjacent area, mainly with regard to the risk of increased anti-social behaviour, increased litter and increased pedestrian and cyclist traffic through the open space where there was no existing east-west route*.'

The Best Practice Guide also includes following text provided by a local resident and member of the Residents Association Committee when discussing views amongst residents before implementation of the Dargle Wood Scheme:

'This green space has a long history of antisocial behaviour… drugs, alcohol abuse, loitering motorbiking etc. Residents thought that making the area more accessible and providing public lighting would worsen these problems and they opposed the project on these grounds.'

The following text is provided by the same local resident, indicating how residents' views have changed as a result of the Dargle Wood scheme:

'*Residents' fears and concerns of a worsening antisocial behaviour situation has not materialised to date and the amended project carried out has so far brought improvements that can be built upon...the putting in place of the review process post project (evaluation) has also helped to assuage residents' concerns in the event that adjustments may be required.'*

In summary, the case study demonstrates that improved pedestrian and cycling links, such as the proposed pedestrian and cyclist link between Patrician Villas and the N11 Road will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

3.4.3.9 Visual Impact / Loss of Privacy

Summary of issues raised

A few submissions mentioned the loss of views associated with the removal of trees on the border of Patrician Villas. The removal of screening trees is considered to expose Patrician Villas residents to the N11 and the apartment blocks on the other side of the N11.

Some submissions have expressed concerns regarding the potential for their privacy to be lost owing to increases in pedestrian traffic within Patrician Villas due to opening up new pedestrian link to the N11.

Response to issue raised

The Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Sheet 20 shows the section of the Proposed Scheme at Patrician Villas, showing the proposed extent of tree removals and the proposed new trees to be planted (55 trees of mixed species and sizes proposed). There is a tag on Sheet 20 describing the tree removal there as follows:

'*Tree removal indicated between A6490 and A6770 assumes a 50% loss of trees. Trees on the north side of this belt should be retained where possible due to the screening function provided to residents on Patrician Villas Road. Approximately 1.8m of additional space is required to the back of the existing cycle track to facilitate the required widening. An arboricultural consultant to be present to oversee setting out and clearance work in order to retain as many existing trees as possible*.'

There is also an additional tag on the drawing regarding the proposed ramp, stating the following:

'*New ramped access from N11 to Patrician Villas. Grassed area re-profiled to suit the ramp gradient with contours tied back into existing smoothly. New tree planting proposed to mitigate for losses*'.

As shown on Sheet 20, it is not proposed to remove the tree group as a whole, with only the roadside edge of the tree group to be removed to make space for the proposed road widening in that area. The residents of Patrician Villas will continue to be largely visually screened from the N11 and from the apartment buildings on the opposite side of the road by the remaining trees in that group, and the replacement trees proposed will strengthen that screen as they establish within the landscape. The existing boundary wall is also retained which provides a visual barrier.

Chapter 17 (Landscape (Townscape) & Visual in Volume 2 of the EIAR describes the assessment of the visual impact of the Proposed Scheme during both the Construction and Operational Phases. The property is located within Section 2 of the Proposed Scheme (Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout), with the Construction Phase impact with respect to the Streetscape Character along this section being assessed as Negative, Moderate, Temporary / Short-Term. On completion of the Construction Phase, the impact is assessed as being Negative, Slight, Short-Term as the Proposed Scheme becomes established and increasingly integrated within its setting.

As responded under the *'Need for the new pedestrian link'* and *'safety, security and vandalism'*, the new pedestrian link is required to improve permeability and achieve the objectives of BusConnects which is in accordance with the various national and local policies. Section 10.4.4.1.1 of Chapter 10 (Population) in Volume 2 of the EIAR describes the Operational Phase community amenity impact for the Kilmacud-Stillorgan community area as Negative, Not Significant and Short-Term.

3.4.3.10 Increased traffic and parking in estate to access N11 & safety concerns

Summary of issues raised

Many submissions have highlighted that increased vehicular traffic within Patrician Villas is expected as non-residents may use the estate as a set-down/collection area or park and ride facility given the direct access which will be provided to the bus route on the N11. The increased traffic would increase the potential for safety for pedestrians and cyclists within the estate.

The residents of Patrician Villas are concerned that their road space would be narrowed and that reversing from driveways could be unsafe with greater footfall within the estate.

Some submissions expressed reservations regarding the proposed winding concrete ramp. Concerns were raised regarding the ramp being used by bicycles and scooters entering Patrician Villas. They noted potentially hazardous conditions that could arise during wet/icy/snowy conditions that would make the ramp unsafe too.

Response to issue raised

Regarding the specific concerns raised about parking at this location, the parking identified in this submission has not been identified as a formal parking space in Parking and Loading assessment described in Section 6.4.6.1.3.4 of Chapter 6 (Traffic &Transport) of Volume 2 of the EIAR due to the absence of relevant signage and demarcation. Issues relating to parking of this nature are the responsibility of Dún Laoghaire–Rathdown County Council and are outside of the remit of the NTA in this Proposed Scheme.

Due to the location of the residential estate along the Proposed Scheme corridor and that it can only be accessed by car via Stillorgan Park Road, it is considered that the journey time associated with driving by car into the Patrician Villas estate to park and access the new bus stops via the proposed link would be highly unattractive to potential bus passengers and will not lead to any significant increase in vehicular traffic within the estate.

As part of the Proposed Scheme at this location, a new pedestrian link is proposed in the green area at Patrician Villas that will connect to the existing residential street. There are no other road works proposed outside the Site Boundary line and Temporary Land Acquisition line and the existing streets are not affected.

The Road Safety Audit for the Proposed Scheme is provided as Appendix M.2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated at this location.

Regarding the concerns for safety for users of the winding ramp during the winter wet/icy/snowy conditions, issues of this nature are the responsibility of Dún Laoghaire–Rathdown County Council and are outside of the remit of the NTA in this Proposed Scheme.

3.4.4 Other Issues Raised and Responses

3.4.4.1 Removal of Slip Roads

Summary of issue raised

Some submissions made reference to the proposal to remove left turning slip lanes outside Patrician Villas which they feel will lead to greater traffic congestion and release of more harmful vehicle emissions.

Response to issue raised

Section 2.2.2 of Design Manual for Urban Roads Standards (DMURS) sets out user priorities. Slip lanes allow vehicles to take corners onto slower roads at much higher speeds, increasing risk of death or significant injury to a pedestrian should there be a collision. Additionally, slip lanes increase the crossing distances for pedestrians and often leave them in a vulnerable location waiting on isolated traffic islands for crossing signals.

To enhance movement by pedestrians and cyclists, the removal of slip lanes will be undertaken at appropriate locations, together with consideration of junction signalling changes. This will better balance the use of the junction between motorised and vulnerable modes, and in urban areas, junctions will be designed such that footpaths on side roads will be carried through at-grade, where practicable and safe to do so. The removal of slip lanes helps to provides safe junction design for both cyclists and pedestrians while achieving bus priority.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling, and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that *'there is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year*'. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact which on the direct study area.

The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

Also refer to response in Section 3.8 in this report for further information on removal of slip lanes along the N11 Stillorgan Road in section Proposed Scheme at N11 Stillorgan Road.

3.5 Proposed Scheme at Belmont Terrace

3.5.1 Description of Proposed Scheme at this Location

The Proposed Scheme at this location maintains the BusConnects standard cross-section, a bus lane, traffic lane, cycle track and footpath and are provided in both directions.

In order to achieve the Proposed Scheme objectives at this location, a section of southbound cycle track has been diverted on to Belmont Terrace at Galloping Green. The southbound segregated cycle track along the N11 is diverted along Belmont Terrace, to improve cycle track safety and allowing for the relocation of a bus stop, and retention of as much side road parking as possible.

The Proposed Scheme design at Belmont Terrace is presented in the 02-General Arrangement Drawings Sheet 23 and Sheet 24 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.69 and Figure 3.70 below.

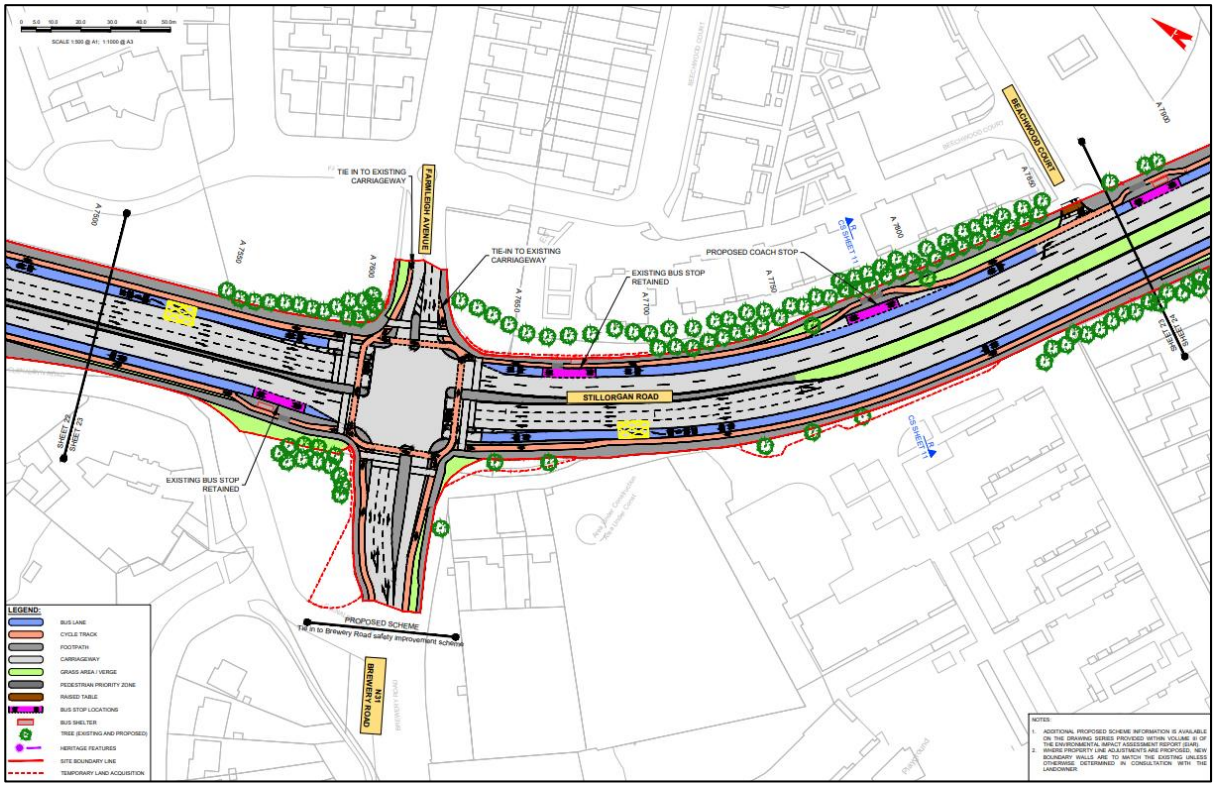


Figure 3.69: Extract from General Arrangement Drawings at Belmont Terrace (Sheet 23)

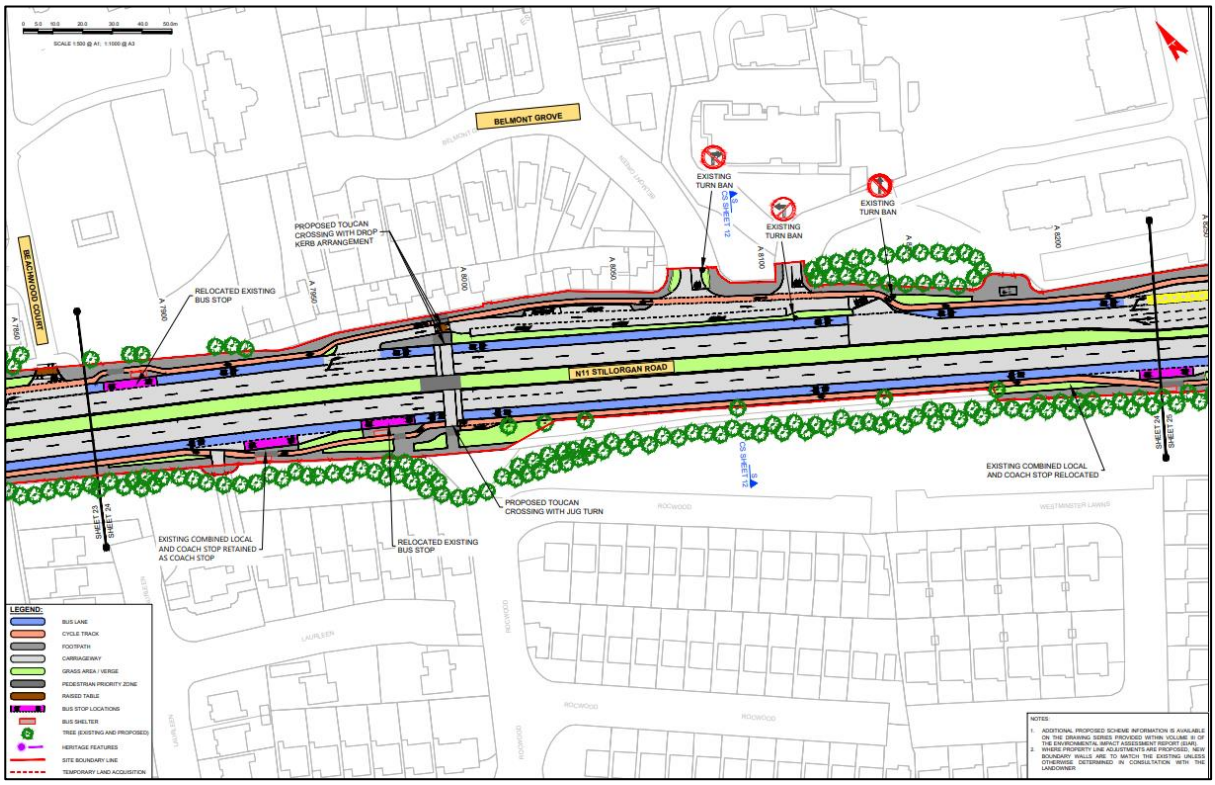


Figure 3.70: Extract from General Arrangement Drawings at Belmont Terrace (Sheet 24)

3.5.2 Overview of Submissions Received

Table 3.16 below lists the 2 individual submissions made in respect of the Proposed Scheme at Belmont Terrace.

Table 3.16: Submissions Made in Respect of at Belmont Terrace

No	Name	No	Name	No	Name
114	Kennedy Wilson & Kennedy Wilson Investments	203	Tony Hearne & Marian Hearne		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

3.5.3 114 - Kennedy Wilson & Kennedy Wilson Investments

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Support for the Scheme

2) Concern on the impact to the existing access and egress

3.5.3.1 Support for the Scheme

Summary of issue raised

Kennedy Wilson in their submission support the BusConnects Proposed Scheme which will improve the bus services along this corridor.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support improvement of bus services.

3.5.3.2 Concern on the impact to the existing access and egress

Summary of issue raised

The submission observed that the current proposal does not take regard of the existing access arrangements at the Grange. The respondent requested that the existing access arrangements be maintained and that the Proposed Scheme is amended appropriately.

Response to issue raised

As set out in paragraph 2 of the statutory notice, which was served upon the objector, the CPO is *'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.*

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The Proposed Scheme design at the location of the Grange Complex is shown in the General Arrangement Drawings in Volume 3, Part 1 of 3 on Sheet 23 and shown in Figure 3.69. As part of the BusConnects Bray to City Centre CBC works, permanent land take (short strip shown in the CPO maps) is required to provide for the desirable minimum width of the footpath and cycle track at this location, hence meeting the objectives of BusConnects. The proposed cycle track at the two existing access and egress points will be at grade with the road level and demarcated by road marking, as per existing arrangement shown in the Figure 3.72 and Figure 3.73, hence maintaining existing access and egress points to the Grange complex. The proposed widening of the cycle track in the green area strip does not impact the car set-down area.

The permanent and temporary land take required from the Kennedy Limited landholding which premises The Grange Office and Apartment complex is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.71. The permanent land take is shown in Plot 1135(1).1c and Plot 1135(2)2c shows the temporary land take.

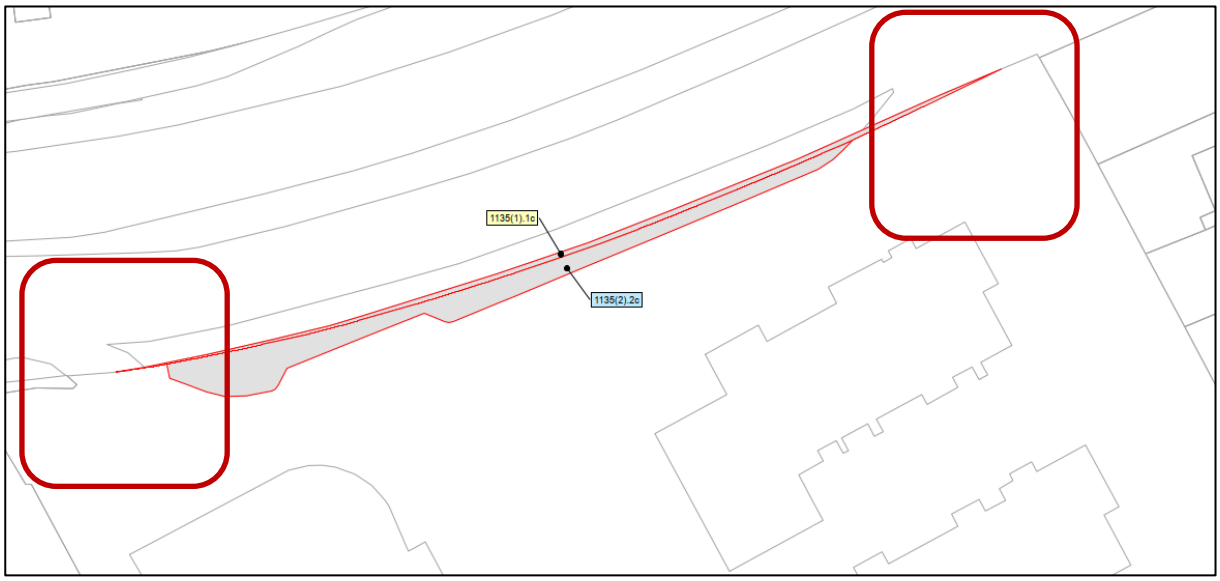


Figure 3.71: Extract from Deposit Map (Sheet 27)

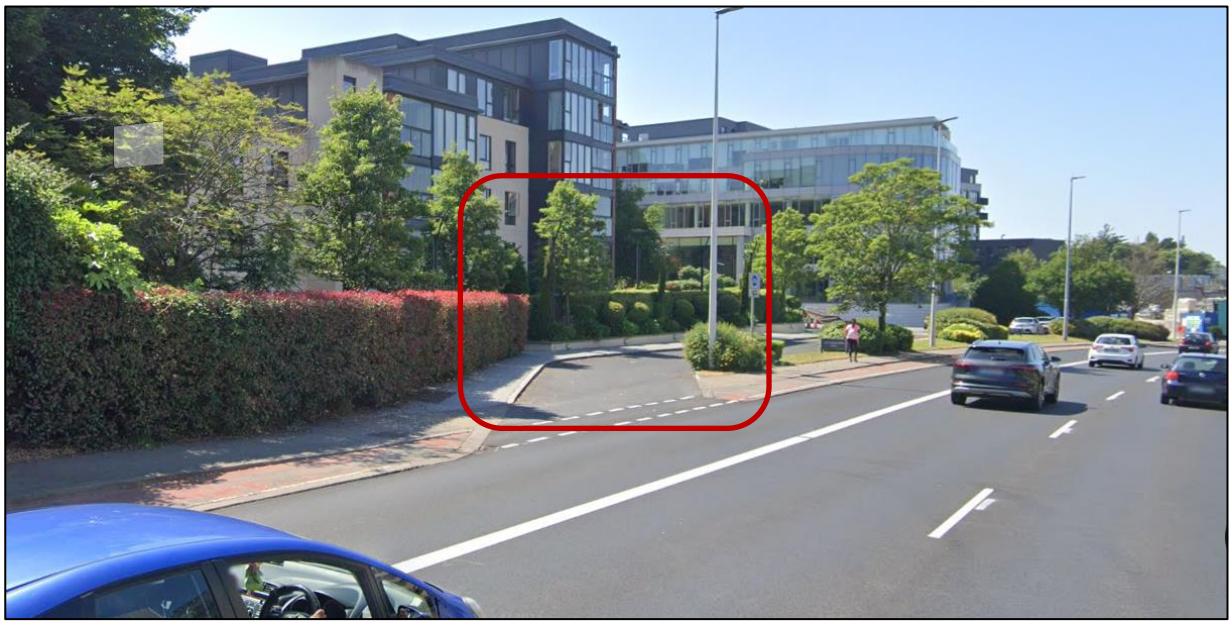


Figure 3.72: Street view at the access/ egress (South) (Source: Google Maps)

Figure 3.73: Street view at the access/ egress (North) (Source: Google Maps)

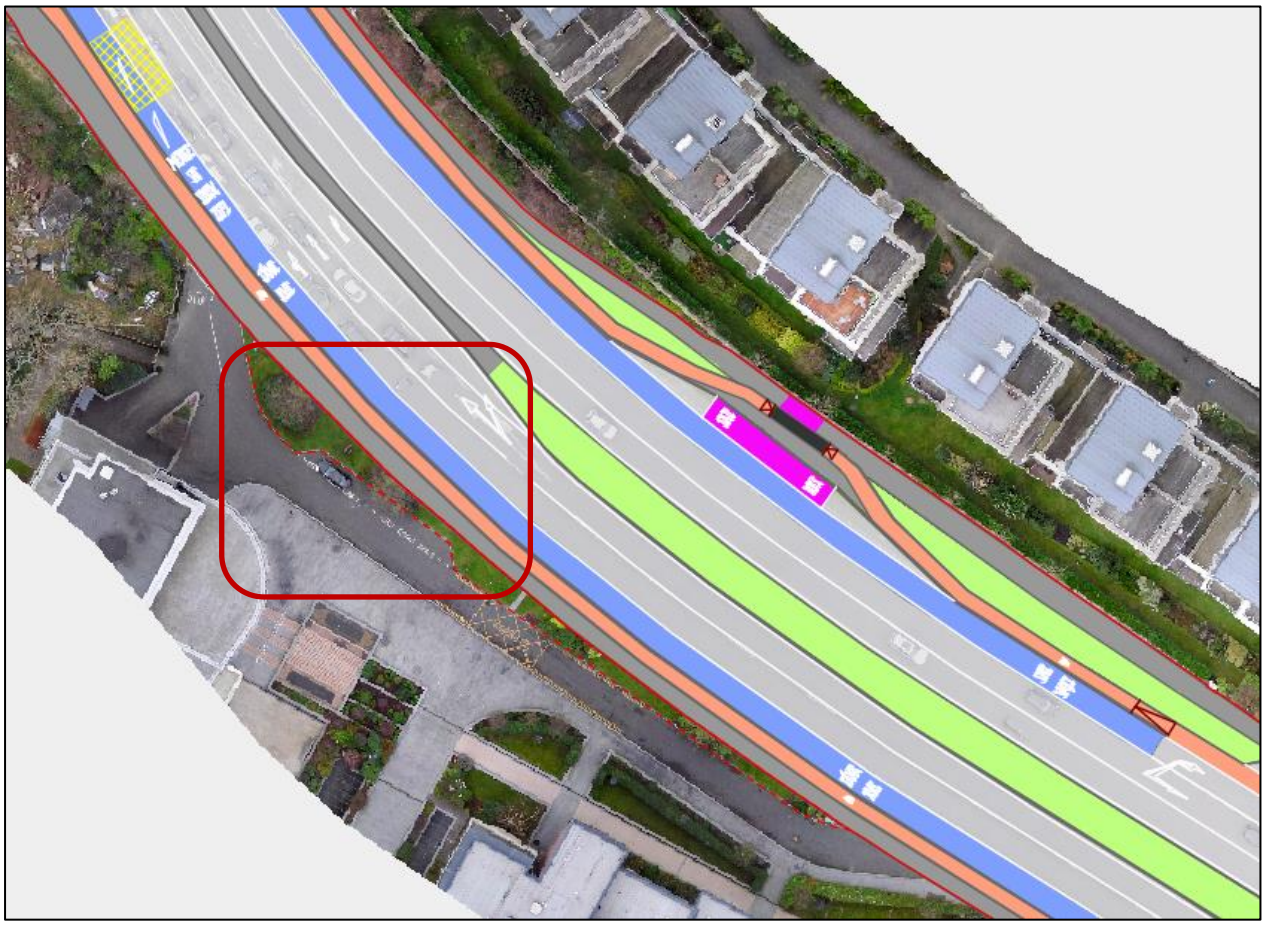


Figure 3.74: Aerial View at the Access/ Egress (North) (Image Source: Maxer)

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/and or accommodation works and will be returned after construction. It will be reinstated in the same condition as was existing. The temporary land take near the northern access/ egress is outside the car set-down area as shown in Figure 3.74.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question. Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation. These are matters that can be successfully addressed between the Kennedy Wilsons and the NTA.

3.5.4 203 – Tony Hearne & Marian Hearne

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Cycle track along the N11 Stillorgan Road mainline as per the EPR Design

2) Visibility

3) Concern on pedestrian safety due to reduced footpath

3.5.4.1 Cycle track along the N11 Stillorgan Road mainline as per EPR design

The submission expresses that there is more space available on the carriageway side of the hedge to accommodate the BusConnects Proposed Scheme cycle track.

Response to issue raised

The Proposed Scheme Design at Belmont Terrace is presented 02-General Arrangement Drawings Sheet 24 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.75.

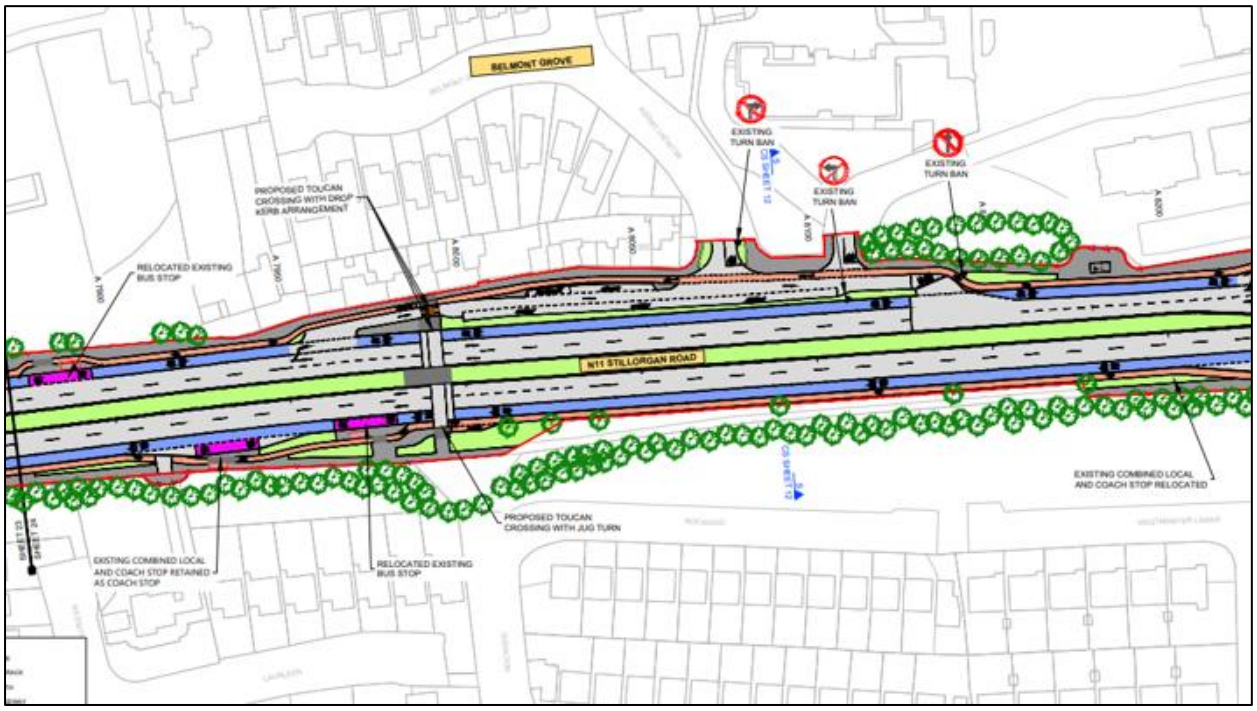


Figure 3.75: Extract from the General Arrangement Drawing at Belmont Terrace (Sheet 24)

The design for this section has been reviewed following the Emerging Preferred Route Option, with a view to providing a safer layout for cyclists while also allowing for the relocation of a bus stop, and retention of as much side-road parking as possible. The EPR Option is presented in the Appendix N of the Preliminary Design Report, part of Supplementary Information

The Proposed Scheme layout at this location has a number of benefits. Firstly, it removes the two points where cyclists have to cross the running carriageway from the N11 Stillorgan Road in to and out of Belmont Terrace, and specifically the northern junction which is not signal controlled. Secondly, the relocated bus stop reduces the impact on parking along Belmont Terrace. This option also provides a continuous green verge between Belmont Terrace and the N11 Stillorgan Road.

Section 3.4.3 of the Chapter 3 (Consideration of Reasonable Alternatives) Volume 2 of EIAR notes, '*At Galloping Green, the southbound segregated cycle track along the N11 was diverted along Belmont Terrace, to improve cycle track safety and allowing for the relocation of a bus stop, and retention of as much side road parking as possible. The updated design would redirect a standard 2m cycle track onto Belmont Terrace to run alongside the current footpath. It would pass the junction with Belmont Green and the adjacent private hospital, and then rejoin the N11 past Belmont Terrace Junction;*'

Section 6.3.2 of the Preferred Route Options Report, part of Supplementary Information notes the following:

'The EPR design proposed a widened continuation of the current cycle track along its present alignment, adjacent to the N11, but with a new bus stop also located in the verge, which the cycle track was to pass behind.

Following a detailed topographical survey of the location, it was found that the proposed cycle track alignment along the verge was not the optimal layout based on the level difference between the N11 and Belmont Terrace. The optimisation of bus stop locations also had led to the relocation of the bus stop approximately 150m to the north. Had the cycle track continued on its current alignment, but widened to 2m, it would also have required encroachment into the verge and potentially impacted on the parking spaces currently used on Belmont Terrace. Cars entering and exiting Belmont Terrace would also cross the straight-ahead N11 cycle track in two places, thus increasing potential conflict with the cyclists.

To provide for a standard 2m cycle track and remove the impact on adjacent parking while also improving the safety of the cycle track, the cycle track has been redirected onto Belmont Terrace to run alongside the current footpath. It passes the junction with Belmont Green and the adjacent private hospital, and then rejoins the N11 past the Belmont Terrace Junction.

This layout has a number of benefits. Firstly, it removes the two points where cyclists have to cross the running carriageway from the N11 in to and out of Belmont Terrace, and specifically the northern junction which is not signal controlled. Secondly, the relocated bus stop reduces the impact on parking along Belmont Terrace. This option also provides a continuous green verge between Belmont Terrace and the N11.'

Section 6.4.6.1.3.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the cycling infrastructure along Section 2 (Donnybrook to Loughlinstown Roundabout) of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced cycling infrastructure on the corridor.

NTA is satisfied alternatives have been assessed for the cycle infrastructure at Belmount Terrance and the Proposed Scheme design meets the objective of BusConnects.

3.5.4.2 Visibility

The submission expressed concern regarding the line of sight of drivers egressing from the entrance to the Belmont Housing estate. The respondent highlighted the potential danger facing cyclists and motorised scooter users as concerns noted that only the immediate adjacent section of the cycle lane and footpath is visible to drivers exiting the estate.

Response to issue raised

Forward visibility checks have been undertaken as part of the Proposed Scheme. Section 4.7 of the Preliminary Design Report included as part of the Supplementary Information notes that desirable minimum forward visibility requirements have been achieved across the majority of the Proposed Scheme. The sections in which reduced forward visibility has been provided are described in Table 4-6 of the Chapter 4 of the PDR. At the entrance to the Belmont Housing estate no forward visibility issues have been identified.

The Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with visibility at this junction.

3.5.4.3 Concern on pedestrian safety due to reduced footpath width

Summary of issue raised

The submission also raised concerns regarding the safety of pedestrians at the entrance to Belmont Housing estate. The submission notes that narrow strip of footpath in front of the houses and pub near the pedestrian crossing which they believe would be uncomfortable traversing as pedestrians.

The submission noted that any solutions to widen the footpath and cycle lane would compromise with the service road width.

Response to issue raised

Section 4.6.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR notes a 2.0m desirable minimum width for footpaths, with 1.2m being a minimum width at pinch points over a 2m length of the path. The minimum nominal width is 1.8m in areas where pedestrian activity is low or where there are localised restrictions. At Belmont Terrace the footpath narrows locally to 1.8m to minimise impact to the service road width and the existing parking.

Table 3.17 shows Table 4.9 of Chapter 4 (Proposed Scheme Description) Volume 2 of the EIAR lists the reduced footpath and cycle track at Belmount Terrace.

Table 3.17: Reduced Footpath Width at Belmount Terrace (Table 4.9)

Table 4.9: Reduced Standard Cross Sections on Section 2 – Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout

Location	Design Element	DMURS	Design	Justification
A7500 – A7600	Cycle track (northbound)	2.0m	1.75m	Cycle Track narrows locally to match existing 1.75m at this pinch point at the bus stop. Widening will require major impact to the retaining wall and associated utilities.
A7650 – A7750	Cycle track (southbound)	2.0m	1.5m	Cycle Track narrows locally to 1.5m or impact to the retaining wall and associated utilities.
A7955 – A8145	Footpath (southbound)	2.0m	1.8m	Footpath narrows locally to 1.8m to avoid impacting properties.
A8225 – A8315	Cycle track (northbound)	2.0m	Varies Approx. 1.5m – 2m	Cycle track locally narrowed to approximately 1.5m at pinch point behind bus stops to reduce cyclist speed.

Section 4.6.3.3 notes that an offline section of cycle track is provided along Belmont Terrace for a short section to improve cycle track widths and interactions with general traffic outbound. Section 4.6.1 describes the desirable minimum width of 2.0m for a single direction, with flow, raised adjacent cycle track. The minimum nominal width is 1.5m. The minimum nominal width of 1.5m cycle track has been provided for along the offline section at Belmont Terrace.

Section 6.4.6.1.3.1 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that it is anticipated that there will be a Positive, Significant and Long-term effect to the quality of the pedestrian infrastructure along Section 2 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 in Appendix A6.4 in Volume 4, Part 1 of 4 of the EIAR.

The design intent at Belmount Terrace is to retain the existing road width and parking without compromising with pedestrian and cycling facilities along the section. Out of the 23 parking spaces along the Belmount Terrace 21 spaces and a loading are retained, as presented in Table 6.31 (see Table 3.18 below) in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Section 6.4.6.1.3.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, notes the following:

'As shown in Table 6.31 (see Table 3.18 below), the proposed amendments to parking / loading will result in a loss of 2 spaces along Section 2. Where parking is removed, the impact is assessed as Negative, Slight and Long-term. This slight effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.'

Table 3.18: Extract from EIAR Chapter 6, Parking Amendments at Belmount Terrace (Table 6.31)

Table 6.31: Section 2 – Overall Changes in Parking / Loading Spaces

Street	Parking Type	Number of Parking Spaces		
		Do Minimum	Do Something	Change
Belmont Terrace	Loading / Unloading (in Designated Loading Bays)	1	1	0
	Informal Parking	23	21	-2
	Side Street Parking	58	58	0
St Brigid's Church Road	Disabled Permit Parking	2	2	0
	Informal Parking (Designated Free Parking)	4	4	0
Airfield Park	Informal Parking (Designated Free Parking)	13	13	0
Johnstown Road	Permit Parking	3	3	0
Old Bray Road	Informal Parking (Designated Free Parking)	12	12	0
Total		**116**	**114**	**-2**

3.6 Proposed Scheme at South Park

3.6.1 Description of Proposed Scheme at this Location

In order to achieve the objectives of the Proposed Scheme, a new pedestrian link is proposed to South Park from Bray Road in Cornelscourt. New footpaths are not proposed along this section, as alternative walking routes exist on adjacent quieter roads.

It is proposed to maintain one bus lane, two general traffic lanes and two cycle tracks in each direction. Junction designs along the route have also been reviewed to remove left turn filter lanes crossing cycle lanes where possible.

The Proposed Scheme design at South Park is presented in the 02-General Arrangement Drawings Sheet 29 and Sheet 30 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.76 and Figure 3.77.

Figure 3.78 below shows an aerial view of the location of South Park Estate and the proposed new pedestrian/cyclist link.

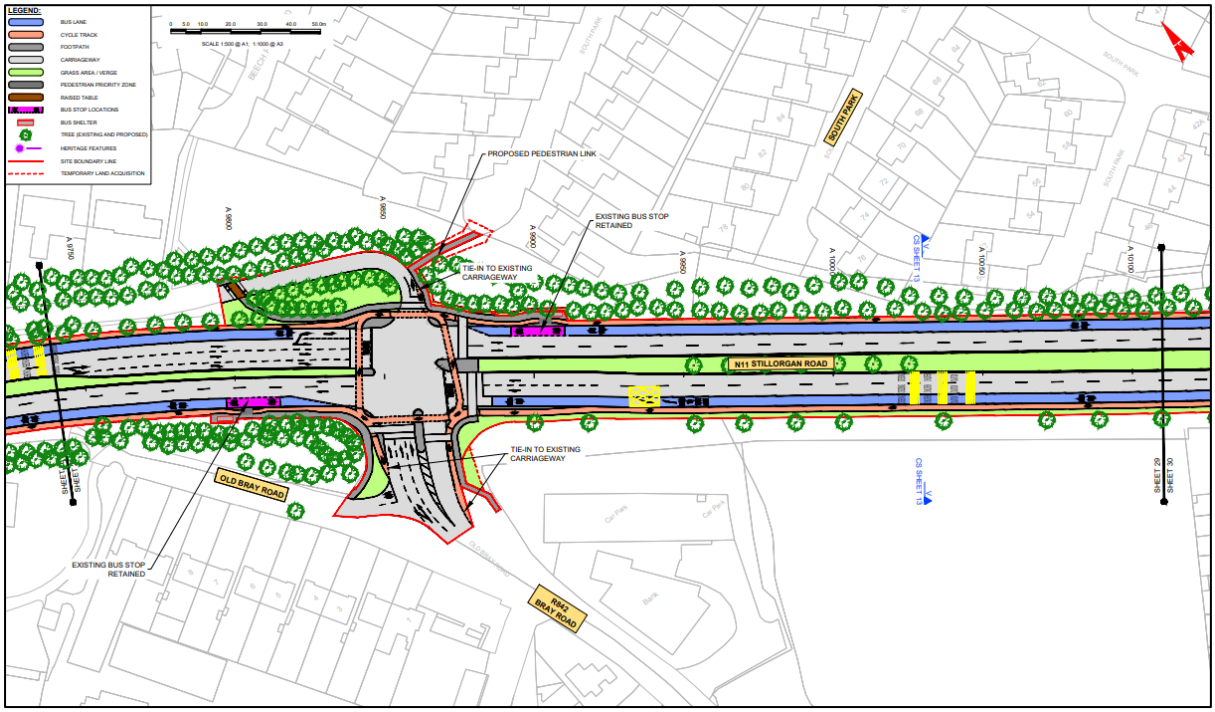


Figure 3.76: Extract from General Arrangement Drawings at South Park (Sheet 29)

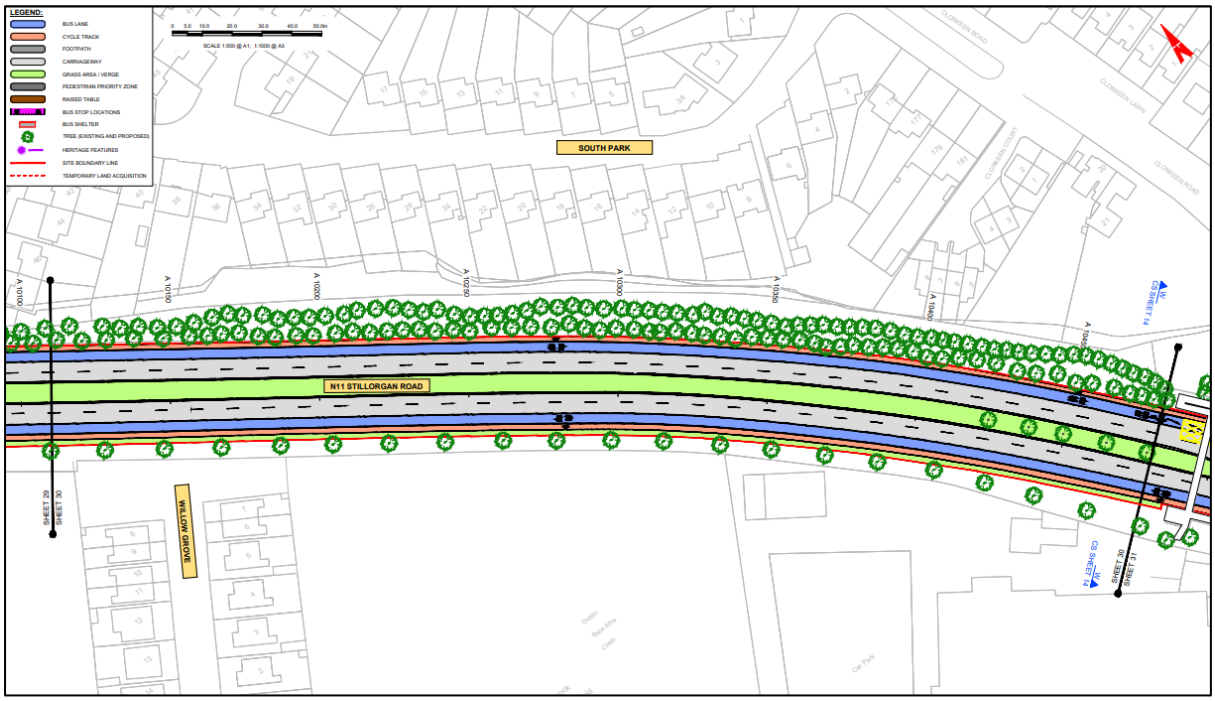


Figure 3.77: Extract from General Arrangement Drawings at South Park at South Park (Sheet 30)

Figure 3.78: Location of South Park Estate and Proposed new Pedestrian/Cyclist Link (Image Source: Google)

3.6.2 Overview of Submissions Received

Table 3.19 below lists the 7 individual submissions made in respect of the Proposed Scheme at South Park.

Table 3.19: Submissions Made in Respect of Pedestrian Link at South Park

No	Name	No	Name	No	Name
8	Anne & Cormac O'Donohoe	51	David Bowman	172	Residents of South Park
20	Blathin O'Shea	66	Eamon Griffith	147	Padraic & Anna Costello

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

- Need for the new pedestrian link
- Querying the consultation process
- Safety, security, anti-social behaviour and vandalism
- Increase in traffic, parking in estate to access N11 Stillorgan Road and safety concern
- Impact on biodiversity, loss of trees and impact to protective mound

Other Issues Raised

- Loss of Property Value
- Opening of the security wall
- Impact during construction

3.6.3 Common Issues Raised and Responses

3.6.3.1 *Need for New Pedestrian Link*

Summary of issue raised

Majority of the submissions have raised objection to the proposed pedestrian laneway at the end of the cul de sac between 116a and 114 South Park. Residents of South Park are satisfied with the existing connectivity to the N11 via the Beech Park pedestrian laneway and feel that the impacts that their neighbourhood would encounter are not warranted.

Few submissions have questioned the need for the proposal at South Park noting that financial resources could be put to better use elsewhere.

Few submissions made reference to the Dún Laoghaire Rathdown County Council Development Plan objective which highlights the need to protect and improve residential amenity. Some residents feel that the Proposed Scheme design at South Park is at odds with the county council objectives.

Response to issue raised

This response addresses the contention that the new link is not necessary and was not investigated adequately.

Existing data

Section 10.2.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR includes the assessment of impacts on community amenity, land take and accessibility consisting of 'community areas', which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Foxrock, in which South Park is located.

Section 10.3.2.3 provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 3.20 below.

Table 3.20: Extract from EIAR Chapter 10, Method of travel to work for bus, train, car and foot/bike % (Table 10.5)

Table 10.5: Method of Travel to Work for Bus, Train, Car and Foot / Bike (%)

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Westland Row	6%	15%	5%	45%	30%
University (Newman) Church	6%	11%	5%	51%	26%
Haddington Road	6%	22%	4%	53%	15%
Rathmines	10%	20%	8%	50%	12%
Donnybrook	11%	33%	3%	37%	15%
Merrion Road	12%	38%	10%	29%	12%
Booterstown	14%	47%	11%	18%	9%
Mount Merrion	13%	58%	3%	15%	11%
Blackrock	10%	46%	17%	16%	11%
Kilmacud - Stillorgan	11%	55%	12%	15%	7%
Newtownpark	13%	53%	10%	15%	9%
Foxrock	16%	60%	5%	10%	9%
Cabinteely	10%	64%	10%	8%	7%
Johnstown - Killiney	12%	64%	7%	9%	7%
Ballybrack - Killiney	6%	61%	16%	8%	9%
Loughlinstown	17%	59%	11%	9%	4%
Shankill	10%	60%	17%	6%	8%
Little Bray	12%	61%	8%	13%	7%
Bray	9%	52%	18%	14%	7%
Study Area Average	**11%**	**46%**	**9%**	**22%**	**11%**
County Dublin	**12%**	**54%**	**8%**	**17%**	**9%**

As can be seen in Table 3.20 above, of the 19 Community Areas assessed, Foxrock has one of the highest car mode share for travel to work trips at 60%. In addition, this mode share exceeds the average mode share for the study area as a whole. This is also highlighted in Section 11.3.4 in Chapter 11 (Human Health) in Volume 2 of the EIAR. References to the data for other community areas in Table 10.5 located along the N11 Road corridor, highlights that they have lower travel by car percentage, compared to Foxrock. These other areas generally have good permeability to the high frequency bus services along the N11 Road.

In comparison, the South Park estate is enclosed by a continuous boundary between the properties in the estate and the N11/Bray Road. This prevents any direct access/egress and acts as a deterrent to achieving the required mode-shift away from private car use or residents in the estate.

The NTA encourages the transformation of neighbourhoods into permeable ones, where people can walk or cycle through areas safely and conveniently, and in a manner which confers a competitive advantage to these modes over motorised forms, particularly the private car. This approach is directly applicable to the existing situation at South Park, demonstrating that the proposed new link follows the approach set out in the best practice guidance promoted by the NTA and the Dublin City Development Plan.

Policy

The application documentation submitted to An Bord Pleanála demonstrates that the proposal for a new pedestrian and cyclist link between South Park and the bus stops on the N11/Bray Road is consistent with, and supports elements of, international policy, European Union (EU) law and policy, national policy, regional policy and local policy.

At all policy levels, there are clear objectives to increase active travel and accessibility to public transport. In response to the submissions in relation to the creation of a new pedestrian and cycling link between South Park and the N11/Bray Road, the details of how the proposed new link supports these different tiers of policy are provided in the paragraphs below.

International Policy, EU Law & Policy

As set out in Sections 2.3.1 and 2.3.2 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and in Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several international policies.

Refer to Table 3.11 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant international policy and EU law and policy. The policy outlined in Table 3.11 is similarly relevant and supportive of the need for the proposed South Park pedestrian link.

National Policy

As set out in Section 2.3.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4 the Proposed Scheme supports several objectives of national policy.

Refer to Table 3.12 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant national policy. The policy outlined in Table 3.12 is similarly relevant and supportive of the need for the proposed South Park pedestrian link.

In addition to the national policies as outlined in Table 3.12 and referenced in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Department of Transport published the National Sustainable Mobility Policy in April 2022. By providing enhanced permeability for the South Park estate, the proposal to provide a new pedestrian link between South Park and the N11/Bray Road supports the following goals of the National Sustainable Mobility Policy.

Goal 3 - Expand availability of sustainable mobility in metropolitan areas

'*Goal 3 aims to expand the capacity and availability of sustainable mobility in our five cities (Cork, Dublin, Galway, Limerick and Waterford). This will be done through improved walking, cycling, bus and rail infrastructure, improved transport interchange and expanded public transport services. Transformed active travel and bus infrastructure and services in all five cities is fundamental to achieving the targets of 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030*.'

As listed in Table 3.12 in relation to the Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR, the proposed link to South Park provides improved connectivity to the public transport system for the residential estate and has the potential to reduce CO_2 emissions through the removal of car trips from the road network and contribute towards the national target 500,000 additional trips by walking, cycling and public transport per day by 2030.

Goal 7 - Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model:

'*Goal 7 'aims to support enhanced permeability and ensure that the universal design principle and Hierarchy of Road Users model is used to inform future investment decisions to reduce inequalities, support a whole of journey approach, and prioritise sustainable mobility'*.

The proposed link at South Park provides enhanced permeability to the residential area and as noted in Section 6.4.6.1.2.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR it states that:

'*All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities*.'

Regional Policy

As set out Section 2.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several regional policies.

Refer to Table 3.13 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant regional policy. The policy outlined in Table 3.13 is similarly relevant and supportive of the need for the proposed South Park pedestrian link.

In addition, Section 7.1.2 of the Transport Strategy for the Greater Dublin Area, sets out several local planning principles, including:

'*New development areas should be fully permeable for walking and cycling and the retrospective implementation of walking and cycling facilities should be undertaken where practicable in existing neighbourhoods, in order to a give competitive advantage to these modes;*'

The proposed new link between South Park and the N11/Bray Road is a good example of a retrospective piece of walking and cycling infrastructure which will increase permeability for walking and cycling and help to encourage active travel.

Local Policy

As set out in Section 2.3.5 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several local policies.

Refer to Table 3.14 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant local policy. The policy outlined in Table 3.14 is similarly relevant and supportive of the need for the proposed South Park pedestrian link.

The NTA's best practice guide referenced above specifically highlights that boundary walls around estates and within residential areas that prevent movement along natural desire lines can act as a barrier to permeability. The removal of a section of the boundary and treeline and the addition of the proposed new link between South Park and the N11/Bray Road provides improved permeability at this location in accordance with the best practice guide.

Proposed Scheme Objectives

The objectives of the Proposed Scheme, included in Section 1.1 of Volume 1 of the EIAR the Non-Technical Summary and also included in Section 2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, support the various policies outlined above. Specifically, the proposal for a new link between South Park, together with the new bus stops on the N11 Road, supports the following stated objectives of the Proposed Scheme as highlighted, and described in detail, below:

- *'Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;* - **The new link between South Park and the N11/Bray Road facilitates a mode-shift from car-dependence;**
- *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;* - **the proposed new link will enhance the potential for cyclists from South Park to access safe segregated cycling infrastructure on the N11/Bray Road;**
- *Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services;* **- the proposed new link will provide improved sustainable connectivity improving accessibility.'**

Existing Access to Sustainable Travel

As shown in Figure 3.79 below, Image 2.11 taken from Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR provides an overview of the existing combined activity density scenario along the length of the of the Proposed Scheme. This identifies the South Park catchment as a low-density location based on the 2011 census data. Image 2.12 (see Figure 3.80 below) taken from the same Chapter displays the Dublin Bus Patronage heat map along the length of the Proposed Scheme which also highlights reduction in Bus Patronage on the N11 Road in the vicinity of South Park relative to the other sections of the Proposed Scheme.

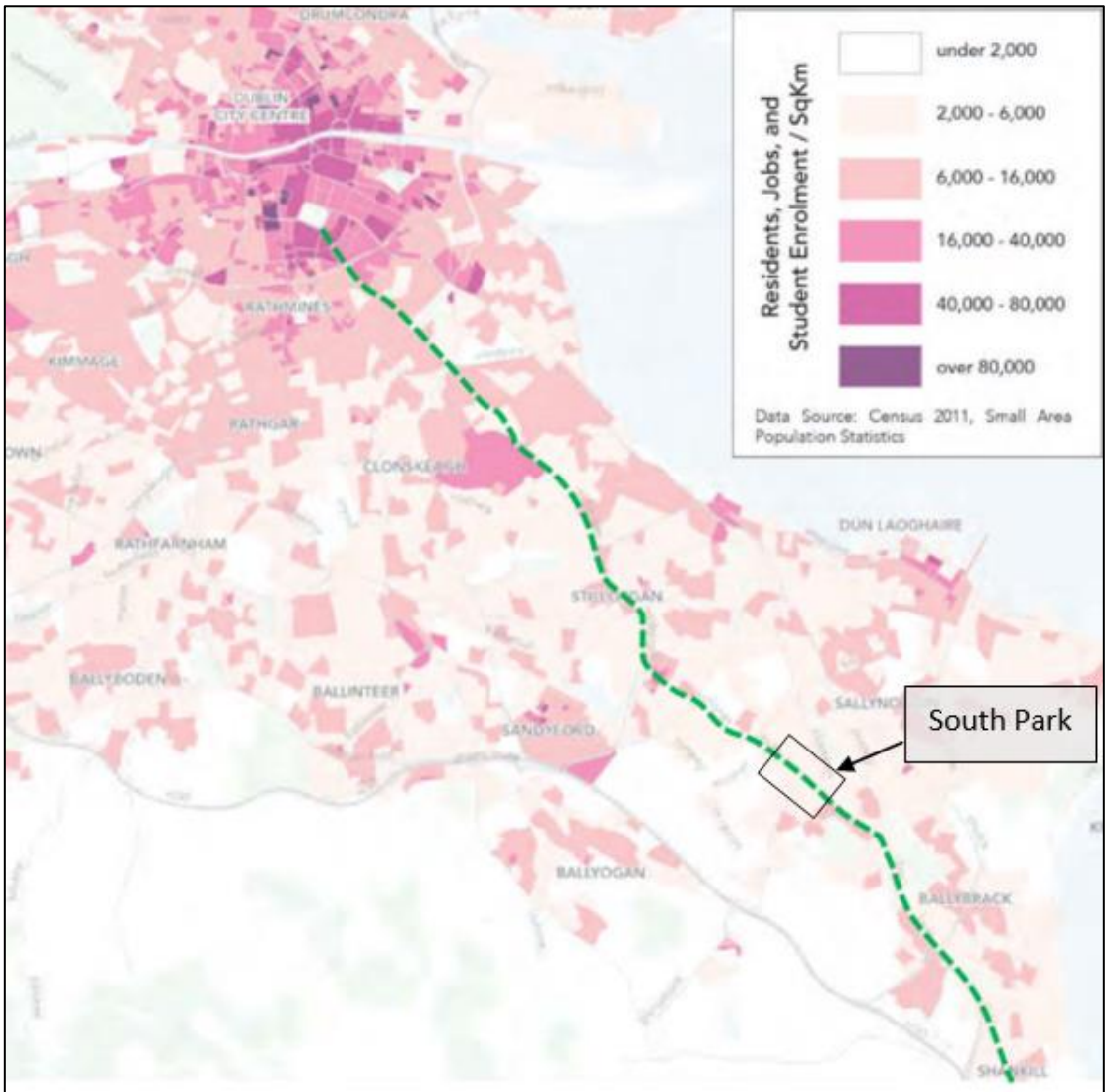


Image 2.11: Combined Activity Density Map (Dublin Area Bus Network Redesign Revised Proposal (NTA 2019) (Proposed Scheme Highlighted in Green)

Figure 3.79: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.11)

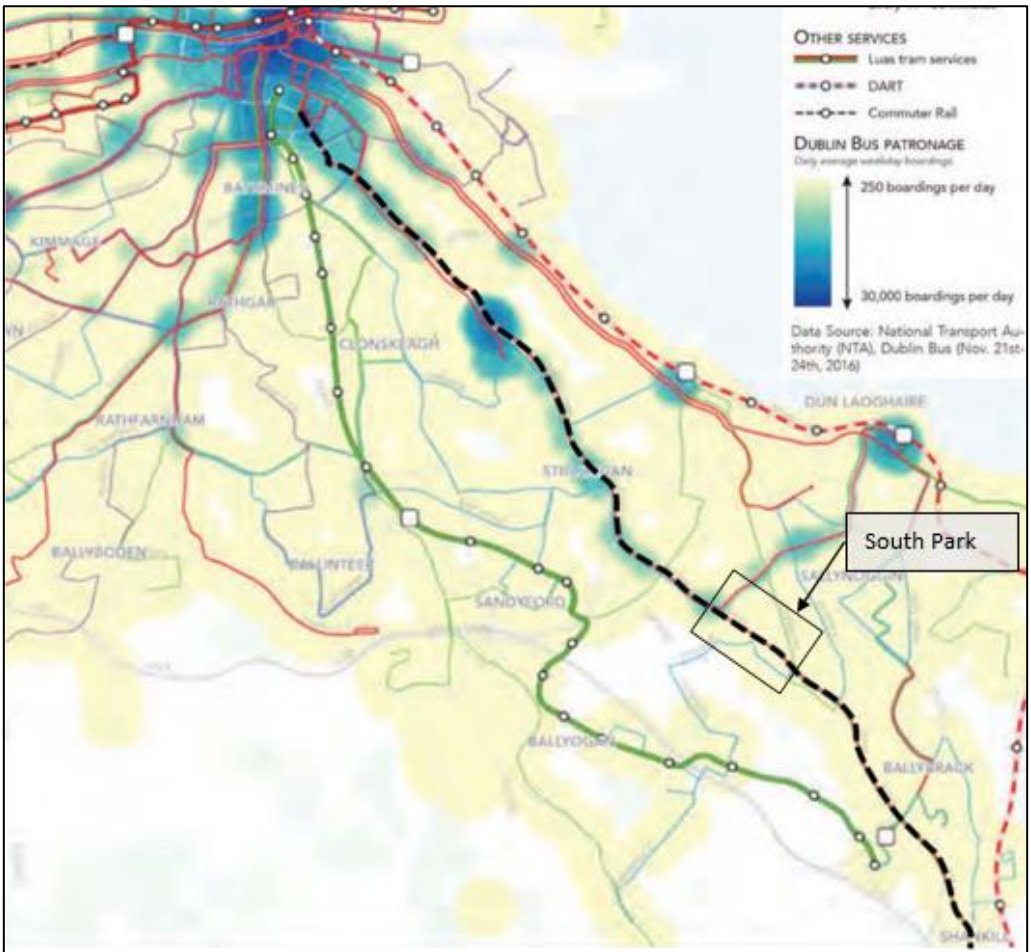


Image 2.12: Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal (NTA 2019) (Proposed Scheme Highlighted in Black)

Figure 3.80: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.12)

This is further supported by Section 10.2.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR includes the assessment of impacts on community amenity, land take and accessibility consist of 'community areas', which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Foxrock.

Section 10.3.2.3 provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 3.20 above.

As can be seen from Table 3.20, of the 19 Community Areas assessed Foxrock is on the higher end of car mode share for travel to work trips at 60%. In addition, this mode share exceeds the average mode share for County Dublin as a whole. Other community areas in Table 10.5 located along the N11 Road corridor, such as Booterstown and Newtownpark, have lower travel by car percentage and higher travel by bus percentage, compared to Foxrock. These other areas generally have good permeability to the high frequency bus services along the N11 Road.

In comparison, as shown in Figure 3.81 below, the South Park estate is enclosed by a continuous boundary between the properties in the estate and the N11 Road. This prevents any direct access/egress and acts as a deterrent to achieving the required mode-shift away from private car use or residents in the estate.

The proposed new link to South Park is situated in close proximity to the existing inbound and outbound bus stop and in close proximity to the junction with the existing pedestrian crossing on the N11. The propose new link to South Park will provide access to the wider catchment to the South Park residents, hence will allow the community at South Park to be better linked to the wider public transport, cycle and walking network routed in the area. The existing footway from the Old Bray Road linking to Beech Park is retained and a raised table crossing is provided as part of the Proposed Scheme to improve pedestrian movement and safety.

Figure 3.81: Location of South Park and Proposed new Pedestrian/Cyclist Link (Image Source: Google)

Overall need for the proposed pedestrian and cyclist link

Section 6.4.6.1.3.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, provides an overall assessment of the Proposed Scheme and concludes that it will deliver a Positive, Significant and Long-term impact in terms of Pedestrian Infrastructure. The Proposed Scheme will deliver significant improvements in people movement by sustainable modes along the Proposed Scheme corridor, particularly by bus, with reductions in car mode share due to the enhanced sustainable mode provision.

Section 6.4.3.2 also highlights that:

'To limit the growth in car traffic, and to ensure that this demand growth is catered for predominantly by sustainable modes, a number of measures will be required, that include improved sustainable infrastructure and priority measures delivered as part of the NDP/GDA Strategy. In addition to this, demand management measures will play a role in limiting the growth in transport demand, predominantly to sustainable modes only. As a result, there will be only limited or no increases overall in private car travel demand. The Proposed Scheme will play a key role in this as part of the wider package of GDA Strategy measures.'

The proposed link to South Park supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

As set out in Table 2.12 of Section 2.3.5.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Dublin City Development Plan includes Policy SMT18:

'To continue to maintain and improve the pedestrian environment and strengthen permeability by promoting the development of a network of pedestrian routes including laneway connections which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice'.

The Proposed Scheme aligns with the objective as along the route, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings.

The NTA document: Permeability in Existing Urban Areas Best Practice Guide 2015 is referenced in the Dublin City Development Plan, as set out in Table 2.9 of Section 2.3.5.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, in the Introduction to this on Page 1 it states that the policy guidance has been developed:

'On how best to facilitate demand for walking and cycling in existing built-up areas. This includes creation of linkages within the urban environment for people to walk and cycle from their homes to shops, schools, local services, places of work and public transport stops and stations.'

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR outlines the policy context that underpins the Proposed Scheme as well as the regional and local transport need for the Proposed Scheme. Section 2.3.4.2 notes the following:

'As part of the 2016 GDA Transport Strategy, the Core Bus Network is to be developed to achieve a continuous priority for bus movement on sections of the Core Bus Network within the Metropolitan Area. This is to be achieved through enhanced bus lane provision, the removal of delays along the routes and to enable the bus to provide a faster mode of transport than the private car along these routes.

The need for the Proposed Scheme is supported by the GDA Transport Strategy in so far as it will provide infrastructure required to facilitate 'a continuous priority for bus movement on sections of the Core Bus network within the Metropolitan area.' The Proposed Scheme will realise the objectives of the GDA Transport Strategy by providing the enhanced bus lanes, removing 'bottlenecks' and making the bus a faster option to commuters than car-based transport. The GDA Transport Strategy 2016 – 2035 has now been replaced by the GDA Transport Strategy 2022-2042 (NTA 2022) which has now been adopted and this is reviewed in Section 2.3.4.3.

It is an objective of the 2019 Implementation Plan to build on the work already achieved in the GDA with respect to catering for greater bus movement. The intention set out in the 2019 Implementation Plan is to progress the development of the Core Bus Corridors (the CBC Infrastructure Works) to achieve, as far as practicable, continuous priority for bus movement. The need for the Proposed Scheme is supported by the 2019 Implementation Plan's stated aim to 'overhaul the current bus system in the Dublin region by (inter alia): • Building a network of new bus corridors on the busiest bus routes to make bus journeys faster, predictable, and reliable'. The Proposed Scheme will provide the infrastructure necessary to deliver the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improve environmental performance. The Proposed Scheme design has been developed by NTA and takes account of policy objectives in the Implementation Plan.'

Section 2.3.5.3 directly references the Dún Laoghaire-Rathdown County Development Plan 2022 – 2028 and outlines how the Proposed Scheme is compliant. The vision of the DLRCDP (DLRCC 2022) is to:

'Embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations'.

The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county. Table 2.14 in Chapter 2 (Need for the Proposed Scheme) In Volume 2 of the EIAR outlines the key transport policies relevant to Bus Improvements in the DLRCDP and how the Proposed Scheme meets the policy objectives T1, T3, T4, 75, T6, T11, T12, T13 and T23. The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022).

Additionally, Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 sets out the manner in which the Proposed Scheme will bring positive impacts for businesses and individuals along the corridor, including encouraging more sustainable travel through increased bus patronage, walking and cycling. This is summarised on page 6 of the Executive Summary of the Appendix where it is highlighted that the improved infrastructure will encourage more walking and cycling, as road safety fears are often the main reason people do not cycle, and the new bus routes will provide improved access for all families, with those on low income or with disabilities, in particular, gaining through improved transport options and less need to spend on car travel. The positive impacts

of the Proposed Scheme are further evidenced in Section 4 Community Health and Wellbeing, where the following conclusion is stated:

'*Walking and cycling infrastructure developed as part of the proposed improvements should lead to an increase in the use of sustainable transport modes by offering new and safer alternatives to the use of private vehicles. These impacts will occur as soon as the new facilities are opened and the evidence suggests that people should rapidly swap to new transport choices.' The proposed link from South Park is an important piece of infrastructure that will support more sustainable travel at this location on the corridor.'*

The Proposed pedestrian link will provide permeability and accessibility to residents of both Beech Park and South Park estate. The proposed link to South Park supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

Summary of Response

The preceding pages describe how the statutory application documentation comprehensively set out why the proposed link between South Park and the N11 Road is proposed and demonstrate the need for it. It is an important piece of infrastructure that supports the significant improvements in people movement by sustainable modes which are necessary at this location.

3.6.3.2 Public Consultation

Summary of issue raised

Various submissions noted their dissatisfaction with the Public Consultation on the Proposed Scheme, stating that there was a failure to engage in adequate and appropriate consultation. Some respondents noted that their contributions during previous consultation events were not taken on board.

Response to issue raised

The Public Consultation Report 2018-2022 provided in the Supplementary Information for the Proposed Scheme outlines the extensive public consultation and stakeholder engagement undertaken during that period, with three rounds of non-statutory public consultation undertaken.

Throughout the three rounds a number of consultation tools were used, including:

- A dedicated website, launched in May 2017;
- An individual brochure for the Proposed Scheme (updated at all 3 rounds);
- Public information events (in person for first and second rounds, virtual for third round),
- Community Forum events, to create a two-way communication process with representatives of local communities, (in person for first and second rounds, virtual for third round, average attendees 24);
- Range of digital channels, including Twitter and Facebook;
- Traditional published material;
- Press and radio advertising;
- Outdoor advertising;
- Presentations; and
- Infographics.

The public events took place in accessible venues chosen to maximise the level of local engagement and attendance where possible. These events allowed members of the public to speak directly and in detail with members of the BusConnects Infrastructure team about the proposals. These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects

website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

The following paragraphs provide more details of each of the three rounds on non-statutory consultation for the Proposed Scheme.

First non-statutory round of public consultation

The first non-statutory round of public consultation for the Bray to City Centre Core Bus Corridor Emerging Preferred Route Option (EPRO) occurred from 14th November 2018 to 31st May 2019.

The first Community Forum meeting for the Bray to City Centre Core Bus Corridor took place on 08 February 2019 at the Talbot Hotel, Stillorgan from 18.30 – 20.00 with approximately 85 representatives in attendance. A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 26 March 2019.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to introduce a pedestrian link between South Park and the N11/Bray Road, see Figure 3.82 below.

The issues raised during the first phase of public consultation were considered as part of the route options assessment process and in determining a preferred route. The EPR proposals were amended to address the issues raised in submissions where possible, including incorporating suggestions and recommendations from local residents, community groups and stakeholders where appropriate.

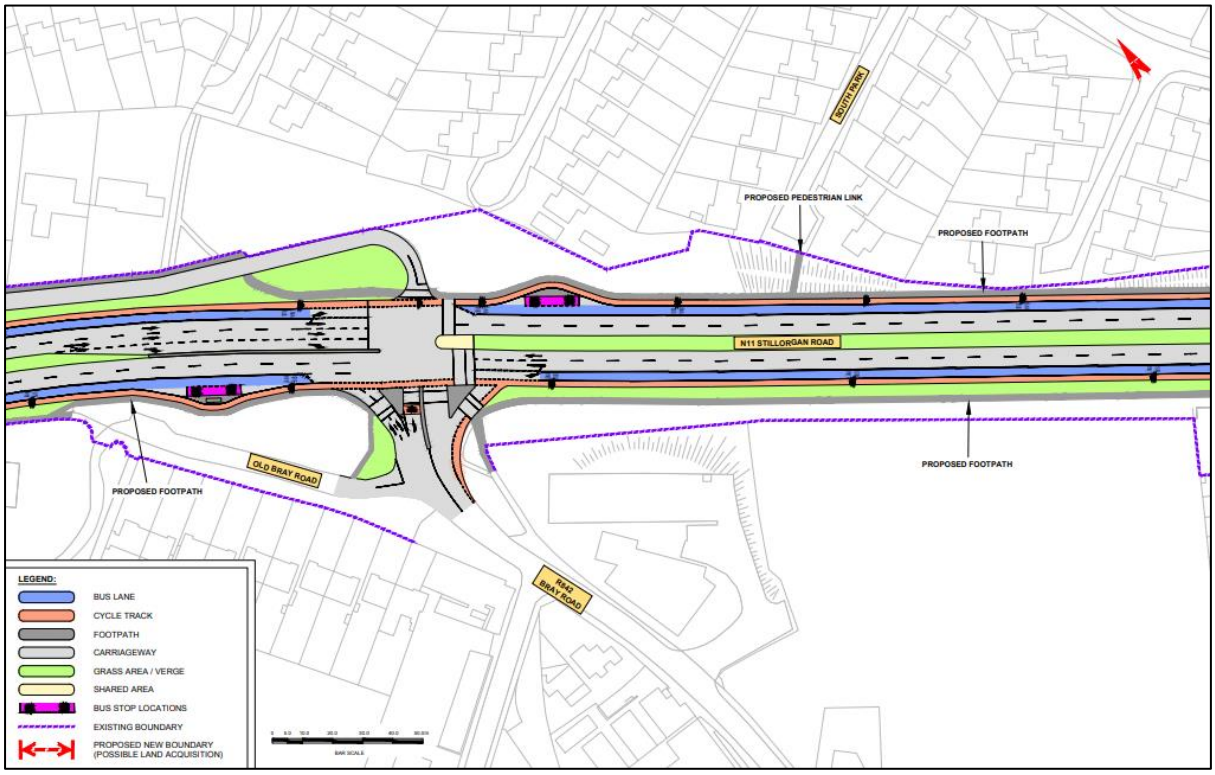


Figure 3.82: Extract from EPRO Drawings – First round of non-statutory consultation (Map: 31 Emerging Preferred Route)

As part of this review, several new design options were developed for consideration in specific areas where issues were identified. At South Park, the proposed location of the pedestrian link was changed from the EPR option and moved closer to the junction with Old Bray Road, to improve the pedestrian movement line and access to the bus stop.

There were 1,225 submissions received relating to the Bray to City Centre Core Bus Corridor, with no comments recorded in relation to the proposed addition of a new pedestrian link at South Park.

Second non-statutory round of public consultation

A second Community Forum event was held at the Talbot Hotel, Stillorgan on 12 September 2019, with approximately 75 in attendance. This Community Forum was held in advance of the launch of second round of non-statutory public consultation. The meeting aimed to keep members updated on the design process between the first and second consultation.

In March 2020, the Draft Preferred Route Option (PRO) was published, and a second non-statutory round of public consultation commenced on 4 March 2020 and ran until 17 April 2020. The consultation was announced via press release and a media briefing that took place in the Alex Hotel, Fenian Street from 10.00 – 12.00.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to remove an existing portion of trees to facilitate the proposed new pedestrian link at South Park, see Figure 3.83 below.

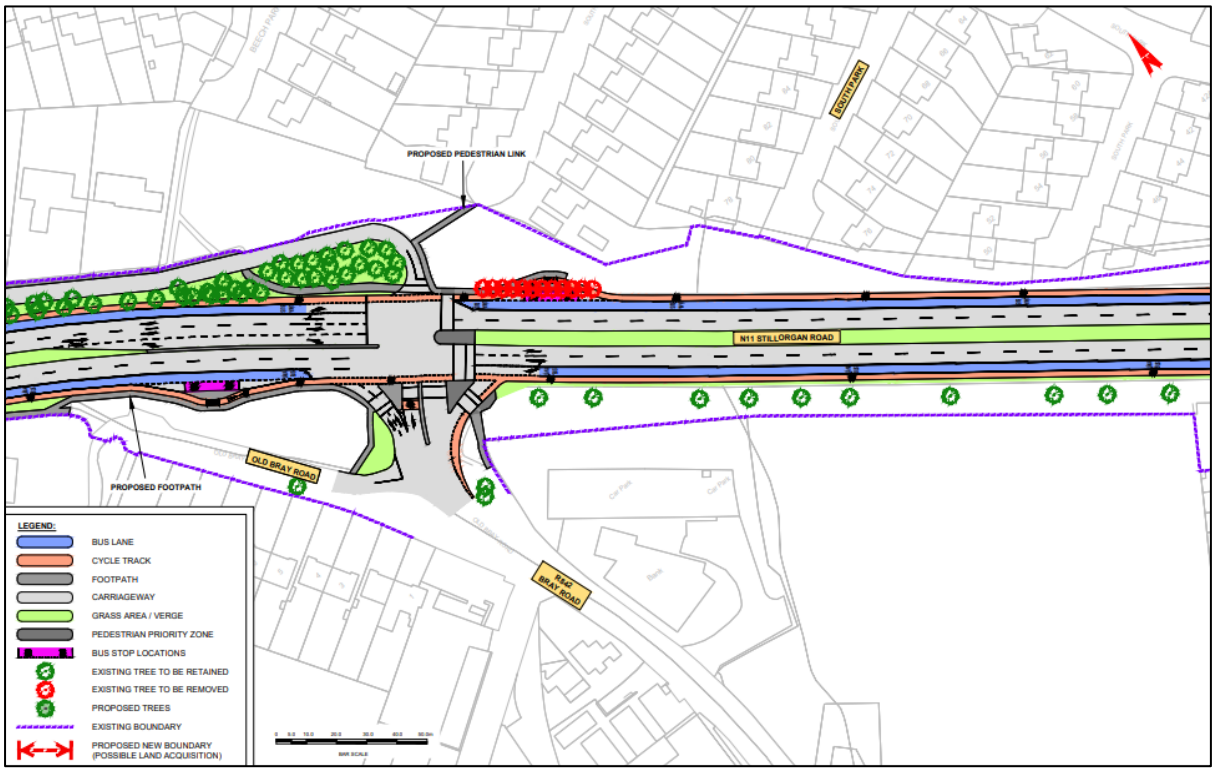


Figure 3.83: Extract from Draft PRO Drawings – Second round of non-statutory consultation (Map 31: Preferred Route)

A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 12 March 2020 from 11.30-19.30. Members of the public were invited to attend to review the changes made to the proposals since the first round of consultation in 2018/2019 and to discuss concerns and observations with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. 204 letters were prepared and delivered on 02 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no-longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Due to the COVID-19 pandemic, all events scheduled after 12 March 2020 were cancelled. In deference to the submissions we had already received, the decision was made not to cancel the consultation. Consequently, there were just 40 submissions received relating to the Bray to City Centre Core Bus Corridor, none of which related to the proposal to create a pedestrian link between South Park and the N11/Bray Road.

Third non-statutory round of public consultation

The third round of non-statutory public consultation took place from 4th November 2020 until 16th December 2020 on the updated Draft Preferred Route Option for the Proposed Scheme. The consultation was announced via press release, on the NTA website and on social media. Public representatives were made aware of the publication of the revised proposals via email. This email also contained information on Community Forums for TDs, Senators, and Councillors to assist in spreading awareness of the meetings. A third Community Forum virtual consultation call was organized via Zoom to take place on 4 November 2020. Members of the Transport & Communications Networks Oireachtas Committee were separately made aware of the launch.

Due to the Covid19 pandemic, which commenced with restrictions in March 2020 and continued throughout the second and third public consultation rounds, the BusConnects Infrastructure team developed online and virtual elements to assist the public in viewing and reading the proposals. Our primary virtual interactive tool during the final third phase of public consultation was the use of virtual consultation rooms available through the BusConnects website. These rooms were online for a six-week period (24hrs x 7 days a week) and included the following:

- all Proposed Scheme materials available for perusal, such as the brochure, maps and all associated support documentation;
- an audio description of the brochure information; and
- a call back facility within the virtual rooms for any stakeholder to book a phone call back from a member of the BusConnects Infrastructure team for additional information or more detailed queries.

These Virtual Consultation Rooms replaced the more traditional Public Information Events due to the Covid restrictions on face-to-face interactions, typically used during non-statutory public consultation. Compared to the face-to-face Public Information Events utilised during the first and second rounds of Non-Statutory Public Consultation the numbers of the public that engaged increased significantly due to the online access available through this facility. Over the seven weeks of the consultation, 433 unique users visited the virtual information room for Bray to City Centre Core Bus Corridor.

In addition, a third, virtual, Community Forum meeting took place on 1st December 2020 with approximately 65 representatives in attendance.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to remove an existing portion of trees to facilitate the proposed new pedestrian link at South Park, see Figure 3.84 below.

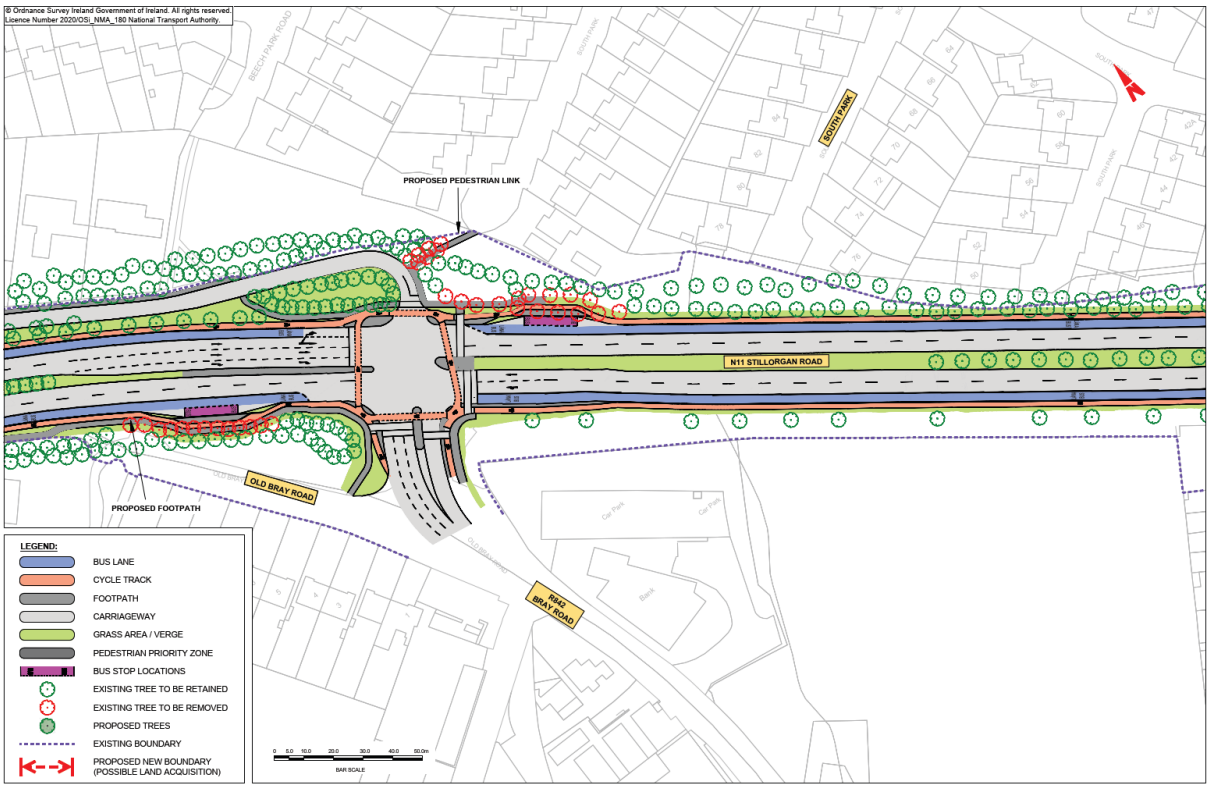


Figure 3.84: Extract from Updated Draft PRO Drawings – Third round of non-statutory consultation (Map 31: Preferred Route)

Advertisements detailing where interested parties could access further information on the CBC including viewing the proposals, making a submission, and attending information events were placed in local and national newspapers, online and in highly visible areas around the Greater Dublin Area. There were 572 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.

The public consultation submission reports provided as Appendices A and B to the Preferred Route Option Report as part of the Supplementary Information, do not record any submissions made to the three rounds of non-statutory consultation in respect to the proposed link to South Park.

Non-statutory property referencing letters

In March-April 2023 a non-statutory property referencing letters were posted to the impacted landowners through registered post to confirm their interest in the property. During this period NTA had communication with the impacted landowners.

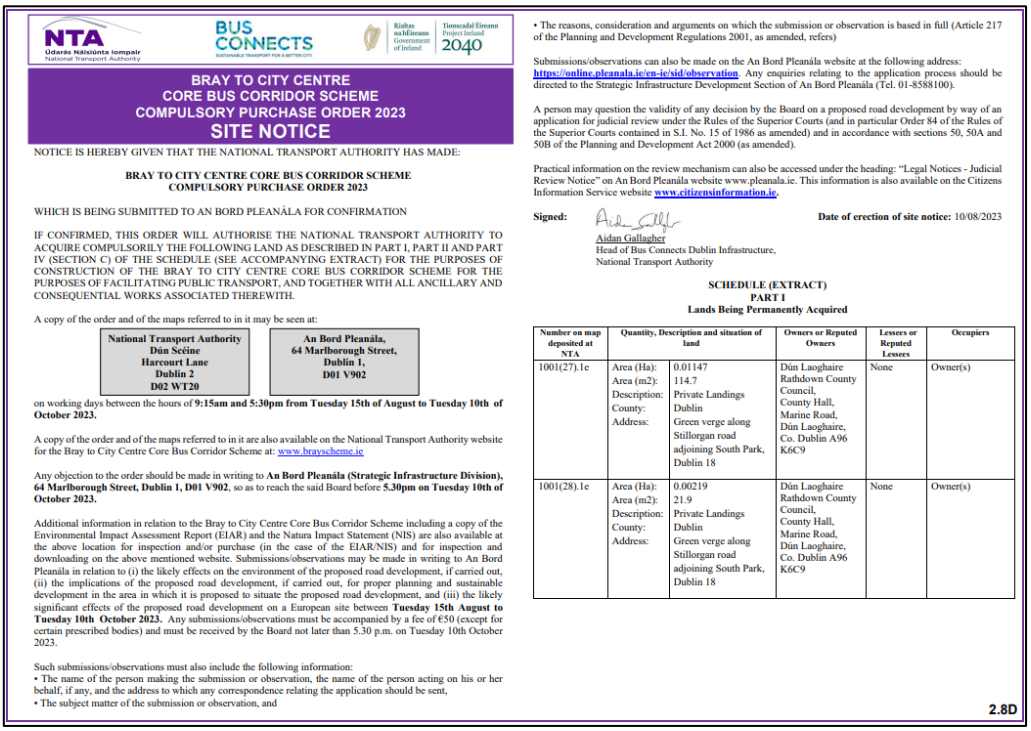
Statutory round of public consultation

As part of the statutory public consultation in addition to the notices required by statute to be published in the newspaper, public notices were also placed at 176 locations along the route of the Proposed Scheme so as to ensure that members of the public in the area who may not have noticed the statutory newspaper notice or whose lands were not being acquired and so were not part of the CPO process were informed of the Proposed Scheme, as shown in Figure 3.85 and Figure 3.86 below.

Figure 3.85: Extract from Site Notices Report - Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

Figure 3.86: Extract from Site Notices Report - Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

Location E included site notices 2.8D and 2.8E, each comprising two A3 sized notices; site notices 2.8D and 2.8E were erected in the green verge along Old Dublin Road and Stillorgan Road respectively. The notices themselves are shown in Figure 3.87, Figure 3.88, Figure 3.89, and Figure 3.90, and further images of the locations for the notice to be erected are shown in Figure 3.91 and Figure 3.92.



NTA Údarás Náisiúnta Iompair National Transport Authority

BUS CONNECTS

Rialtas na HÉireann Government of Ireland | Tionscadal Éireann Project Ireland 2040

BRAY TO CITY CENTRE
CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023
SITE NOTICE

NOTICE IS HEREBY GIVEN THAT THE NATIONAL TRANSPORT AUTHORITY HAS MADE:

BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023

WHICH IS BEING SUBMITTED TO AN BORD PLEANÁLA FOR CONFIRMATION

IF CONFIRMED, THIS ORDER WILL AUTHORISE THE NATIONAL TRANSPORT AUTHORITY TO ACQUIRE COMPULSORILY THE FOLLOWING LAND AS DESCRIBED IN PART I, PART II AND PART IV (SECTION C) OF THE SCHEDULE (SEE ACCOMPANYING EXTRACT) FOR THE PURPOSES OF CONSTRUCTION OF THE BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME FOR THE PURPOSES OF FACILITATING PUBLIC TRANSPORT, AND TOGETHER WITH ALL ANCILLARY AND CONSEQUENTIAL WORKS ASSOCIATED THEREWITH.

A copy of the order and of the maps referred to in it may be seen at:

National Transport Authority
Dún Scéine
Harcourt Lane
Dublin 2
D02 WT20

An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

on working days between the hours of **9:15am and 5:30pm from Tuesday 15th of August to Tuesday 10th of October 2023.**

A copy of the order and of the maps referred to in it are also available on the National Transport Authority website for the Bray to City Centre Core Bus Corridor Scheme at: www.brayscheme.ie

Any objection to the order should be made in writing to **An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902**, so as to reach the said Board before **5.30pm on Tuesday 10th of October 2023.**

Additional information in relation to the Bray to City Centre Core Bus Corridor Scheme including a copy of the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) are also available at the above location for inspection and/or purchase (in the case of the EIAR/NIS) and for inspection and downloading on the above mentioned website. Submissions/observations may be made in writing to An Bord Pleanála in relation to (i) the likely effects on the environment of the proposed road development, if carried out, (ii) the implications of the proposed road development, if carried out, for proper planning and sustainable development in the area in which it is proposed to situate the proposed road development, and (iii) the likely significant effects of the proposed road development on a European site between **Tuesday 15th August to Tuesday 10th October 2023.** Any submissions/observations must be accompanied by a fee of €50 (except for certain prescribed bodies) and must be received by the Board not later than 5.30 p.m. on Tuesday 10th October 2023.

Such submissions/observations must also include the following information:
• The name of the person making the submission or observation, the name of the person acting on his or her behalf, if any, and the address to which any correspondence relating the application should be sent,
• The subject matter of the submission or observation, and
• The reasons, consideration and arguments on which the submission or observation is based in full (Article 217 of the Planning and Development Regulations 2001, as amended, refers)

Submissions/observations can also be made on the An Bord Pleanála website at the following address: https://online.pleanala.ie/en-ie/sid/observation. Any enquiries relating to the application process should be directed to the Strategic Infrastructure Development Section of An Bord Pleanála (Tel. 01-8588100).

A person may question the validity of any decision by the Board on a proposed road development by way of an application for judicial review under the Rules of the Superior Courts (and in particular Order 84 of the Rules of the Superior Courts contained in S.I. No. 15 of 1986 as amended) and in accordance with sections 50, 50A and 50B of the Planning and Development Act 2000 (as amended).

Practical information on the review mechanism can also be accessed under the heading: "Legal Notices - Judicial Review Notice" on An Bord Pleanála website www.pleanala.ie. This information is also available on the Citizens Information Service website www.citizensinformation.ie.

Signed: Aidan Gallagher
Head of Bus Connects Dublin Infrastructure,
National Transport Authority

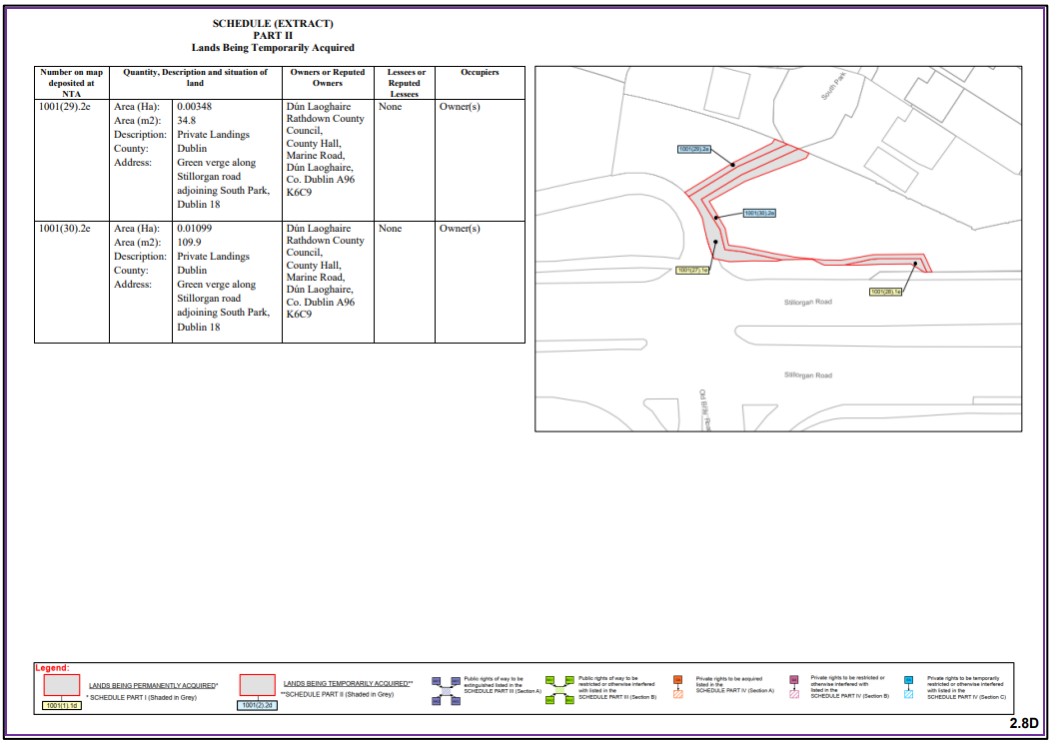
Date of erection of site notice: 10/08/2023

SCHEDULE (EXTRACT)
PART I
Lands Being Permanently Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1001(27).1e	Area (Ha): Area (m2): Description: County: Address:	0.01147 114.7 Private Landings Dublin Green verge along Stillorgan road adjoining South Park, Dublin 18	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)
1001(28).1e	Area (Ha): Area (m2): Description: County: Address:	0.00219 21.9 Private Landings Dublin Green verge along Stillorgan road adjoining South Park, Dublin 18	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)

2.8D

Figure 3.87: Extract from Site Notices Report - First A3 sheet of Non-statutory Site Notices 2.8 D



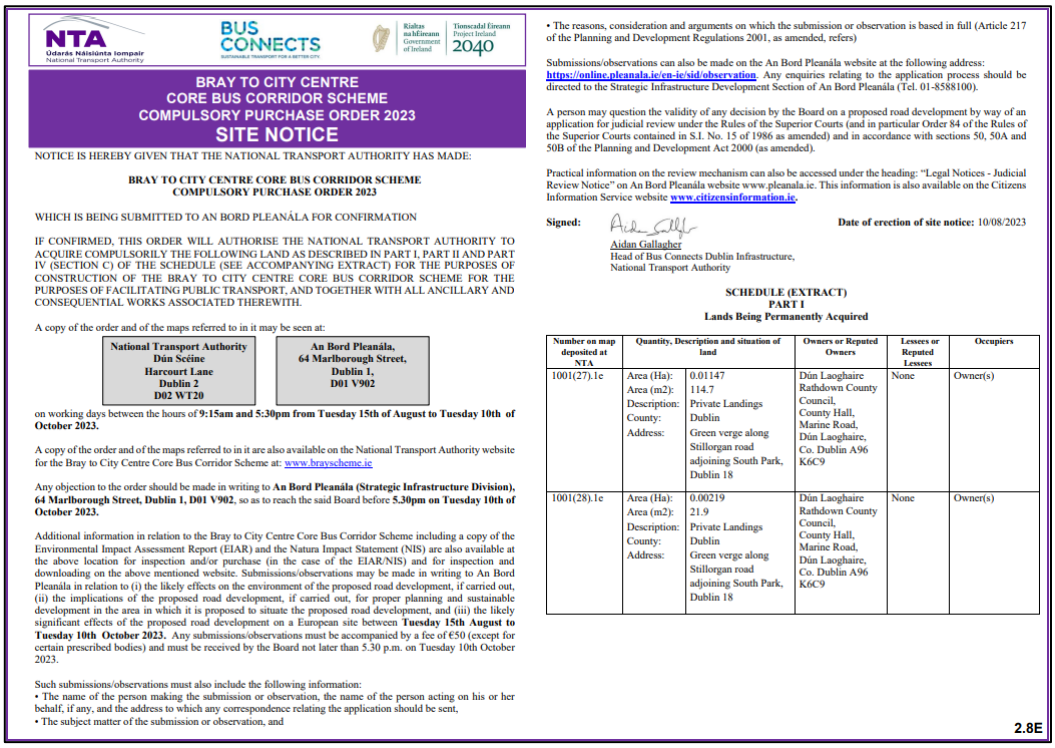
SCHEDULE (EXTRACT)
PART II
Lands Being Temporarily Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1001(29).2e	Area (Ha): Area (m2): Description: County: Address:	0.00348 34.8 Private Landings Dublin Green verge along Stillorgan road adjoining South Park, Dublin 18	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)
1001(30).2e	Area (Ha): Area (m2): Description: County: Address:	0.01099 109.9 Private Landings Dublin Green verge along Stillorgan road adjoining South Park, Dublin 18	Dún Laoghaire Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin A96 K6C9	None	Owner(s)

Legend:
LANDS BEING PERMANENTLY ACQUIRED*
* SCHEDULE PART I (Shaded in Grey)
LANDS BEING TEMPORARILY ACQUIRED**
**SCHEDULE PART II (Shaded in Grey)

2.8D

Figure 3.88: Extract from Site Notices Report - Second A3 sheet of Non-statutory Site Notices 2.8 D



NTA Údarás Náisiúnta Iompair National Transport Authority

BUS CONNECTS

Rialtas na hÉireann Government of Ireland | Tionscadal Éireann Project Ireland 2040

BRAY TO CITY CENTRE
CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023
SITE NOTICE

NOTICE IS HEREBY GIVEN THAT THE NATIONAL TRANSPORT AUTHORITY HAS MADE:

BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023

WHICH IS BEING SUBMITTED TO AN BORD PLEANÁLA FOR CONFIRMATION

IF CONFIRMED, THIS ORDER WILL AUTHORISE THE NATIONAL TRANSPORT AUTHORITY TO ACQUIRE COMPULSORILY THE FOLLOWING LAND AS DESCRIBED IN PART I, PART II AND PART IV (SECTION C) OF THE SCHEDULE (SEE ACCOMPANYING EXTRACT) FOR THE PURPOSES OF CONSTRUCTION OF THE BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME FOR THE PURPOSES OF FACILITATING PUBLIC TRANSPORT, AND TOGETHER WITH ALL ANCILLARY AND CONSEQUENTIAL WORKS ASSOCIATED THEREWITH.

A copy of the order and of the maps referred to in it may be seen at:

National Transport Authority
Dún Scéine
Harcourt Lane
Dublin 2
D02 WT20

An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

on working days between the hours of **9:15am and 5:30pm from Tuesday 15th of August to Tuesday 10th of October 2023.**

A copy of the order and of the maps referred to in it are also available on the National Transport Authority website for the Bray to City Centre Core Bus Corridor Scheme at: www.brayscheme.ie

Any objection to the order should be made in writing to **An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902**, so as to reach the said Board before **5.30pm on Tuesday 10th of October 2023.**

Additional information in relation to the Bray to City Centre Core Bus Corridor Scheme including a copy of the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) are also available at the above location for inspection and/or purchase (in the case of the EIAR/NIS) and for inspection and downloading on the above mentioned website. Submissions/observations may be made in writing to An Bord Pleanála in relation to (i) the likely effects on the environment of the proposed road development, if carried out, (ii) the implications of the proposed road development, if carried out, for proper planning and sustainable development in the area in which it is proposed to situate the proposed road development, and (iii) the likely significant effects of the proposed road development on a European site between **Tuesday 15th August to Tuesday 10th October 2023.** Any submissions/observations must be accompanied by a fee of €50 (except for certain prescribed bodies) and must be received by the Board not later than 5.30 p.m. on Tuesday 10th October 2023.

Such submissions/observations must also include the following information:
• The name of the person making the submission or observation, the name of the person acting on his or her behalf, if any, and the address to which any correspondence relating the application should be sent,
• The subject matter of the submission or observation, and
• The reasons, consideration and arguments on which the submission or observation is based in full (Article 217 of the Planning and Development Regulations 2001, as amended, refers)

Submissions/observations can also be made on the An Bord Pleanála website at the following address: **https://online.pleanala.ie/en-ie/sid/observation**. Any enquiries relating to the application process should be directed to the Strategic Infrastructure Development Section of An Bord Pleanála (Tel. 01-8588100).

A person may question the validity of any decision by the Board on a proposed road development by way of an application for judicial review under the Rules of the Superior Courts (and in particular Order 84 of the Rules of the Superior Courts contained in S.I. No. 15 of 1986 as amended) and in accordance with sections 50, 50A and 50B of the Planning and Development Act 2000 (as amended).

Practical information on the review mechanism can also be accessed under the heading: "Legal Notices - Judicial Review Notice" on An Bord Pleanála website www.pleanala.ie. This information is also available on the Citizens Information Service website **www.citizensinformation.ie.**

Signed: Aidan Gallagher
Head of Bus Connects Dublin Infrastructure,
National Transport Authority

Date of erection of site notice: 10/08/2023

SCHEDULE (EXTRACT)
PART I
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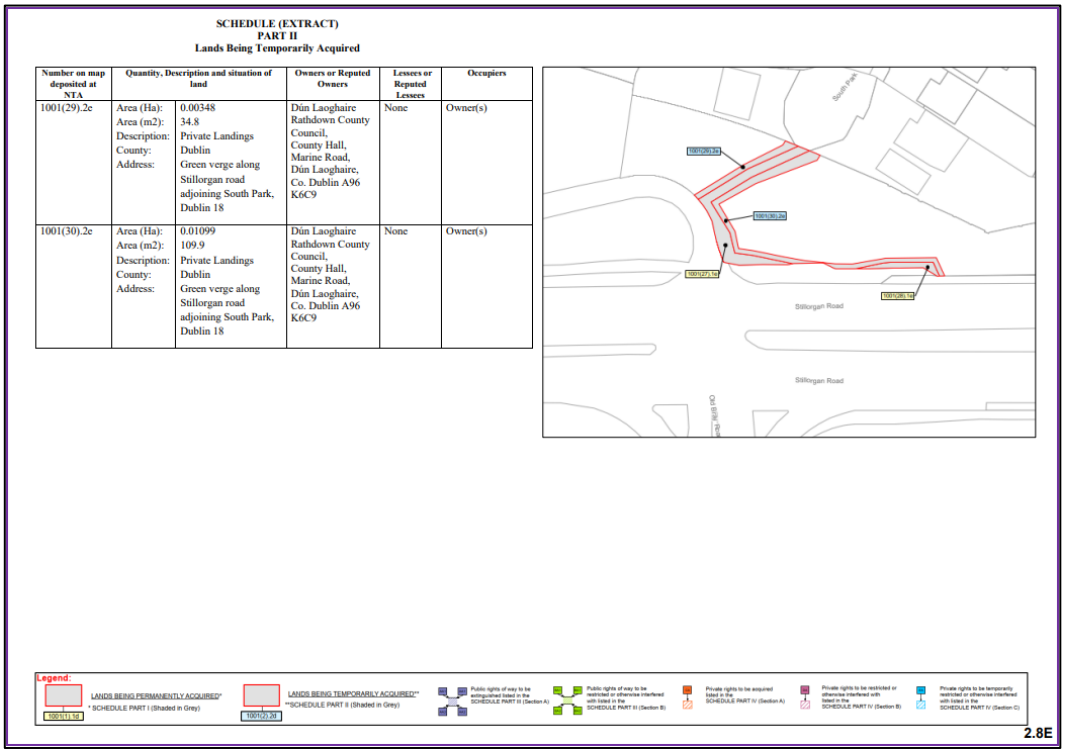
2.8E

Figure 3.89: Extract from Site Notices Report - First A3 sheet of Non-statutory Site Notices 2.8 E



SCHEDULE (EXTRACT)
PART II
Lands Being Temporarily Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
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2.8E

Figure 3.90: Extract from Site Notices Report - Second A3 sheet of Non-statutory Site Notices 2.8 E

Figure 3.91: Extract from Site Notices Report – Site Notice Placement & Quantum 2.8D

Figure 3.92: Extract from Site Notices Report – Site Notice Placement & Quantum 2.8E

The National Transport Authority (NTA) has applied under Section 51(2) of the Roads Act 1993 (as amended) to An Bord Pleanála for approval in relation to a proposed road development consisting of the construction of the Bray to City Centre Core Bus Corridor Scheme. The application was made to An Bord Pleanála on the 4th of August 2023. An application for confirmation of the associated Compulsory Purchase Order under Section 76 of, and the Third Schedule to, the Housing Act 1966 (as amended) was submitted to An Bord Pleanála on the 11th of August 2023. Impacted landowners were served CPO Statutory Notice on 10th August through registered post. A 12-week statutory consultation period was

allowed for relevant stakeholders for queries/ concerns both written (email/ letter) and telephonic conversation with the NTA, from the period 15th August 2023 until 10th October 2023. During this period NTA had communication with the impacted landowners. The landowners were advised that any objection to the Compulsory Purchase Order should be made in writing to An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902, must reach the said Board before 5.30pm on October 10th 2023 and encouraged all parties to ensure that, if they so wish, that they make a submission/observation to An Bord Pleanála.

3.6.3.3 Safety, security, anti-social behaviour and vandalism

Summary of issue raised

A few of the submissions have highlighted concerns regarding the potential for increased security concern facing the residents of South Park. The submissions stated that they believed there was a risk of an increase in public order offences and/or anti-social behaviour, as well as a loss of security and impact on residential amenity owning to increased disturbances in the residential estate as a result of the new pedestrian laneway. One submission notes that there will be noise and general disturbance as people will use the new laneway.

Response to issue raised

Section 10.4.4.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR considers the impact of the Operational Phase of the Proposed Scheme on community amenity. For the Foxrock community area, in which South Park is located, the community amenity impact is assessed as a Negative, Not Significant and Short-Term during the first year of operation.

Refer to Section 3.4.3.8 for further information on Safety, Security, Anti-Social Behaviour & Vandalism.

In summary, the case studies outlined in Section 3.4.3.8 demonstrates that improved pedestrian and cycling links, such as the proposed pedestrian and cyclist link between South Park and the Bray Road will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

3.6.3.4 Increase in traffic, parking in estate to access N11 Stillorgan Road and safety concern

Summary of issue raised

Many submissions have highlighted that increased vehicular traffic within South Park is expected as non-residents may use the estate as a set-down/collection area or park and ride facility given the direct access which will be provided to the bus route on the N11. The increased traffic would increase the potential for safety for pedestrians and cyclists within the estate, especially the children playing on the street.

Few submissions noted the potential for conflicts between pedestrians/cyclists and residents driving to and from their houses in South Park. Some noted particular concerns regarding reversing from driveways within the existing cul-de-sac, stating that larger vehicles and emergency vehicles have found it difficult to manoeuvre in the cul-de-sac.

Response to issue raised

Regarding the specific concerns raised about parking at this location, the parking identified in this objection has not been identified as a formal parking space in Parking and Loading assessment described in Section 6.4.6.1.3.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR due to the absence of relevant signage and demarcation. Issues relating to informal parking of this nature are the responsibility of Dún Laoghaire–Rathdown County Council and are outside of the remit of the NTA in this Proposed Scheme.

Due to the location of the residential estate along the Proposed Scheme corridor and that it can only be accessed by car via Beech Park Road or Clonkeen Road it is considered that the journey time associated with driving by car into the South Park estate to park and access the new bus stops via the

proposed link would be highly unattractive to potential bus passengers and will not lead to any significant increase in vehicular traffic within the estate.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any problems or concerns associated at this location.

3.6.3.5 Impact on biodiversity, impact to protective mound and noise

Summary of issue raised

Few submissions have noted that the proposed pedestrian laneway will impact on the biodiversity and wildlife that currently reside within the land.

Few submissions also noted a protective mound at this location, which would be breached to facilitate the proposed pedestrian laneway. The protective mound was constructed to act as a flood protection measure and is also said to function as a barrier from N11 road noise.

Response to issue raised

The Landscape General Arrangement Drawings are provided as Appendix 05-Landscaping General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. The proposed new pedestrian link at South Park is shown on Sheet 29. An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, the proposals at that location to facilitate the construction of the pedestrian link involves the removal of approximately 109m^2 of a mixed species group comprising ash, sycamore, lime and Norway maple (Group Number G0730*P) which has been assessed as a Category C2 group (low value and conservation, mainly of landscape value).

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. Figure 12.5 shows the habitat types within and adjacent to the Proposed Scheme, with the area for the planned pedestrian link (Sheet 7) identified as Fossitt habitat type WD1 '(mixed) broadleaved woodland'. With respect to the impact assessment for this habitat type, the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively. Multiple ecological surveys were carried out between 2018 and 2023 to inform the biodiversity impact assessment (as listed in Table 12.2 of the Chapter), including habitat surveys, mammal surveys, bat surveys, wintering bird surveys, amphibian habitat suitability assessments and reptile habitat suitability assessments. No significant or protected ecological features were identified in this area during those surveys.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Very Significant, Short-Term (Section 17.4.3.2.9 and Table 17.7). The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Moderate / Significant, Long-Term over time.

With respect specifically to flood risk, Appendix A13.2 (Flood Risk Assessment) in Volume 4, Part 3 of 4 of the EIAR describes the Flood Risk Assessment (FRA) which was undertaken for the Proposed Scheme in order to inform the drainage design. The Proposed Surface Water Drainage Drawings are provided as Appendix 11-Proposed Surface Water Drainage in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR and the proposed drainage works are described in Section 4.6.15 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR. Specifically with respect to the drainage design, the following principles (as described in Section 4.6.15.4) were followed:

- *'All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance. Unless informed otherwise via hydraulic models, drainage structures for existing paved areas are assumed to have been designed with a return period of no flooding in 1:5 years;*

- *A SuDS drainage design has been developed for all newly paved areas in accordance with the SuDS hierarchy set out in the Drainage Design Basis. SuDS are provided to ensure no increase on existing runoff rates from new or existing paved areas;*
- *Due to the largely impermeable nature of soils across Dublin, infiltration rates were assumed to be zero for calculating the required attenuation volumes of any SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will need to be completed so that infiltration rates can be considered in a future design stage;*
- *All runoff from road pavement or any other paved areas is collected in a positive drainage system. Over-the-edge discharges are not permitted; and*
- *Narrow filter drains or fin drains are not expected for inner city roads'.*

The FRA does not identify any specific flood risk at this location. The NTA are satisfied that the proposed drainage design will attenuate any potential changes in run-off as a result of the construction of the pedestrian link at this location.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at the N11 Stillorgan Road in the Newpark housing estate approximately 18m from the road edge (Reference Number CBC0013ANML008), approximately 1km north-west of South Park as shown in Figure 9.2 (Sheet 7) in Volume 3, Part 3 of 3 of the EIAR. This location would be comparable to the noise conditions at South Park. The results of the survey for Section 2 of the Proposed Scheme are described in Section 9.3.2.2 as:

'*The noise survey results within this geographical section are dominated by road traffic noise from R138 Stillorgan Road and N11 Stillorgan Road / Bray Road, in addition to traffic along the surrounding road network and a small contribution from localised urban sources e.g. pedestrian movements*', with the average daytime noise level being measured at 66dB $L_{Aeq,T}$ and the average 24-hour noise level being measured at 71dB L_{den}.

Figures 9.4 and 9.5 in Volume 3, Part 3 of 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for both the Opening Year and Design Year giving an impact significance rating of Imperceptible / Positive for both the N11 in front of South Park. Therefore, the modelling does not predict any significant increase in traffic noise at South Park as a result of the operation of the Proposed Scheme.

3.6.4 Other Issues Raised and Responses

3.6.4.1 Loss of Property Value

Summary of issue raised

One submission noted that the Proposed Scheme would significantly depreciate the value of the two properties at 114 and 116a South Park.

Response to issue raised

In regard to the view expressed that the combined impact of all the issues raised would have an adverse and negative impact on the value of properties at South Park, Chapter 10 (Population) in Volume 2 of the EIAR includes Table 10.14 and 10.15 to summarise the predicted impact on community land take in the construction and operational phases. It is identified that the impact on community land take in the Foxrock area is 'Negative, Not Significant to Slight and Short-Term' in the construction phase and 'Negative, Not Significant to Slight and Long-Term' in the Operational Phase. Chapter 10 (Population) includes Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 of the Core Bus Corridors. Section 3 on Page 14 of Appendix A10.2 discusses the impact of the Proposed Scheme on property prices. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors, with evidence showing that

investing in public realm creates improved spaces that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.

Based on the above, it is believed that a combination of improved connectivity as a result of the dedicated public transport infrastructure being rolled out by the Proposed Scheme as well as public realm improvements, will not have a negative impact on values of residential properties at South Park but are more than likely to contribute to an increase in property value along the Proposed Core Bus Corridor.

If the CPO is confirmed by An Bord Pleanála, a 'Notice to Treat' will be served on the landowner whose land is being acquired. Following service of the 'Notice to Treat', the landowner will be required to submit a claim for compensation, which can include perceived loss in property value, and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent / valuer in preparing, negotiating and advising on compensation.

3.6.4.2 Opening of existing security wall

Summary of issue raised

One submission notes that the existing low profile 5ft high block wall along the back of the mound across the cul-de-sac of 114A/116A South Park acts as a security wall, which separated the then cul-de-sac from the N11 Stillorgan Road and will be compromised.

Response to issue raised

Section 4.6.18.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a summary of the accommodation works and boundary treatment for the entirety of the Proposed Scheme and notes that:

'There are a number of areas along the extents of the route where the Proposed Scheme will result in the requirement for accommodation works and boundary treatments. Specific accommodation work are considered on a case-by-case basis'.

Section 4.6.18.1 goes on to state that:

'To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics, unless a section of street can benefit from urban improvement appropriate to the area'.

The proposed boundary treatment at South Park is presented in the Fencing and Boundary Treatment Drawings which are provided as an Appendix in to 07-Fencing and Boundary Treatment Drawings Sheet 29 in Chapter 17 (Landscape (Townscape) & Visual) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.93. Detailed accommodation works plans will be prepared in consultation with the landowner in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

As shown in the Fencing and Boundary Treatment Drawings, there will be break and cap off through the existing boundary wall.

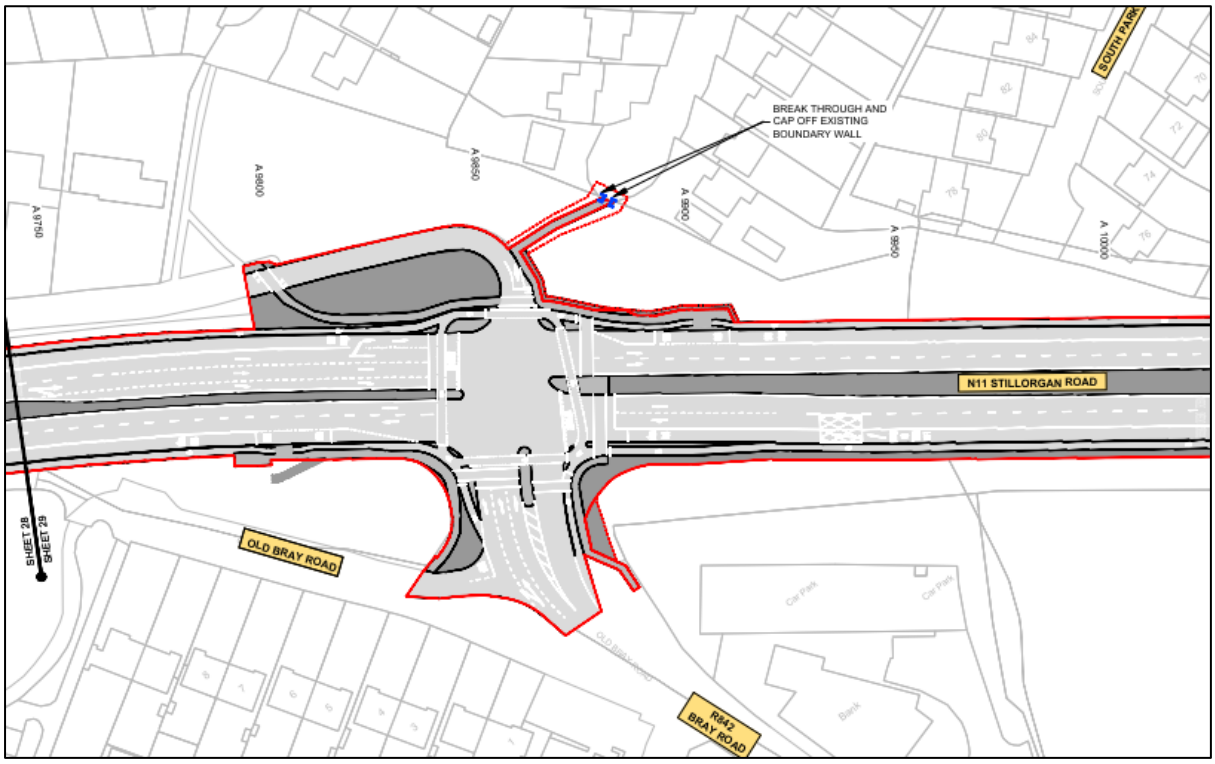


Figure 3.93: Extract from Boundary Treatment and Fencing at South Park (Sheet 29)

3.6.4.3 Impact during construction

Summary of issue raised

One submission notes there will be general disturbance of the works from traffic generated and construction as well as undermining the safety of the cul de sac for residents and especially children playing on the road.

Response to issue raised

During the Construction Phase, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Section 5.2.1.2 Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to 'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'

Section 5.8.1 of Chapter 5 (Construction) of Volume 2 of this EIAR notes the following:

'The measures set out in Section 8.2.8 of the Traffic Signs Manual (DTTAS 2019) will be implemented, wherever practicable, to ensure the safety of all road users, in particular pedestrians (including able-bodied pedestrians, wheel-chair users, mobility impaired pedestrians, pushchair users) and cyclists. Therefore, where footpaths or cycle facilities are affected by construction, a safe route will be provided past the works area, and where practicable, provisions for matching existing facilities for pedestrians and cyclists will be made. Where this is not practicable, pedestrians will be directed to use the footpath on the opposite side of the road, crossing at controlled crossing points.'

As stated in Section 5.1:

'A Construction Environmental Management Plan (CEMP) has also been prepared and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to the commencement of the Construction Phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval.'

Section 5.10.1.1, Construction Traffic Management Plan (CTMP), goes on to state:

'The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CTMP the manner in which it is intended to effectively implement all the applicable mitigation measures identified in this EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála, should they grant approval.'

3.7 Proposed Scheme at Shanganagh Vale

3.7.1 Description of Proposed Scheme at this Location

In order to achieve the objectives of this Proposed Scheme between Johnstown to Loughlinstown Roundabout, it is proposed to maintain one bus lane and two general traffic lanes in each direction. Footpath and cycle tracks are maintained in both directions of the N11 Road.

A new pedestrian link is proposed to Shanganagh Vale from the N11 Road and a new footpath is proposed on either side of the Stillorgan Road at the new junction on the N11 at Druid's Glen Road which tie-in with the existing footpath towards Wyattville Road.

Existing toucan crossing has been retained and improved with dropped kerb and jug handle at Shanganagh Vale and Garrison Mews and the existing southbound bus stop has been modified to an island layout. Improvements have been made to cycle track provisions at the Wyattville Road Junction.

The Proposed Scheme design at Shanganagh Vale is presented in the 02-General Arrangement Drawings Sheet 36 and Sheet 37 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.94 and Figure 3.95 below.

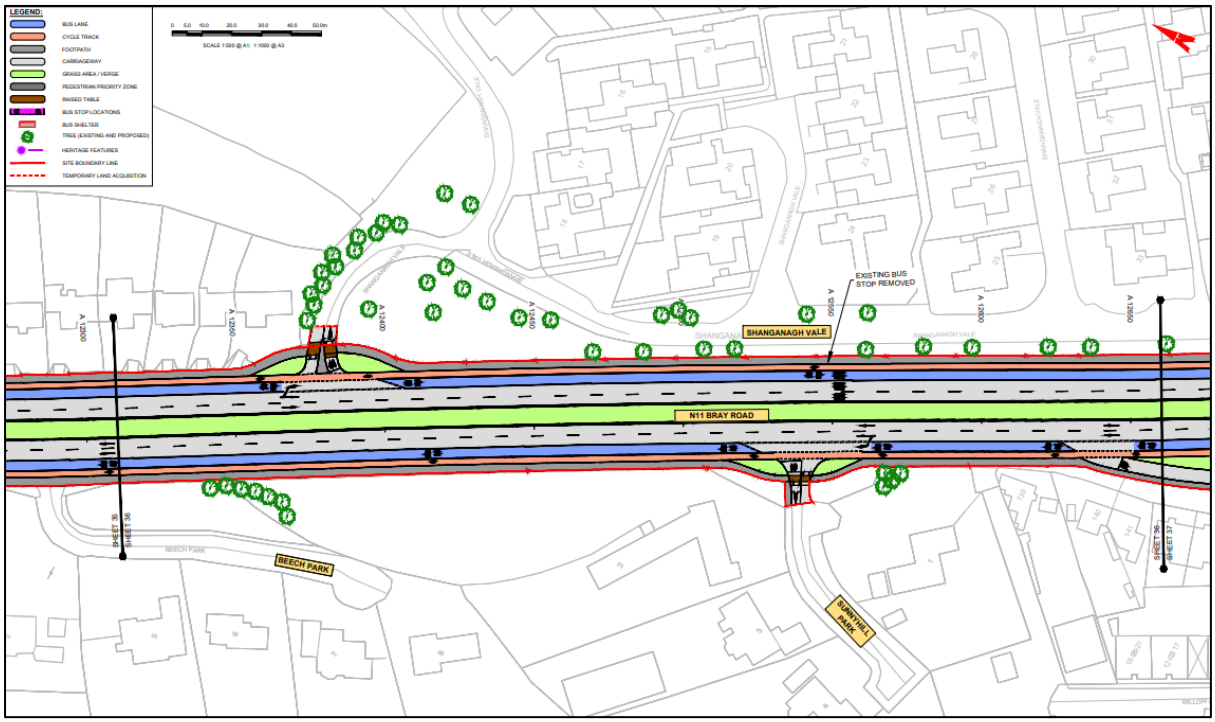


Figure 3.94: Extract from General Arrangement Drawings at Shanganagh Vale (Sheet 36)

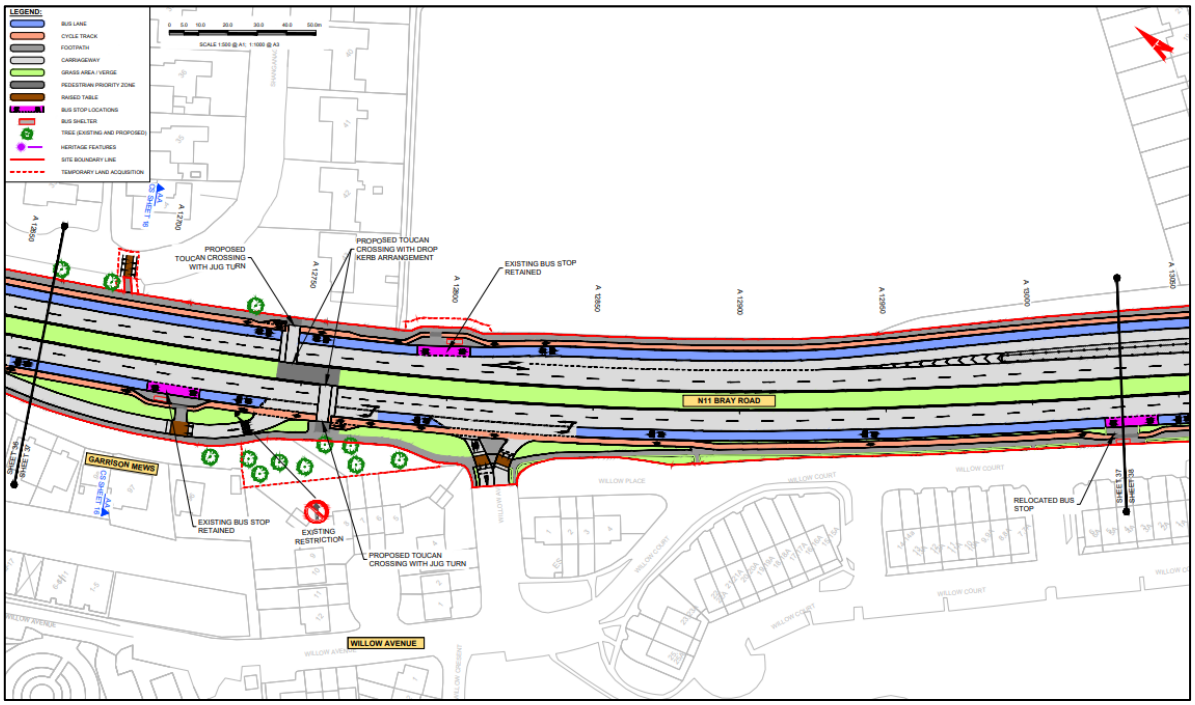


Figure 3.95: Extract from General Arrangement Drawings at Shanganagh Vale (Sheet 37)

Figure 3.96 below shows an aerial view of the location of the new pedestrian link to Shanganagh Vale.

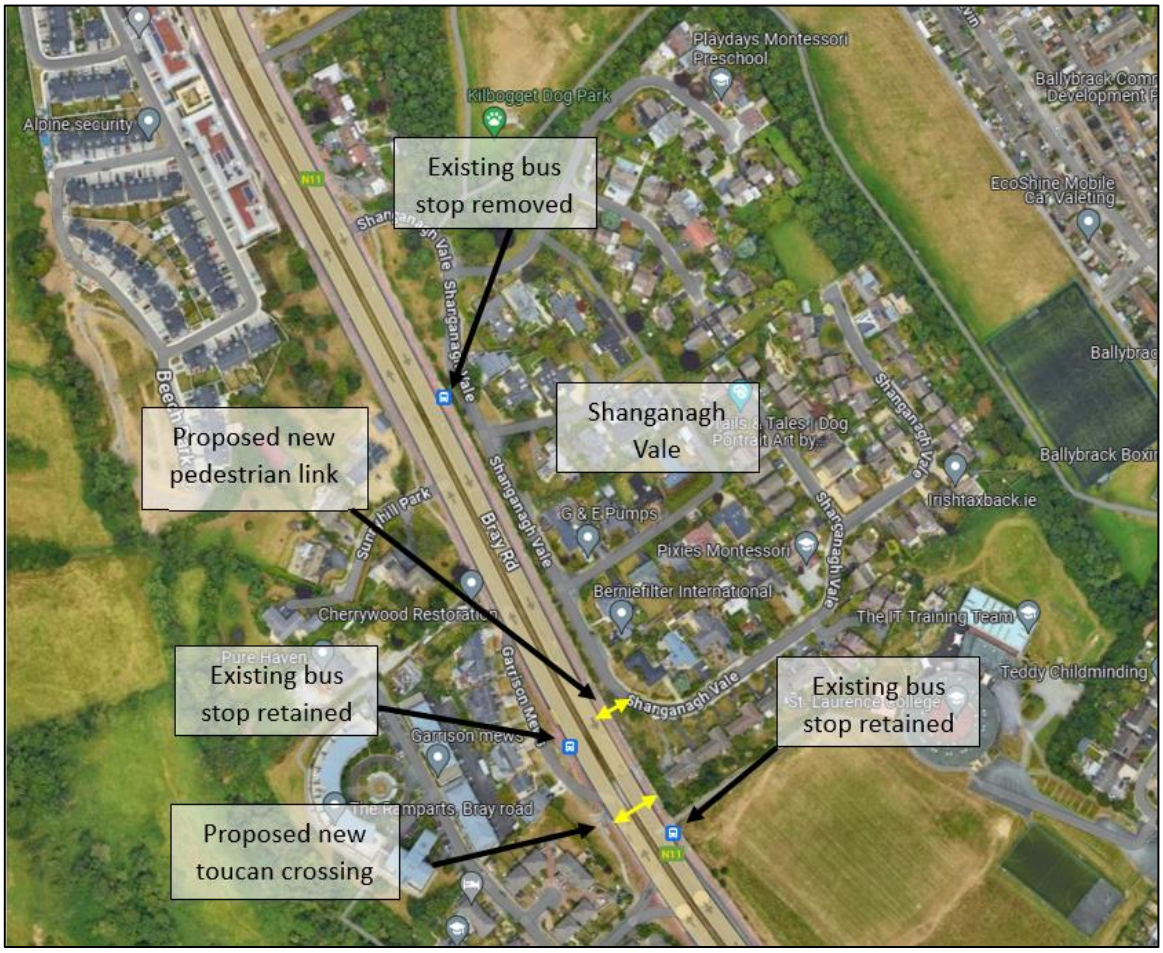


Figure 3.96: Location of Shanganagh Vale Estate and Proposed new Pedestrian/Cyclist Link (Image Source: Google)

3.7.2 Overview of Submissions Received

Table 3.21 below lists the 9 individual submissions made in respect of the Proposed Scheme at Shanganagh Vale.

Table 3.21: Submissions Made in Respect of at Shanganagh Vale

No	Name	No	Name	No	Name
2	Aidan Byrne	49	David & Eana Bernie	87	Gerald McCormick
35	Claire Scott-Lennon	83	Frank & Trudy Scott-Lennon	177	Ruth Kennedy
47	Dara Byrne	85	Gerald Kennedy	213	Willow Park Residents

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

1) Need for the new Pedestrian Entrance/Laneway
2) Safety, security, antisocial behaviour, and vandalism
3) Querying the consultation process

Other Issues Raised

1) Safety, security and anti-social behaviour linked to tree planting strategy
2) Visual impact/loss of privacy and noise
3) Increase in traffic on N11 and pedestrian footfall in estate between N11 bus stops and Cherrywood Luas stop

3.7.3 Common Issues Raised and Responses

3.7.3.1 Need for the New Pedestrian Entrance/Laneway

Summary of issue raised

Majority of the submissions expressed concerns regarding the proposals for pedestrian/cycle access within an opening of the existing boundary wall surrounding the Shanganagh Vale residential estate. One of the submissions requested that should an access be provided in this location, that the access should be for pedestrian use only.

Majority of the submissions have highlighted the satisfactory access to the N11 that they currently have through the main entrance.

Few submissions state that they are dissatisfied with the use of taxpayer money to fund the proposed access which they feel would be of little benefit.

One submission noted the option for an alternative link to the N11 bus stop, through the existing lane which runs between St. Lawrence's School and Shanganagh Vale.

Response to issue raised

This response addresses the contention that the new link is not necessary and was not investigated adequately.

Existing data

Section 10.2.1.1 of Chapter 10 (Population) in Volume 2 of the EIAR includes the assessment of impacts on community amenity, land take and accessibility consisting of 'community areas', which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Cabinteely.

Section 10.3.2.3 provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 3.22 below.

Table 3.22: Extract from EIAR Chapter 10, Method of Travel to Work (Table 10.5)

Table 10.5: Method of Travel to Work for Bus, Train, Car and Foot / Bike (%)

Community Area	Travel by Bus / Minibus or Coach	Travel by Car / Van	Travel by Train	Travel by Foot / Bike	Other
Westland Row	6%	15%	5%	45%	30%
University (Newman) Church	6%	11%	5%	51%	26%
Haddington Road	6%	22%	4%	53%	15%
Rathmines	10%	20%	8%	50%	12%
Donnybrook	11%	33%	3%	37%	15%
Merrion Road	12%	38%	10%	29%	12%
Booterstown	14%	47%	11%	18%	9%
Mount Merrion	13%	58%	3%	15%	11%
Blackrock	10%	46%	17%	16%	11%
Kilmacud - Stillorgan	11%	55%	12%	15%	7%
Newtownpark	13%	53%	10%	15%	9%
Foxrock	16%	60%	5%	10%	9%
Cabinteely	10%	64%	10%	8%	7%
Johnstown - Killiney	12%	64%	7%	9%	7%
Ballybrack - Killiney	6%	61%	16%	8%	9%
Loughlinstown	17%	59%	11%	9%	4%
Shankill	10%	60%	17%	6%	8%
Little Bray	12%	61%	8%	13%	7%
Bray	9%	52%	18%	14%	7%
Study Area Average	**11%**	**46%**	**9%**	**22%**	**11%**
County Dublin	**12%**	**54%**	**8%**	**17%**	**9%**

As can be seen in Table 3.22 above, of the 19 Community Areas assessed, Cabinteely has one of the highest car mode shares for travel to work trips at 64%. In addition, this mode share exceeds the average mode share for the study area. This is also highlighted in Section 11.3.4 in Chapter 11 (Human Health) in Volume 2 of the EIAR. Reference to the data for other community areas in Table 10.5 located along the N11 Road corridor, highlights that they have lower travel by car percentage, compared to Cabinteely. These other areas generally have good permeability to the high frequency bus services along the N11/Bray Road.

In comparison, the Shanganagh Vale estate is enclosed by a continuous boundary between the properties in the estate and the Bray Road. This prevents any direct access/egress and acts as a deterrent to achieving the required mode-shift away from private car use or residents in the estate.

The NTA encourages the transformation of neighbourhoods into permeable ones, where people can walk or cycle through areas safely and conveniently, and in a manner which confers a competitive advantage to these modes over motorised forms, particularly the private car. This approach is directly applicable to the existing situation at Shanganagh Vale, demonstrating that the proposed new link follows the approach set out in the best practice guidance promoted by the NTA and the Dublin City Development Plan.

Policy

The application documentation submitted to An Bord Pleanála demonstrates that the proposal for a new pedestrian and cyclist link between Shanganagh Vale and the new bus stops on the Bray Road is consistent with, and supports elements of, international policy, European Union (EU) law and policy, national policy, regional policy, and local policy.

At all policy levels, there are clear objectives to increase active travel and accessibility to public transport. In response to the submissions in relation to the creation of a new pedestrian and cycling link between Shanganagh Vale and the Bray Road, the details of how the proposed new link supports these different tiers of policy are provided in the paragraphs below.

International Policy, EU Law & Policy

As set out in Sections 2.3.1 and 2.3.2 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several international policies.

Refer to Table 3.11 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant international policy and European policy. The policy outlined in Table 3.11 is similarly relevant and supportive of the need for the proposed Shanganagh Vale pedestrian link.

National Policy

As set out in Section 2.3.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several objectives of national policy.

Refer to Table 3.12 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant national policy. The policy outlined in Table 3.12 is similarly relevant and supportive of the need for the proposed Shanganagh Vale pedestrian link.

In addition to the national policies as outlined in Table 3.12 and referenced in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Department of Transport published the National Sustainable Mobility Policy in April 2022. By providing enhanced permeability for the South Park estate, the proposal to provide a new pedestrian link between Shanganagh Vale and the N11/Bray Road supports the following goals of the National Sustainable Mobility Policy.

Goal 3 - Expand availability of sustainable mobility in metropolitan areas

'*Goal 3 aims to expand the capacity and availability of sustainable mobility in our five cities (Cork, Dublin, Galway, Limerick and Waterford). This will be done through improved walking, cycling, bus and rail infrastructure, improved transport interchange and expanded public transport services. Transformed active travel and bus infrastructure and services in all five cities is fundamental to achieving the targets of 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030*.'

As listed in Table 3.12 in relation to the Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR, the proposed link to Shanganagh Vale provides improved connectivity to the public transport system for the residential estate and has the potential to reduce CO_2 emissions through the removal of car trips from the road network and contribute towards the national target 500,000 additional trips by walking, cycling and public transport per day by 2030.

Goal 7 - Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model

'*Goal 7 'aims to support enhanced permeability and ensure that the universal design principle and Hierarchy of Road Users model is used to inform future investment decisions to reduce inequalities, support a whole of journey approach, and prioritise sustainable mobility*'.

The proposed link at Shanganagh Vale provides enhanced permeability to the residential area and as noted in Section 6.4.6.1.2.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that:

'*All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities*.'

Regional Policy

As set out Section 2.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4, the Proposed Scheme supports several regional policies.

Refer to Table 3.13 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant regional policy. The policy outlined in Table 3.13 is similarly relevant and supportive of the need for the proposed Shanganagh Vale pedestrian link.

In addition, Section 7.1.2 of the Transport Strategy for the Greater Dublin Area, sets out several local planning principles, including:

'*New development areas should be fully permeable for walking and cycling and the retrospective implementation of walking and cycling facilities should be undertaken where practicable in existing neighbourhoods, in order to a give competitive advantage to these modes*;'

The proposed new link between Shanganagh Vale and the Bray Road is a good example of a retrospective piece of walking and cycling infrastructure which will increase permeability for walking and cycling and help to encourage active travel.

Local Policy

As set out in Section 2.3.5 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4 the Proposed Scheme supports several local policies.

Refer to Table 3.14 in Section 3.4.3.1 (Need for the New Pedestrian Link) of this report for an overview of the relevant regional policy. The policy outlined in Table 3.14 is similarly relevant and supportive of the need for the proposed Shanganagh Vale pedestrian link.

The NTA's best practice guide referenced above specifically highlights that boundary walls around estates and within residential areas that prevent movement along natural desire lines can act as a barrier to permeability. The removal of a section of the boundary wall and the addition of the proposed new link between Shanganagh Vale and the Bray Road provides improved permeability at this location in accordance with the best practice guide.

Proposed Scheme Objectives

The objectives of the Proposed Scheme, included in Section 1.1 in Volume 1, the Non-Technical Summary of the EIAR, and also included in Section 2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, support the various policies outlined above. Specifically, the proposal for a new link between Shanganagh Vale, together with the new bus stops on the Bray Road, supports the following stated objectives of the Proposed Scheme as highlighted, and described in detail, below:

- *'Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;* - **The new link between Shanganagh Vale and the Bray Road facilitates a mode-shift from car-dependence;**
- *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;* - **the proposed new link will enhance the potential for cyclists from the Shanganagh Vale to access safe segregated cycling infrastructure on the Bray Road;**
- *Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services;* **- the proposed new link will provide improved sustainable connectivity improving accessibility.'**

Existing Access to Sustainable Travel

As shown in Figure 3.97 below, Image 2.11 from Chapter 2 (Need for the Proposed Scheme) in volume 2 of the EIAR provides an overview of the existing combined activity density scenario along the length

of the of the Proposed Scheme. This identifies the Shanganagh Vale catchment as a medium-density location based on the 2011 census data. Image 2.12 (see Figure 3.98 below) of the same Chapter displays the Dublin Bus Patronage heat map along the length of the Proposed Scheme which also highlights reduction in Bus Patronage on the N11 Road in the vicinity of Shanganagh Vale relative to the other sections of the Proposed Scheme.

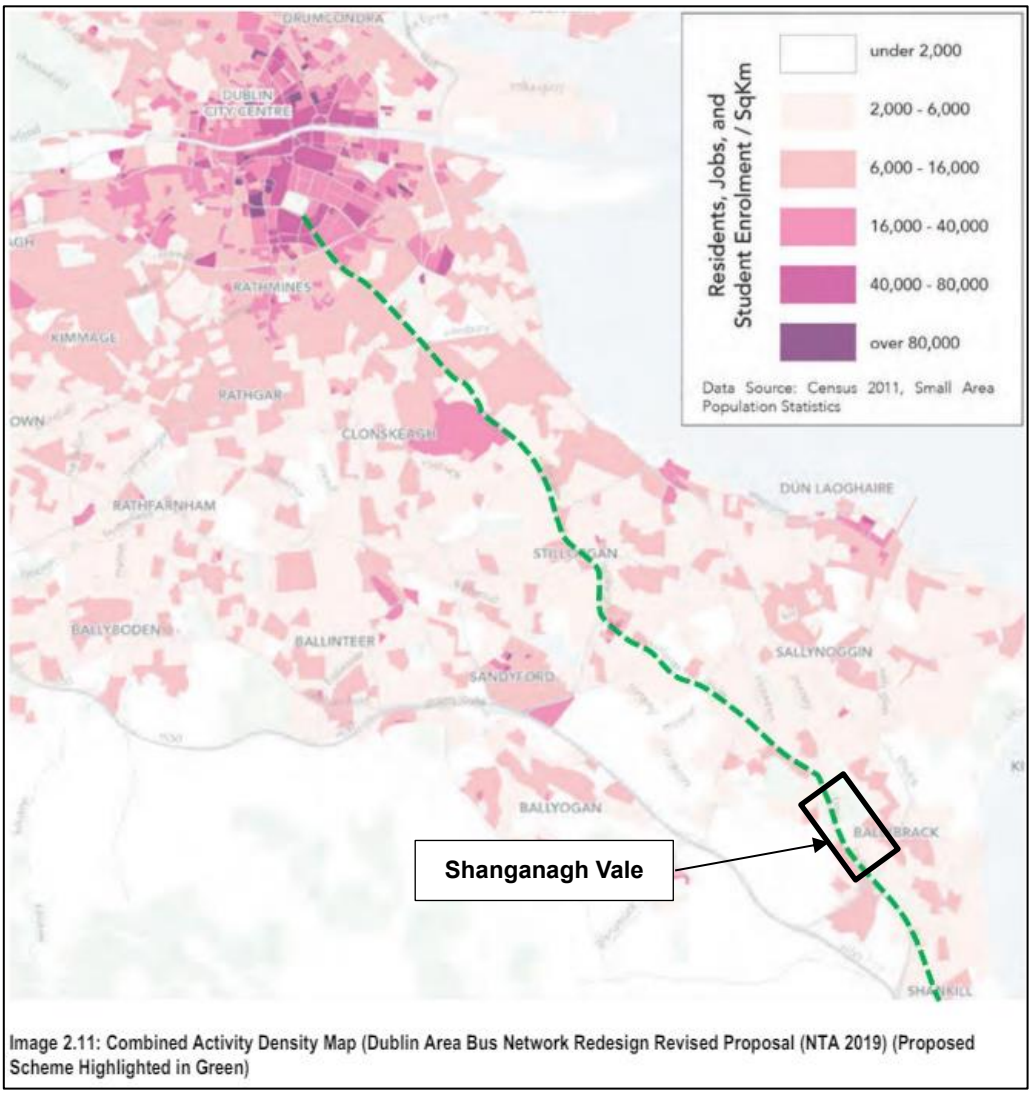


Image 2.11: Combined Activity Density Map (Dublin Area Bus Network Redesign Revised Proposal (NTA 2019) (Proposed Scheme Highlighted in Green)

Figure 3.97: Extract from EIAR Chapter 2, Combined activity density at Shanganagh Vale (Image 2.11)

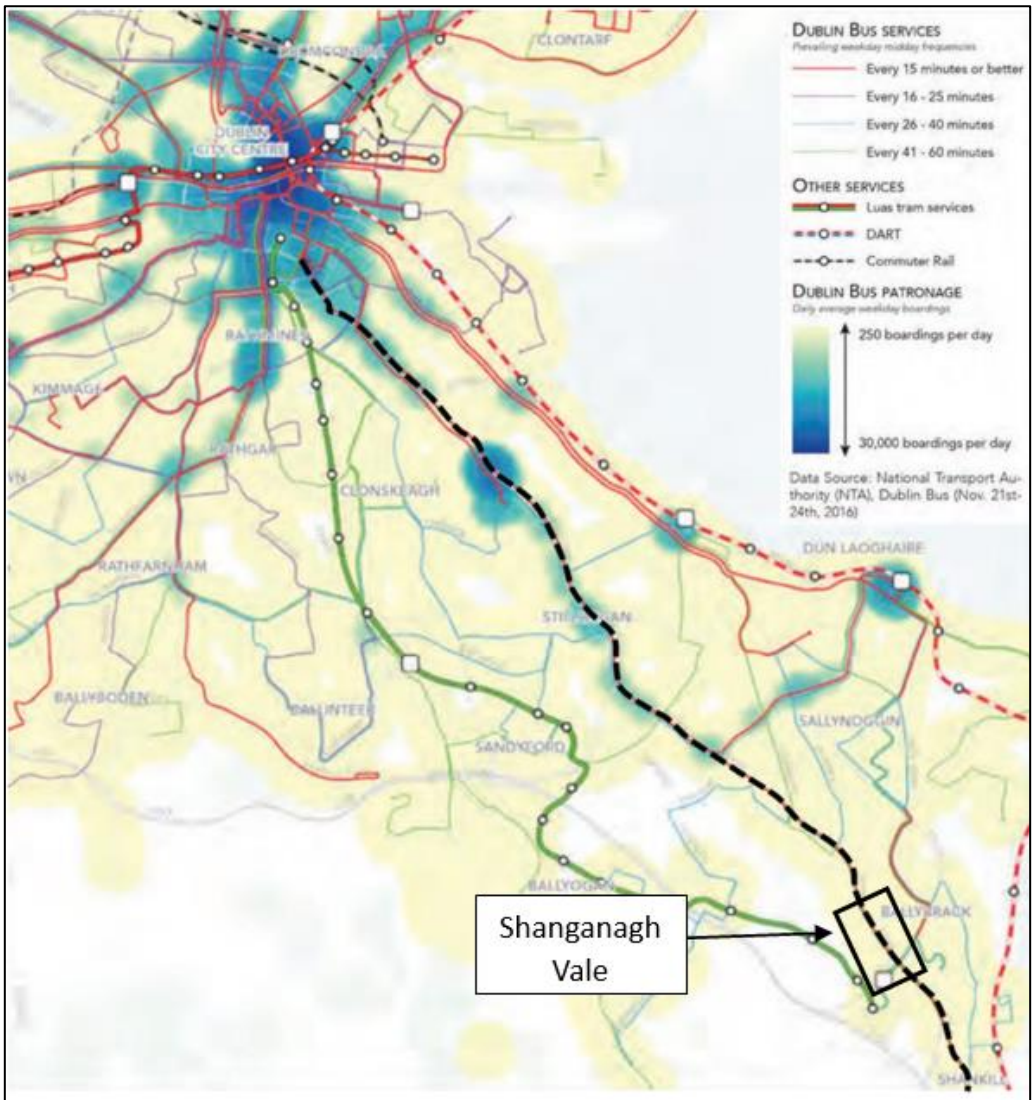


Figure 3.98: Extract from EIAR Chapter 2, Combined activity density at Shanganagh Vale (Image 2.11)

This is further supported by Section 10.2.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR and includes the assessment of impacts on community amenity, land take and accessibility consist of *'community areas'*, which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). One of these community areas is Cabinteely.

Section 10.3.2.3 provides data on the method of travel to work for each of these community areas and the results are presented in Table 10.5 of that section, which is shown in Table 3.22 above.

As can be seen in Table 3.22, of the 19 Community Areas assessed Cabinteely has one of the highest car mode shares for travel to work trips at 64%. In addition, this mode share exceeds the average mode share for County Dublin as a whole. Other community areas in Table 10.5 located along the N11 Road corridor, have lower travel by car percentage compared to Cabinteely. These other areas generally have good permeability to the high frequency bus services along the N11 Road.

In comparison, as shown in Figure 3.99 below, the Shanganagh Vale estate is enclosed by a continuous boundary between the properties in the estate and the Bray Road. This prevents any direct access/egress and acts as a deterrent to achieving the required mode-shift away from private car use or residents in the estate.

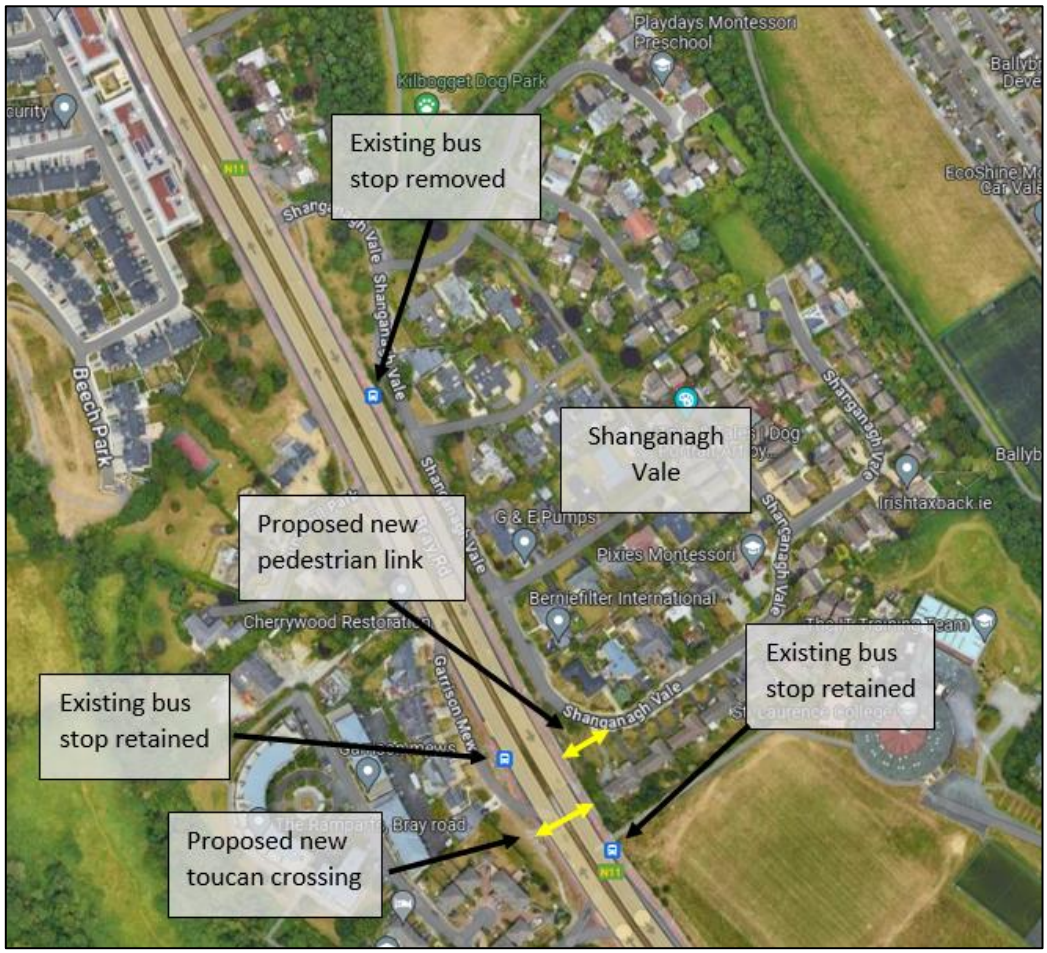


Figure 3.99: Location of Shanganagh Vale Estate and Proposed new Pedestrian/Cyclist Link (Image Source: Google)

The new pedestrian link to Shanganagh Vale is situated in close proximity to the retained inbound and outbound bus stop at this location and the toucan crossing on the Bray Road. The proposed pedestrian link is also designed to DMURS with a 2-metre width. The proposed design will allow the community to be better linked to the wider public transport, cycle and walking network routed in the area.

Overall need for the proposed pedestrian and cyclist link

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.1.3.1 - Pedestrian Infrastructure provides an overall assessment of the Proposed Scheme and concludes that it will deliver a Positive, Significant and Long-term impact in terms of Pedestrian Infrastructure. The Proposed Scheme will deliver significant improvements in people movement by sustainable modes along the Proposed Scheme corridor, particularly by bus, with reductions in car mode share due to the enhanced sustainable mode provision.

Section 6.4.3.2 also highlights that:

'To limit the growth in car traffic, and to ensure that this demand growth is catered for predominantly by sustainable modes, a number of measures will be required, that include improved sustainable infrastructure and priority measures delivered as part of the NDP/GDA Strategy. In addition to this, demand management measures will play a role in limiting the growth in transport demand, predominantly to sustainable modes only. As a result, there will be only limited or no increases overall in private car travel demand. The Proposed Scheme will play a key role in this as part of the wider package of GDA Strategy measures.'

The proposed link to Shanganagh Vale supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

As set out in Table 2.12 of Section 2.3.5.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Dublin City Development Plan includes Policy '*SMT18 To continue to maintain and improve the pedestrian environment and strengthen permeability by promoting the development of a network of pedestrian routes including laneway connections which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe, accessible to all in accordance with best accessibility practice*'. The Proposed Scheme aligns with the objective as along the route, improvements and enhancements will be made to footpaths, walkways, and pedestrian crossings.

The NTA document: Permeability in Existing Urban Areas Best Practice Guide 2015 is referenced in the Dublin City Development Plan, as set out in Table 2.9 of Section 2.3.5.1. The Introduction to this on Page 1 states that the policy guidance has been developed:

'*On how best to facilitate demand for walking and cycling in existing built-up areas. This includes creation of linkages within the urban environment for people to walk and cycle from their homes to shops, schools, local services, places of work and public transport stops and stations*.'

Chapter 2 (Need for the Proposed Scheme) outlines the policy context that underpins the Proposed Scheme as well as the regional and local transport need for the Proposed Scheme. Section 2.3.4.2 notes the following:

'As part of the 2016 GDA Transport Strategy, the Core Bus Network is to be developed to achieve a continuous priority for bus movement on sections of the Core Bus Network within the Metropolitan Area. This is to be achieved through enhanced bus lane provision, the removal of delays along the routes and to enable the bus to provide a faster mode of transport than the private car along these routes.

The need for the Proposed Scheme is supported by the GDA Transport Strategy in so far as it will provide infrastructure required to facilitate 'a continuous priority for bus movement on sections of the Core Bus network within the Metropolitan area.' The Proposed Scheme will realise the objectives of the GDA Transport Strategy by providing the enhanced bus lanes, removing 'bottlenecks' and making the bus a faster option to commuters than car-based transport. The GDA Transport Strategy 2016 – 2035 has now been replaced by the GDA Transport Strategy 2022-2042 (NTA 2022) which has now been adopted and this is reviewed in Section 2.3.4.3.

It is an objective of the 2019 Implementation Plan to build on the work already achieved in the GDA with respect to catering for greater bus movement. The intention set out in the 2019 Implementation Plan is to progress the development of the Core Bus Corridors (the CBC Infrastructure Works) to achieve, as far as practicable, continuous priority for bus movement. The need for the Proposed Scheme is supported by the 2019 Implementation Plan's stated aim to 'overhaul the current bus system in the Dublin region by (inter alia): • Building a network of new bus corridors on the busiest bus routes to make bus journeys faster, predictable, and reliable'. The Proposed Scheme will provide the infrastructure necessary to deliver the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improve environmental performance. The Proposed Scheme design has been developed by NTA and takes account of policy objectives in the Implementation Plan'.

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, Section 2.3.5.3 directly references the Dún Laoghaire-Rathdown County Development Plan 2022 – 2028 and outlines how the Proposed Scheme is compliant. The vision of the DLRCDP (DLRCC 2022) is to '*embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations*'. The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county. Table 2.14 in the EIAR Chapter 2 outlines the key transport policies relevant to Bus Improvements in the DLRCDP and how the Proposed Scheme meets the policy objectives T1, T3, T4, 75, T6,T11, T12, T13 and T23. The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022).

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4, sets out the manner in which the Proposed Scheme will bring positive impacts for businesses and individuals along the corridor, including encouraging more sustainable travel through increased bus patronage, walking and cycling. This is summarised on Page 6 of the Executive Summary where it is highlighted that the

improved infrastructure will encourage more walking and cycling, as road safety fears are often the main reason people do not cycle, and the new bus routes will provide improved access for all families, with those on low income or with disabilities, in particular, gaining through improved transport options and less need to spend on car travel. The positive impacts of the Proposed Scheme are further evidenced in Section 4, Community Health and Wellbeing, where the following conclusion is stated:

'*Walking and cycling infrastructure developed as part of the proposed improvements should lead to an increase in the use of sustainable transport modes by offering new and safer alternatives to the use of private vehicles. These impacts will occur as soon as the new facilities are opened, and the evidence suggests that people should rapidly swap to new transport choices.*'

The proposed link from Shanganagh Vale is an important piece of infrastructure that will support more sustainable travel at this location on the corridor.

The proposed link to Shanganagh Vale supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

3.7.3.2 Safety, Security, Antisocial behaviour, and Vandalism

Summary of issue raised

Residents feel that marginal journey time benefits would be overshadowed by negative impacts such as crime and increased antisocial behaviour.

Some submissions alluded to a previous pedestrian entrance to the estate that was situated in the same location as is currently being proposed. Residents recalled the prevalence of crime, antisocial behaviour, property damage, and intimidation that neighbours had to endure during the period in which the previous access was installed. Responses noted that the construction of the current boundary wall which they feel resolved the aforementioned issues.

One submission made an objection to the placing of a bus stop on the N11 at Shanganagh Vale. The submission noted previous issues regarding intimidation, robbery, and antisocial behaviour associated with a previous bus stop and pedestrian entrance located at the same location in which the proposed access is sited. The submission requested that an alternative route/position for a bus stop be considered.

Response to issue raised

Section 10.4.4.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR considers the impact of the Operational Phase of the Proposed Scheme on community amenity. For the Cabinteely community area, in which Shanganagh Vale is located, the community amenity impact is assessed as a Negative, Not Significant and Short-Term during the first year of operation.

Refer to Section 3.4.3.8 on Safety, Security, Anti-Social Behaviour & Vandalism.

In summary, the case studies outlined in Section 3.4.3.8 demonstrates that improved pedestrian and cycling links, such as the proposed pedestrian and cyclist link between Shanganagh Vale and the N11 Bray Road will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

Bus Stop Placement

The design of the bus stop at this location is considered desired for pedestrian movement along this local area and is aligned with the local development plans. The new pedestrian entrance at Shanganagh Vale will provide better connectivity to the local communities and vulnerable users. A bus stop review carried out concluded, that there was no justification to relocate the outbound bus stop at this location and as a result the stop as Shanganagh Vale will remain in its current location at Chainage A12800. The existing inbound local bus stop at Wyattville junction has been moved to Chainage A13050.

As noted in Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR:

'To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment'.

The criteria for consideration when locating a bus stop are as follows:

- *Driver and waiting passengers are clearly visible to each other;*
- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*
- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as part of the Preliminary Design Report and set out in Bus Stop Review Report, Appendix H, and specifically in Appendix H2 (Bus Stop Review Analysis), using the methodology as set out in Appendix H1 (Bus Stop Review Methodology) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis Appendix H2 notes the following in relation to the existing bus stops on Stillorgan Road near Shanganagh Vale at this section of the Proposed Scheme:

Bus Stop 3146 (Outbound)

'No change from existing location. An island layout is proposed, this is the preferred layout for both cyclists/pedestrians.'

Bus Stop 3132 (Inbound)

'Low usage stop removed to improve journey times, can be captured by adjacent stops. New pedestrian access to adjacent housing development to minimise walking times to merged bus stop.'

3.7.3.3 Public Consultation

Summary of issue raised

Two submissions noted previous objections in 2019 to the proposal for the provision of a pedestrian entrance via an opening in the existing boundary wall. Respondents feel that there has not been proactive engagement on the issues raised during previous consultations and feel that their concerns were disregarded in 2019.

Response to issue raised

The Public Consultation Report 2018-2022 provided in the Supplementary Information for the Proposed Scheme outlines the extensive public consultation and stakeholder engagement undertaken during that period, with three rounds of non-statutory public consultation undertaken.

Throughout the three rounds a number of consultation tools were used, including:

- A dedicated website, launched in May 2017;
- An individual brochure for the Proposed Scheme (updated at all 3 rounds);
- Public information events (in person for first and second rounds, virtual for third round),
- Community Forum events, to create a two-way communication process with representatives of local communities, (in person for first and second rounds, virtual for third round, average attendees 24);
- Range of digital channels, including Twitter and Facebook;
- Traditional published material;
- Press and radio advertising;
- Outdoor advertising;
- Presentations; and
- Infographics.

The public events took place in accessible venues chosen to maximise the level of local engagement and attendance where possible. These events allowed members of the public to speak directly and in detail with members of the BusConnects Infrastructure team about the proposals. These non-statutory Public Information Events were advertised in local newspapers, through radio, on the BusConnects website, through extensive email reminders to public representatives, Local Authorities' Public Partnership Networks (PPN's), emails to Community Forum members, promoted through social media and digital channels.

The following paragraphs provide more details of each of the three rounds on non-statutory consultation for the Proposed Scheme.

First non-statutory round of public consultation

The first non-statutory round of public consultation for the Bray to City Centre Core Bus Corridor Emerging Preferred Route Option (EPRO) occurred from 14th November 2018 to 31st May 2019.

The first Community Forum meeting for the Bray to City Centre Core Bus Corridor took place on 08 February 2019 at the Talbot Hotel, Stillorgan from 18.30 – 20.00 with approximately 85 representatives in attendance. A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 26 March 2020 from 11.30-19.30.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to introduce a pedestrian link from Shanganagh Vale to the Bray Road, see Figure 3.100 and Figure 3.101 below.

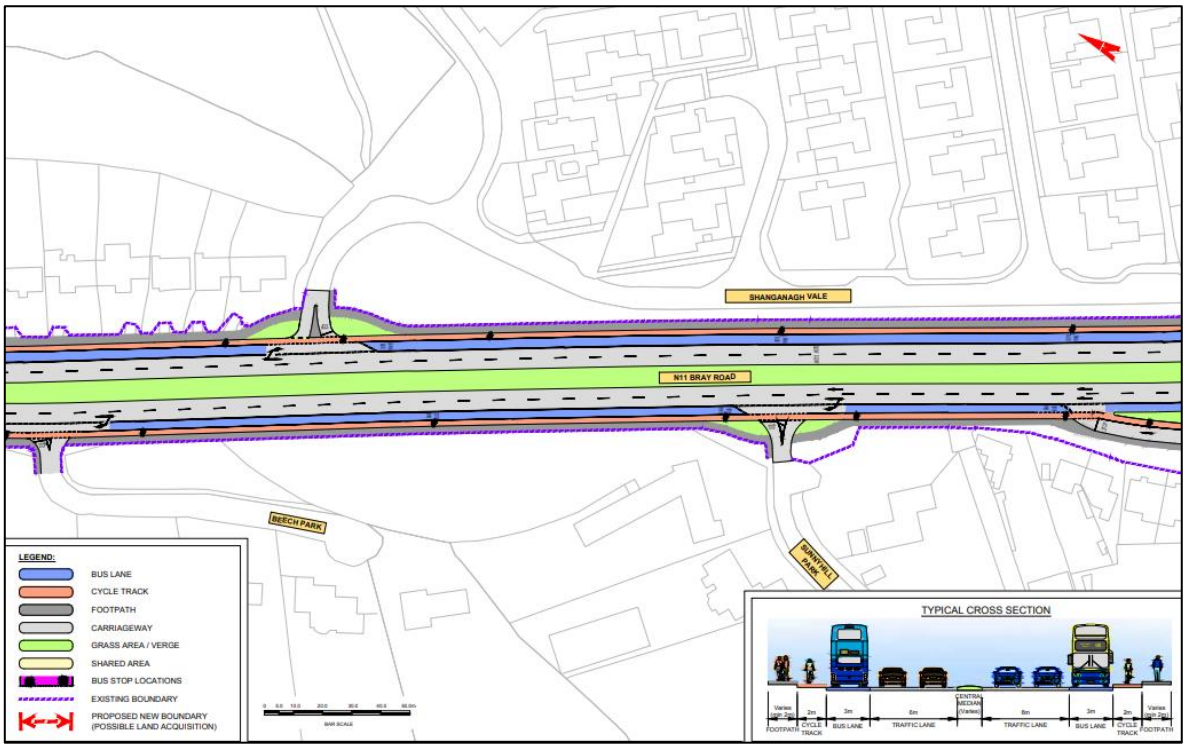


Figure 3.100: Extract from EPRO Drawings – First round of non-statutory public consultation (Map 38: Emerging Preferred Route)

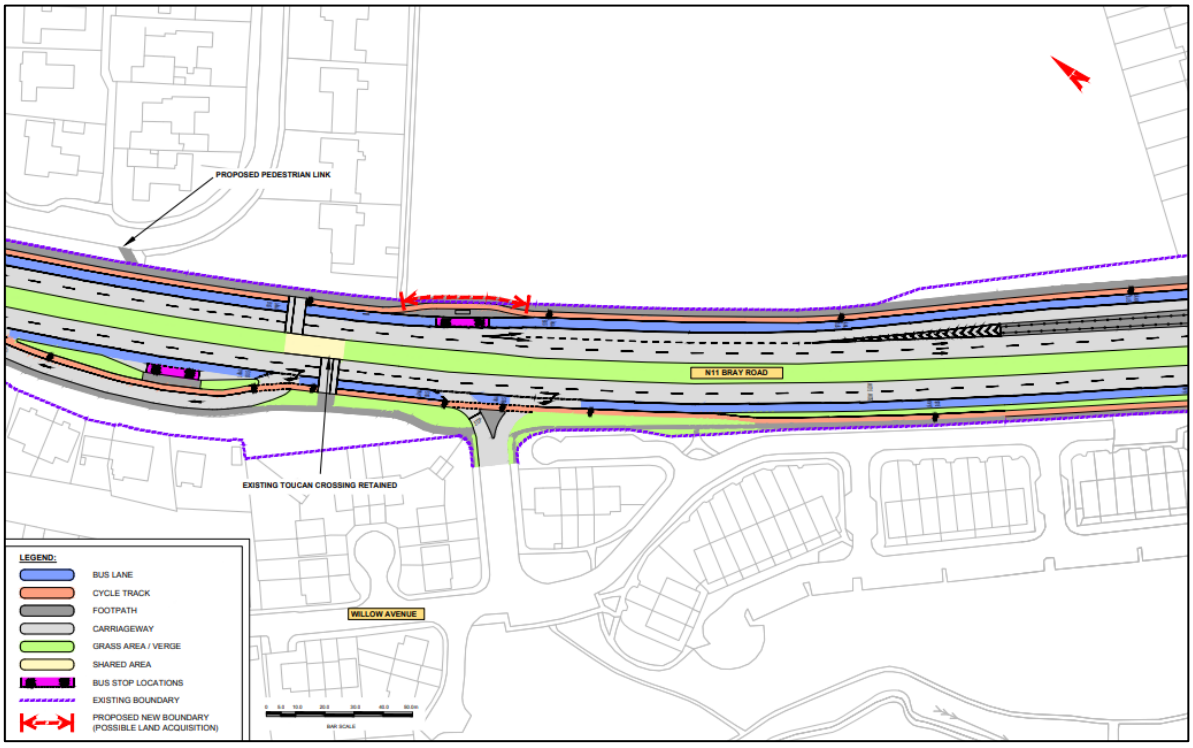


Figure 3.101: Extract from EPRO Drawings – First round of non-statutory public consultation (Map 39: Emerging Preferred Route)

There were 1,225 submissions received relating to the Bray to City Centre Core Bus Corridor, with 40 submissions recorded in relation to the proposed addition of a new pedestrian link at Shanganagh Vale. Some residents were against the proposal, while others were in favour of the new entrance as this would mean quicker and more direct access to the bus stops.

Second non-statutory round of public consultation

A second Community Forum event was held at the Talbot Hotel, Stillorgan on 12 September 2019 from 18.30 – 20.00, with approximately 75 in attendance. This Community Forum was held in advance of the

launch of second round of non-statutory public consultation. The meeting aimed to keep members updated on the design process between the first and second consultation.

In March 2020, the Draft Preferred Route Option (PRO) was published and a second non-statutory round of public consultation commenced on 4 March 2020 and ran until 17 April 2020. The consultation was announced via press release and a media briefing that took place in the Alex Hotel, Fenian Street from 10.00 – 12.00.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to introduce a pedestrian link from Shanganagh Vale to the Bray Road, see Figure 3.102 and Figure 3.103 below.

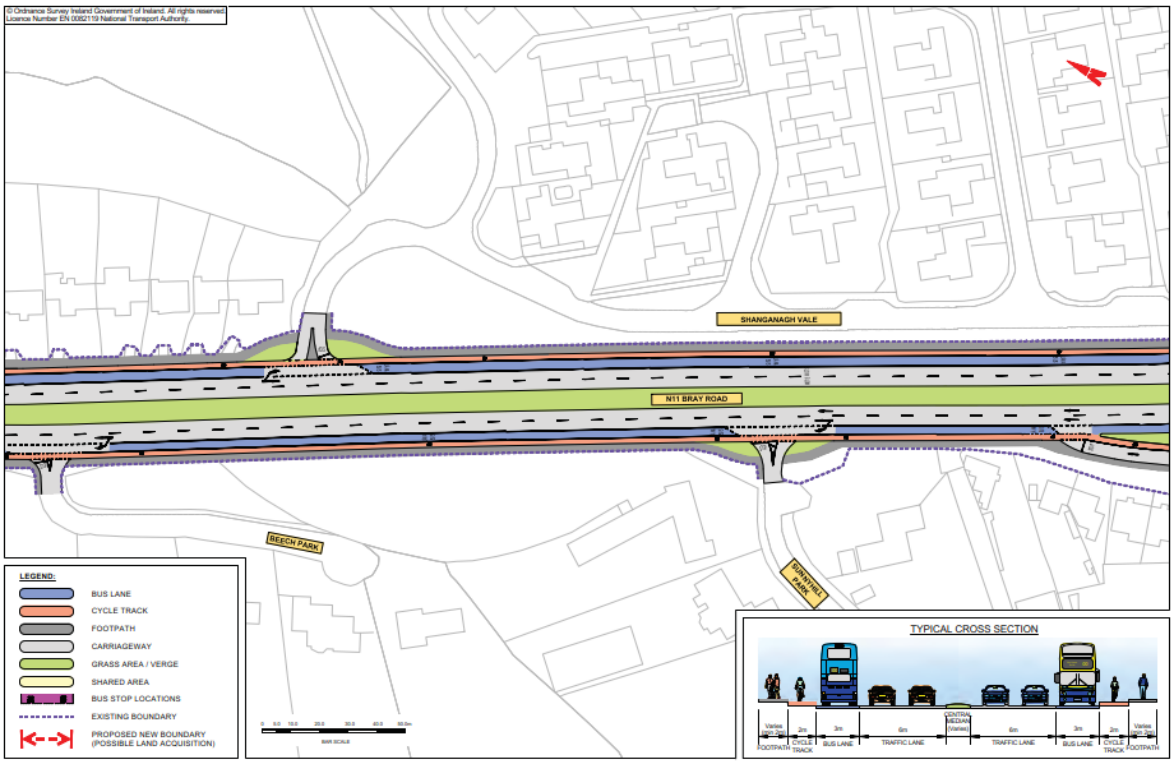


Figure 3.102: Extract from Draft PRO Drawings – Second round of non-statutory public consultation (Map 38: Preferred Route)

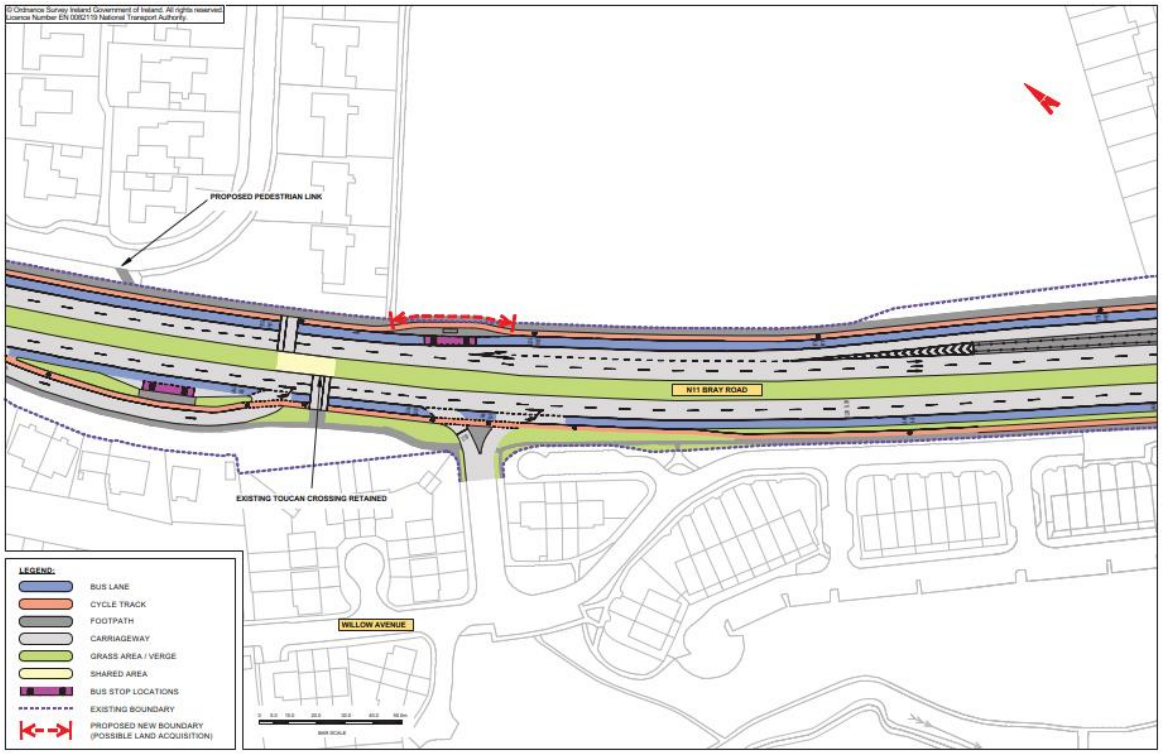


Figure 3.103: Extract from Draft PRO Drawings – Second round of non-statutory public consultation (Map 39: Preferred Route)

A public information event for the Bray to City Centre Core Bus Corridor took place in the Talbot Hotel, Stillorgan on 12 March 2020 from 11.30-19.30. Members of the public were invited to attend to review the changes made to the proposals since the first round of consultation in 2018/2019 and to discuss concerns and observations with members of the BusConnects Infrastructure team. Due to the COVID-19 pandemic, this event had to end earlier than scheduled and all further planned consultation events scheduled after 12 March 2020 were postponed.

Following the EPR submissions review of the proposals, there were some changes to the number of properties that were potentially impacted. 204 letters were prepared and delivered on 02 March 2020 to properties either continuing to be potentially impacted; newly potentially impacted; or no-longer potentially impacted, with recipients invited to schedule meetings with the BusConnects Infrastructure team if they wished to discuss the proposals on an individual basis.

Due to the COVID-19 pandemic, all events scheduled after 12 March 2020 were cancelled. In deference to the submissions we had already received, the decision was made not to cancel the consultation. Consequently, there were just 40 submissions received relating to the Bray to City Centre Core Bus Corridor, none of which related to the proposal to create a pedestrian link between Shanganagh Vale and the Bray Road.

Third non-statutory round of public consultation

The third round of non-statutory public consultation took place from 4th November 2020 until 16th December 2020 on the updated Draft Preferred Route Option for the Proposed Scheme. The consultation was announced via press release, on the NTA website and on social media. Public representatives were made aware of the publication of the revised proposals via email. This email also contained information on Community Forums for TDs, Senators, and Councillors to assist in spreading awareness of the meetings. A briefing session was organized via Zoom to take place on 4 November 2020 focusing on the proposals relating to the Shankill area.

Due to the Covid19 pandemic, which commenced with restrictions in March 2020 and continued throughout the second and third public consultation rounds, the BusConnects Infrastructure team developed online and virtual elements to assist the public in viewing and reading the proposals. Our primary virtual interactive tool during the final third phase of public consultation was the use of virtual consultation rooms available through the BusConnects website. These rooms were online for a six-week period (24hrs x 7 days a week) and included the following:

- all Proposed Scheme materials available for perusal, such as the brochure, maps and all associated support documentation;
- an audio description of the brochure information; and
- a call back facility within the virtual rooms for any stakeholder to book a phone call back from a member of the BusConnects Infrastructure team for additional information or more detailed queries.

These Virtual Consultation Rooms replaced the more traditional Public Information Events due to the Covid restrictions on face-to-face interactions, typically used during non-statutory public consultation. Compared to the face-to-face Public Information Events utilised during the first and second rounds of Non-Statutory Public Consultation the numbers of the public that engaged increased significantly due to the online access available through this facility. Over the seven weeks of the consultation, 433 unique users visited the virtual information room for Bray to City Centre Core Bus Corridor.

In addition, a third, virtual, Community Forum meeting took place on 1st December 2020 with approximately 65 representatives in attendance.

The Proposed Scheme drawings in the published consultation brochure highlighted the proposal to introduce a pedestrian link from Shanganagh Vale to the Bray Road, see Figure 3.104 and Figure 3.105 below.

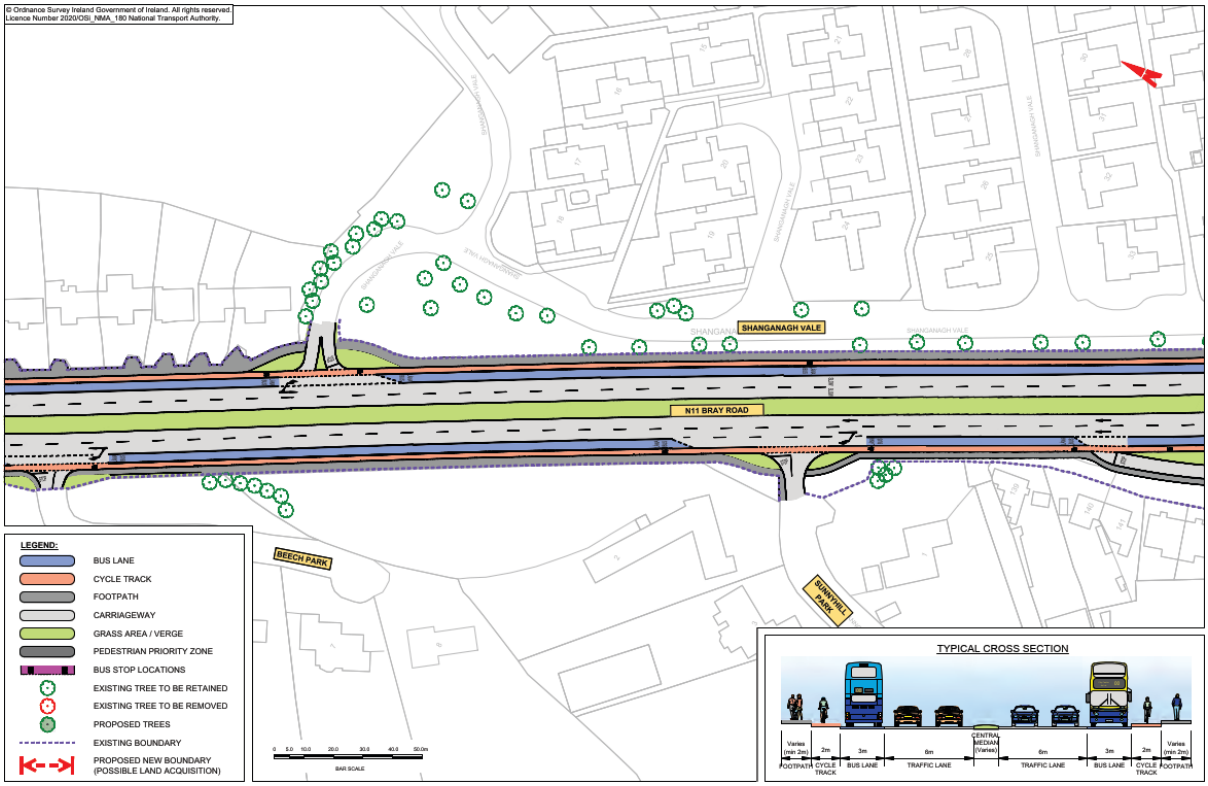


Figure 3.104: Extract from Draft PRO Drawings – Third round of non-statutory consultation (Map 38: Preferred Route)

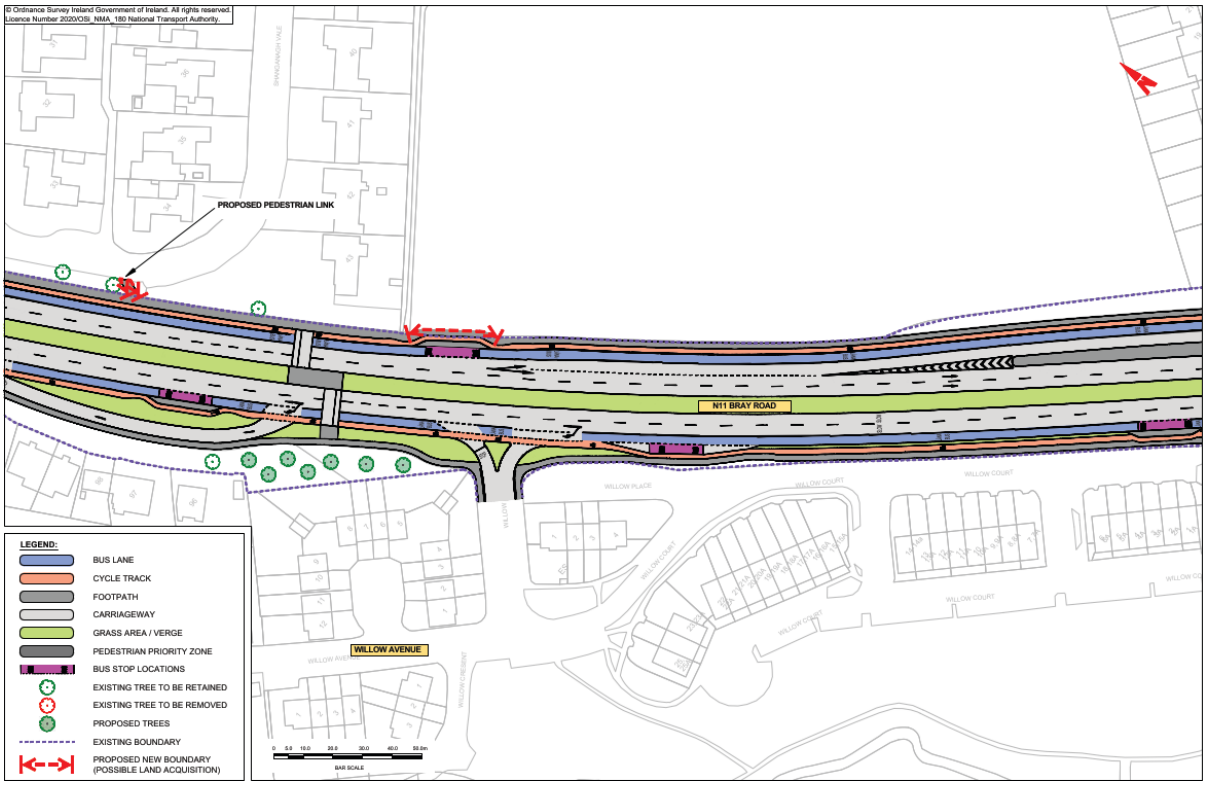


Figure 3.105: Extract from Draft PRO Drawings – Third round of non-statutory consultation (Map 39: Preferred Route)

Advertisements detailing where interested parties could access further information on the CBC including viewing the proposals, making a submission, and attending information events were placed in local and national newspapers, online and in highly visible areas around the Greater Dublin Area. There were 572 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.

The public consultation submission reports provided as Appendices A and B to the Preferred Route Option Report, provided as part of the Supplementary Information, do not record any submissions made to the third round of non-statutory consultation in respect to the proposed link to Shanganagh Vale.

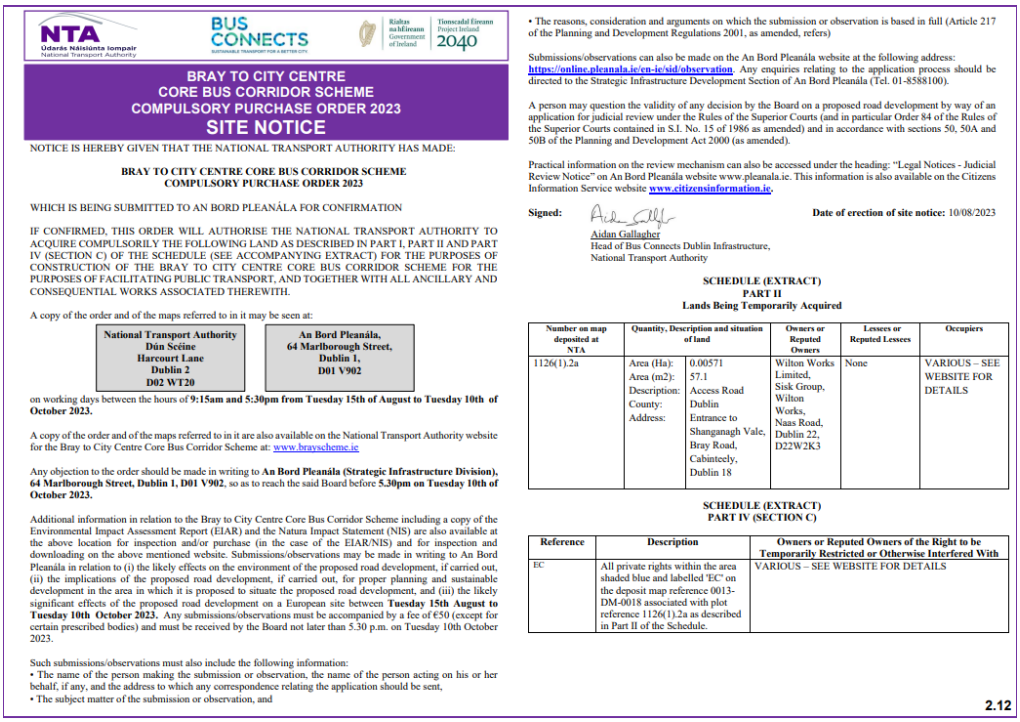
Statutory round of public consultation

As part of the statutory public consultation in addition to the notices required by statute to be published in the newspaper, public notices were also placed at 176 locations along the route of the Proposed Scheme so as to ensure that members of the public in the area who may not have noticed the statutory newspaper notice or whose lands were not being acquired and so were not part of the CPO process were informed of the Proposed Scheme, as shown in Figure 3.106 and Figure 3.107 below.

Figure 3.106: Extract from Site Notices Report – Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

Figure 3.107: Extract from Site Notices Report – Location of non-statutory public notices erected during statutory consultation (Section 1 of 4)

Location I and J included site notices 2.12 and 2.13, each comprising two A3 sized notices; site notices 2.12 and 2.13 were erected to the right of the entrance to Shanganagh Vale and in a grass verge within Shanganagh Vale. The notices themselves are shown in Figure 3.108, Figure 3.109, Figure 3.110, Figure 3.111, and Figure 3.112, and the proposed locations in Figure 3.113 and Figure 3.114.



NTA Údarás Náisiúnta Iompair National Transport Authority

BUS CONNECTS

Rialtas na hÉireann Government of Ireland | Tionscadal Éireann Project Ireland 2040

BRAY TO CITY CENTRE
CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023
SITE NOTICE

NOTICE IS HEREBY GIVEN THAT THE NATIONAL TRANSPORT AUTHORITY HAS MADE:

BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023

WHICH IS BEING SUBMITTED TO AN BORD PLEANÁLA FOR CONFIRMATION

IF CONFIRMED, THIS ORDER WILL AUTHORISE THE NATIONAL TRANSPORT AUTHORITY TO ACQUIRE COMPULSORILY THE FOLLOWING LAND AS DESCRIBED IN PART I, PART II AND PART IV (SECTION C) OF THE SCHEDULE (SEE ACCOMPANYING EXTRACT) FOR THE PURPOSES OF CONSTRUCTION OF THE BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME FOR THE PURPOSES OF FACILITATING PUBLIC TRANSPORT, AND TOGETHER WITH ALL ANCILLARY AND CONSEQUENTIAL WORKS ASSOCIATED THEREWITH.

A copy of the order and of the maps referred to in it may be seen at:

National Transport Authority	An Bord Pleanála,
Dún Scéine	64 Marlborough Street,
Harcourt Lane	Dublin 1,
Dublin 2	D01 V902
D02 WT20	

on working days between the hours of **9:15am and 5:30pm from Tuesday 15th of August to Tuesday 10th of October 2023.**

A copy of the order and of the maps referred to in it are also available on the National Transport Authority website for the Bray to City Centre Core Bus Corridor Scheme at: www.brayscheme.ie

Any objection to the order should be made in writing to **An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902**, so as to reach the said Board before **5.30pm on Tuesday 10th of October 2023.**

Additional information in relation to the Bray to City Centre Core Bus Corridor Scheme including a copy of the Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement (NIS) are also available at the above location for inspection and/or purchase (in the case of the EIAR/NIS) and for inspection and downloading on the above mentioned website. Submissions/observations may be made in writing to An Bord Pleanála in relation to (i) the likely effects on the environment of the proposed road development, if carried out, (ii) the implications of the proposed road development, if carried out, for proper planning and sustainable development in the area in which it is proposed to situate the proposed road development, and (iii) the likely significant effects of the proposed road development on a European site between **Tuesday 15th August to Tuesday 10th October 2023.** Any submissions/observations must be accompanied by a fee of €50 (except for certain prescribed bodies) and must be received by the Board not later than 5.30 p.m. on Tuesday 10th October 2023.

Such submissions/observations must also include the following information:
- The name of the person making the submission or observation, the name of the person acting on his or her behalf, if any, and the address to which any correspondence relating the application should be sent,
- The subject matter of the submission or observation, and
- The reasons, consideration and arguments on which the submission or observation is based in full (Article 217 of the Planning and Development Regulations 2001, as amended, refers)

Submissions/observations can also be made on the An Bord Pleanála website at the following address: https://online.pleanala.ie/en-ie/sid/observation. Any enquiries relating to the application process should be directed to the Strategic Infrastructure Development Section of An Bord Pleanála (Tel. 01-8588100).

A person may question the validity of any decision by the Board on a proposed road development by way of an application for judicial review under the Rules of the Superior Courts (and in particular Order 84 of the Rules of the Superior Courts contained in S.I. No. 15 of 1986 as amended) and in accordance with sections 50, 50A and 50B of the Planning and Development Act 2000 (as amended).

Practical information on the review mechanism can also be accessed under the heading: "Legal Notices - Judicial Review Notice" on An Bord Pleanála website www.pleanala.ie. This information is also available on the Citizens Information Service website www.citizensinformation.ie.

Signed: **Date of erection of site notice:** 10/08/2023

Aidan Gallagher
Head of Bus Connects Dublin Infrastructure,
National Transport Authority

SCHEDULE (EXTRACT)
PART II
Lands Being Temporarily Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1126(1).2a	Area (Ha): Area (m2): Description: County: Address:	0.00571 57.1 Access Road Dublin Entrance to Shanganagh Vale, Bray Road, Cabinteely, Dublin 18	Wilton Works Limited, Sisk Group, Wilton Works, Naas Road, Dublin 22, D22W2K3	None	VARIOUS – SEE WEBSITE FOR DETAILS

SCHEDULE (EXTRACT)
PART IV (SECTION C)

Reference	Description	Owners or Reputed Owners of the Right to be Temporarily Restricted or Otherwise Interfered With
EC	All private rights within the area shaded blue and labelled 'EC' on the deposit map reference 0013-DM-0018 associated with plot reference 1126(1).2a as described in Part II of the Schedule.	VARIOUS – SEE WEBSITE FOR DETAILS

2.12

Figure 3.108: Extract from Site Notices Report – First A3 sheet of Non-Statutory Site Notices 2.12

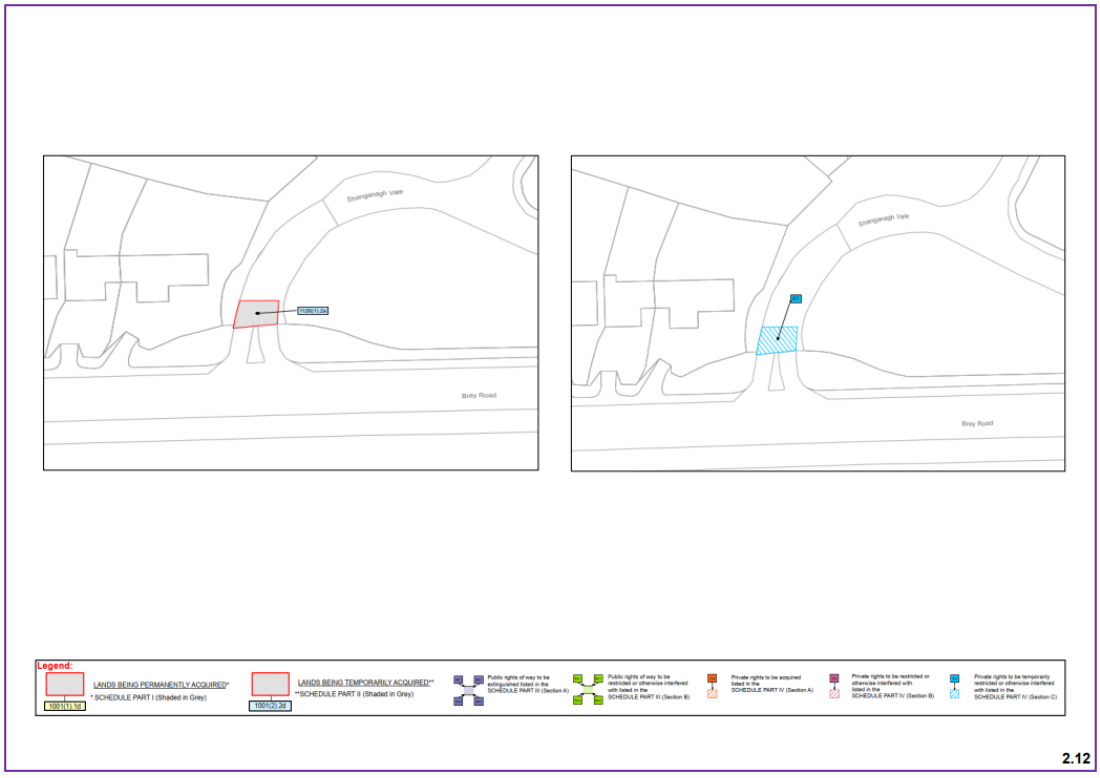
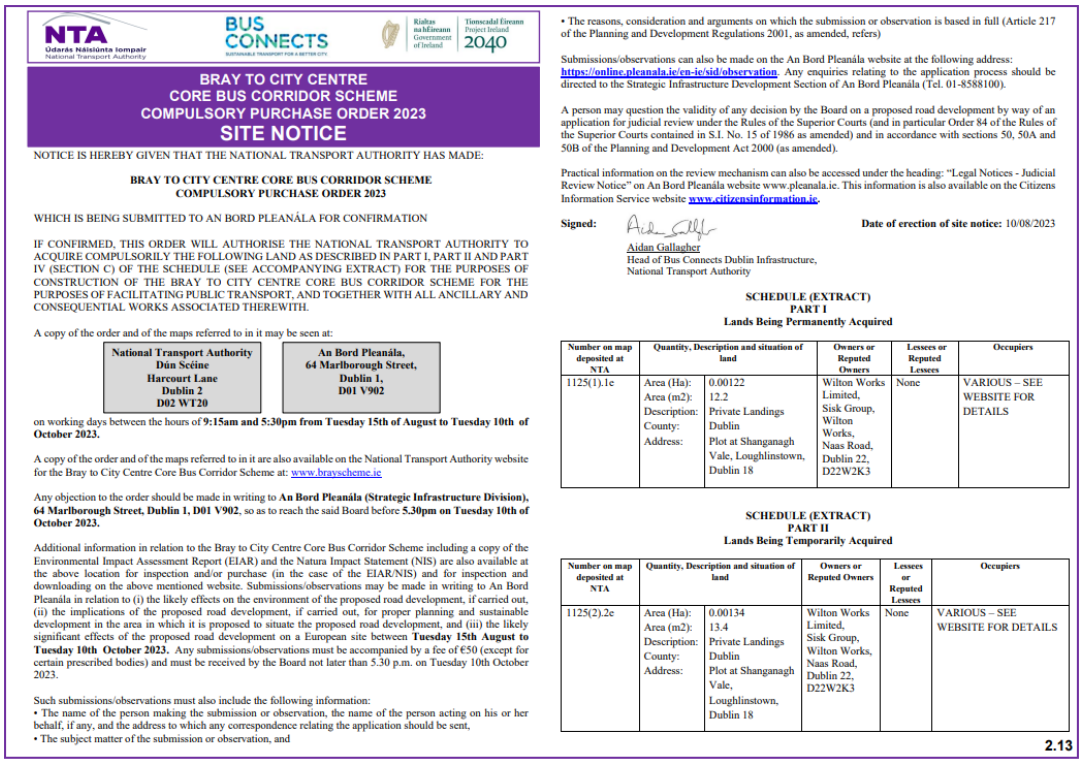


Figure 3.109: Extract from Site Notices Report – Second A3 sheet of Non-Statutory Site Notices 2.12



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BRAY TO CITY CENTRE
CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023
SITE NOTICE

NOTICE IS HEREBY GIVEN THAT THE NATIONAL TRANSPORT AUTHORITY HAS MADE:

BRAY TO CITY CENTRE CORE BUS CORRIDOR SCHEME
COMPULSORY PURCHASE ORDER 2023

WHICH IS BEING SUBMITTED TO AN BORD PLEANÁLA FOR CONFIRMATION

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A copy of the order and of the maps referred to in it may be seen at:

National Transport Authority
Dún Scéine
Harcourt Lane
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D02 WT20

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64 Marlborough Street,
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Such submissions/observations must also include the following information:
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• The subject matter of the submission or observation, and
• The reasons, consideration and arguments on which the submission or observation is based in full (Article 217 of the Planning and Development Regulations 2001, as amended, refers)

Submissions/observations can also be made on the An Bord Pleanála website at the following address: https://online.pleanala.ie/en-ie/sid/observation. Any enquiries relating to the application process should be directed to the Strategic Infrastructure Development Section of An Bord Pleanála (Tel. 01-8588100).

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Signed: **Date of erection of site notice:** 10/08/2023

Aidan Gallagher
Head of Bus Connects Dublin Infrastructure,
National Transport Authority

SCHEDULE (EXTRACT)
PART I
Lands Being Permanently Acquired

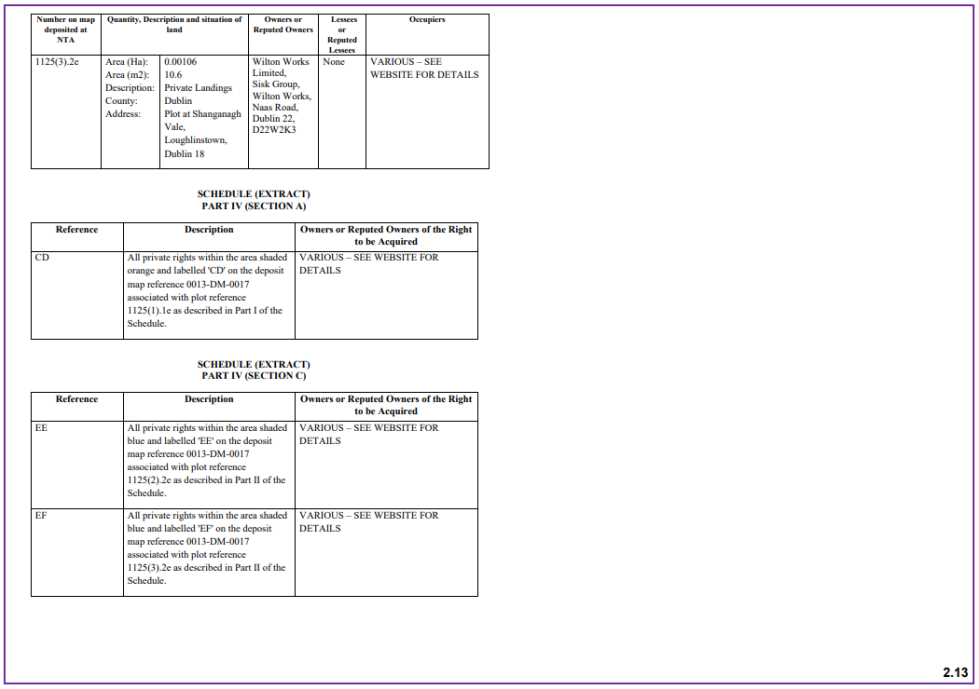
Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1125(1).1e	Area (Ha): Area (m2): Description: County: Address:	0.00122 12.2 Private Landings Dublin Plot at Shanganagh Vale, Loughlinstown, Dublin 18	Wilton Works Limited, Sisk Group, Wilton Works, Naas Road, Dublin 22, D22W2K3	None	VARIOUS – SEE WEBSITE FOR DETAILS

SCHEDULE (EXTRACT)
PART II
Lands Being Temporarily Acquired

Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1125(2).2e	Area (Ha): Area (m2): Description: County: Address:	0.00134 13.4 Private Landings Dublin Plot at Shanganagh Vale, Loughlinstown, Dublin 18	Wilton Works Limited, Sisk Group, Wilton Works, Naas Road, Dublin 22, D22W2K3	None	VARIOUS – SEE WEBSITE FOR DETAILS

2.13

Figure 3.110: Extract from Site Notices Report – First A3 sheet of Non-Statutory Site Notices 2.13



Number on map deposited at NTA	Quantity, Description and situation of land		Owners or Reputed Owners	Lessees or Reputed Lessees	Occupiers
1125(3).2e	Area (Ha): Area (m2): Description: County: Address:	0.00106 10.6 Private Landings Dublin Plot at Shanganagh Vale, Loughlinstown, Dublin 18	Wilton Works Limited, Sisk Group, Wilton Works, Naas Road, Dublin 22, D22W2K3	None	VARIOUS – SEE WEBSITE FOR DETAILS

SCHEDULE (EXTRACT)
PART IV (SECTION A)

Reference	Description	Owners or Reputed Owners of the Right to be Acquired
CD	All private rights within the area shaded orange and labelled 'CD' on the deposit map reference 0013-DM-0017 associated with plot reference 1125(1).1e as described in Part I of the Schedule.	VARIOUS – SEE WEBSITE FOR DETAILS

SCHEDULE (EXTRACT)
PART IV (SECTION C)

Reference	Description	Owners or Reputed Owners of the Right to be Acquired
EE	All private rights within the area shaded blue and labelled 'EE' on the deposit map reference 0013-DM-0017 associated with plot reference 1125(2).2e as described in Part II of the Schedule.	VARIOUS – SEE WEBSITE FOR DETAILS
EF	All private rights within the area shaded blue and labelled 'EF' on the deposit map reference 0013-DM-0017 associated with plot reference 1125(3).2e as described in Part II of the Schedule.	VARIOUS – SEE WEBSITE FOR DETAILS

2.13

Figure 3.111: Extract from Site Notices Report – Second A3 sheet of Non-Statutory Site Notices 2.13

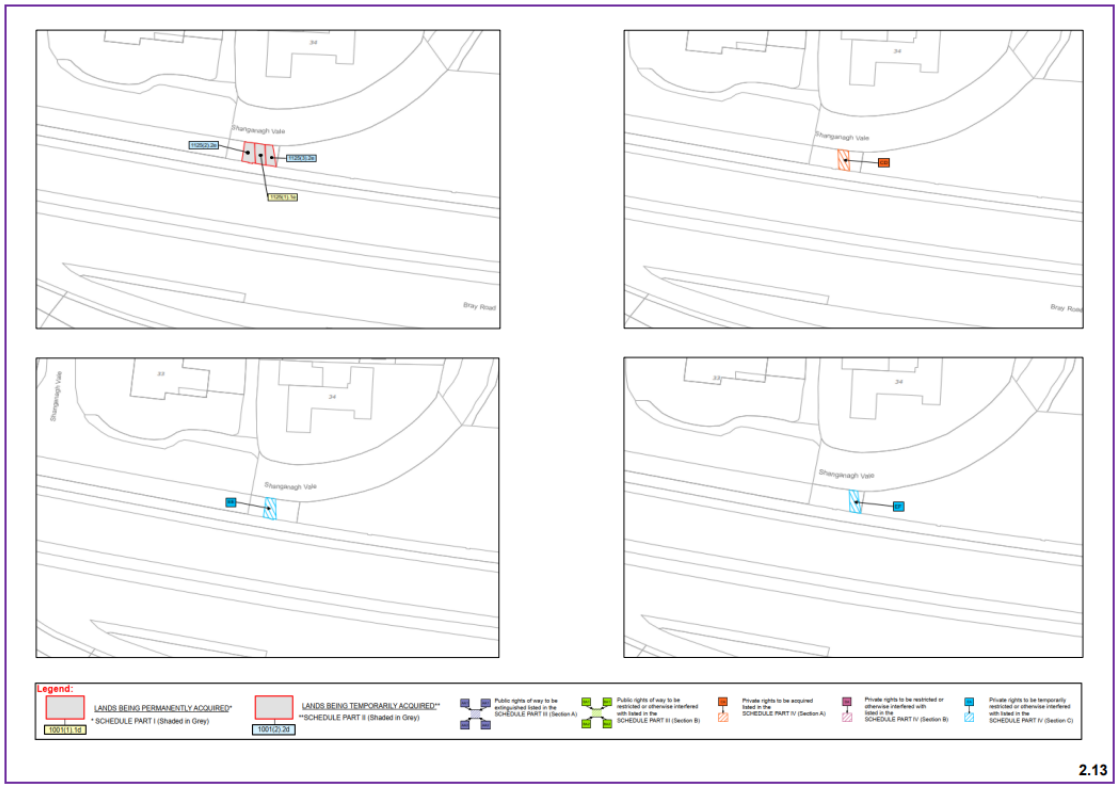


Figure 3.112: Extract from Site Notices Report – Third A3 sheet of Non-Statutory Site Notices 2.13

Figure 3.113: Extract from Site Notices Report – Site Notice Placement & Quantum – 2.12

Figure 3.114: Extract from Site Notices Report – Site Notice Placement & Quantum – 2.13

3.7.4 Other Issues Raised and Responses

3.7.4.1 Request for safety & security mitigation

Summary of issue raised

Few submissions have raised concerns regarding the location of the proposed access. Residents note that the new entrance would be in close proximity to a blind corner in the estate which has been observed to experience excessive speeding. Responses note the proximity of two Montessori schools and express concerns regarding the safety of children.

One submission has requested that, should the proposed design at Shanganagh Vale be approved, that mitigation measures for the safety and security of pedestrians and residents be enforced. The submission has provided a non-exhaustive list of potential mitigation measures which include: *'the provision of speed ramps either side of a zebra crossing, the provision for pedestrian-only access (not including bicycles or motorised vehicles), and the provision of a staggered wall at the opening to the N11 to ensure privacy and noise protection.'*

Response to issue raised

Regarding the specific concerns regarding the location of the pedestrian link, the proposed location and the proposed alignment of the pedestrian link has been improved as a straight link with raised table pedestrian crossing introduced for both traffic calming and safe crossings for pedestrians.

Suggestions related to additional traffic calming measures within the Shanganagh Vale residential estate if this nature are the responsibility of Dún Laoghaire–Rathdown County Council and are outside of the remit of the NTA in this Proposed Scheme.

3.7.4.2 Visual impact/ loss of privacy and noise

Summary of issue raised

The Willow Park Residents submission raises objection to the Proposed Scheme design near Garrison Mews on the basis that no effective sound and/or privacy barrier has been provided along the footpath perimeter. The submission observed that a sound barrier was a requirement of the original permission for the building of houses at the Wyattville Road Interchange. The residents note that a sound barrier has not been constructed to date and is not addressed as part of the current Bus Connects proposal.

The submission indicates that residential properties would be overlooked by buses travelling along the proposed route and that their privacy would be diminished.

The submission acknowledges the provision of trees within the Proposed Scheme proposal; however they feel that they do not form an effective sound or privacy barrier as their effectiveness as sound barriers would only be realised in the long term.

Response to issue raised

It should be noted that the design of the Proposed Scheme at this location does not propose to materially change the existing kerb lines. The location of the bus lane and general traffic lanes relative to the properties along Garrison Mews and in Willow Park will not be changed by the Proposed Scheme. The changes proposed here are only the redesign of the existing bus stop area at Garrison Mews to bring the bus island and shelter closer to the edge of the bus lane and to redirect the cycle track around the bus stop island to the rear of the proposed new shelter to remove the conflict between the boarding and alighting bus passengers, cyclists in the cycle lane and buses stopping at that stop. Additionally, there are the proposed landscaping improvements with the proposal to plant eight new trees in the open green space between Garrison Mews and Willow Avenue.

As the location of the bus lane is not proposed to change, there will be no change to the extent to which buses overlook the residential properties in this area compared to the current situation, therefore there will be no reduction in privacy compared to the existing situation. With respect to the planting of the proposed trees, the proposal is described in Section 4.5.2.8.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR where it states the following:

'*New trees are proposed in the grass verge at the service road north of Willow Avenue to offer increased separation and partial screening to the adjacent residential area*'.

Therefore, given the lack of change to the existing privacy situation, the addition of the eight proposed trees in the green area between the N11 Bray Road and the rear of Willow Park will only improve the situation over time as they grow and mature.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR assesses the impact of the Proposed Scheme on traffic and transport as a result of the construction and operation of the Proposed Scheme. Robust traffic modelling was undertaken as part of the assessment as described in Chapter 6 and Appendix A6.1 to A6.4 in Volume 4, Parts 1 and 2 of 4 of the EIAR. Modelling was carried out for both the Do Minimum and Do Something scenarios, for both the Opening Year (2028) and the Design Year (2043). With respect to the modelling of modal shift, Section 6.4.6.2.2 states that:

'*The same demographic assumptions (population, employment levels) are included in both the Do Minimum and Do Something scenarios. The bus network and frequency assumptions are also the same in both scenarios and are in line with the BusConnects bus network proposals. It is acknowledged, therefore, that the assessment is conservative in terms of the level of people movement that is predicted in the Do Something scenario*'.

The modelling assessed both the AM peak hour people movements and the PM peak hour people movements for both years, with the results as follows:

- Opening Year (2028):
    - A 49% reduction in the number of people travelling by car during the AM peak hour (Section 6.4.6.2.2.1); and
    - A 47% reduction in the number of people travelling by car during the PM peak hour (Section 6.4.6.2.2.2).
- Design Year (2043):
    - A 47% reduction in the number of people travelling by car during the AM peak hour (Section 6.4.6.2.2.3); and
    - A 42% reduction in the number of people travelling by car during the PM peak hour (Section 6.4.6.2.2.4).

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR also includes a general traffic assessment as described in Section 6.4.6.2.8, looking at the impacts along the Proposed Scheme as well as on adjacent roads which may experience traffic redistribution due to the reduction in capacity for general traffic along the route of the Proposed Scheme. This section of Chapter 6 states the following:

'*It should be noted that the Do Minimum and Do Something scenarios are based on the assumption that travel behaviour will remain broadly consistent over time and that car demand, used for this assessment, represents a reasonable worst-case scenario. It is possible that societal trends in the medium to long term may reduce car demand further due to the ongoing changes to travel behaviours and further shifts towards sustainable travel, flexibility in working arrangements brought on following COVID-19, and delayed car ownership trends that are emerging.*'

Overall, the findings of the general traffic assessment were that there would be reductions in general traffic flows along the Proposed Scheme resulting in a Positive, Significant and Long-Term impact. Therefore increased traffic congestion is not anticipated in the vicinity of Willow Park / Garrison Mews as a result of the Proposed Scheme.

With respect to the potential noise impacts, Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR describes the assessment of the potential noise and vibration impacts at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at the entrance to Shanganagh Vale (Reference Number CBC0013ANML009), on the opposite side of the N11 Bray Road from Garrison Mews / Willow Park as shown in Figure 9.2 (Sheet 9/10) in Volume 3, Part 3 of 3 of the EIAR. Figure 9.3 maps the potential noise impacts associated with the predicted Construction Phase traffic, with the N11 in front of Willow Avenue and Garrison Mews (Sheet 6) mapped with an impact significance rating of Imperceptible / Positive. Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for both years also giving an impact significance rating of Imperceptible / Positive at Willow Avenue and Garrison Mews, therefore the noise levels at this location are not modelled to significantly increase as a result of either the construction or operation of the Proposed Scheme.

It should also be noted that vegetation is not generally relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening. The proposals to add the eight new trees are not to provide noise mitigation but are to act as a visual screen and to act as an enhancement to the local public realm. With respect to mitigation for traffic noise during the Operational Phase, Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR states that:

'*The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme*'.

Regarding the comments on the requirement for a noise barrier under an existing planning permission, the failure of a developer to adhere to their planning conditions is a matter for the competent authority which granted the original planning permission and assigned those conditions. As outlined above, given that the impact assessments carried out for the Proposed Scheme predicts a reduction in traffic and therefore did not identify any potential significant change in noise above the current baseline as a result of both construction and operational traffic at this location, no specific mitigation measures were identified as being required as a result of the Proposed Scheme.

3.7.4.3 Safety, security and anti-social behaviour linked to tree planting strategy and increase in pedestrian footfall between N11 Stillorgan Road bus stops and Cherrywood Luas stop

Summary of issue raised

The Willow Park Residents submission expressed reservations regarding the proposed positioning of trees, with planting to be located away from the boundary wall. They foresee this giving rise to the formation of an antisocial area. The respondents have observed numerous instances of antisocial behaviour including graffiti, loitering, and theft and see effective deterrents as a vital element to be

considered as part of the Proposed Scheme. In a similar vein, the submission highlighted the prevalence of a littering problem owing to the lower height of the base of the existing wall. The submission also noted that saplings were previously planted within an area similar to the CPO area that were damaged or died shortly after planting.

The Willow Park resident's submission raised concerns that the increases in bus traffic will also increase foot traffic between the bus and Cherrywood Luas stop. The respondents foresee that this increased footfall will have negative impacts on sound, privacy, security, and safety. They note the urgency and necessity in providing a means of mitigation by way of a barrier.

The stated their concern regarding scooters, bicycles, and motorcycles using the Willow Park access, would increase traffic in the residential estate and safety concerns.

Response to issue raised

With respect to the planting of the proposed trees, the proposal is described in Section 4.5.2.8.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR where it states the following:

'*New trees are proposed in the grass verge at the service road north of Willow Avenue to offer increased separation and partial screening to the adjacent residential area*'.

With respect to the types of trees to be planted, the Landscaping General Arrangement Drawings which are provided as an Appendix in the 05-Landscaping General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR describes the types and sizes of the trees to be planted, namely three *betula utilis jacquemontii* and five *prunus 'kanzan'* trees, while the Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR states in Paragraph 5.20 (under the heading of 'Mitigation & Improvements') with respect to the new tree planting that:

'*This new planting should include a varied age and mix of tree species that are chosen with consideration to local site and environmental conditions, native environment, future use of the site, provision of ecosystem services and contribution that can be made to local communities. The aim should be to plant the 'right tree in the right place' to create a tree population that is both functional and resilient*'.

Section 10.4.4.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR considers the Community Amenity and for the Cabinteely area it is assessed that overall, the area will experience a '*Negative, Not Significant and Short-Term*' impact.

Refer to Section 3.4.3.8 on Safety, Security, Anti-Social Behaviour & Vandalism.

In summary, the case study demonstrates that improved travel infrastructure will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

Due to the location of the Willow Park residential estate and bus stops on the N11 along the Proposed Scheme corridor, that it can only be accessed by car and motorcycles via Wyattville Link Road (R118) from the Cherrywood Luas Stop. It is considered that the journey time associated with driving by car into the Willow Park to park and access the bus stops on the N11 via the Willow Park estate would be highly unattractive to potential bus passengers and will not lead to any significant increase in vehicular traffic within the estate. Similarly, for the pedestrians and scooters it can only be accessed safely via Wyattville Link Road (R118) and flat terrain footpath around the Wyattville Park land. It is considered that the existing substandard footway in step and vegetated terrain into the Willow Park would be highly unattractive due to safety reasons.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or safety concerns associated at this location.

3.8 Proposed Scheme at N11 Stillorgan Road

3.8.1 Description of Proposed Scheme at this Location

The existing lane configuration along the N11 Stillorgan Road between Mount Merrion Avenue and Loughlinstown Roundabout has for the most part been retained. Junction designs along the route have been reviewed in an attempt to remove left turn filter lanes crossing cycle lanes where possible.

Between Merrion Grove and Lower Kilmacud Road it is proposed to provide a bus lane and two general traffic lanes plus a one-way segregated cycle track in each direction. A new dedicated footpath is to be provided between the Lower Kilmacud Road and the Old Dublin Road (Stillorgan), and the Old Dublin Road (Stillorgan) and Trees Road Lower junctions on both sides of the Stillorgan Road. The new southbound footpath at this location will require an extension to the existing St Laurence's Park subway, where a new toucan crossing will also be provided across the Stillorgan Road. The slip road from the Stillorgan Road on to The Hill at Stillorgan is proposed to be closed.

The northbound cycle track north of Brewery Road has been diverted on to St Brigid's Church Road, additional traffic calming and footway improvement measures are proposed along the St Brigid's Church Road to accommodate this. A section of southbound cycle track has also been diverted on to Belmont Terrace at Galloping Green. A new pedestrian link is proposed to South Park from Bray Road in Cornelscourt, and to Shanganagh Vale from the Bray Road.

It is proposed to maintain one bus lane and two general traffic lanes in each direction between Wyattville Road and Loughlinstown Roundabout. Widening of the carriageway and a setback of existing vehicle restraint systems in front of the pedestrian footbridge will be provided on the southbound carriageway to ensure a continuous southbound bus lane through the Loughlinstown Roundabout.

Footpaths are not proposed as per existing infrastructure between the Old Bray Road and Cornelscourt Shopping Centre pedestrian bridge, and between Clonkeen Road and Johnstown Road junctions and between Johnstown Road junction and the new junction at Druid's Glen Road, as alternative walking routes exist on adjacent quieter roads.

A new footpath is proposed on either side of the Stillorgan Road at the new junction on the N11 Stillorgan Road at Druid's Glen Road which tie-in with the existing footpath towards Wyattville Road. Improvements have been made to cycle track provisions at the Wyattville Road Junction. The existing adjacent northbound Bray Road slip towards Cherrywood Road will be retained in its current two-way layout.

At the Loughlinstown Roundabout it is proposed to signalise the existing roundabout on three arms and to provide a continuous bus lane southbound through the junction towards Shankill.

In addition, new junction layouts have been proposed at all major junctions along this section to remove existing left turn slips and to provide improved cycle movements. The northbound U-turn Lane has been removed at the Westminster Road junction in order to facilitate a toucan crossing.

It is proposed that existing kerb lines will be retained and that the BusConnects Design Guide will be adhered to where possible along Section 2 of the Proposed Scheme.

All General Arrangement Drawings are provided as an Appendix in the 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR. The General Arrangement Drawings relevant to this section begin at Mount Merrion Avenue (Sheet 18) to Loughlinstown (Sheet 40).

3.8.2 Overview of Submissions Received

Table 3.23 below lists the 13 individual submissions made in respect of the Proposed Scheme at N11 Stillorgan Road.

Table 3.23: Submissions Made in Respect of at N11 Stillorgan Road

No	Name	No	Name	No	Name
6	Andrew Peet & Others	99	Jacqueline Kennedy	202	Tom Wade
9	Anne Austin	102	James & Victoria Fahey	207	Twomey's Supermarkets Limited
10	Anne Marie Murtagh	160	Pearse Nolan	212	William Riordan
12	Aoibhinn Maloney & Others	169	Redmond & Judith O'Leary		
59	Donagh O'Doherty	179	Sandra Maguire		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

- Removal of slip lanes for the junctions along the N11 Stillorgan Road section
- Investment and intervention to improve bus reliability
- Concern for cyclists along the N11 Stillorgan Road
- Concern on additional pedestrian crossing at Patrician Vilas along the N11 Stillorgan Road

Specific Issues Raised

- Newtown Park/ Leopardstown Junction
- Foxrock Church/ Kill Lane Junction
- Johnstown Junction

3.8.3 Common Issues Raised and Responses

3.8.3.1 Removal of slip lanes for the junctions along the N11 Stillorgan Road

Summary of issue raised

All the submissions noted above have raised concerns regarding the proposal to remove slip roads at all junctions along the N11 section, highlighting issues at few specific junctions. The following four junctions are particularly noted in the above listed in 13 number submissions:

- Newtown Park/ Leopardstown Junction
- Foxrock Church / Kill Lane Junction near
- Clonkeen Road Junction
- Johnstown Junction

Majority of the submissions raised particular concern is the knock-on on effects to vehicular traffic with many respondents anticipating increased traffic congestion both along the N11 Stillorgan Road mainline and other connecting roads, anticipated with the removal of slip roads and prevalence of stacked vehicles along the left lanes.

Multiple submissions highlighted their concerns regarding the potential for increased noise and pollution owing to increased traffic congestion. There are concerns regarding increases in CO_2 emissions due to idling engines in congested traffic and not in response to climate change.

Concern the benefits to road users is minimal and therefore there is no justification for the impact on road safety and the safety of pedestrians. Few believe pedestrian lights at the slip lane provide for safety for pedestrians.

One submission raised concern regarding loss of through traffic in Deansgrange which would be detrimental to small businesses, the economy, and community in Deansgrange.

One submission noted that the removal of filters and slip lanes will not improve bus times along the corridor.

One submission queried regarding the enforcement of bus lanes.

One submission queried why left turn slip lane has been retained at Newtown Park/ Leopardstown Junction and not at other junction e.g. Kill Lane.

One submission observed that a more effective approach would be to implement measures in areas in which congestion has a greater impact on public transport and safety of non-vehicular road users. They also observed that the priority for intervention should be for urban areas and that the removal of slip roads in suburban areas should be avoided.

In general, the view is the almost blanket removal of left turning slip lanes is excessive and unnecessary. The rationale between retaining and removing the left turning slip lanes is not clear, many of the junctions where the proposal to remove them applies are just as busy as where there is a proposal to retain.

Response to issue raised

Removal of slip lane along the N11 Stillorgan Road and congestion

Section 2.2.2 of Design Manual for Urban Roads Standards (DMURS) sets out user priorities. Slip lanes allow vehicles to take corners onto slower roads at much higher speeds, increasing risk of death or significant injury to a pedestrian should there be a collision. Additionally, slip lanes increase the crossing distances for pedestrians and often leave them in a vulnerable location waiting on isolated traffic islands for crossing signals.

To enhance movement by pedestrians and cyclists, the removal of slip lanes will be undertaken at appropriate locations, together with consideration of junction signalling changes. This will better balance the use of the junction between motorised and vulnerable modes, and in urban areas, junctions will be designed so as footpaths on side roads will be carried through at-grade, where practicable and safe to do so. The removal of slip lanes helps to provides safe junction design for both cyclists and pedestrians while achieving bus priority.

The junction types set out in the PDGB directly align to the Proposed Scheme core aims and objectives. One of the core aims of the Proposed Scheme is to:

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

The Netherlands has one of the highest rates of bicycle use in the world, provides the widest range of cycling know-how and is famous worldwide for its cycling infrastructure. The 'Ontwerpwijzer Fietsverkeer' (Dutch Cycle Design Guide) was used during the development of the PDGB. Of particular interest to the NTA, was how the design of junctions could be improved to offer better protection to cyclists.

The typical protected junction layout is presented in Image 16 of Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR and shown in Figure 3.115 below, offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the

cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

- Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- Raised and protected cycle track approaching junction;
- Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- Improved right-turning safety; and
- Improved sight lines for left turning traffic.

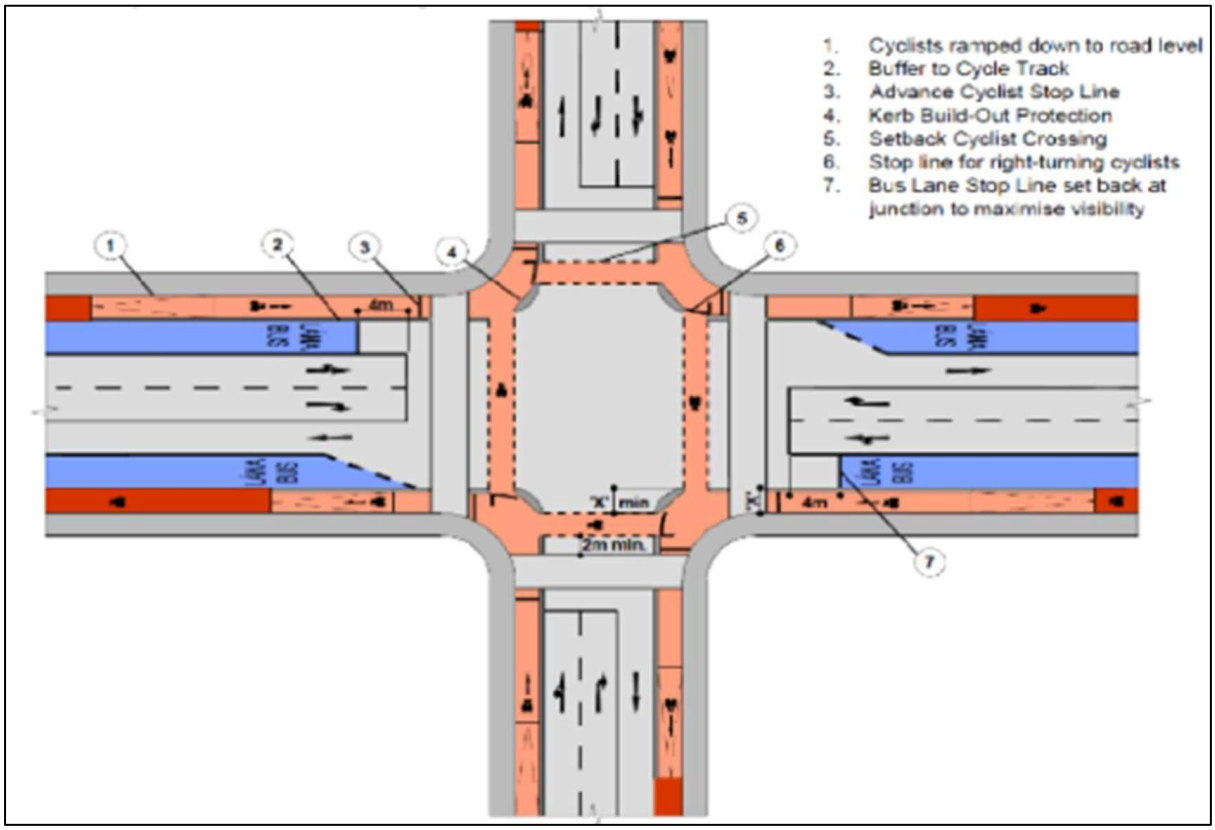


Figure 3.115: Typical Junction Layout from BusConnects Design Guidance Booklet (Image 16 from PDGB)

52 of the 54 key junctions on the Proposed Scheme have implemented this approach to achieve optimum operational effectiveness including the efficient movement of cyclists. Introducing separate signal phases will increase delay for cyclists at junctions. This arrangement will promote the sustainable mode hierarchy for cyclists at junctions by providing priority to ahead cyclists over left turning vehicles. At each of these junctions the left turning vehicle traffic volumes in these locations are estimated to be less than the 150 PCU threshold and similarly low HGV volumes are estimated in line with the principles established by international guidance. The Proposed Scheme has also been subject to Road Safety Audits at different stages that have informed the design development of the Proposed Scheme. Separately, the NTA, DLRCC, WCC, and DCC will continue to promote the already established driver awareness campaign that seeks to promote driver awareness in line with the Road Safety Authority rules of the road as noted below.

'When turning left, or right, all drivers must watch out for cyclists going ahead or turning. When making a turn, watch out for cyclists in front of you or coming up on your left or right. Do not overtake a cyclist as you approach a junction if you are turning left or right, as the cyclist may be continuing straight ahead.'

The Proposed Scheme has been designed to achieve the stated objectives, and this allows for all junctions in practice to operate on an adaptive basis, permitting priority to be applied to different modes. The EIAR as submitted has robustly addressed this matter.

All junctions within the Proposed Scheme have been designed taking into consideration anticipated demands and predicted operation. Staging and signal times have been proposed on the basis considering multiple factors including safety and demand.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a General Traffic Impact Assessment Summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. The Proposed Scheme shows that there:

'Is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year'.

This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact which on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

Increase in pollution, noise and climate change impact

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. For the traffic assessment, the focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figures 7.3 to 7.8 in Volume 3, Part 3 of 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) during the Operational Phase (Figures 7.3 to 7.5). For the sensitive receptors along the N11Stillorgan Road (Sheets 1 to 3 in each Figure), the modelling has found that the significance of the change will be Negligible to Substantial Beneficial with respect to NO_2, and Negligible for both PM_{10} and $PM_{2.5}$. Therefore, the air quality assessment has found that the Operational Phase of the Proposed Scheme will not result in a significant increase in those pollutants associated with traffic at the nearest sensitive receptors along the N11, which aligns with the modelled reduction in traffic flows as outlined above. The chapter also states that the impact of the operation of the Proposed Scheme on the regional air quality will be overall 'Neutral and Long-term'.

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there were nine attended noise monitoring locations within Section 2 of the Proposed Scheme (along the R138 / N11 Stillorgan Road) as shown in Figure 9.2 (Sheets 2 to 10) in Volume 3, Part 3 of 3 of the EIAR. The results of the survey for Section 2 of the Proposed Scheme are described in Section 9.3.2.2 as:

'*The noise survey results within this geographical section are dominated by road traffic noise from R138 Stillorgan Road and N11 Stillorgan Road / Bray Road, in addition to traffic along the surrounding road network and a small contribution from localised urban sources e.g. pedestrian movements*', with the average daytime noise level being measured at 66dB $L_{Aeq,T}$ and the average 24-hour noise level being measured at 71dB L_{den}.

Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for both the Opening Year and Design Year giving an impact significance rating of Slight to Imperceptible / Positive for the length of the R138 / N11 Stillorgan Road (Sheets 2 to 6 in both figures). As stated in Section 9.4.4.1.1.5:

'*Along the Proposed Scheme, a Direct, Positive, Moderate and Short to Medium-Term impact to a Direct, Negative, Slight and Short to Medium-Term impact is calculated (Table 9.16). This is as a result*

of a reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, a bus gate, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths'.

Figures 9.4 and 9.5 also show the modelled significance of noise impacts on the surrounding road network as a result of modelled traffic redistribution, with those impacts described in Section 9.4.4.1.1.5. The chapter states that:

'*Along the majority of roads off the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to be Indirect, Positive, Moderate and Short to Medium-Term impact to Indirect, Negative, Slight to Moderate and Short to Medium-Term impact (Table 9.17) for the majority of roads due to the negligible to low volume of additional traffic added once the Proposed Scheme becomes operational.*

There are a small number of roads in the overall study area where there are potential initial significant impacts. These are defined as roads with a daytime traffic noise level above 55 dB $L_{Aeq,16hr}$ *and an increase in noise level greater than 3 dB. All roads with potential initial significant impacts are located off the Proposed Scheme and are indirectly impacted by redistributed traffic during daytime periods*'.

In the Opening Year, the highest potential noise impacts are calculated on a section of Clonkeen Road, north of Beech Park Road where the overall impact is determined to be 'Indirect, Negative, Moderate to Significant and Short to Medium-Term' (Table 9.47). In the Design Year, the potential noise impacts on the surrounding road network are generally reduced, with the same stretch of Clonkeen Road remaining the most impacted, with the overall impact reducing to 'Indirect, Negative, Moderate and Long-Term' (Table 9.48). Section 9.4.4.1.1.6 outlines that this assessment is a worst-case as follows:

'*For the roads assessed in Table 9.47 to Table 9.48, the majority of the fleet type is comprised of cars and LGVs. Given the same power type (ICE) has been assumed for both the Do Minimum and Do Something scenarios, the relative change in traffic noise remains the same for these roads, irrespective of the vehicle power.*

The range of traffic noise levels calculated along these roads have the potential to be lower during the future year scenarios as a result of the conversion from ICE to EVs and HEVs, particularly along residential roads with speeds lower than 30km/hr. In addition, an overall reduction in engine noise will occur at junctions and roundabouts. The calculated traffic noise level for these roads is therefore considered a robust analysis and to be worst-case.

Along the Proposed Scheme the fleet type is a mixture of buses, cars, LGVs with a portion of HGVs. The change in noise levels is determined to be Neutral to Positive and Moderate along the Proposed Scheme for both the Opening Year (2028) and the Design Year (2043) due to reduced overall traffic volumes. Given the same fleet type (ICE) has been assumed for both the Do Minimum and Do Something scenarios, the relative change in traffic noise remains the same for these roads irrespective of the vehicle power type.

Notwithstanding, it is likely that a further reduction in overall noise level will occur along the Proposed Scheme due to the transition towards a full EV and HEV bus fleet. This reduction will occur irrespective of the Proposed Scheme. An overall reduction in engine noise from buses will occur at junctions, roundabouts and bus stops. The calculated traffic noise level assuming ICEs for all fleet is therefore considered a robust analysis and to be worst-case.'

Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'The Proposed Scheme has the potential to reduce CO_2*eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively.'*

Localised traffic impact at Deansgrange

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, Section 6.4.6.2.8, road links that have been identified as experiencing additional traffic volumes, were assessed using a threshold impact assessment. The threshold impact assessment identified that Kill Lane / N11 Stillorgan Road junction will have less than a 5% increase on turning flows at junctions. This means that Kill Lane / N11 Stillorgan Road junction would operate well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios.

In Section 6.4.6.2.8 it mentions road links that have been identified as experiencing additional traffic volumes, were assessed using a threshold impact assessment. The threshold impact assessment identified that Clonkeen Road / N11 Stillorgan Road junction will have less than a 5% increase on turning flows at junctions. This means that Clonkeen Road / N11 Stillorgan Road junction would operate well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios.

Kill Lane and Clonkeen Road both experience an increase in traffic flows during the AM and PM Peak hours, although it is determined that there will be an overall '*Negative, Low and Long-Term'* effect impact from the redistributed general traffic as a result of the Proposed Scheme. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area. It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.

Improved Journey Time Reliability

Section 6.4.6.2.5.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR demonstrates the average bus journey time savings, in both the AM and PM peak hour. The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures.

Section 6.4.6.2.5.2 shows that the Proposed Scheme will '*deliver average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043 from the implementation of bus priority measures. The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM).*'

Enforcement of Bus Lane

The NTA acknowledges the comments raised in relation to a request for camera enforcement at bus lanes, bus priority signals, bus gates, and turning restrictions. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána, the NTA is separately exploring proposals and methods for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

Impact at Leopardstown Junction

At Leopardstown Junction Type 2 Junction as have proposed as per the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (NTA 2021), based on the left turning traffic numbers and physical space available.

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a General Traffic Impact Assessment Summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. The Proposed Scheme shows a reduction in traffic flows along Leopardstown Road, *'there is a reduction of -309 of combined flows during the AM peak hour and a reduction of -204 of combined flows during the PM peak*'. This is attributed to the Proposed Scheme and the associated modal shift from the introduction of bus priority measures. This reduction in general traffic flow has been determined as an overall long-term positive impact as a result of traffic redistribution following the delivery of the Proposed Scheme.

3.8.3.2 Investment and Interventions to improve bus reliability

Summary of issue raised

The submission considered that investment in alternative Public Transport approaches such as the improvement in the bus service operations would be of greater benefit.

The submission questioned whether public funds are best spent on delivering solutions for which they believe to be unnecessary or detrimental to their communities. The two submissions have noted their objection to improving the public transport system at the expense of private vehicle ownership. However, submissions are generally in favour of improvement to public transport systems.

One respondent considered an alternative intervention of improving the predictability, capacity, and reliability of bus services would serve as a more beneficial solution than the Proposed Scheme.

One submission raised reservation regarding the degree in which a modal shift will be achieved. The submissions stated that is the expected modal shift is not achieved, that the CO2 emissions will increase.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in one of the submissions to support improvement of bus services.

Need for the Proposed Scheme

Chapter 2 (Need of the Proposed Scheme) in Volume 2 of the EIAR outlines the need for the Proposed Scheme and notes the following:

'*Sustainable transport infrastructure assists in creating more sustainable communities and healthier places to live and work while also stimulating our economic development and contributes to enhanced health and well-being when delivered effectively.*

The key radial traffic routes into and out of Dublin City Centre are characterised by poor bus and cycle infrastructure in places. Effective and reliable bus priority can be achieved through a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 69% of the route of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 47% of the route of the Proposed Scheme providing segregated cycle tracks. Furthermore there are key sections of the current bus lanes that are not operational on a 24-hour basis. Additionally bus lanes are being shared with both formal and informal parking facilities and cyclists. These conditions compromise the reliability and effectiveness of the bus services in these areas.

Private car dependence has resulted in significant congestion in the Greater Dublin Area (GDA) that has impacted on quality of life, the urban environment, and road safety. The population of the GDA is projected to rise by 25% by 2040 (National Planning Framework 2018), reaching almost 1.5 million. This growth in population will increase demand for travel necessitating improved sustainable transport options to facilitate this growth.

Without intervention, traffic congestion will lead to longer and less reliable bus journeys throughout the region and will affect the quality of people's lives. The Proposed Scheme is needed in order to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor through the provision of enhanced walking, cycling and bus infrastructure on this key access corridor in the GDA. The objectives of the Proposed Scheme are to:

- *Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements;*
- *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;*
- *Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;*

- *Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;*

- *Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and*

- *Ensure that the public realm is carefully considered in the design and development of transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.*

The objectives outlined above relating to enhancing capacity of the public transport system and enhancing safe infrastructure for cycling are underpinned by the central concept and design philosophy of People Movement. People Movement is the concept of the optimisation of roadway space and/or the prioritisation of the movement of people over the movement of vehicles along the route and through the junctions along the Proposed Scheme. The aim is to reduce journey times for modes of transport with higher person carrying capacity modes (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

The need for the Proposed Scheme is to respond to current deficiencies in the transport system at a Regional and Local level is set out in Section 2.2.

The delivery of the Proposed Scheme is supported by International, European Union, National, Regional and Local strategies, policies, and plans. The key policy and planning documents are described in Section 2.3, including the manner in which the need for the Proposed Scheme is supported by the relevant policies and objectives.

Finally, Section 2.4 describes the benefits that will accrue from the provision of the Proposed Scheme.

Investments in high quality public transport infrastructure and systems have been proven to result in significant modal shift. Indeed, in Dublin the Canal Cordon Report (National Transport Authority (NTA) 2019a) outlined that in 2019 (prior to COVID-19 restrictions) travel by sustainable modes accounted for 72% of all trips into Dublin City Centre, compared to 59% in 2010. This positive improvement in sustainable mode uptake was facilitated by investment in walking, cycling and bus infrastructure, Luas Cross City and the re-opening of the Phoenix Park Tunnel in addition to investments in systems such as Leap Card and Real Time Passenger Information.'

Bus Reliability and Modal Shift

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR demonstrates the average bus journey time savings, in both the AM and PM peak hour. The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures.

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that the Proposed Scheme will '*deliver average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043 from the implementation of bus priority measures. The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM).*'

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling on this key access corridor in the Dublin region.

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport.

Section 6.4.6.2.2 in Chapter 6 (Traffic & Transport) Volume 2 of the EIAR notes that the Opening year 2028 AM scenario shows '*an increase of 40% in the number of people travelling via bus and an increase of 108% in people walking or cycling along the Proposed Scheme during the AM Peak Hour*'. These are referenced from Table 6.43 Modal Shift of 2028 AM Peak Hour along Proposed Scheme by hourly trips and modal split per scenario, see Table 3.24 and shown in Figure 3.116 (reproduced from Diagram

6.6 in Chapter 6). The results indicate a 44% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 3.24: Modal Shift of 2028 AM Peak Hour Along Proposed Scheme (Extract from Table 6.43 of Chapter 6 EIAR Volume 2)

Table 6.43: Modal Shift of 2028 AM Peak Hour Along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Inbound towards the City Centre	AM Peak Period	General Traffic	1,290	40%	660	19%	-630	-49%
		Public Transport	1,830	56%	2,560	73%	730	40%
		Walking	100	3%	120	3%	20	20%
		Cycling	30	1%	150	4%	120	400%
		Combined Walking / Cycling	130	4%	270	8%	140	108%
		Sustainable Modes Total	**1,960**	**60%**	**2,830**	**81%**	**870**	**44%**
		Total (All modes)	**3,250**	**100%**	**3,490**	**99%**	**240**	**7%**

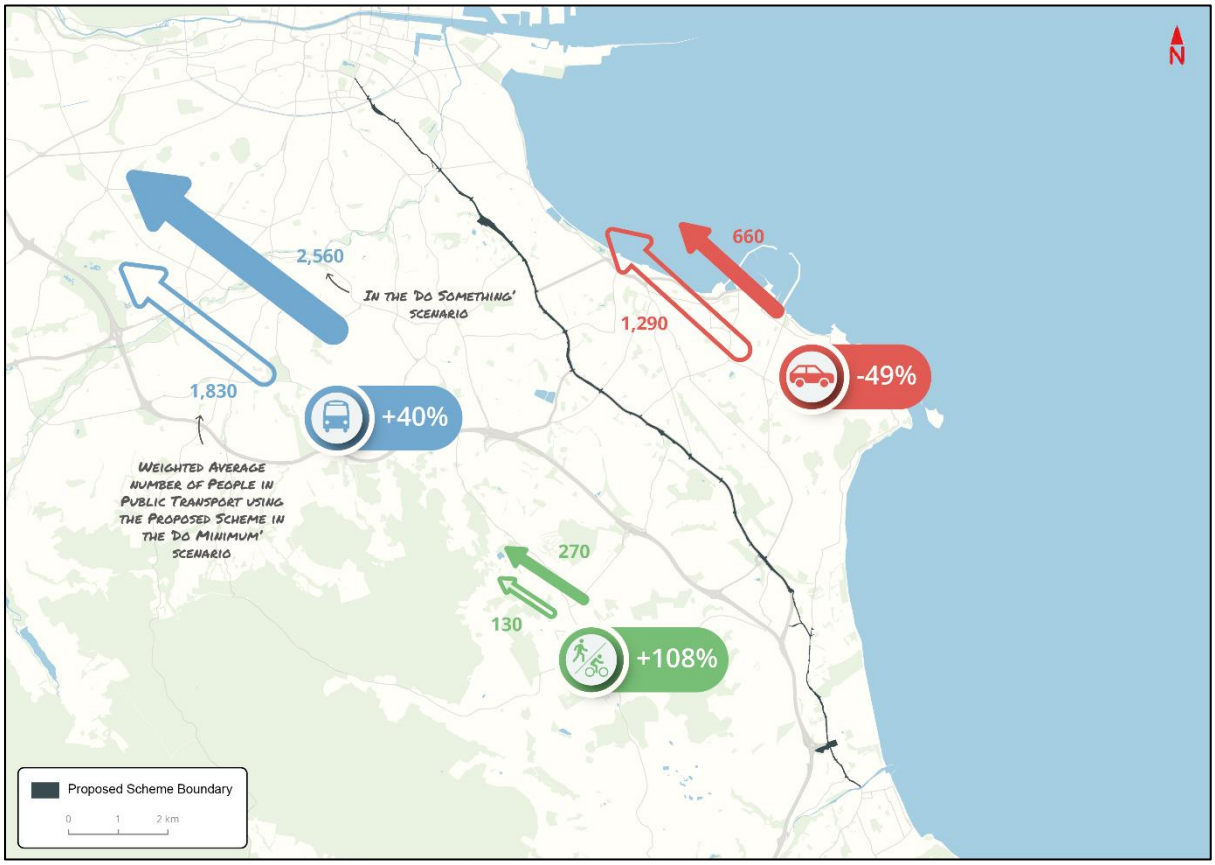


Figure 3.116: Extract from Chapter 6 EIAR Weighted Average People Movement by Mode During 2028 AM Peak Hour (Diagram 6.6)

Similarly for the PM scenario, there is an increase of 17% in the number of people travelling via bus and an increase of 67% in people walking or cycling along the Proposed Scheme during the PM Peak Hour. These are referenced from Table 6.44 Modal Shift of 2028 PM Peak Hour along Proposed Scheme by hourly trips and modal split per scenario, see Table 3.25 and shown in Figure 3.117 (reproduced from Diagram 6.7 in Chapter 6). The results indicate a 21% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 3.25: Modal Shift of 2028 PM Peak Hour Along Proposed Scheme (Extract from Table 6.44 of Chapter 6 EIAR Volume 2)

Table 6.44: Modal Shift of 2028 PM Peak Hour Along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Outbound from the City Centre	PM Peak Period	General Traffic	1,270	38%	670	21%	-600	-47%
		Public Transport	1,930	57%	2,260	70%	330	17%
		Walking	150	4%	160	5%	10	7%
		Cycling	30	1%	140	4%	110	367%
		Combined Walking / Cycling	180	5%	300	9%	120	67%
		Sustainable Modes Total	**2,110**	**62%**	**2,560**	**79%**	**450**	**21%**
		Total (All modes)	**3,380**	**100%**	**3,230**	**100%**	**-150**	**-4%**

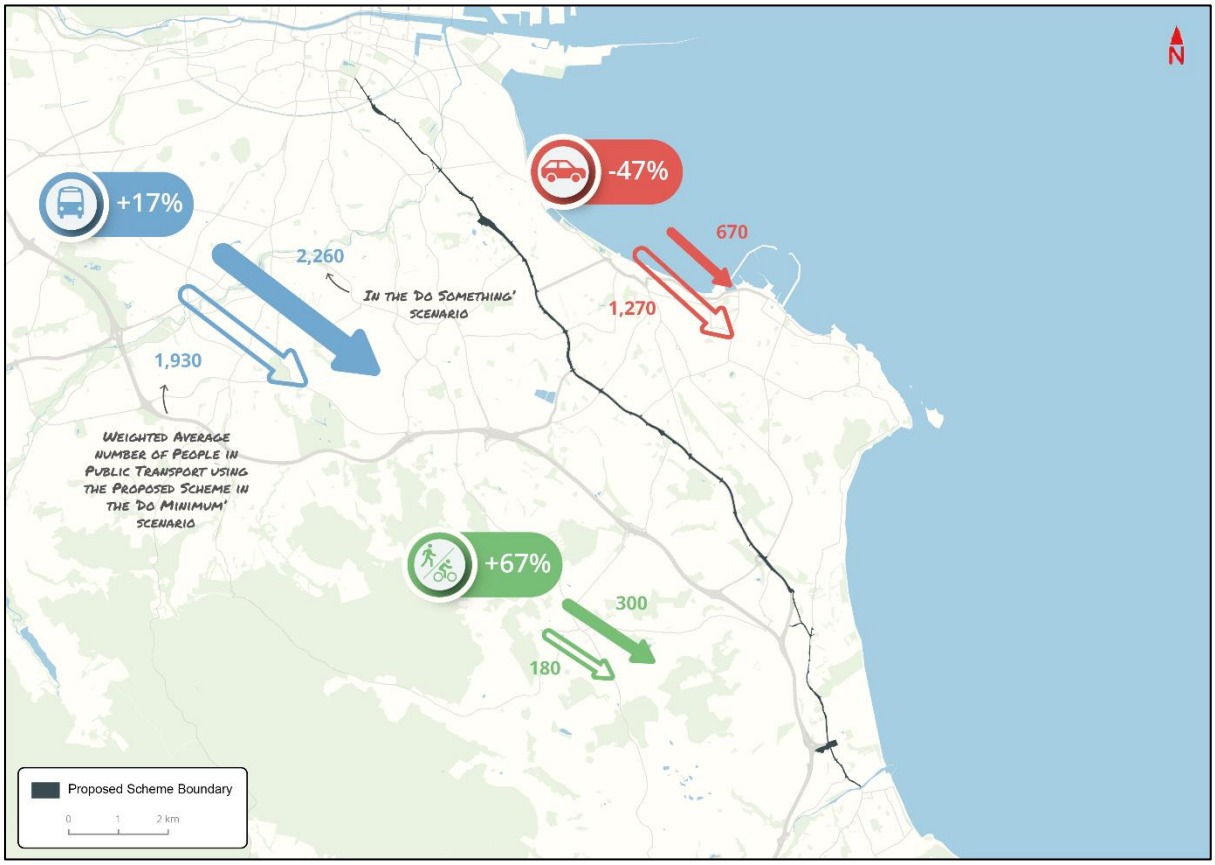


Figure 3.117: Extract from Chapter 6 EIAR Weighted Average People Movement by Mode During 2028 PM Peak Hour (Diagram 6.7)

A traffic redistribution assessment was carried out to determine the impacts of the Proposed Scheme on general traffic movements along the indirect study area. From Section 6.4.6.3, Operational Phase Summary, the results of the assessment demonstrate that the surrounding road network has the capacity to accommodate the redistributed general traffic as a result of the Proposed Scheme. The majority of assessed junctions that required further traffic analysis have Volume to Capacity ratios that are broadly similar before and after the Proposed Scheme implementation. Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be reduction in general traffic flows along the Proposed Scheme will be Positive, Significant and Long-term whilst the impact of the redistributed general traffic along the surrounding road network will be Negative, Moderate and Long-term. Thus, overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the Proposed Scheme objectives of providing enhanced sustainable mode priority along the direct study area.

In the absence of the Proposed Scheme, bus services will be operating in a more congested environment, leading to higher journey times and lower reliability for bus journeys. This limits their attractiveness to users, and this will lead to reduced levels of public transport use, making the bus system less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will also significantly limit the potential to grow those modes into the future.

On the whole, the Proposed Scheme will make a significant contribution to the overall aims of BusConnects that is a key part of the GDA Strategy and will enable the city to grow sustainably into the future. This would not be possible in the absence of the Proposed Scheme.

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, shows how the Proposed Scheme will impact on bus journey times along the corridor, outputs for the E1 service, which traverses the entire length of the Proposed Scheme, have been extracted from the model. The assessment is based in the context of the full implementation of the BusConnects network re-design in both the Do Minimum and Do Something scenarios, with the Proposed Scheme servicing the E-Spine services.

The Proposed Scheme will deliver an '*average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043*'. Furthermore, results presented in Diagram 6.14 in Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and shown in Figure 3.118 below suggests an improvement in bus journey time reliability in all 4 core scenarios as indicated by the reduced ranges of journey times achieved with the individual durations focused much closer to the average journey times (lower standard deviation) in the Do Something scenario (blue dots) with the Proposed Scheme in place compared to the more dispersed range in the Do Minimum scenario (red dots).

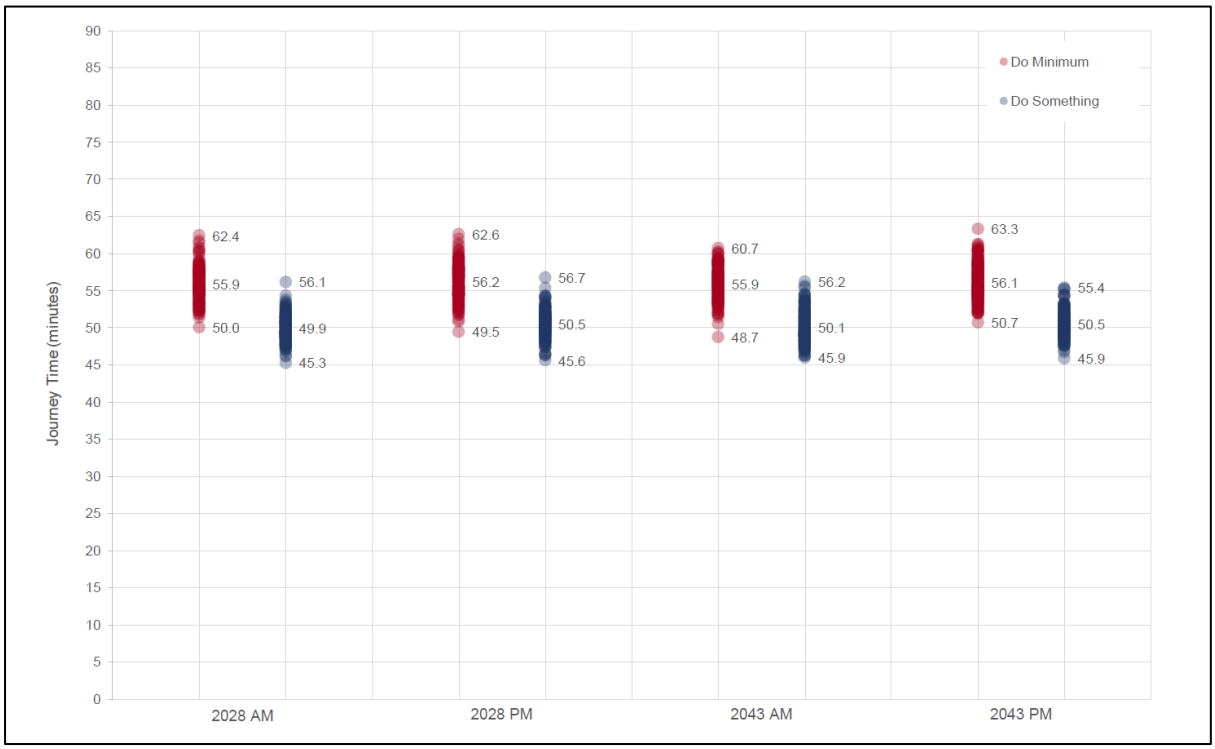


Figure 3.118: Extract from Chapter 6 EIAR E1 Bus Journey Times (Inbound Direction) (Diagram 6.14)

The Proposed Scheme will deliver an *'average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM)'*. Furthermore, results presented in Diagram 6.19 in Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR and shown in Figure 3.119 below suggests an improvement in bus journey time reliability in all four scenarios as indicated by the reduced ranges of journey times achieved with the durations focused much closer to the average journey times (lower standard deviation) in the Do Something scenario (blue dots) with the Proposed Scheme in place compared to the more dispersed range in the Do Minimum scenario (red dots). Note that the variation in journey times shown above are based on one set of predicted flows for the Do Minimum and Do Something scenario. Traffic flows fluctuate daily which would mean that the variation in journey times would be much greater in the Do Minimum with

any increases in traffic flows compared to the protection of journey time reliability provided by the bus priority measures that comprise the Proposed Scheme.

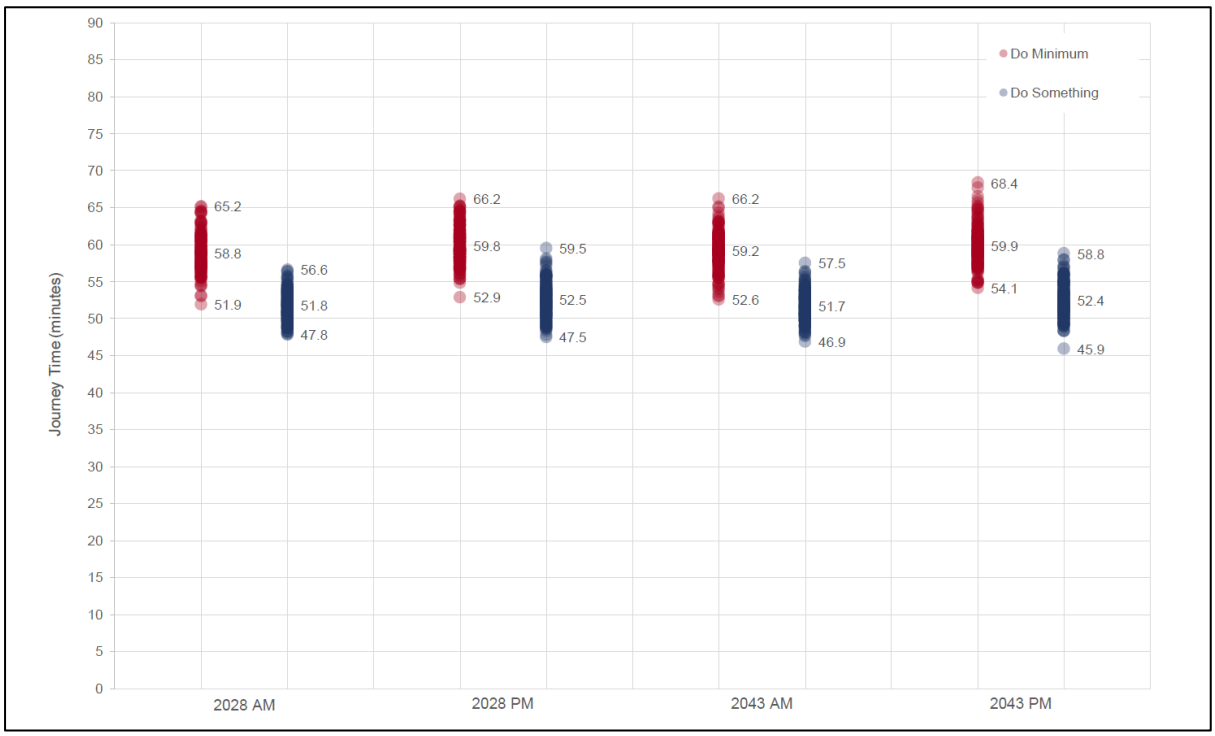


Figure 3.119: Extract from Chapter 6 EIAR E1 Bus Journey Times (Outbound Direction) (Diagram 6.19)

Cumulative journey time savings can be seen in the Proposed Scheme along the CBC due to the introduction of signal-controlled priority at junctions which offer active control at intersections and therefore help to reduce congestion.

3.8.3.3 Concern for cyclists along the N11 Stillorgan Road

Summary of issue raised

The submission raised concern regarding the impact of cyclists using the N11 Stillorgan Road. The submission suggested it would be safer to have cyclists cross the N11 Stillorgan Road not along it, many less confident cyclists may not want to travel on such a main road, using parallel roads and parks instead. Request alternative cycling routes on adjacent quieter roads should exist as with walking plans.

The submission suggested placement of bus stop at better location, mentioning Kill Lane junction as an example.

Response to issue raised

Section 2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR sets out the objectives of the Proposed Scheme, which are noted in response to Section 3.8.3.2.

In order to achieve these objectives, it is essential to enhance pedestrian and cyclists safety, as well as providing priority to bus movement over general traffic movements, particularly at road junctions, including segregating cyclist from general traffic wherever practicable.

The GDA Cycle Network Plan 2013 was key in assessing the cycling infrastructure along the Proposed Scheme. The GDACNP 2013 proposed a network of cycle links throughout the GDA, categorised as follows:

- *'Primary Routes: Main cycle arteries that cross the urban area and carry most cycle traffic;*
- *Secondary Routes: Link between principal cycle routes and local zones;*
- *Feeder Routes: Cycle routes within local zones and/or connections from zones to the network*

- *levels above;*
- *Inter-Urban Routes: Links the towns and city across rural areas and includes the elements of the*
- *National Cycle Network within the GDA; and*
- *Green Route Network: Cycle routes developed predominately for tourist, recreational and leisure*
- *purposes but may also carry elements of the utility cycle route network above. Many National Cycle Routes will be of this type.'*

The GDA Cycle Network Plan 2013 references that '*N11 Stillorgan Road is a Primary Route of the GDA Cycle Network Plan*'. Segregated cycling facility already existing along the entire N11 section which have been retained and improved as part of the Proposed Scheme. Segregated cycling infrastructure along the N11 Stillorgan Road will provide a safe direct route along the Proposed Scheme corridor connecting City to Donnybrook to Stillorgan and further Shankill and Bray.

Typical cross-section with segregated cycling infrastructure is proposed as per Section 5 and Figure 8 of the Preliminary Design Guidance document, part of Appendix 4.1 in Chapter 4 (Proposed Scheme Description) in Volume 4, Part 1 of 4, as shown in Figure 3.120 below. The desirable minimum width for a single-direction, with-flow, raised-adjacent cycle track is 2.0m. This arrangement allows for two-abreast cycling. Based on the National Cycle Manual (NCM) Width Calculator; this allows for overtaking within the cycle track. The minimum width is 1.5m, which, based on the NCM Width Calculator, allows for single file cycling. Localised narrowing of the cycle track below 1.5m may be necessary over very short distances to cater for local constraints (e.g. mature trees). Table 4.9 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, lists the locations along the N11 section where the cycle track width has been relaxed from the desirable 2.0m.

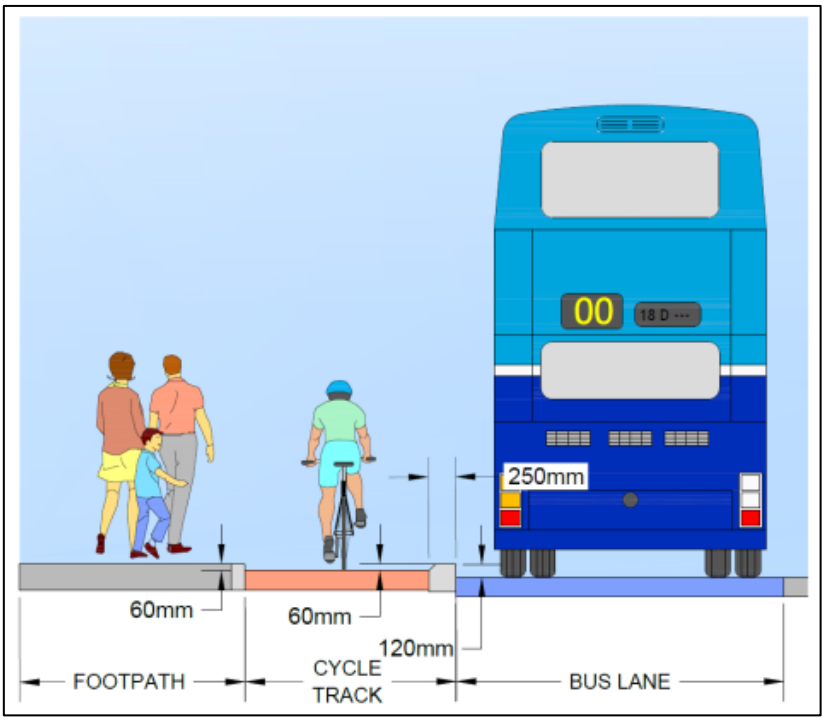


Figure 3.120: Extract from BusConnects Preliminary Design Guidance Document (Figure 8)

Image 2.1 and Image 2.2 in Section 2.2.1.4 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and shown in Figure 3.121 and Figure 3.122 below shows the extract from the GDA CNP 2013 highlighting the Primary Route S01/ N10, which runs along the Proposed Scheme.

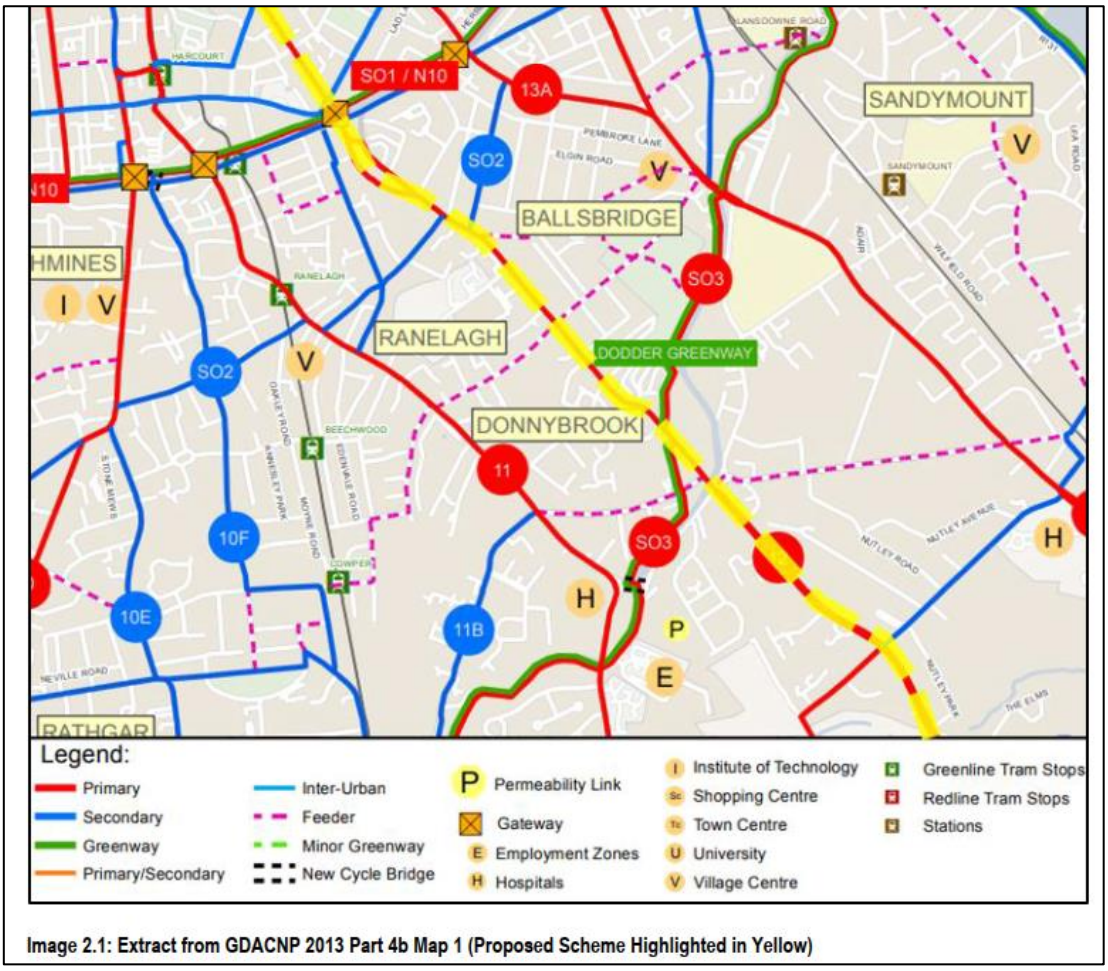


Image 2.1: Extract from GDACNP 2013 Part 4b Map 1 (Proposed Scheme Highlighted in Yellow)

Figure 3.121: Extract from EIAR Chapter 2 showing GDA CNP 2013 (Image 2.1)

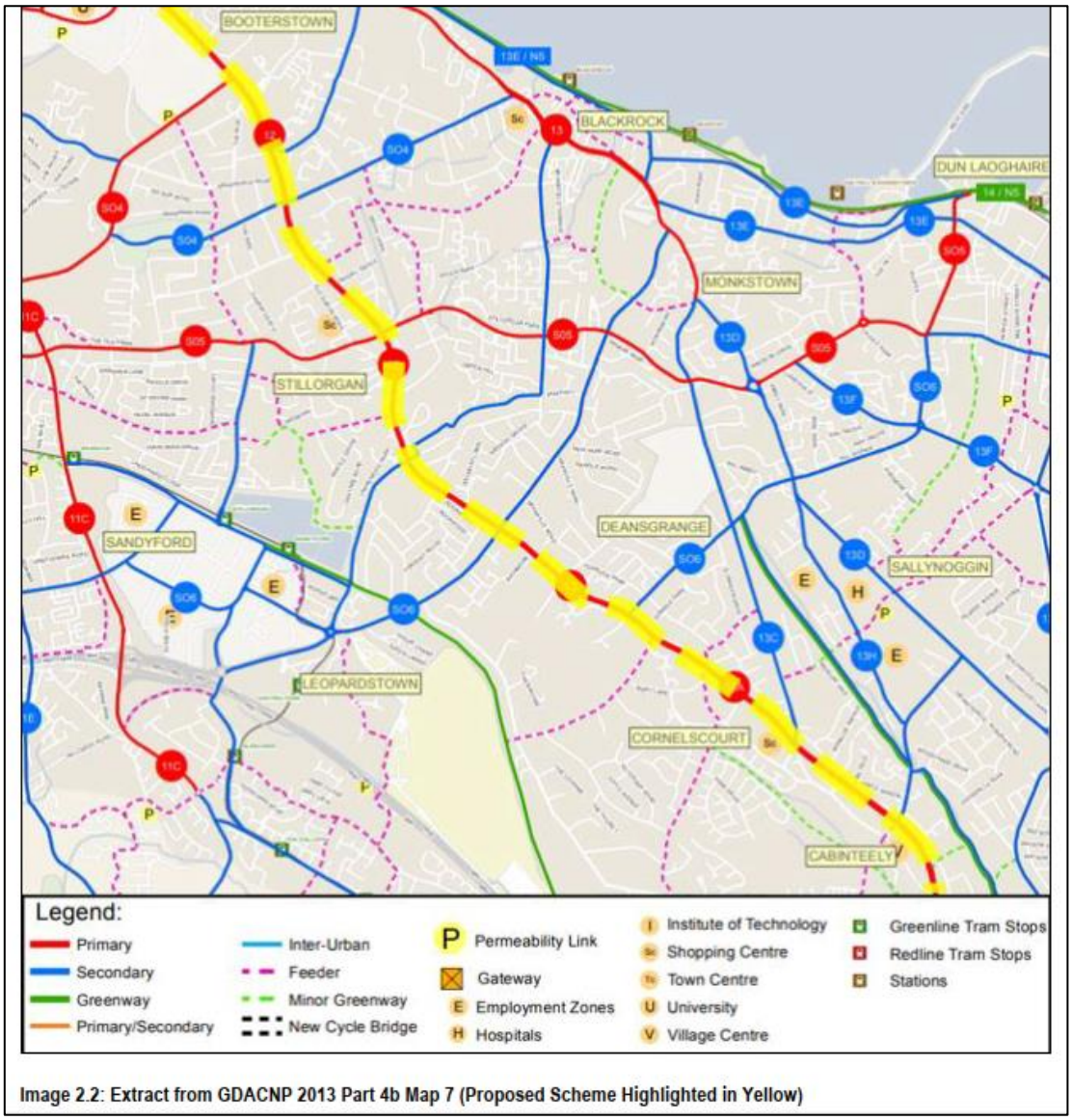


Image 2.2: Extract from GDACNP 2013 Part 4b Map 7 (Proposed Scheme Highlighted in Yellow)

Figure 3.122: Extract from EIAR Chapter 2 showing GDA CNP 2013 (Image 2.2)

Bus Stops

As noted in Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR:

'To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.

- The criteria for consideration when locating a bus stop are as follows:
- Driver and wait*ing passengers are clearly visible to each other;*
- Location close to key facilities;
- Lo*cation close to main junctions without affecting road safety or junction operation;*
- Location to minimise walking distance between interchange stops;
- Where there is sp*ace for a bus shelter;*
- Location i*n pairs, 'tail to tail' on opposite sides of the road;*
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and

- Adequate footway width.

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as part of the Preliminary Design Report and set out in Bus Stop Review Report, Appendix H, and specifically in Appendix H2 (Bus Stop Review Analysis), using the methodology as set out in Appendix H1 (Bus Stop Review Methodology) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis Appendix H2 notes the following in relation to the existing bus stops on Kill Lane Junction at this section of the Proposed Scheme:

Bus Stop 5128 and 7362

'No change from existing.

No change from existing for local stop'

3.8.3.4 Concern on additional pedestrian crossing at Patrician Vilas

Summary of issue raised

The submission notes concern on the proposal of a surface level pedestrian crossing just north of the Stillorgan Park Road intersection due to this area having too many lights and being directly near the existing underpass. Suggestion to divide the underpass between pedestrians and cyclists.

Response to issue raised

Refer to Section 3.4 in this report for further information on the Proposed Scheme at Patrician Villas and in particular Section 3.4.3.1 on Need for the New Pedestrian Link, 3.4.3.3 on Need for New Toucan Crossing, and Section 3.4.3.4 on Relocation of Bus Stop.

3.8.4 Other Issues Raised and Responses

3.8.4.1 Newtown Park / Leopardstown Junction

Summary of issue raised

Submissions raise concerns regarding design at Leopardstown Junction and the proposal to eliminate current slip road arrangement. One submission raised concerns regarding increased traffic along the Leopardstown Road due to new proposed residential development and increased traffic intensity into Whites Cross. Residents believe there will be more vehicle using the intersection, at a slower pace, which will have a direct impact of the quality of our lives.

One submission note the following concern at the Leopardstown Junction due to removal of slip lane:

- When travelling north on the N11 Stillorgan Road to turn left onto Leopardstown Road, the introduction of a filter light with no slip lane will lead to a larger number of vehicles waiting to make the turn
- When travelling east on Leopardstown Road to turn left onto the N11, the elimination of the slip lane will increase the amount of traffic waiting to get through the intersection.
- The opening of the school will place an additional burden on the intersection resulting in more cars going more slowly
- The number of motorists who cut through local residential neighbourhoods of Westminster and Torquay Woods to avoid Whites Cross will continue to increase.

Response to issue raised

The Proposed Scheme design at Newtown Park / Leopardstown Junction is shown in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 25 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.123 below.

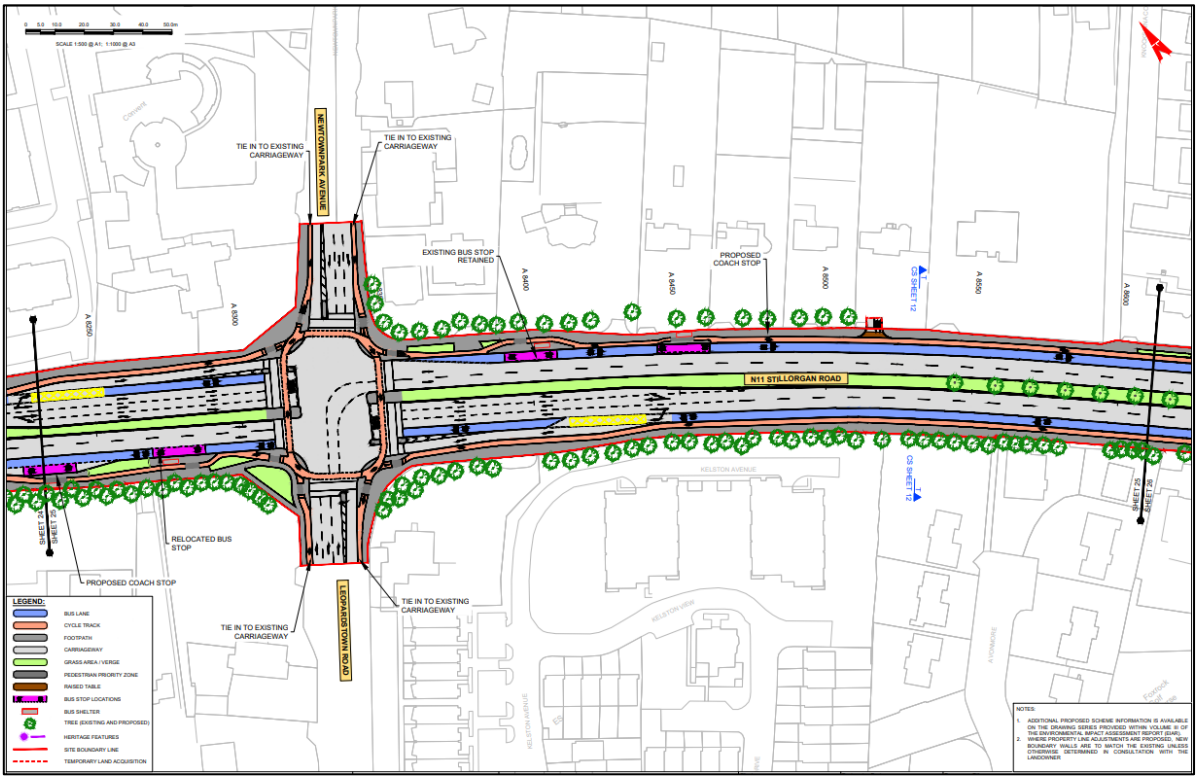


Figure 3.123: Extract from General Arrangement Drawings at Newtown Park / Leopardstown Junction (Sheet 25)

The N11 Stillorgan Road / Leopardstown Road junction is being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians. The four-arm traffic signal junction will be modified to include full pedestrian, cycle, and bus infrastructure. The large footprint of the junction has led to fully segregated cycle lanes on the immediate approaches with pedestrian/cycle crossing managed by mini zebra facilities. This keeps the pedestrian crossings over the carriageway as short as possible.

Left turn slip crossings on Newtownpark Avenue and Leopardstown Road have been removed, reducing the number of crossings required over each arm of the junction. This reduces overall delay and wait time for pedestrians and reduces cyclist conflict.

At Leopardstown Junction Type 2 Junction as have proposed as per the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (NTA 2021), based on the left turning traffic numbers and physical space available.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at N11 Stillorgan Road / Leopardstown Road Junction. The PRC is 61% during the AM Peak Hours and 58% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Section 6.4.6.2.7.3 and Section 6.4.6.2.7.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, the Proposed Scheme shows that:

'There is a reduction of -309 combined flows along Leopardstown Road during the AM Peak Hour and a reduction of -204 combined flows along Leopardstown Road during the PM Peak Hour'.

In summary, there is a moderate reduction of combined flows along Leopardstown Road during the AM and PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation.

3.8.4.2 Foxrock Church / Kill Lane Junction

Summary of issue raised

The submission notes concern on the closing of the slip lane from the N11 Stillorgan Road to Kill lane to general traffic, as they believe the diverted traffic will take a route at Whites Cross (Newtownpark Ave Junction) onto residential roads such as Foxrock Avenue to access housing that is accessed from Kill Lane such as Foxrock Park, Foxrock Grove, Beech Park and Clonkeen Drive. Concerns regarding 'rat-running in the residential estate.

Concerns regarding access to Foxrock Church being diverted.

Queried regarding alterations proposed by DRLCC along Deansgrange Road. Asked whether a traffic impact study had included this proposal.

Response to issue raised

The Proposed Scheme design at Kill Lane Junction is shown in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 27 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.124 below.

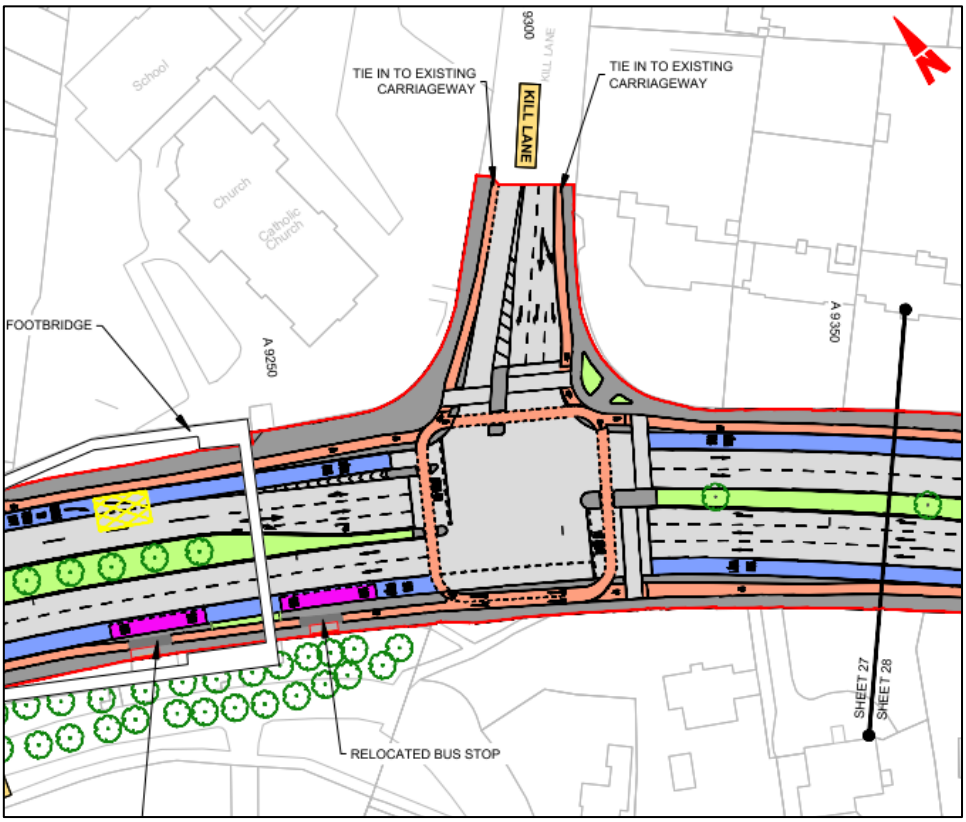


Figure 3.124: Extract from General Arrangement Drawing at Kill Lane Junction (Sheet 27)

The N11 Stillorgan Road / Kill Lane junction is being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians.

Pedestrian crossing provision improved by the removal of the left turn slip crossings on Kill Lane reducing the number of crossings and wait time for pedestrians. The removal of the left turn slip lane will help to reduce cyclist conflict.

The Proposed Scheme proposal allows for Junction Type 1 to be physically accommodated in both directions, with bus lanes extended to the stop lines and dedicated traffic signal displays provided to maximise bus priority.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at N11 Stillorgan Road / Kill Lane Junction. The PRC is -4% during the AM Peak Hours and -8% during the PM Peak Hours. Although this is slightly over capacity in the AM and PM Peak Hour, this suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Section 6.4.6.2.7.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, the Proposed Scheme shows that Kill Lane experiences an '*increase of 385 combined flows in the AM Peak Hour*'. There is no increase in combined flows along Kill Lane during the PM Peak Hour. Although Kill Lane experiences an increase in traffic flows during the AM Peak hours, this is determined as an overall *'Negative, Low and Long-Term'* impact from the redistributed general traffic as a result of the Proposed Scheme. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area. Therefore, it is considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.

As noted in the General Arrangement Drawing the access to the Church is retained as per existing.

3.8.4.3 Johnstown Junction

Summary of issue raised

The submission raised concerns regarding removal of the left slip road turning south towards Bray from Johnstown Road. Concerns regarding reduction of the second right, turning north towards city from Johnstown Road. The submission requests that this junction has the left-hand turn going south to Bray retained, and the two lanes allowed to turn right towards the city.

Response to the issue raised

The Proposed Scheme design at Johnstown Junction is shown in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 33 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.125 below.

The N11 Bray Road / Johnstown Road junction is being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians. The four-arm traffic signal junction will be modified to include improved pedestrian, cycle, and bus infrastructure.

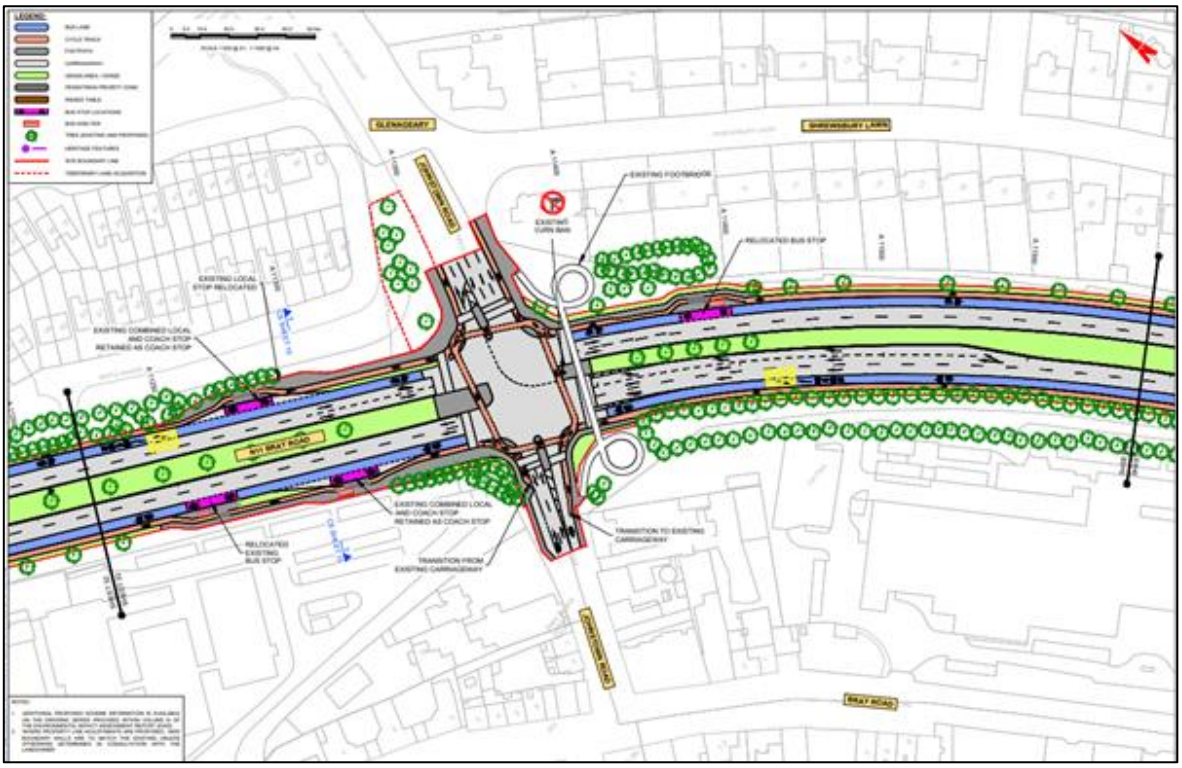


Figure 3.125: Extract from General Arrangement Drawing at Johnstown Junction (Sheet 33)

The proposed junction design allows for Junction Type 1 to be physically accommodated in both directions, with bus lanes extended to the stop line unhindered and dedicated traffic signal displays provided to maximise bus priority. Page 113 of the junction assessment presented the lane configuration and signal phasing of the Johnstown Junction in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR as shown in Figure 3.126 and Figure 3.127 below.

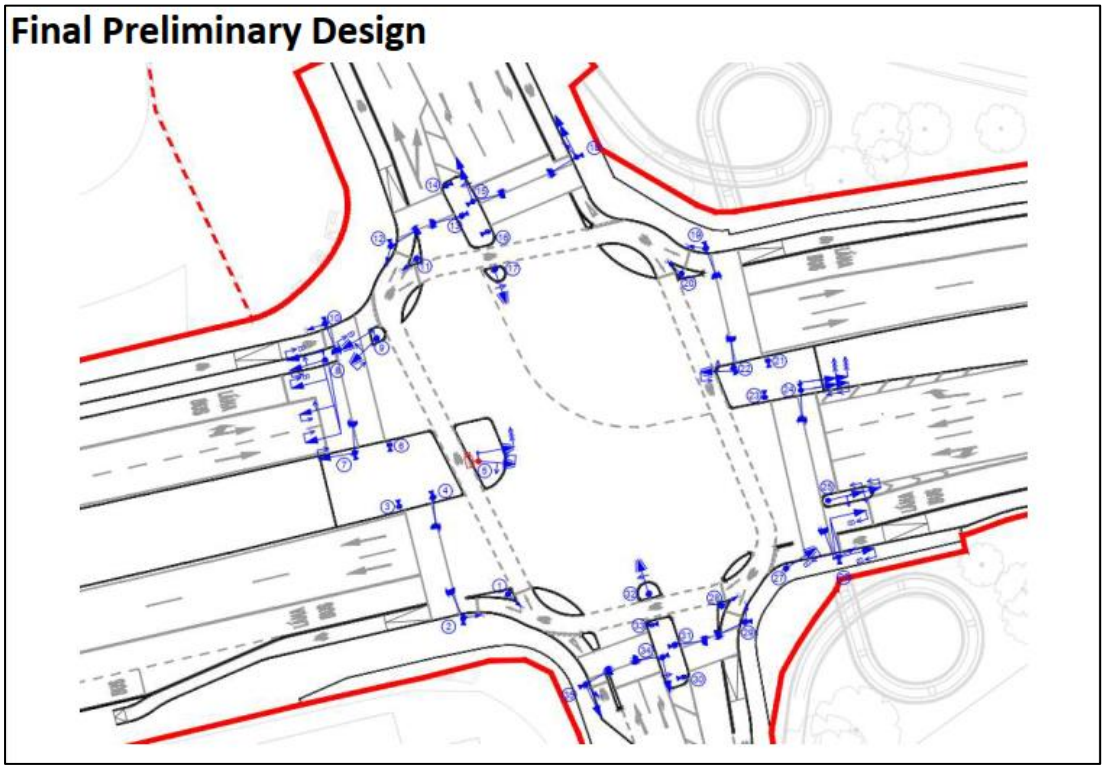


Figure 3.126: Extract from Junction Design Report of lane configuration at Johnstown Junction (Sheet 112)

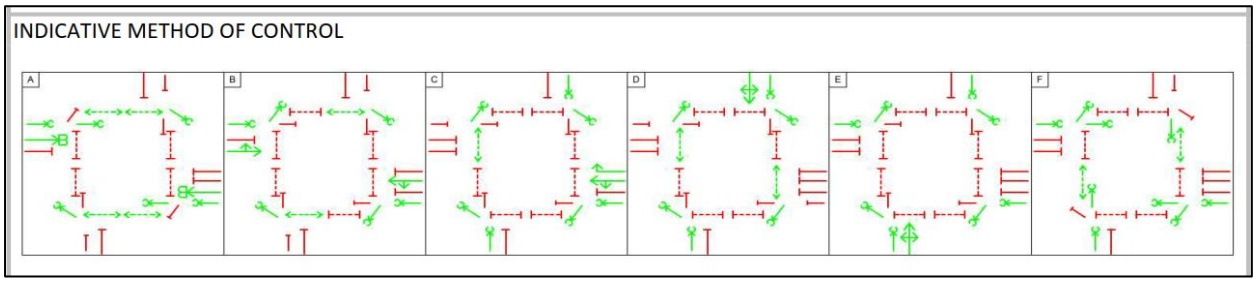


Figure 3.127: Extract from Junction Design Report of Traffic Signal Phasing at Johnstown Junction (Sheet 113)

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at N11 Stillorgan Road / Johnstown. The PRC is 4.2 % during the AM Peak Hours and 1.4% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

The junction lane capacity from Figure 3.127 above will be able to accommodate traffic flows. Section 6.4.6.2.8.3 and Section 6.4.6.2.8.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a General Traffic Impact Assessment Summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. The Proposed Scheme shows that:

'*There is a reduction of -838 combined general traffic flows along Johnstown Road in the AM Peak Hour and a reduction of -717 combined general traffic flows along Johnstown Road in the PM Peak Hour*'.

It is recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme is due to modal shift. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

3.9 Proposed Scheme in Shankill (General)

3.9.1 Description of Proposed Scheme at this Location

Between Loughlinstown Roundabout and Stonebridge Road it is intended to provide a bus lane and general traffic lane in both directions. Where bus lanes are not continuous, Signal Controlled Bus Priority has been provided. South of Stonebridge Road up to Crinken Lane, where bus lanes are not continuous in both directions due to existing constraints, SCP has been proposed to ensure bus priority. Signal-controlled bus priority has been proposed between the St Anne's Church / Corbawn Lane Junction and Rathmichael Woods in the northbound direction.

Segregated cycle tracks have not been provided between Loughlinstown Roundabout and Stonebridge Road along the Proposed Scheme. It is intended to provide a two-way cycle track from Stonebridge Road on the Dublin Road as far as the Shanganagh Road junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road.

The roundabout between the Dublin Road, Corbawn Lane, and Shanganagh Road is proposed to be upgraded to a signalised junction with new pedestrian crossing facilities and SCP for buses. Corbawn Lane is to be an exit only junction on to Shanganagh Road. A dedicated right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Shanganagh Road into Beechfield Manor is also to be provided.

The proposed design between the Shanganagh Road junction and Crinken Lane retains the existing general traffic lanes with no bus or cycle lanes, apart from a section of the northbound carriageway where a bus lane is provided from Crinken Lane to a new junction at the entrance to Olcovar. Signal-controlled bus priority will be provided along this section. The Quinn's Road roundabout is to be upgraded to a signalised junction, and an upgraded signalised junction is proposed at the entrance to the Olcovar development. Footpaths along the Dublin Road at Cherrington Drive and Beech Road are to be retained at their roadside location.

From Crinken Lane to the Wilford Roundabout it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes. Signal-controlled bus priority will be used northbound from Wilford Junction for a short distance as far as Woodbrook College. Where appropriate, roadside trees shall be retained by locating the proposed footpaths and cycle tracks behind the tree line. Improved lighting and crowning of trees will be provided to enhance visibility.

New pedestrian crossings are proposed at the new junction outside Olcovar, south of Crinken Lane, south of Allies River Road, and by Crinken Church. The existing pedestrian crossing at Woodbrook College is to be moved southwards to provide a crossing point close to the relocated southbound bus stop.

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two Toucan Crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line. New lighting and crowned trees (trees with lower branches thinned / removed) will be provided to ensure through visibility. Playground areas will be retained in their current existing location as part of BusConnects proposals. Their final future location will be confirmed as part of the Shanganagh Park and Cemetery Masterplan (Dún Laoghaire-Rathdown County Council).

Two new residential developments are under construction, at Shanganagh Castle and the Woodbrook Estate. The proposed signalised junctions for these developments and bus stops have been coordinated with the development proposals and incorporated within the design.

Bus stop locations and layouts have been reviewed, and in certain areas adjusted, to ensure optimum spacings between Loughlinstown Roundabout and Wilford Roundabout (Section 3). Coach laybys have been proposed at certain locations along the route to reduce instances of loading coaches blocking the bus lane.

All General Arrangement Drawings are provided as an Appendix in the 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR. The General Arrangement Drawings relevant to this section begin at Loughlinstown Roundabout (Sheet 40)

to Bray North (Wilford Roundabout) (Sheet 40, 41, 42, 43, 44, 45, 46, 47, 48 and 49), and also Stonebridge Road (Sheet 53).

The existing St Anne's Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane) is proposed to be upgraded to a signalised junction with new pedestrian crossing facilities, cycling infrastructure and SCP for buses. Corbawn Lane is to be an exit only junction on to Shanganagh Road.

A dedicated right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Shanganagh Road into Beechfield Manor is also to be provided.

The two-way cycle track from Stonebridge Road will run through Dublin Road and connect to the Dublin Road/ Shanganagh Road/ Corbawn Lane). A two-way cycle track is proposed at the Corbawn Lane.

The extract from the General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR is included in Figure 3.128.

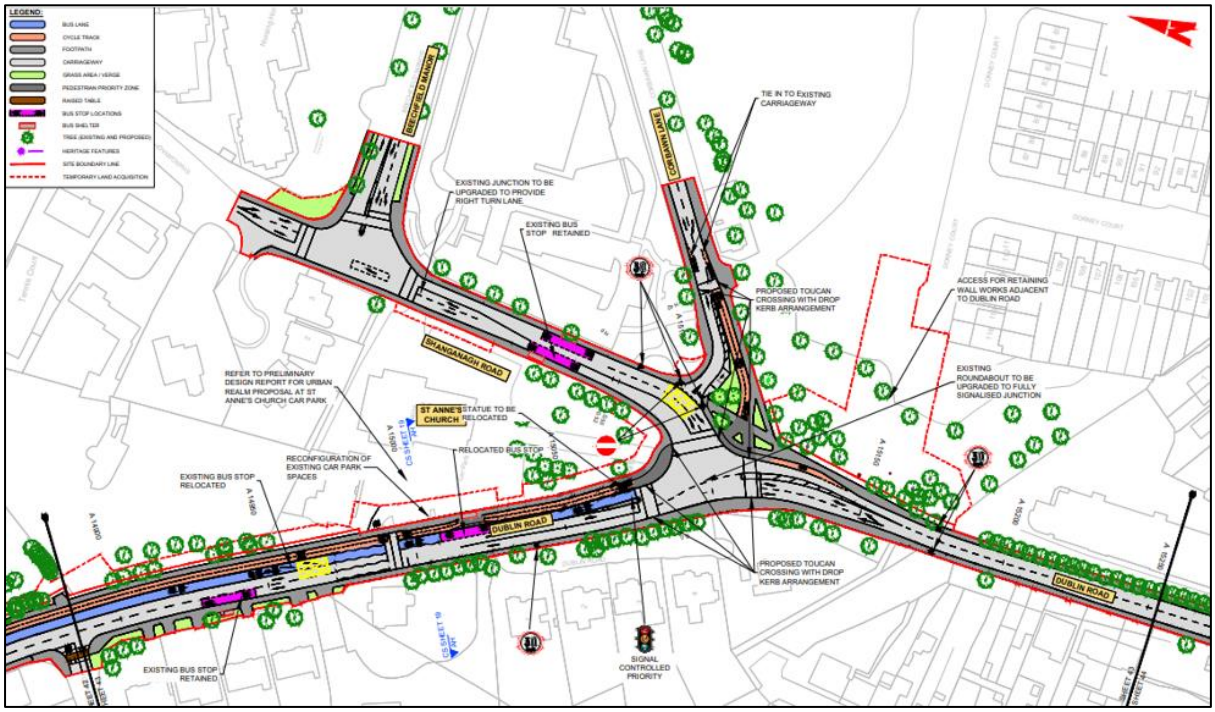


Figure 3.128: Extract from General Arrangement Drawings at Dublin Road / Shanganagh Road / Corbawn Lane junction (Sheet 43)

3.9.2 Overview of Submissions Received

Table 3.26 below lists the 95 individual submissions made in respect of the proposed scheme at Dublin Road Shankill.

Table 3.26: Submissions Made in Respect of at Dublin Road, Shankill

No	Name	No	Name	No	Name
4	Alison, Mark, Leya & Esme Fallon	84	Gavin Doherty	145	Orla & Tom Wilson
7	Angela O'Sullivan	86	Geraldine Comiskey	149	Patricia Beales & Pamela Donlan
14	Aoife Stokes & Glenn Mason	88	Gerry Cosgrave	153	Partick O'Connell
15	Aoife Sweeney	89	Gill Owen & Others	155	Paul Deery and Michael Fitzgerald

No	Name
16	AWC Estate Owners Management Company Clg
17	Barry Wallace
22	Brendan Dunne
24	Brian Hannon & Sinead Ni Argain
25	Brian Holland
26	Bridin Hegarty
27	Cara Corbawn Residents Association
28	Carol Scott
29	Céleste Golden
30	Celine Smyth
40	Colette Harold & Tim Bebbington
41	Conor Gerard Maher
42	Cora Plant & D'Omuirthile
45	Courtenay Pollard
46	Damien & Berna MacKenna & Others
50	David & Mary Reidy
52	David Lawlor
54	Denis & Trish Hosford
56	Dermot & Anne Grumley
68	Edward & Noirin Gahan
72	Esmond Green
73	Eugene Ryan
74	Eve & Ian McAulay
75	Fergus McCarthy
76	Fiachra Baynes & Sinead Lucey
77	Fiona Bennett & Brendan Dunne
90	Grant White & Darina Bewley
91	Gregory Gallagher
92	Gregory O'Brien
94	Helen Griffin
95	Helen Ronayne
96	Ina Knerr
98	Jacinta O'Sullivan and Sean Raghallaigh
101	Jamie Mckeown and Beatrice Journee
103	James Bergin
104	Jane & John Deehan
105	Jill & John Bolton
109	John Healy
110	John Hickie
111	John Kane
112	Karl Troy
115	Kim & Fintan McAlinden
117	Kylie O'Grady & Carl Faichney
120	Mairead Divilly
122	Marian Ward
123	Mark & Christine Russell
125	Martin D. Bernon
133	Michael Greene
135	Michael Roberts
136	Michelle Salter
138	Monica Glynn & William Cleary
141	Nigel Kenning
156	Paul Wilcock
159	Peader Ward
161	Philomena O'Riordan
162	PM O'Loughlin Shankill Limited
163	Pola Finegan
164	Professor Patrick Davey
167	Rathmichael Residents Association
173	Richard Noonan
174	Rod & Mary Allsop
176	Roy Parker
180	Sarah & Peter Brennan
182	Senator Barry Ward
184	Shane Gethings
186	Shankill Community Action
187	Shankill Tidy Towns
188	Sharon and Nigel Rodgers
189	Shekur Bonomally
190	Simon Geelon
191	Siobhan Mac Cobb
193	Sophie Wynne-Evans
194	Stephen & Marie Hedderman
195	Stephen & Patricia Kelly
196	Susan & Gareth Fanning
197	Suzanne Cook
205	Tricia McGrath
208	Una Bannon

No	Name	No	Name	No	Name
79	Fionnuala & Noel Gilchrist	142	Nina and Peter Brenan	216	Zoe Stephenson & Adam Wong
82	Frances Healy & Others	144	Oksana Marchenko		

A number of common issues were raised, and these are listed below and described in section below.

Common Issues Raised

1) Need for the Proposed Scheme
    a. Need for the Proposed Scheme in Shankill (Policy Context)
    b. Consideration of Alternatives and Options Assessment
    c. Alternate N11/M11 Bus Priority Interim Scheme
    d. Cost Benefit Analysis
2) Benefits of the Proposed Scheme
3) Impact to Bus Services & Journey Time Benefits
4) Upgrade Roundabouts to Signalised Junction and Signal Control Priority
5) Impact to Traffic Flows, Speed Limit, and Traffic Calming
6) Deficiency in Traffic and Transport Assessment
7) Impact to Cycle Infrastructure
8) Impact to Safety (for Pedestrians & Cyclists)
9) Review of Design Alternatives
10) Adequacy of Environmental Assessment
11) Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
12) Impact to Green Amenity Areas
13) Impact to Shankill Village & Community
14) Changes to Working Patterns
15) Public Consultation
16) Impact to Health & Wellbeing
17) Impact to Business
18) Impact to Heritage & Architecture
19) Impact on Property Values
20) Impact During Construction
21) Impact of Road Closure
22) Request for Oral Hearing
23) Support for the Proposed Scheme

The submissions also raised some other specific issues which are listed below and described in section below.

Other Issues Raised

1) Insufficient Design Detail & Constitutional Rights
2) Insufficient Land-take Details in the CPO and Consultation
3) Flooding
4) Impact to Boundary Walls & Privacy
5) Impact to Property Access
6) Impact to Beechfield Manor Nursing Home

3.9.3 Common Issues Raised and Responses

3.9.3.1 Need for the Proposed Scheme

Summary of issue raised

A number of submissions raised concerns regarding the need for the Proposed Scheme and the benefits of investment, particularly between Loughlinstown Roundabout and Wilford Roundabout (Section 3 of the Proposed Scheme) through Shankill due to the current bus service having no delays and current levels of traffic impose no delays and the submission believes that no intervention is deemed.

Some submissions have raised concerns on the lack of alternatives and option assessment considered in Shankill. They also raised the concern that the assessment was done in 2017 and is out of date.

A number of submissions raised the issue that the N11/M11 scheme is also progressing and should be used as an alternative to the Shankill section of the scheme. They noted that Option 2A of the options assessment report along the N11/M11 was the most economically advantageous route.

Some submissions also raised concerns regarding the cost benefit of the Proposed Scheme.

Response to issue raised

Need for the Proposed Scheme

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR outlines the need for the Bray to City Centre Core Bus Corridor Scheme and notes the following:

"Sustainable transport infrastructure assists in creating more sustainable communities and healthier places to live and work while also stimulating our economic development and contributes to enhanced health and well-being when delivered effectively.

The key radial traffic routes into and out of Dublin City Centre are characterised by poor bus and cycle infrastructure in places. Effective and reliable bus priority can be achieved through a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 69% of the route of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 47% of the route of the Proposed Scheme providing segregated cycle tracks. Furthermore there are key sections of the current bus lanes that are not operational on a 24-hour basis. Additionally bus lanes are being shared with both formal and informal parking facilities and cyclists. These conditions compromise the reliability and effectiveness of the bus services in these areas.

Private car dependence has resulted in significant congestion in the Greater Dublin Area (GDA) that has impacted on quality of life, the urban environment, and road safety. The population of the GDA is projected to rise by 25% by 2040 (National Planning Framework 2018), reaching almost 1.5 million. This growth in population will increase demand for travel necessitating improved sustainable transport options to facilitate this growth.

Without intervention, traffic congestion will lead to longer and less reliable bus journeys throughout the region and will affect the quality of people's lives. The Proposed Scheme is needed in order to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor through the provision of enhanced walking, cycling and bus infrastructure on this key access corridor in the GDA. The objectives of the Proposed Scheme are to:

- *Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements;*
- *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable;*
- *Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets;*
- *Enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks;*
- *Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services; and*
- *Ensure that the public realm is carefully considered in the design and development of transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.*

The objectives outlined above relating to enhancing capacity of the public transport system and enhancing safe infrastructure for cycling are underpinned by the central concept and design philosophy of People Movement. People Movement is the concept of the optimisation of roadway space and/or the prioritisation of the movement of people over the movement of vehicles along the route and through the junctions along the Proposed Scheme. The aim is to reduce journey times for modes of transport with higher person carrying capacity modes (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

The need for the Proposed Scheme is to respond to current deficiencies in the transport system at a Regional and Local level is set out in Section 2.2.

The delivery of the Proposed Scheme is supported by International, European Union, National, Regional and Local strategies, policies, and plans. The key policy and planning documents are described in Section 2.3, including the manner in which the need for the Proposed Scheme is supported by the relevant policies and objectives.

Finally, Section 2.4 describes the benefits that will accrue from the provision of the Proposed Scheme.

Investments in high quality public transport infrastructure and systems have been proven to result in significant modal shift. Indeed, in Dublin the Canal Cordon Report (National Transport Authority (NTA) 2019a) outlined that in 2019 (prior to COVID-19 restrictions) travel by sustainable modes accounted for 72% of all trips into Dublin City Centre, compared to 59% in 2010. This positive improvement in sustainable mode uptake was facilitated by investment in walking, cycling and bus infrastructure, Luas Cross City and the re-opening of the Phoenix Park Tunnel in addition to investments in systems such as Leap Card and Real Time Passenger Information."

Refer to response on sections below:

1) Need for the Proposed Scheme in Shankill (Policy Context)
2) Consideration of Alternatives and Option Assessment in Shankill
3) Alternate N11/ M11 Bus Priority Interim Scheme
4) Cost Benefit Analysis

3.9.3.1.1 Need for the Proposed Scheme in Shankill (Policy Context)

A number of submissions raised concerns regarding the need for the Proposed Scheme, particularly for between Loughlinstown Roundabout and Wilford Roundabout (Section 3 of the Proposed Scheme), through Shankill. The response below outlines the policy context and transport need for the Proposed Scheme in Section 3.

BusConnects

Section 2.2.1.6 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR provides details of the BusConnects programme.

'The BusConnects programme seeks to greatly improve bus services in Irish cities, including Dublin, so that journeys by bus will be fast, reliable, punctual, convenient and affordable. …'

'…BusConnects Dublin is a suite of transformative changes to the bus system, intended to make it more efficient, faster, reliable and easier to use. The BusConnects Dublin programme contains nine elements, one of which is the BusConnects Dublin – Core Bus Corridor Infrastructure Works (the CBC Infrastructure Works). …'

'…The CBC Infrastructure Works are needed because they will provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.'

'The CBC Infrastructure Works brings a range of benefits as an element in its own right. However, the CBC Infrastructure Works is also integral to realising the fullest potential of the other elements part of overall BusConnects programme.

In the absence of the Proposed Scheme, bus services will operate in a more congested environment, leading to higher journey times for bus and lower reliability which will lead to reduced levels of public transport use, making the bus system far less attractive and less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will significantly limit the potential to grow those modes into the future.'

Section 2.2.1.7 does on to state:

'The CBC Infrastructure Works will typically run along existing trunk bus routes, connecting residential suburbs, retail and village areas, metropolitan urban centres along the route, and the City Centre.

BusConnects is part of the Government's policy to improve public transport and address climate change in Dublin and other cities. BusConnects is included as a specific policy objective of Project Ireland 2040 – The National Development Plan 2018 – 2027 (Government of Ireland 2018a). In the Climate Action Plan 2023 (Government of Ireland 2022), there is a specific action to advance the BusConnects programme in five cities (which includes Dublin).

Bray to City Centre Core Bus Corridor (Proposed Scheme) Objectives

The aim of the Proposed Scheme, part of the BusConnects CBC Infrastructure Works is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The objectives of the core bus corridor CBC Infrastructure Works, as set out in Section 1.2 of Chapter 1 (Introduction) in Volume 2 of the EIAR.

Refer to response in 3.9.3.1 on Need for the Proposed Scheme for objectives of the Proposed Scheme.

Transport Need for the Proposed Scheme

Section 2.2.1 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR provides an overview of the GDA Transport Strategy 2016 – 2035 and GDA Cycle Network Plan and how it aligns with the need of the Proposed Scheme.

'The Transport Strategy for the Greater Dublin Area 2022-2042 replaces the prior transport strategy for the period 2016 to 2035. …'

'… Major projects provided for in the prior strategy included BusConnects Dublin, of which the Proposed Scheme is a key component.'

Section 2.2.1.5 in relation to the Bus Network goes on to state:

'To inform the preparation of the GDA Transport Strategy 2016 – 2035, the NTA prepared the Core Bus Network Report (NTA 2015) for the Dublin Metropolitan Area, which identified those routes on which there needed to be a focus on high capacity, high frequency and reliable bus services, and where investment in bus infrastructure should be prioritised and concentrated. The Core Bus Network is defined as a set of primary orbital and radial bus corridors which operate between the larger settlement centres in the Dublin Metropolitan Area. …'

'…The GDA Transport Strategy 2016 – 2035 concluded that this high-quality Core Bus Network would form an integral part of the improved public transport infrastructure measures for the Dublin Metropolitan Area. The final resulting Core Bus Network presented in the prior GDA Transport Strategy represents the most important bus routes within the Dublin Metropolitan Area, generally characterised by high passenger volumes, frequent services and significant trip attractors along the routes.

It comprises 16 radial corridors, three orbital corridors and six regional corridors. The radial core corridors, as extracted from the GDA Transport Strategy 2016 – 2035, are shown in Image 2.9 (reproduced from Figure 5.5 in the GDA Transport Strategy 2016 – 2035 - routes presented are indicative only).'

Figure 3.129 shows the 2035 Core Bus Network – Radial Corridors presented in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR.

'The need for the Proposed Scheme is supported by the objective of the GDA Transport Strategy to provide continuous bus priority, as far as is practicable, along the core bus route, that supports a more efficient and reliable bus service with lower journey times.'

The radial Core Bus Corridors identified in the GDA Transport Strategy, as modified in the light of more detailed assessment, are to be delivered under the CBC Infrastructure Works. The CBC Infrastructure Works will deliver approximately 230km of dedicated bus lanes and 200km of cycle tracks along 12 stand-alone Core Bus Corridor Schemes, which include the Proposed Scheme.

Figure 3.130 shows the CBC Infrastructure Works (12-schemes) presented in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR.

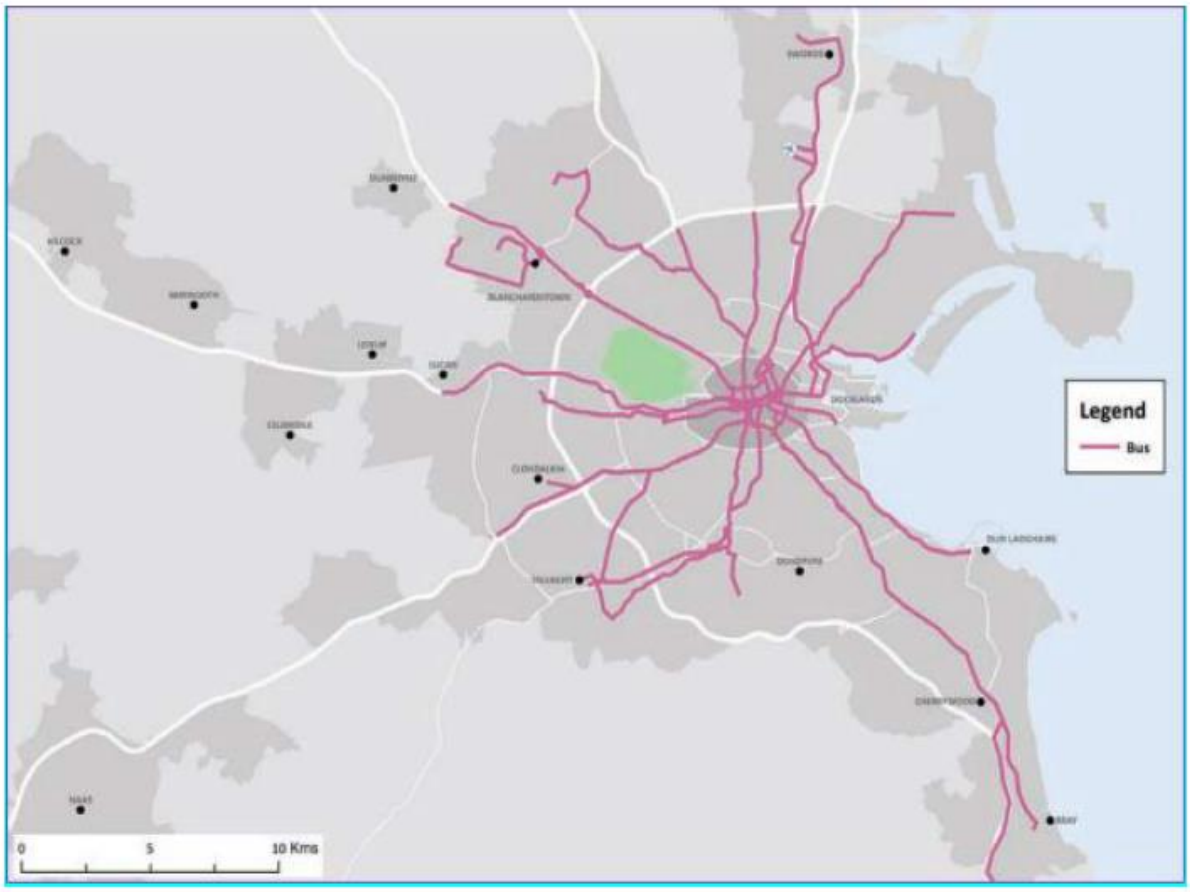


Image 2.9: 2035 Core Bus Network – Radial Corridors

Figure 3.129: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.9 Core Bus Corridor Network – Radial Route)

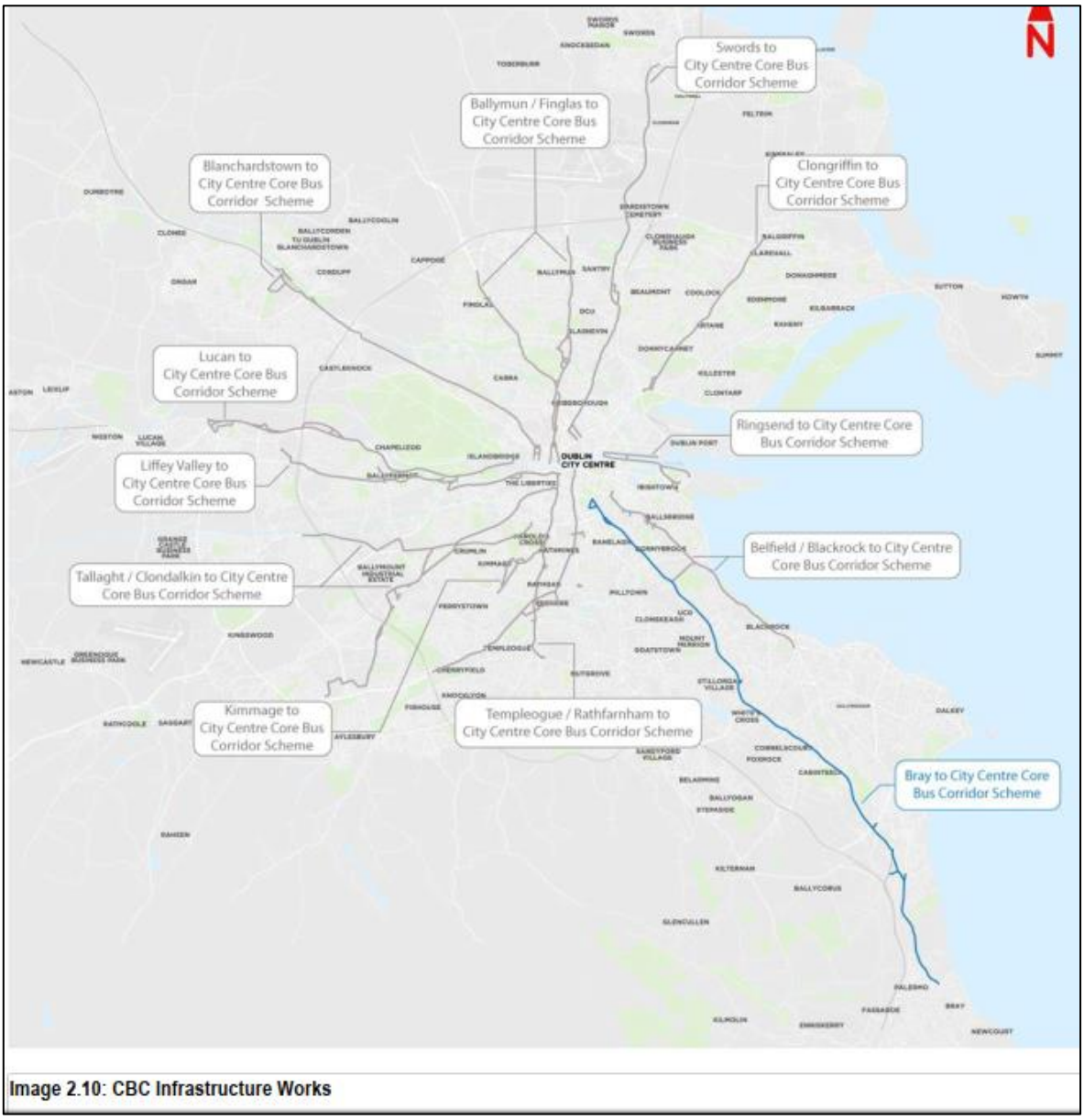


Figure 3.130: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.10 CBC Infrastructure Works 12 corridors)

Section 2.2.1.3 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR goes on to note in relation to pedestrian network as part of the GDA Transport Strategy 2016-2035 and cycle network as part of the GDA Cycle Network Plan 2013.

'The Pedestrian Network

The GDA Transport Strategy 2016 – 2035 identified deficiencies in the existing pedestrian network, comprising footpaths and pedestrianized areas catering for pedestrian movement throughout the GDA. Specifically, at many junctions across the GDA, pedestrian crossings are not provided, or are provided only on some arms. The amount of time given to pedestrians to cross, and the time they must wait to cross, also renders the walking experience sub-optimal. While these issues affect all parts of the GDA, they are particularly critical in Dublin City Centre where the number of pedestrians is highest.'

In order to address this, the prior Transport Strategy sought to:

- *'Provide a safer, more comfortable and more convenient walking environment for those with mobility, visual and hearing impairments, and for those using buggies and prams;*

- *Develop, in collaboration with the local authorities, a strategic pedestrian network plan, encompassing the main urban centres of the region, which will identify the key pedestrian linkages in those areas;*
- *Enhance pedestrian movement along the strategic pedestrian routes by widening footpaths where appropriate, providing better surfacing and by removing unnecessary poles, signs, street cabinets, advertising and other street clutter;*
- *Support local authorities in the implementation of pedestrianisation schemes, particularly in central*
- *areas of high pedestrian footfall, such as shopping streets;*
- *Revise road junction layouts, where appropriate, to provide dedicated pedestrian crossings, reduce pedestrian crossing distances, provide more direct pedestrian routes, and reduce the speed of turning traffic;*
- *Reduce waiting time for pedestrians at crossings in Dublin City Centre and other urban centres;*
- *Liaise with local authorities to deliver pedestrian information and wayfinding signage in urban centres across the GDA;*
- *In conjunction with local authorities and An Garda Síochána, evaluate, and where appropriate seek the introduction of, lower speed limits on residential streets and in urban centres;*
- *Cooperate with other agencies in the enforcement of laws in relation to parking on footpaths;*
- *Support pedestrian permeability provision in new developments, and the maintenance, plus enhancement where appropriate, of such arrangements in existing developments; and*
- *Ensure that permeability and accessibility of public transport stops and stations for local communities is maintained and enhanced.'*

The need for the Proposed Scheme is supported by the prior GDA Transport Strategy and the new GDA Transport Strategy 2022-2042 in regard to improving the pedestrian environment along the Proposed Scheme, while taking cognisance of and supporting pedestrian and public realm planning objectives locally.'

Section 2.2.1.4 in relation to the Cycle Network goes on to state:

'The GDA Cycle Network Plan 2013 (hereafter referred to as the GDACNP 2013) (NTA 2013) was adopted by the NTA in early 2014 following a period of consultation with the public and various stakeholders. This plan formed the strategy for the implementation of a high quality, integrated cycle network as set out in the GDA Transport Strategy 2016 - 2035. This is further discussed in Section 2.3.4.5.

The predominant provision for cycling in the Dublin City Council (DCC) area, including the areas associated with the Proposed Scheme, is by means of either non-segregated on street cycle lanes (both advisory and mandatory) or bus lanes. These facilities are generally of a low Quality of Service (QoS) in the city area mainly due to the lack of width for cyclists and the discomfort caused by large volumes of vehicular traffic sharing the road space. The GDACNP 2013 found that typically the cycle lanes achieve a QoS score of C or D in the DCC Area (QoS scores are assigned on a five-point scale from A+ to D). In addition it found that in general the QoS of many of the existing facilities within the Dún Laoghaire-Rathdown County Council (DLRCC) area is low at C. However upgrade works on the N11 Stillorgan Road undertaken during and since the production of this plan has improved the QoS along this part of the Proposed Scheme. A QoS score was not given for the Wicklow County Council (WCC) area facilities, but there are some existing cycling facilities along the R119 / R761 Dublin Road part of the Proposed Scheme. More information on the QoS cycling assessment criteria can be found in Chapter 6 (Traffic & Transport). It is noted that, since the production of GDACNP 2013, several interventions have taken place – both permanent and temporary. In the case of the Proposed Scheme however only 47% of the route is currently providing segregated cycle tracks.'

Section 2.2.1.4 also state:

'The Proposed Scheme, which was supported by the GDACNP 2013 for the area, is needed to address the very limited segregated cycling infrastructure currently available on this corridor.'

Figure 3.131 and Figure 3.132 show the 2022 GDACNP in Section 3 and 4 of the Proposed Scheme (Loughlinstown Roundabout to Bray end), extract from Chapter 2 (Need for the Proposed Scheme) in Volume 2 of EIAR.

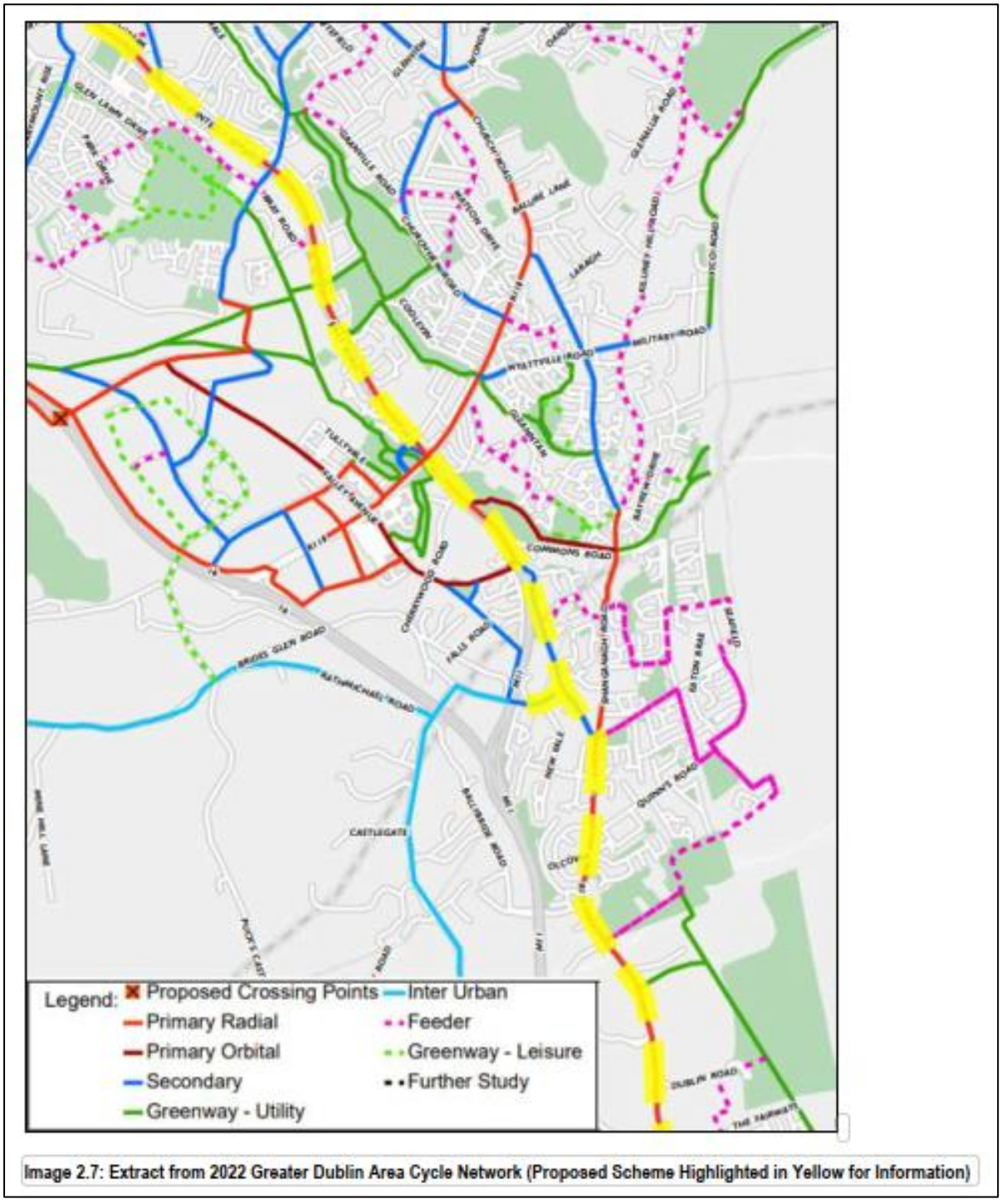


Figure 3.131: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.7 2022 GDACNP)

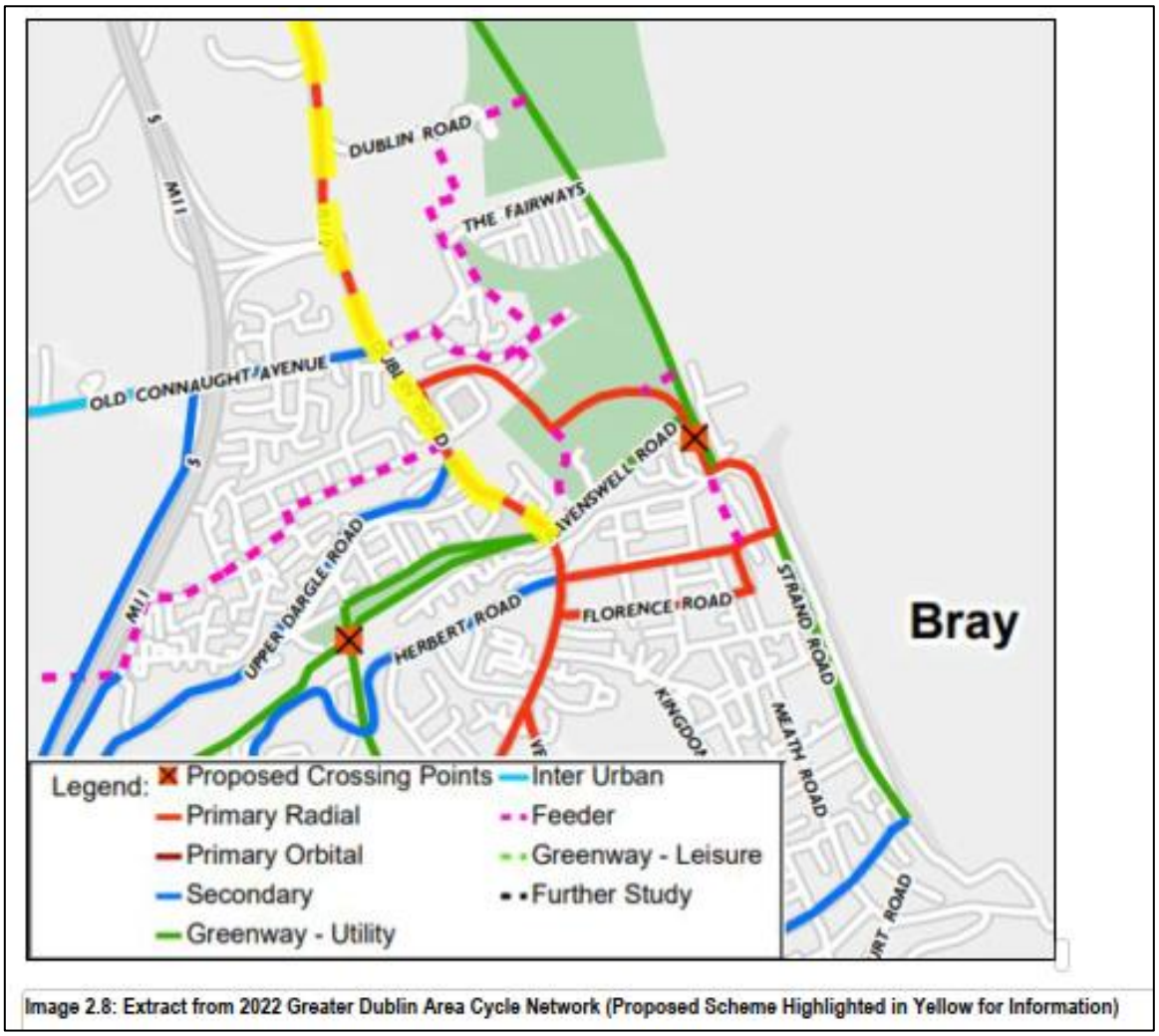


Image 2.8: Extract from 2022 Greater Dublin Area Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

Figure 3.132: Extract from Chapter 2 (Need for the Proposed Scheme) (Image 2.8 2022 GDACNP)

Section 2.2.1.4 goes on to state:

'The Proposed Scheme, which was supported by the GDACNP 2013 for the area, is needed to address the very limited segregated cycling infrastructure currently available on this corridor.

It is noted that in preparing the GDA Transport Strategy (2022 - 2042) the NTA also carried out a review of the GDACNP. This review culminated in the preparation of the 2022 Greater Dublin Area Cycle Network which was published alongside the GDA Transport Strategy (2022 - 2042). With respect to the Proposed Scheme, the 2022 Greater Dublin Area Cycle Network is broadly aligned with the GDACNP 2013.'

Some of the changes between the 2022 Greater Dublin Area Cycle Network and GDACNP 2013 include:

- *'The R837 Dublin Road between the Loughlinstown Roundabout and the St. Anne's Church Roundabout is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as a Primary Route in the GDACNP 2013;*
- *Stonebridge Road between the M11 and the R837 Dublin Road is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as an Inter-Urban Route in the GDACNP 2013;*
- *Shanganagh Road is identified as a Primary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as a Secondary Route in the GDACNP 2013;*
- *Corbawn Lane is identified as a Feeder Route in the 2022 Greater Dublin Area Cycle Network.*

This was identified as a Primary/Secondary Route in the GDACNP 2013;

- *The section through Bray (R761 Dublin Road/Castle Street) is identified as a Primary Route in the 2022 Greater Dublin Area Cycle Network. This route was identified as a Primary/Secondary Route in the GDACNP 2013; …'*

'…It is noted that each of the changes listed above support and reinforce the need for the delivery of cycling infrastructure along the route of the Proposed Scheme.'

'The GDA Transport Strategy 2022-2042 states that key elements of the Cycling Network Plan for the GDA will be delivered as part of the Core Bus Corridor schemes.

The Proposed Scheme, which is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network for the area, is needed to address the deficiency in the segregated cycling infrastructure currently available on this corridor.'

Policy Context

The application documentation submitted to An Bord Pleanála demonstrates that the proposed Bus Corridor through Shankill is consistent with, and supports elements of, international policy, European Union (EU) law and policy, national policy, regional policy, and local policy.

At all policy levels, there are clear objectives to increase active travel and accessibility to public transport. In response to the submissions in relation to the Preferred Route Option (Proposed Scheme) through Shankill, the details of how the Proposed Scheme supports these different tiers of policy are provided in the paragraphs below. In response to the submission in relation to necessity for a bus corridor through Shankill, the details of how the proposed new link supports these different tiers of policy are provided in the paragraphs below.

International Policy, EU Law & Policy

Sections 2.3.1 and 2.3.2 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several international policies. In relation to the proposed bus corridor in Shankill, it supports particular aspects of the policies as described in Table 3.27 below.

Table 3.27: International Policy, European Union Law & Policy referenced in EIAR Chapter 2 supported by the Proposed Link

International Policy, EU Law & Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
United Nations 2030 Agenda	Section 2.3.1.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the 2030 Agenda aims to deliver a more sustainable, prosperous, and peaceful future for the entire world, and sets out a framework for how to achieve this by 2030. This framework is made up of 17 Sustainable Development Goals (SDGs) which cover the social, economic, and environmental requirements for a sustainable future. Section 2.3.1.1. notes that SDGs 9 and 11 are relevant to the Proposed Scheme as follows: Goal 9: '*Build resilient infrastructure, promote inclusion and sustainable industrialization and foster innovation'*; Target 9.1: '*Develop quality, reliable, sustainable, and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all.*' Goal 11: '*Make cities and human settlements inclusive, safe, resilient, and sustainable*'; Target 11.2: '*By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding*

International Policy, EU Law & Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.' Section 2.3.1.1 assesses that '*the need for the Proposed Scheme is supported by the goals and targets set out in the relevant SDGs. It will provide for enhanced walking, cycling and bus infrastructure, which will subsequently enable more efficient, safe and integrated sustainable transport movement along this corridor.*' **As part of the Proposed Scheme, the provision of a Core Bus Corridor in Shankill will provide for enhanced walking and cycling infrastructure in Shankill which will enable improved accessibility to sustainable transport and will reduce the distances to sustainable public transport for those in vulnerable situations, women, children, persons with disabilities and older persons.**
Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)	Section 2.3.2.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how this EU strategy sets out a number of goals as to how people will move within and between cities in the future and explains how the strategy has identified 82 initiatives which have been categorised into 10 '*flagships.*' The flagship relevant to the Proposed Scheme is '*Flagship 3 – Making interurban and urban mobility more sustainable and healthy*'. This flagship states that: '*increasing the modal shares of collective transport, walking and cycling, as well as automated, connected and multimodal mobility will significantly lower pollution and congestion from transport, especially in cities and improve the health and well-being of people. Cities are and should therefore remain at the forefront of the transition towards greater sustainability.*' Section 2.3.2.1 assesses that '*the need for the Proposed Scheme is supported by the objectives of the EU's Sustainable and Smart Mobility Strategy through significant investment in cycle and pedestrian infrastructure, in addition to bus priority, along the route of the Proposed Scheme, thereby supporting and encouraging growth in active travel and sustainable public transport usage.*' **The proposed Core Bus Corridor in Shankill will support and encourage growth in active travel and sustainable public transport usage.**
European Green Deal (EDG) 2019	Section 2.3.2.2 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the EDG indicated the European Commission adopted a communication entitled 'Sustainable and Smart Mobility Strategy – putting European transport on track for the future'. Section 2.3.2.2 states that *'this Strategy has the objective of 'accelerating the shift to sustainable and smart mobility' and requires that, '[t]he EU transport system and infrastructure will be made fit to support new sustainable mobility services that can reduce congestion and pollution, especially in urban areas.' It is noted that pollution is concentrated the most in cities and that a combination of measures is needed which includes 'improving public transport and promoting active modes of transport such as walking and cycling."* *'The Proposed Scheme is necessary, in conjunction with a range of other initiatives, to attain the objectives of the European Green Deal, through significant investment in cycle and pedestrian infrastructure, in addition to bus priority, thereby supporting and encouraging growth in active travel and sustainable public transport usage.'* **The proposed Core Bus Corridor in Shankill will support and encourage growth in active travel and sustainable public transport usage.**

National Policy

Section 2.3.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several objectives of national policy. The specific element of the Proposed Scheme about which the submissions have been made to the Board, the bus corridor in Shankill, supports particular aspects of the policies as described in Table 3.28 below.

Table 3.28: National Policies referenced in EIAR Chapter 2 supported by the Proposed Link

National Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
Project Ireland 2040 – National Planning Framework (NPF) & National Development Plan (NDP) 2021-2030	Table 2.3 of Section 2.3.3.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR describes how the Proposed Scheme meets various National Strategic Outcomes (NSOs) of the NPF. Relevant NSOs in respect of the proposed new link to Patrician Villas include the following: **NSO1 Compact Growth** – EIAR Chapter 2 Table 2.3 assesses that *'the Proposed Scheme will support the creation of an attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity'* . Table 2.3 also states that *'The Proposed Scheme will bring greater accessibility to the City Centre and better connect communities and locations along its route for people to avail of housing, jobs, amenities and services.'* **The proposed Core Bus Corridor in Shankill will improve the accessibility to the City Centre, and better connect communities and locations along its route.** NSO4 Sustainable Mobility - Table 2.3 assesses that *'the Proposed Scheme will provide infrastructure to support a sustainable transport network that will facilitate a modal shift from private car usage to sustainable transport. It will reduce journey times and increase journey time reliability and increase the attractiveness of active travel and public transport for travel, which will in turn facilitate sustainable transport option alternatives to private car usage.* *The Proposed Scheme will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.'* Table 10.5 in Chapter 10 (Population) in Volume 2 of the EIAR shows that of the 11 Community Areas assessed along the Proposed Scheme corridor Shankill has a car mode share for travel to work trips at 60%, compared to the average for the study area of 46%. It is also above the average value for County Dublin which is 54%. **The proposed Core Bus Corridor in Shankill will help facilitate a modal shift from car usage to sustainable transport (active travel and public transport).** **NSO8 Transition to a Low Carbon and Climate Resilient Society** - Table 2.3 assesses that *'the Proposed Scheme comprises transport infrastructure that supports the delivery of an efficient, low carbon and climate resilient public transport service. The primary objective of the Proposed Scheme therefore, through the provision of necessary bus, cycle, and walking infrastructure enhancements is the facilitation of modal shift from car dependency, and thereby contributing to an efficient, integrated transport system and a low carbon and climate resilient City in compliance with NSO8.*

National Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	The Proposed Scheme will provide the advantage of segregated cycling facilities. *These high quality cycle tracks will be typically 2m in width offering a high level of service and help to reduce dependency on private car use for short journeys in compliance with the objectives of NSO8.'* **The proposed Core Bus Corridor in Shankill will provide bus, cycle, and walking infrastructure enhancements, which will facilitate the modal shift from car dependency, and contribute to an efficient, integrated transport system and a low carbon and climate resilient City.** **NSO10 Access to Quality Childcare, Education and Health Services** – Table 2.3 assesses that *'the Proposed Scheme provides infrastructure to support the delivery of sustainable transport that will benefit the entire community in terms of greater accessibility, capacity and speed of service improvements. The infrastructure improvements are along key arterial routes which include many of Dublin's childcare, educational and health care services in compliance with the objectives of NS10.'* **The proposed Core Bus Corridor in Shankill will improve the accessibility to community services located along the proposed scheme. Notable community services along the Proposed Scheme in Shankill include St. Columcille's Hospital, St Anne's School, Rathmichael Parish School, St Anne's Church, Woodbrook College and Shanganagh Park.**
National Investment Framework for Transport in Ireland	Section 2.3.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that *'the Department of Transport (DoT) has finalised the transport framework, the National Investment Framework for Transport in Ireland (hereafter referred to as NIFTI) (DoT 2021a) to ensure alignment with the policies of the NPF.'* Section 2.3.3.4 notes that the draft plan states that future transport planning will prioritise sustainable modes and *'…sets out a hierarchy of travel modes to be accommodated and encouraged when investments and other interventions are made. Sustainable modes, starting with active travel and then public transport, will be encouraged over less sustainable modes such as the private car*. *Active travel is the most sustainable mode of travel. Increasing the share of active travel can reduce the carbon footprint of the transport sector, improve air quality, reduce urban congestion, and bring about positive health impacts as a result of increased physical activity. The attractiveness of this mode is dependent on infrastructure — for example, dedicated footpaths, segregated cycle lanes and the quality and priority of road crossing points all impact upon the number of people engaging in active travel.'* **The proposed Core Bus Corridor in Shankill supports the above hierarchy of sustainable modes by encouraging active travel in Shankill.**
Smarter Travel – A Sustainable Transport Future: A New Transport Policy for Ireland 2009 - 2020	Section 2.3.3.7 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that *'the Department of Transport, Tourism and Sport (DTTAS) Smarter Travel - A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020 (hereafter referred to as Smarter Travel) (DTTAS 2009a) is the National planning policy document to deliver an integrated transport policy for Ireland as supported by Government. A SEA and Appropriate Assessment (AA) were carried out as part of Smarter Travel.'*

National Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	Table 2.6 in Section 2.3.3.7 describes how the Proposed Scheme meets the 5 Key Goals of Smarter Travel. Relevant Key Goals in respect of the proposed bus corridor in Shankill include the following: *'Improve quality of life and accessibility to transport for all and, in particular, for people with reduced mobility and those who may experience isolation due to lack of transport'* **The proposed Core Bus Corridor in Shankill will make the bus transit experience more accessible for users of all abilities and ages. Provision and enhancement of cycling facilities along the Proposed Scheme, creating routes that are safe, accessible and attractive for people of all abilities and ages.** *'Reduce overall travel demand and commuting distances travelled by the private car'* **The proposed Core Bus Corridor in Shankill aligns with the goal as it will promote a viable modal shift from private car to a more sustainable forms of transport. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.** *'Improve security of energy supply by reducing dependency on imported fossil fuels'* **The proposed Core Bus Corridor in Shankill aligns with the goal as it will provide the infrastructure necessary to facilitate a viable modal shift to sustainable transport.**
Climate Action Plan 2023	Section 2.3.3.12 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR states that in regard to modal shift the Climate Action Plan 2023 sets out that: *'The transport sector has an aim of a 50% reduction in emissions by 2030. The 'Avoid' (reduce or avoid the need for travel – land use planning), 'Shift' (Shift to more environmentally friendly modes – public transport, active travel), 'Improve' (Improve the energy efficiency of vehicle technology-vehicle efficiency, clean fuels) approach has been adopted to help achieve these targets'.* Section 2.3.3.12 also describes Section 15.3.3 of the Plan which states '*Greater prioritisation and reallocation of existing road space towards public transport and active travel will be a key supporting element for the new DMS* [Demand Management Strategy]. *This already forms a crucial element of the BusConnects programme in each of our five cities. It is also a key recommendation from the OECD's Redesigning Ireland's Transport for Net Zero report*'. **The proposed Core Bus Corridor in Shankill supports this through infrastructure improvements for active travel and through the provision of enhanced bus priority measures for existing and future services through Shankill. These measures will encourage greater uptake of active travel and public transport from Shankill.** Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR states that *'the Proposed Scheme will however support the delivery of government strategies outlined in the 2023 CAP (DCCAE 2022) and the 2021 Climate Act by enabling sustainable mobility and delivering a sustainable transport system. The Proposed Scheme will provide connectivity and integration with*

National Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	other public transport services leading to more people availing of public transport, helping to further reduce GHG emissions.' Section 8.8.2 goes on to state that *'it is concluded that the Proposed Scheme achieves the project objectives in supporting the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets. The Proposed Scheme has the potential to reduce CO_2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively. This has the effect of a reduction in total vehicle kilometres, a reduction in fuel usage, and increases to sustainable transport trips and modal share in accordance with the 2023 Climate Action Plan (CAP) (DCCAE 2022).* *It is concluded that, the Proposed Scheme will make a significant contribution to reduction in carbon emissions provided the measures outlined in the traffic optimisation and bus frequency resilience analysis are employed i.e. the service pattern and frequency of bus services are increased into the future to accommodate additional demand without having a significant negative impact on bus journey time reliability.'* **The proposed Core Bus Corridor in Shankill will provide improved connectivity to the public transport system and has the potential to reduce CO_2 emissions through the removal of unnecessary car trips from the road network and contribute towards the national target of a 50% reduction in emissions for the transport sector by 2030 as outlined as a target in the 2023 Climate Action Plan.** The NTA would like to acknowledge the recent approval of the Climate Action Plan 2024 on 21 May 2024. The NTA are satisfied that the newly approved plan does not change the overall assessment as described here and in the EIAR for the Proposed Scheme.

In addition to the national policies above referenced in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, the Department of Transport published the National Sustainable Mobility Policy in April 2022. By providing enhanced permeability for Shankill, proposed bus corridor supports the following goals of the National Sustainable Mobility Policy.

Goal 3 - Expand availability of sustainable mobility in metropolitan areas

4) *'Goal 3 aims to expand the capacity and availability of sustainable mobility in our five cities (Cork, Dublin, Galway, Limerick and Waterford). This will be done through improved walking, cycling, bus and rail infrastructure, improved transport interchange and expanded public transport services. Transformed active travel and bus infrastructure and services in all five cities is fundamental to achieving the targets of 500,000 additional daily active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030.'*

As listed in Table 2.12 above in relation to the Section 8.8.2 in Chapter 8 (Climate) in Volume 2 of the EIAR, the proposed bus corridor in Shankill provides improved connectivity to the public transport system and has the potential to reduce CO_2 emissions through the removal of car trips from the road network and contribute towards the national target 500,000 additional trips by walking, cycling and public transport per day by 2030.

Goal 7 - Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model

5) *'Goal 7 aims to support enhanced permeability and ensure that the universal design principle and Hierarchy of Road Users model is used to inform future investment decisions to reduce inequalities, support a whole of journey approach, and prioritise sustainable mobility'.*

The proposed bus corridor in Shankill provides enhanced permeability and as noted in Section 6.4.6.1.2.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that:

'All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities.'

Regional Policy

Section 2.3.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several regional policies. The proposed bus corridor in Shankill supports particular aspects of the policies as described in Table 3.29 below.

Table 3.29: Regional Policies referenced in EIAR Chapter 2 supported by the Proposed Link

Regional Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
Transport Strategy for the Greater Dublin Area (GDA) 2016 – 2035	Section 2.3.4.1 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Section 3.6.1 of Appendix A2.1 in Volume 4, Part 1 of 4 describe how the need for the Proposed Scheme is supported by the GDA Transport Strategy. Section 3.6.2.1 of Appendix A2.1 assesses: *'The Proposed Scheme will provide the infrastructure necessary to deliver the transformational change of the current bus network required to meet objectives such as, greater efficiency, reduction in journey times and improve environmental performance. The Proposed Scheme design has been developed by NTA and takes account of policy objectives in the Implementation Plan.'* **The proposed Core Bus Corridor in Shankill will improve accessibility to the wider Bray to City Centre CBC, which is an important component of the significantly enhanced bus network in this area.**
Greater Dublin Area Transport Strategy 2022-2042	Table 2.11 in Section 2.3.4.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the GDA strategy includes various measures that the Proposed Scheme will support. In respect of the proposed link between Patrician Villas and the N11 Road the following measures are directly relevant: *'Measure PLAN15 – Urban Design in Walking and Cycling Projects.'* **The proposed Core Bus Corridor meets this measure increasing the permeability accessibility in Shankill, thereby increasing accessibility to the core bus corridor and bus stops, as well as increasing accessibility for cyclists to the new cycle track and for pedestrians.** *'Measure PLAN2 – The Road User Hierarchy'* **The proposed Core Bus Corridor in Shankill aligns with this measure as it will help promote modal shift from private car to a more sustainable forms of transport. It enhances active travel networks and thus encourages the use of these modes reducing reliance on the private car.** *'Measure INT3 – Integration of all Modes in Transport Scheme'* **The proposed Core Bus Corridor in Shankill aligns with this measure as it enhances the connection between the public transport network**

Regional Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	and the active travel network and thus encourages the use of these modes reducing reliance on the private car.
Regional Spatial Economic Strategy (RSES) for the Eastern and Midland Region (EMR) 2019 – 2031	Section 2.3.4.4 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the RSES for the ERM contains the Dublin Metropolitan Area Strategic Plan (Dublin MASP) which includes various Regional Policy Objectives (RPOs) that the Proposed Scheme will support. **In respect of RPO 5.3 the proposed Core Bus Corridor in Shankill is directly relevant as it will support the increase of active travel modes and public transport use:** *'RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.'*

In addition to the above, Section 7.1.2 of the Transport Strategy for the Greater Dublin Area (2016-2035) sets out several principles under the heading Local Planning Principles, including:

'New development areas should be fully permeable for walking and cycling and the retrospective implementation of walking and cycling facilities should be undertaken where practicable in existing neighbourhoods, in order to a give competitive advantage to these modes;'

Local Policy

Section 2.3.5 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR and Appendix A2.1 in Volume 4, Part 1 of 4 notes that the Proposed Scheme supports several local policies. The provision of a bus corridor through Shankill supports particular aspects of the policies as described in Table 3.30 below.

Table 3.30: Local Policies referenced in EIAR Chapter 2 supported by the Proposed Link

Local Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
Dún Laoghaire-Rathdown County Development Plan 2022 – 2028	Table 2.14 of Section 2.3.5.3 in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes that the Dún Laoghaire-Rathdown County Development Plan includes a number of policies and objectives that the Proposed Scheme supports. In respect of the proposed Bus Corridor in Shankill the following are directly relevant: *'Policy Objective T1: Integration of Land Use and Transport Policies – It is a Policy Objective to actively support sustainable modes of transport and ensure that land use and zoning are aligned with the provision and development of high quality public transport systems. (Consistent with NSO 1, NPO 26 of the NPF, 64, RPO 4.40, 5.3, 8.1 and Guiding Principles on Integration of Land Use and Transport of the RSES)'* *'The Proposed Scheme will actively support sustainable modes of transport to help with the creation of an attractive, resilient, equitable public transport network better connecting communities and improving access to work, education and social activity. The Proposed Scheme will help to achieve greater land use densities that will encourage compact growth in compliance with Policy Objective T1 and policy objectives of NSO1, NPO 26, RPO 4.40, 5.3 8.1 and Guiding Principles on Integration of Land Use and Transport of the RSES.'*

Local Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	The proposed Core Bus Corridor in Shankill will support sustainable active travel and public transport modes. *'Policy Objective T3: Delivery of Enabling Transport Infrastructure – It is a Policy Objective to support the delivery of enabling transport infrastructure so as to allow development take place in accordance with the Core Strategy of this Plan and the settlement strategy of the RSES. (Consistent with RPO 4.40, 10.2, 10.3, 10.11, 10.16 of the RSES)'* *'The Proposed Scheme will support upcoming development in accordance with the Core Strategy of this Plan and the settlement strategy of the RSES as it will provide efficient, reliable and attractive transport infrastructure for a variety of different users throughout the Dublin Area. The Proposed Scheme is therefore compliant with Policy Objective T3.'* **The proposed Core Bus Corridor in Shankill will support upcoming development in accordance with the Core Strategy of this Plan.** *'Policy Objective T4: Development of Sustainable Travel and Transport – It is a Policy Objective to promote, facilitate and cooperate with other transport agencies in securing the implementation of the transport strategy for the County and the wider Metropolitan Area as set out in Department of Transport's 'Smarter Travel A Sustainable Transport Future 2009 –2020', and subsequent updates and the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035' and subsequent updates, the RSES and the MASP. (Consistent with NPOs 26, 64 of the NPF and RPOs 5.2, 5.3, 8.4, 8.7, 8.8 and 8.9 of the RSES)'* *'The Proposed Scheme is part of the NTA's BusConnects Programme to provide for enhanced bus and active travel networks in the GDA. The Proposed Scheme is therefore compliant with Policy Objective T4.'* **The proposed Core Bus Corridor in Shankill will support enhanced bus and active travel networks in the GDA.** *'Policy Objective T5: It is a Policy Objective to expand attractive public transport alternatives to car transport as set out in 'Smarter Travel, A Sustainable Transport Future' and subsequent updates; the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035' and the NTAs 'Integrated Implementation Plan 2019-2024' and subsequent updates by optimising existing or proposed transport corridors, interchanges, developing new park and rides, taxi ranks and cycling network facilities at appropriate locations.'* *'The Proposed Scheme will provide the infrastructure required for an attractive public transport system that caters for different transport modes including walking, cycling and bus as alternatives to the private car. The Proposed Scheme will enhance existing transport corridors and implement new cycling and pedestrian networks to cater for a variety of different users. Whilst the Proposed Scheme does not involve the development of new park and rides and taxi ranks it will provide for better transport connections throughout the area and therefore help better link existing facilities. The Proposed Scheme is therefore compliant with Policy Objective T5.'* **The proposed Core Bus Corridor in Shankill will provide improved integration between active travel and public transport modes.** *'Policy Objective T6: Quality Bus Network/Bus Connects – It is a Policy Objective to co-operate with the NTA and other relevant agencies to facilitate the implementation of the bus network measures as set out in the NTA's 'Greater Dublin Area Transport 2016-2035' and 'Integrated Implementation*

Local Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	Plan 2019-2024' and the BusConnects Programme, and to extend the bus network to other areas where appropriate subject to design, environmental assessment, public consultation, approval, finance and resources. (Consistent with RPO 8.9 of the RSES)' *The Proposed Scheme is part of the NTA's BusConnects Programme to provide for enhanced bus services in the GDA and will provide the transport infrastructure required to facilitate a sustainable transport system. The Proposed Scheme is therefore compliant with Policy Objective T6.* **The proposed Core Bus Corridor in Shankill will provide for enhanced bus services in the GDA.** *'Policy Objective T11: – It is a Policy Objective to secure the development of a high quality, fully connected and inclusive walking and cycling network across the County and the integration of walking, cycling and physical activity with placemaking including public realm permeability improvements.'* *'The Proposed Scheme will provide the infrastructure necessary for high quality, connected and inclusive walking and cycling routes across the Proposed Scheme corridor. Chapter 6 (Traffic & Transport) of the EIAR has considered permeability as part of the project.'* **The proposed Bus Corridor in Shankill will provide improved permeability and is in accordance with the NTA's best practice guide referenced above.** *'Policy Objective T12: Footways and Pedestrian Routes – It is a Policy Objective to maintain and expand the footway and pedestrian route network to provide for accessible, safe pedestrian routes within the County in accordance with best accessibility practice. (Consistent with NPO 27 and 64 of the NPF and RPO 5.3 of the RSES)'* *'The Proposed Scheme will provide the transport infrastructure necessary to facilitate the expansion of the footway and pedestrian route network throughout the Proposed Scheme corridor. Best accessibility practice has been considered in the design of the Proposed Scheme as identified within the EIAR. The Proposed Scheme is considered to be compliant with Policy Objective T12'* **The proposed Core Bus Corridor in Shankill will support the expansion of the footway and pedestrian route network within the County.** *'Policy Objective T13: County Cycle Network – It is a Policy Objective to secure improvements to the County Cycle Network in accordance with the Dún Laoghaire-Rathdown Cycle Network Review whilst supporting the NTA on the development and implementation of the Greater Dublin Area Cycle Network Plan 2013 and subsequent revisions, subject to environmental assessment and route feasibility. (Consistent with RPO 5.2, 5.3 of the RSES)'* *'The Proposed Scheme is part of the NTA's BusConnects Programme to provide the transport infrastructure necessary to provide bus services in conjunction with cycling and pedestrian routes in the GDA. The Proposed Scheme is therefore compliant with Policy Objective T13.'* **The proposed Core Bus Corridor in Shankill will support improvements to the County Cycle Network.**

Local Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
Woodbrook-Shanganagh LAP 2017-2023	Policy T7: *'To co-operate with the National Transport Authority, Transport Infrastructure Ireland and Wicklow County Council in relation to on-going corridor studies in respect of the Dublin Road Core Bus Corridor M11 / N11 which will inform potential road infrastructure improvements and public transport provision both in the Plan Area and the wider environs.'* **The Proposed Core Bus Corridor in Shankill forms part of Bus Connects programme which is the NTA's programme to provide enhanced walking, cycling and bus infrastructure in the Dublin region.** Policy T8: *'To seek to retain the sylvan character of the Dublin Road in any road improvement schemes and to ensure that any loss of mature trees will be mitigated by replacement tree planting with consideration also to the re-instatement of any historic walls or features along any new road alignment.'* **The Proposed Core Bus Corridor in Shankill will require the removal of trees along the Dublin Road; however, any loss of mature trees will be mitigated by replacement tree planting with consideration. There will be no impacts to historic walls or features along this road alignment.** Policy T9: *'To provide for high quality pedestrian and cycle network within the LAP Area with high levels of permeability, passive surveillance and supervision where feasible and to ensure that this network will provide attractive, legible and direct links to the Neighbourhood Centre, the DART Station, Bus Stops, Shanganagh Park and the wider area outside the Plan Boundary.'* **The Proposed Core Bus Corridor in Shankill will provide for a high quality pedestrian and cycle network, whilst improving permeability within the area.** Policy T10: '*To ensure that all proposals for new roads, streets and residential layouts comply with the 'Design Manual for Urban Roads and Streets' (DMURS, 2013) which focuses on the needs of pedestrians, cyclists and public transport users.'* **The Proposed Bus Corridor in Shankill aligns with Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR which has considered DMURS.** Policy T11: *'To provide for safe and secure cycle parking at appropriate locations within the LAP Area and in particular close to recreational or community facilities, residential units, transport nodes, shops and services*.' **The Proposed Bus Corridor in Shankill will provide facilities for cycle parking at the proposed island bus stops, particularly at Woodbrook College.** Policy T14: '*To adopt a proactive mobility management approach and to encourage a culture of sustainable travel in the new residential neighbourhoods at Woodbrook-Shanganagh. Travel Plans will be required for large scale residential proposals and / or each of the key sites at Master Plan Level.'* **The Proposed Bus Corridor in Shankill will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport, whilst promoting active travel through enhanced cycle and pedestrian infrastructure. It will reduce bus journey times which will in turn reduce fuel usage.** Policy US4: '*To promote streets, routes and spaces which are human scaled, memorable as places, have a high standard of amenity and are in*

Local Policy	How the proposed bus corridor in Shankill supports the policies identified in EIAR Chapter 2
	accordance with the guidance set out in Design Manual for Urban Roads and Streets, 2013 (DMURS).' **The Proposed Bus Corridor in Shankill will provide additional landscaping and outdoor amenities to improve the local urban realm. The proposed design aligns with Chapter 6 (Traffic & Transport) in Volume of the EIAR which has considered DMURS.** Policy US6: '*To ensure that new north-south linkages and routes are created to allow for quality usable connections between the future residential communities at Shanganagh Castle and Woodbrook, as well as Shanganagh Park as a major recreational resource.'* **The Proposed Bus Corridor in Shankill runs north-south along the Dublin Road providing high-quality cycling and pedestrian infrastructure.** Policy US7: *'To ensure that the public realm is legible, cohesive and operates as a connected network and that it interfaces successfully with the public realm of the wider area and facilitates future strategic connections.'* **The Proposed Bus Corridor in Shankill aims to mitigate adverse effects that the proposals may have on the streets, spaces, local areas and landscape through the use of appropriate design responses. In addition, opportunities have been sought to enhance the public realm and landscape design where possible.** **The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor adjoining the Woodbrook – Shanganagh LAP area. It will facilitate a modal shift towards public transport and active travel modes which is are key objectives of EU, National and Local policy.**

NTA are satisfied that there is sufficient need for the Proposed Scheme and will deliver the infrastructure necessary to enhance public transport, walking and cycling networks in Section 3 through Shankill.

3.9.3.1.2 Consideration of Alternatives and Options Assessment in Shankill

Some submissions have raised concerns on the lack of alternatives and option assessment considered in Shankill. They also raised the concern that the assessment was done in 2017 and is out of date.

Strategic Alternatives Considered

Section 3.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR, describes the reasonable alternatives studied and the main reasons for the selection of the proposed Bray to City Centre Core Bus Corridor Scheme (referred to as the Proposed Scheme), taking into account the effects on the environment. It considers the alternatives at three levels:

- Strategic Alternatives;
- Route Alternatives; and
- Design Alternatives.

Route Alternatives and Design Alternatives are discussed in sections below.

Options Assessment to inform Emerging Preferred Route Option (EPR)

Section 3.3.1 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the high level route options considered at the Feasibility and Route Options stage to inform the Emerging Preferred Route (EPR) option.

'At the start of the Stage 1 assessment, an initial 'spiders web' of potential route options that could accommodate a CBC was identified for each study area section. This is presented in Image 3.5 for Section 3 Lounglinstown Roundabout to Bray North (Wilford Junction)

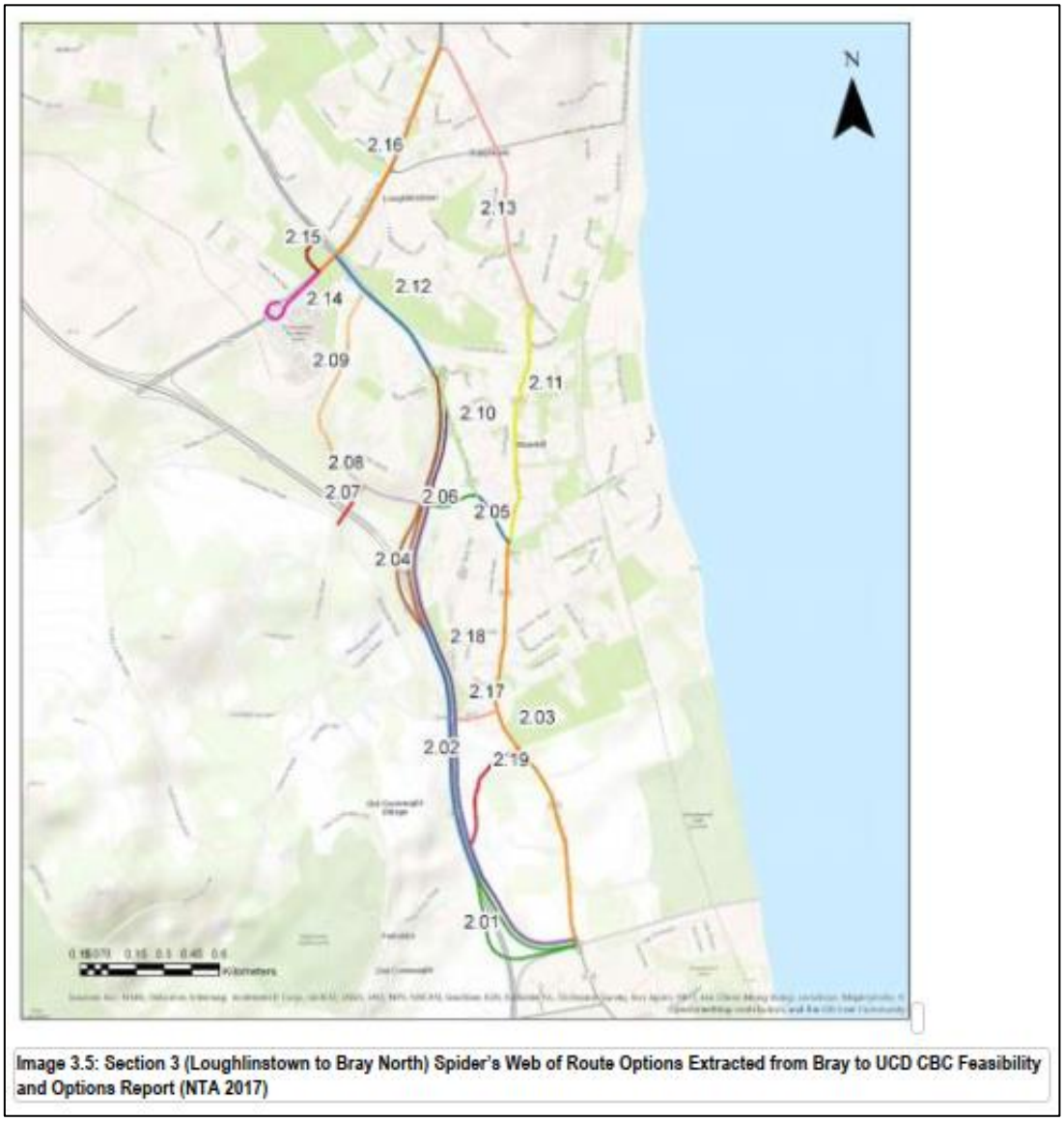


Image 3.5: Section 3 (Loughlinstown to Bray North) Spider's Web of Route Options Extracted from Bray to UCD CBC Feasibility and Options Report (NTA 2017)

The initial 'spider's web' was narrowed down using a high level qualitative method based on professional judgement and a general appreciation for existing physical conditions / constraints within the study area. This exercise examined and assessed technically feasible route options, based upon the following specific objectives:

6) *'Deliver the on street infrastructure necessary to provide continuous priority for bus movements along the Core Bus Corridor. This will mean enhanced bus lane provision on the corridor, removing current delays in relevant locations and enabling the bus to provide a faster alternative to car traffic along the route, making bus transport a more attractive alternative for road users. It will also make the bus system more efficient, as faster bus journeys means that more people can be moved with the same level of vehicle and driver resources.*

7) *Provide any cycle facilities along the route that are required under the Greater Dublin Area Cycle Network Plan (published by the NTA, 2013) to the target Quality of Service(s) specified therein and to give consideration to further providing cycle facilities along sections of the route where they may not be expressly required under the Cycle Network Plan.' (NTA 2017; NTA 2018)*

In addition to being assessed on their individual merits, routes were also assessed relative to each other enabling some routes to be ruled out if more suitable alternatives existed. The Stage 1

assessment considered engineering constraints, high-level environmental constraints and an analysis of population and employment catchments. Numerous links forming part of the 'spider's web' were not brought forward to the Stage 2 assessment due to space constraints, lack of appropriate adjacent linkages to form a coherent end-to-end route, unsuitability of particular routes, in addition to other factors.

Arising from the consideration of the various permutations possible in respect of the 'spider's web', a reduced number of coherent end-to-end options were identified for specific sections for further assessment. In arriving at these options, those links which failed the initial sifting stage were removed as well as those links that were disconnected and could not clearly form part of the potential end-to-end options. These options are presented in Image 3.7 to Image 3.10. This is presented in Image 3.9 for Section 3 Lounglinstown Roundabout to Bray North (Wilford Junction).

Image 3.9: Route Options from Initial Sift (Loughlinstown to Bray North Section) (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

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Section 3.3.2.3 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the Stage 2 route options assessment in Section 3 Loughlinstown Roundabout to Bray North (Wilford Roundabout), where five route options were assessed to inform the Emerging Preferred Route Option (Route Option 2B).

'*Following the Stage 1 sifting process, five viable route options for Section 3 were taken forward for assessment and further refinement. These five route options were as follows:*

- *Route 2A would run parallel to the M11 on a newly constructed busway from Wilford Junction through to Loughlinstown Roundabout and then along the N11 to the Wyattville Interchange;*

- *Route 2B (EPR) would run via the Dublin Road from Wilford Junction, through Shankill and onto the N11 at Loughlinstown Roundabout to the Wyattville Interchange;*

- *Route 2C would run via the Dublin road and Crinken Lane, and join a newly built bus-way parallel to the M11 at Loughlinstown Roundabout, before following the existing N11 to the Wyattville Interchange;*

- *Route 2D would have buses follow the same route as Route 2B, but general traffic could be diverted around Shankill Village using a newly constructed road on the same alignment as that proposed for the bus route in 2C. A Bus Gate would be put in place on the Dublin Road between the Shanganagh Road and Lower Road junctions; and*

- *Route 2E would combine routes 2A and 2B whereby the route would run parallel to the M11 on a newly constructed busway from Wilford Junction to the intersection with Crinken Lane, then it would run along the Dublin Road from Crinken Lane to Loughlinstown Roundabout and along the N11 to the Wyattville Interchange.*

There is a good deal of overlap between these five route options. All five corridors were proposed to follow the same route along the N11 from the Loughlinstown Roundabout to the Wyattville Interchange. Routes 2B and 2D are almost exactly the same except for the diversion of general traffic on to a new road around Shankill Village under Route 2D. Routes 2B, 2C and 2D were proposed to take the same alignment along Dublin Road from the Wilford Junction to Crinken Lane, while Routes 2A and 2E were proposed to take the alternative route along a new busway parallel to the M11 between Wilford Junction and Crinken Lane. Routes 2A and 2C were proposed to take the same route from Crinken Lane to the Wyattville Interchange (via a new bus-way parallel to the M11), while Routes 2B, 2D and 2E were proposed to take the same route from Crinken Lane to the Wyattville Interchange (via the Dublin Road).

Route Option 2A would commence at the Wilford Junction and run to the east of, and parallel to, the M11 along a dedicated bus route, passing west of Shankill Village, before joining the R837 Dublin Road south of Loughlinstown and continuing north on the N11 to the Wyattville Interchange. Wilford Roundabout would be upgraded to a signalised junction. The route would travel from there along a dedicated bus route crossing Allies River Road at grade and rising to intersect Crinken Lane at grade before continuing north to the west of Mountain View and intersecting Lordello Road footbridge and pedestrian route to the west of New Vale. It would then travel west of Stonebridge Grove before rising to intersect with Stonebridge Road at grade. The route would continue north, parallel to the M11, before joining the R837 Dublin Road to the south of Loughlinstown Roundabout via a proposed signalised junction. This option would require land take including private lands, portions of gardens, woodland, treelines and grass verges along the entire route and would require significant earthworks and retaining structures, as well as the removal of trees and hedgerows which currently provide screening for the M11. On the southbound approach to Loughlinstown Roundabout road widening would be required to extend the bus lane to and around the eastern side of the roundabout, requiring realignment of the existing road to provide clearance for buses under the existing footbridge. There would also be a dedicated bus lane provided on the northbound approach to the Wyattville Interchange, requiring reconfiguration of the existing Cherrywood Road Junction and amendment of the existing service road running parallel to the N11 into a one-way northbound only route.'

A schematic route alignment of the five route options presented in Figure 3.133, extract Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR.

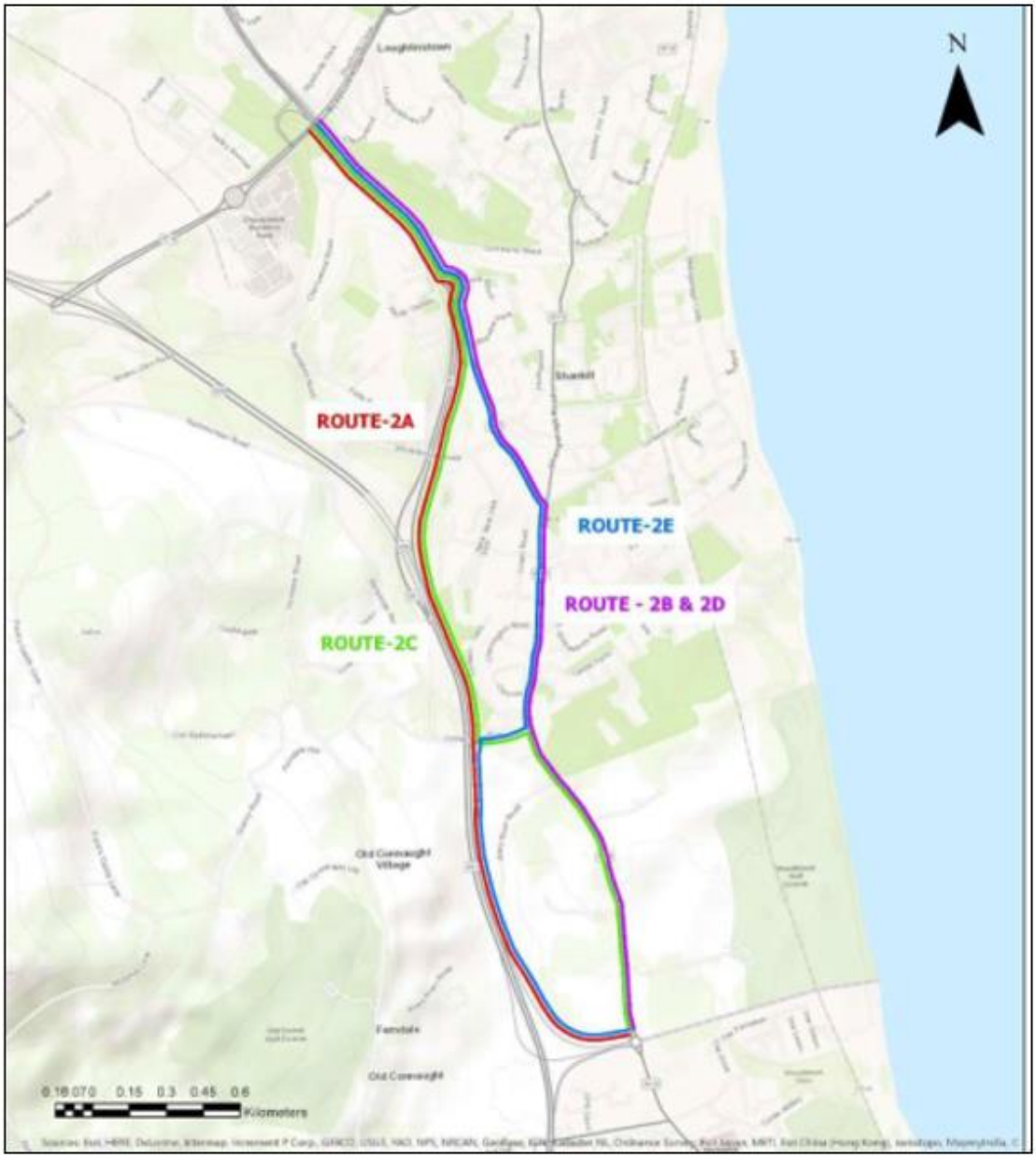


Image 3.13: Section 3 Route Options Remaining After Stage 1 Sifting (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

Figure 3.133: Extract from Chapter 3 (Reasonable Alternatives) in Volume 2 of EIAR (Image 3.13)

A schematic route alignment of Options 2A and a cross-section on the new busway Option 2A is presented in Figure 3.134 and Figure 3.135, extract from Appendix M (Bray to UCD CBC Feasibility and Options Report) of the Preferred Route Options Report part of Supplementary Information.

As noted in from Appendix M (Bray to UCD CBC Feasibility and Options Report) of the Preferred Route Options Report part of Supplementary Information, Option 2A proposes total of 7 bus stops would likely be provided in each direction along the route, out of which 5 number bus stops are located within the Loughlinstown roundabout to Wilford roundabout section, which will serve the Shankill residents.

Figure 6.4 Route Option 2A

Figure 3.134: Extract from Appendix M of the Preferred Route Option Report (Figure 6.4 Route Option 2A)

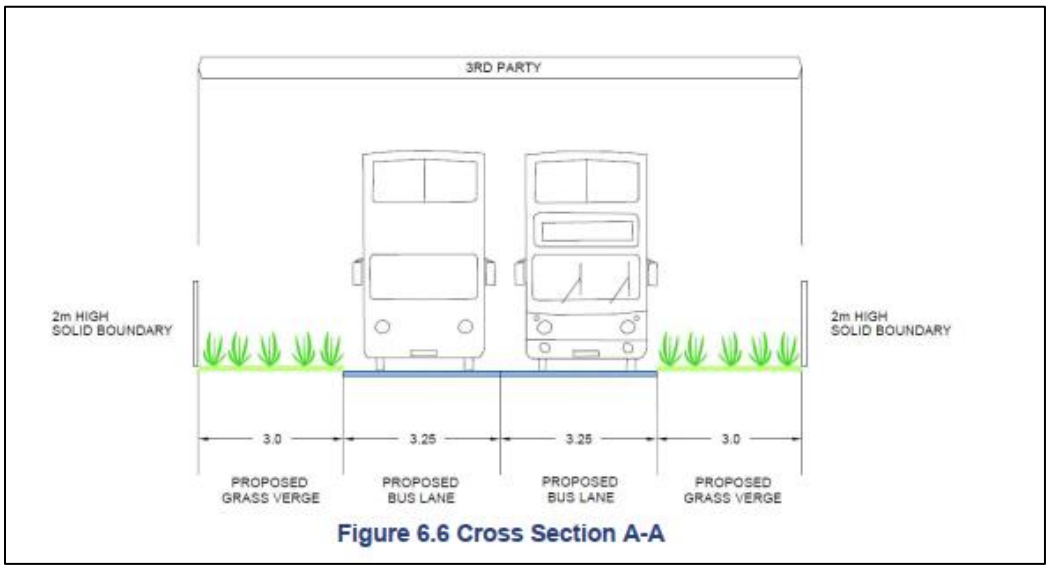


Figure 6.6 Cross Section A-A

Figure 3.135: Extract from Appendix M of the Preferred Route Option Report (Figure 6.6 Cross-section for Route Option 2A)

Section 3.3.2.3 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes, further goes on to describe Option 2B (Emerging Preferred Route Option) and the assessment of all other options.

'Route Option 2B would commence at the Wilford Junction and run via the Dublin Road through Shankill Village to Loughlinstown Roundabout and north to the Wyattville Interchange. Due to particular constraints along this route, particularly around Shankill Village, the route was broken down into a number of sub-sections with separate options assessments undertaken for each. The following lists the sub-sections and their individual options, with the chosen option indicated:

Section 1: Wilford Roundabout to Crinken Lane:

- ***Option 1 – providing parallel bus lanes, cycle tracks and footpaths in a 20m cross-section. Southbound footpath to run through Shanganagh Park** (chosen option); and*
- *Option 2 – providing dedicated bus lanes and footpaths with a section of off-line cycle tracks running to the east of the Dublin Road.*

Section 2: Crinken Lane to St. Anne's Church Junction:

- *Cycling – as it is not possible to provide continuous dedicated bus lanes and cycle tracks along this section, four options were considered for alternative cycle routes (refer to Section 3.3.3 of this Chapter for further details);*
- *Option 1 – a northbound bus lane between Crinken Lane and Quinn's Road, with a section of northbound bus lane through Shankill Village between Stonebridge Close and Lower Road, and a southbound bus lane between Stonebridge Close and Crinken Lane;*
- *Option 2 – bus lanes in both directions between Crinken Lane and Quinn's Road, and a southbound bus lane between Lower Road and Crinken Lane; and*
- *Option 3 – a northbound bus lane between Crinken Lane and Quinn's Road, with a section of northbound bus lane through Shankill Village between Stonebridge Close and Lower Road, and a southbound bus lane between Lower Road and Crinken Lane (chosen option). This section does not have segregated cycle tracks as cycling options were evaluated separately through this section as discussed under Section 3.3.3.*

Section 3: St. Anne's Junction to Loughlinstown:

- *Option 1 – bus lanes in both directions between St. Anne's Church Roundabout and Loughlinstown Roundabout, with a two-way cycle track on the western side of the Dublin Road between St. Anne's Church Roundabout and the Resource Centre, and a two-way cycle track on the eastern side of the Dublin Road between Seaview Park and Loughlinstown Roundabout (chosen option); and*
- *Option 2 – bus lanes in both directions between St. Anne's Church Roundabout and Loughlinstown Roundabout, with an alternative cycle route provided linking Loughlinstown Roundabout to Shanganagh Road and St. Anne's Church Roundabout via Seaview Wood and Seaview Park.*

Pulling all of those individual options together, Route Option 2B would commence at the Wilford Roundabout which would be upgraded to a signalised junction to provide bus priority. Bus and cycle lanes would be provided in both directions to Crinken Lane. Bus lanes in both directions would be provided from Crinken Lane to Quinn's Road Roundabout, which would be upgraded to a signalised junction. An offline cycle track would be provided to the west of Shankill Village along Beech Road, Mountain View, Assumpta Park / Stonebridge Close and Lower Road. Through Shankill Village a continuous southbound and only a section of northbound bus lane would be provided due to space constraints. North of the village is an old bridge which constrains the carriageway width, requiring the buses to merge with general traffic. Bus lanes would be provided in both directions between the St. Anne's Church Junction and Loughlinstown Roundabout, with some segregated cycle tracks and some shared footpath / cycle paths proposed. Land acquisition of agricultural lands, amenity lands and portions of gardens, as well as removal of a number of trees, throughout this section would be required in order to accommodate the proposed road widening. From Loughlinstown Roundabout it would be the

same as Route Option 2A.

Route Option 2C was considered most favourable under the Archaeological, Architectural and Cultural Heritage sub-criterion, while Route Option 2A was considered most favourable under the Landscape and Visual; and the Land Use and Built Environment sub-criteria. Route Options 2A and 2E were considered equally favourable under the Flora and Fauna sub-criterion; Route Options 2B, 2C and 2E were considered equally favourable under the Soils and Geology sub-criterion; and Route Options 2A, 2C and 2E were considered equally favourable under the Noise, Vibration and Air sub-criterion. Overall, Route Option 2A was deemed to be the most advantageous under the Environment criteria as the loss of immature woodland along the M11 is considered to be less significant when compared to the loss of stone boundary walls, tree lines, hedgerows and mature trees along the Dublin Road. Route Option 2A also required land take from lower amenity land than that required for the other options as it avoids Shankill Village.

Overall 2B was deemed to be the most advantageous route, even though it was not the most advantageous under the Environment criterion. This is due to its comparatively lower cost; significant benefits in terms of integration, accessibility and social inclusion as it serves the catchment of Shankill, integrates with the DART and provides continuous cycle facilities; and it would deliver a high level of service for bus passengers. Therefore, 2B was brought forward into the Emerging Preferred Route.'

Table 3.31 presents the multi-criteria assessment of the Route Options 2A, 2B, 2C, 2D and 2E, extract from Appendix M (Bray to UCD CBC Feasibility and Options Report) of the Preferred Route Options Report, part of Supplementary Information.

Based on the assessments above it has been determined that while not the most favourable from an environment perspective Route Option 2B offers the preferred route option for the following reasons:

- It has the lowest capital cost of the five schemes
- It has significant benefits in terms of integration, accessibility and social inclusion as it serves the catchment of Shankill, integrates with the DART and provides continuous cycle facilities
- While not the most preferable of the schemes under journey time reliability, it would still deliver a high level of service for bus passengers
- In terms of safety, the five schemes are considered equal

Route Option 2B was identified as the preferred option for this section and is brought forward as the Emerging Preferred Route. Scheme 2A was the next preferred as it offers the best journey time reliability and has significant environmental benefits compared to the other schemes, however it has significant disbenefits in terms of integration.

Table 3.31: Extract from Appendix M of Preferred Route Options Report (Table 6.6 and 6.7 MCA for Section 3)

Table 6.6 Section 2 Route Options Assessment Summary (Sub-Criteria)

Assessment Criteria	Sub-Criteria	2A	2B	2C	2D	2E
Economy	Capital Cost					
	Journey-time reliability and quality of service					
Integration	Land Use Integration					
	Residential Population and Employment Catchments					
	Transport Network Integration					
	Cyclists and pedestrian Integration					
Accessibility and Social Inclusion	High volume trip attractors					
	Deprived Geographic Areas					
Safety	Road Safety					
Environment	Archaeological, Architectural and Cultural Heritage					
	Flora and Fauna					
	Soils and Geology					
	Hydrology					
	Landscape and visual					
	Noise, Vibration and Air					
	Land Use and the Built Environment					

Table 6.7 Route Options Assessment Summary (Main Criteria)

Assessment Criteria	2A	2B	2C	2D	2E
Economy					
Integration					
Accessibility and Social Inclusion					
Safety					
Environment					

Figure 3.136 presents the indicative scheme design for the Route Option B (Emerging Preferred Route Option), extract from Appendix M (Bray to UCD CBC Feasibility and Options Report) of the Preferred Route Options Report part of Supplementary Information.

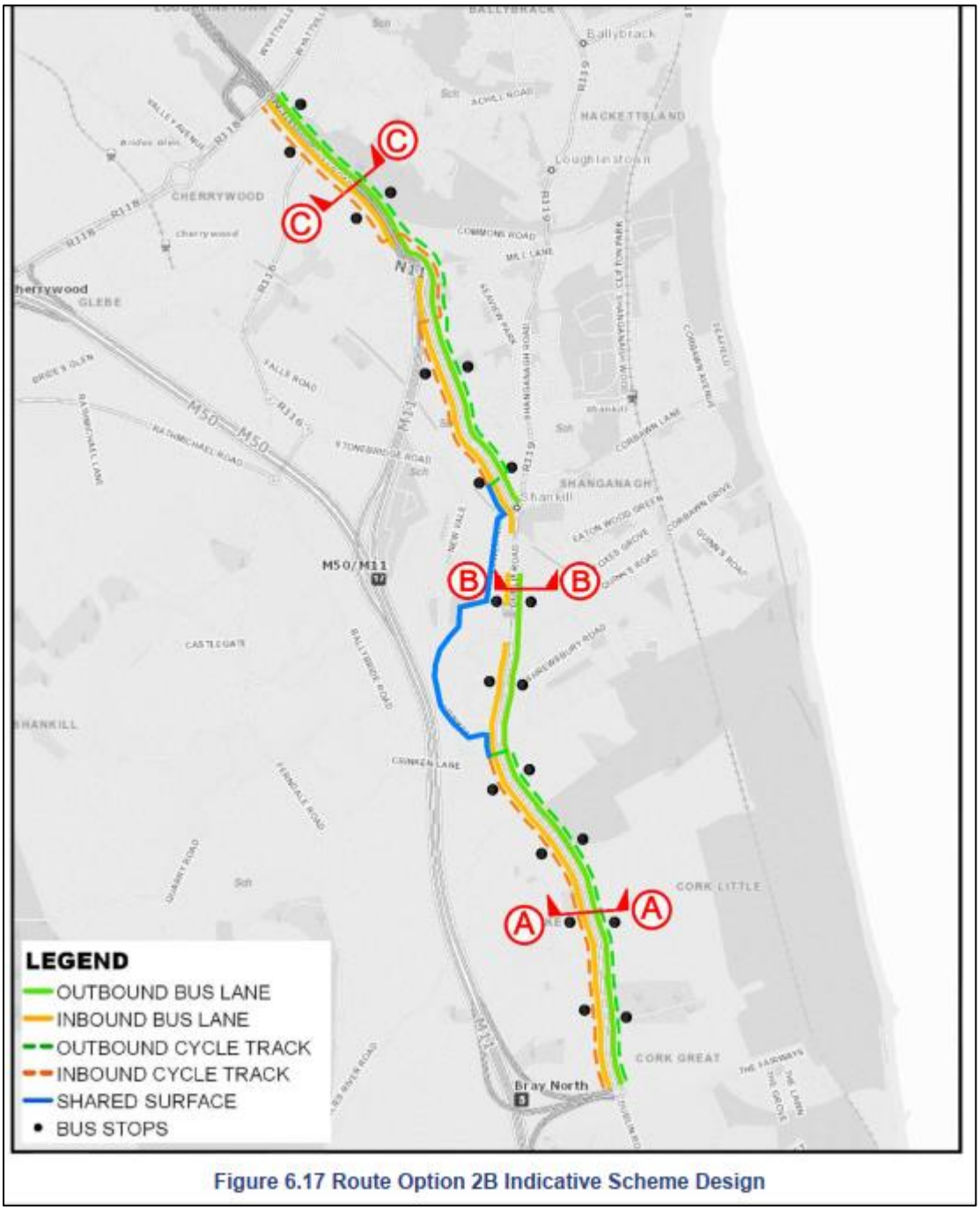


Figure 6.17 Route Option 2B Indicative Scheme Design

Figure 3.136: Extract from Appendix M of Preferred Route Options Report (Image 6.17 EPR Option)

The Emerging Preferred Route Option is presented in Appendix N (EPR Public Consultation Feb 2019) of the Preferred Route Options Report as part of the Supplementary Information.

Options Assessment to inform Preferred Route Option (Proposed Scheme)

Section 3.3 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR, notes the following on assessment carried out post the ERP to inform the Preferred Route Option (Proposed Scheme).

"Following on from the strategic alternatives considered earlier, this Section sets out the route alternatives which were considered as part of the process to establish the Proposed Scheme. Development of the Proposed Scheme has evolved in the following stages:

1. *Feasibility and Options Reports were concluded in December 2017 and March 2018 (two reports associated with the Proposed Scheme (Bray to UCD CBC in December 2017 and UCD*

to City Centre (St. Stephen's Green) CBC in March 2018)), setting out the initial route options and concluding with the identification of the combined Emerging Preferred Route;

2. *A first round of non-statutory Public Consultation was undertaken on the Emerging Preferred Route from 26 February 2019 to 31 May 2019;*

3. *Development of Draft Preferred Route Option (May 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder and community engagement and the availability of additional design information, the design of the Emerging Preferred Route evolved with further alternatives considered;*

4. *A second round of non-statutory Public Consultation was undertaken on the draft Preferred Route Option from 4 March 2020 to 17 April 2020. Due to the introduction of COVID-19 restrictions, some planned in-person information events were cancelled, leading to a decision to hold a third consultation later in the year;*

5. *A third round of non-statutory Public Consultation was undertaken on the updated draft Preferred Route Option from 4 November 2020 to 16 December 2020; and*

6. *Finalisation of Preferred Route Option. Informed by feedback from the overall public consultation process, continuing stakeholder engagement and the availability of additional design information, the Preferred Route Option, being the Proposed Scheme, was finalised.*

Alternative route options have been considered in a number of areas during the iterative design of the Proposed Scheme, such as the location of offline cycle routes and the road layout in constrained locations. The iterative development of the Proposed Scheme has also been informed by a review of feedback and new information received during each stage of public consultation and as data, such as topographical surveys, transport and environmental information was collected and assessed. In addition, the potential for climate impact was considered in all phases of the design process for the Proposed Scheme. As the design progressed climate was indirectly affected in a positive way by refining the design at each stage through reducing the physical footprint of the scheme coupled with the inclusion of technological bus priority measures.

Key environmental aspects have been considered during the examination of reasonable alternatives in the development of the Preferred Route Option for the Proposed Scheme. Environmental specialists have been involved in the iteration of key aspects of the Proposed Scheme with the engineering design team. The following key environmental aspects were considered:

- ***Archaeological, Architectural and Cultural Heritage** – There is the potential for impacts on archaeological, architectural and cultural heritage when providing CBC infrastructure. The assessment had regard to Recorded Monuments and Protected Structures, Sites of Archaeological or Cultural Heritage and on buildings listed on the National Inventory of Architectural Heritage adjacent to the corridor;*

- ***Flora and Fauna** – The provision of the CBC could have negative impacts on flora and fauna, for example, through construction of new infrastructure through green field sites;*

- ***Soils and Geology** – Construction of infrastructure necessary for the provision of the CBC has the potential to negatively impact on soils and geology. For example, through land acquisition and ground excavation. There is also the potential to encounter ground contamination from historical industries;*

- ***Hydrology** – The provision of CBC infrastructure may include aspects (for example structures) with the potential to impact on hydrology;*

- ***Landscape and Visual** – Provision of CBC infrastructure has the potential to negatively impact on the landscape and visual aspects of the area, for example, by the removal of front gardens or green spaces or the altering of streetscapes, character and features;*

- ***Noise, Vibration and Air** – Provision of CBC infrastructure (e.g. the construction activities), has the potential to negatively impact on noise, vibration and air quality along a scheme. For example, through construction works;*

- ***Land Use and the Built Environment*** *– This criterion assesses the impact of each option on land use character, and measured impacts which would prevent land from achieving its intended use, for example through land acquisition, removal of parking spaces or severance of land; and*

- ***Climate*** *– Construction works involve negative GHG emissions impacts, while operational efficiencies of public transport, walking and cycling through modal shift from car usage has the potential to reduce GHG impacts."*

Section 3.3.2.3 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR, goes on to note the following on the route alternatives considered post the Emerging Preferred Route Option to inform the Preferred Route Option (Proposed Scheme). These are discussed below.

A. Loughlinstown Roundabout to junction with Stonebridge Road (approx. 700m)

The existing provision over this length comprises a general traffic lane in each direction with an advisory cycle lane in both directions. At St. Rita's, a Toucan Crossing allows cyclists to cross to the eastern side of the road to/from the northbound continuation of a two-way cycle track. The existing advisory cycle lane is considered to be substandard R837 Dublin Road between Loughlinstown Roundabout and the R837 Dublin Road / Stonebridge Road Junction.

The EPR for this section provided a full suite of two footpaths, two segregated cycle tracks, two bus lanes and two general traffic lanes from Dublin Road/ Shanganagh Road/ Corbawan Lane to Loughlinstown Roundabout. Figure 3.137 shows the EPR option schematic extract from the PRO, part of Supplementary information.

The Proposed Scheme (Preferred Route Option) design in this section provides for dedicated bus lane, traffic lane and footpath in both directions. Following the first Non-Statutory Public Consultation, taking comments from the public into account, the cycle tracks on this section were removed from the design due to the additional impact that the 4m of cross-section had on adjacent lands and properties. Updated topographical and tree surveys were carried out which informed additional design development. Options were assessed for combinations of Signal Controlled Bus Priority taking adjacent properties and trees into account.

The Proposed Scheme in this section does not provide for segregated cycling facility, however, it provides a more direct route to the cyclists in this section to approach Shankill and journey towards Bray. Whilst no segregated cycle lanes will be provided along here, cyclists will share the combined bus and cycle lanes and therefore be segregated from general traffic.

Also, Dublin Road from Loughlinstown Roundabout to Corbawn Roundabout is identified as Secondary Route in the 2022 Greater Dublin Area Cycle Network. These routes were identified as Primary Secondary Routes in the 2013 GDA Cycle Network Plan. Shanganagh Road continuing into Dublin Road R119 is now identified as the Primary Cycle Route. Hence, the Proposed Scheme design at this section meets the objectives of the BusConnects and in accordance with the 2022 Greater Dublin Area Cycle Network Plan, hence a lower level of service for cycling has been provided i.e. cyclists will share the bus lane.

Figure 6.16: EPR Cycle Route Option 1 from St. Anne's Church to Loughlinstown Roundabout

Figure 3.137: Extract from Preferred Route Options Report (Figure 6.16 EPR Option)

Section 3.4.1.3.4 in Chapter 3 (Reasonable Alternatives) in Volume 2 of EIAR notes the following:

'The Emerging Preferred Route for this section would have provided a full suite of two footpaths, two segregated cycle tracks, two bus lanes and two general traffic lanes from St. Anne's Church Roundabout to Loughlinstown Roundabout. The design in this section was reviewed as part of the development of the Preferred Route Option following consultation feedback, updated topographical survey information and a tree survey. Options were assessed for combinations of Signal Controlled Bus Priority in order to reduce the impact on adjacent properties and trees.

Following the first Non-Statutory Public Consultation, taking comments from the public and local community feedback into account, the cycle tracks on this section were removed from the design due to the additional impact that the 4m of cross-section had on adjacent lands and properties. The proposed cycle route required cyclists to share bus lanes between Loughlinstown Roundabout and Stonebridge Road. Cycle track options are discussed in more detail in Section 3.4.1.3.2 and Section 3.4.1.3.3 above as Options 3.2C and 3.2D.

The design was amended to provide continuous bus lanes where possible, with Signal Controlled Bus Priority proposed between St. Anne's Church Junction and Rathmichael Woods in the northbound direction.

From the Dublin Road / Stonebridge Road Junction to the Loughlinstown Roundabout, the necessary widening is entirely to the west of the carriageway.'

Section 3.4.1.3.2 goes on to note the following alternative options considered to determine the Preferred Route Option:

'3.4.1.3.2 Section 3.2C – Cycle Provision Between Crinken Lane and Loughlinstown Roundabout

Due to the number of submissions received during public consultation on the cycle provision along this section, the design for this section was further investigated. The section was split into two sub-sections, with alternative options assessed against the Emerging Preferred Route for each as outlined:

Subsection 1 between Loughlinstown Roundabout and Stonebridge Road:

- *New Option 3.2C1 (M11 Cycle Track): would consist of a new cycle track constructed to the east of the M11, requiring clearance and construction along the grassed verge including*

additional vehicle restraints, retaining walls and earthworks to provide sufficient width. It would also require a ramp to be constructed from the M11 to Stonebridge Road due to the level difference;

- *New Option 3.2C2 (Dublin Road Cycle Route): would not provide segregated cycle tracks between Loughlinstown Roundabout and Stonebridge Road, requiring cyclists to share bus lanes or general traffic lanes along this length. It would provide a more direct route for cyclists and tie in with the GDA Cycle Network Plan Primary Route;*

The assessment concluded that New Option 3.2C2 was to be taken forward due to the potential impacts associated with constructing New Option 3.2C1.'

Figure 3.138 shows the schematic design of the above two cycle options, as noted in Section 6.4.3.3 and 6.4.3.4 of the Preferred Route Option Report, part of Supplementary Information.

Table 3.32 the summary of MCA of the above two cycle options, as noted in Section 6.4.3.5 of the Preferred Route Option Report, part of Supplementary Information.

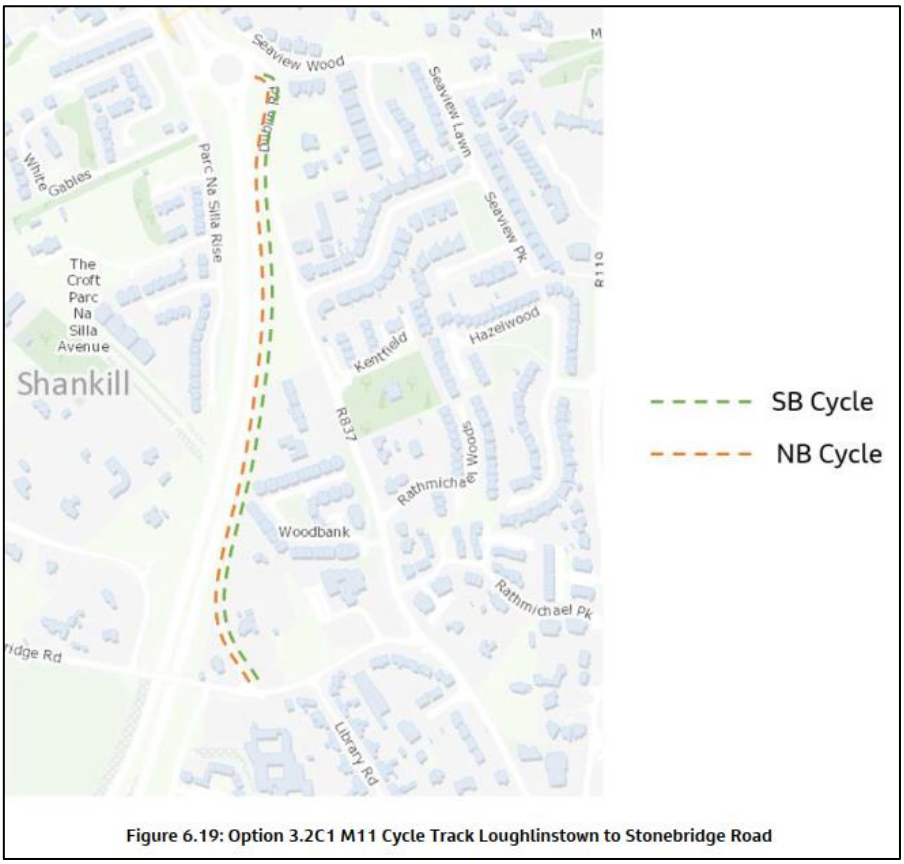


Figure 6.19: Option 3.2C1 M11 Cycle Track Loughlinstown to Stonebridge Road

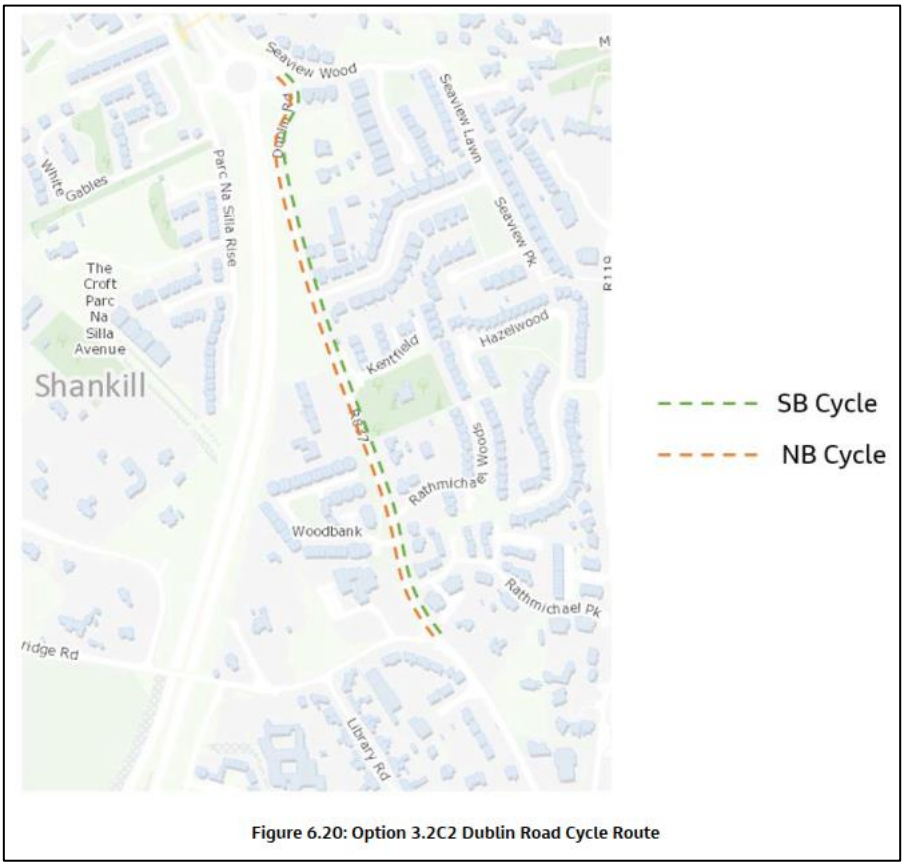


Figure 6.20: Option 3.2C2 Dublin Road Cycle Route

Figure 3.138: Extract from Preferred Route Options Report (Figure 6.19 and Figure 6.20)

Section 6.4.3.4 of Preferred Route Options Report, part of Supplementary Information notes the following:

'In terms of Economy, Option 3.2C2 performs best as it requires no additional construction. EPR Option

1 and 3.2C1perform best in terms of Journey Time Reliability as the cyclists would not interfere with bus travel times.

In terms of Integration, EPR Option 1 and 3.2C2 perform best as they serve the main population, transport and commercial elements in the locality, while Option 3.2C1 is located away from these. This is the same reason these two options perform best in terms of Accessibility and Social Inclusion.

In terms of Safety, EPR Option 1 and Option 3.2C1 perform best as they provide segregated cycle facilities.

In terms of Environment, Option 3.2C2 performs best as it has the least impact on the existing environment, with Option 3.2C1 next and EPR Option 1 performing worst by comparison.

A summary of the assessment and relative ranking of route options against the five main assessment criteria is presented in Table 6.8.

From this assessment, the option taken forward was new Option 3.2C2 – Dublin Road Cycling Route for the Cycling subsection 1. Although this option does not provide segregated cycle infrastructure along this section, it is considered the most appropriate solution to bring forward over this section taking into account the impact of cycle infrastructure on adjacent properties and planted areas, the associated requirement for specific structural earthwork solutions along the M11, and input from the local community.'

Table 3.32: Extract from Preferred Route Options Report (Table 6.7 and Table 6.8)

MCA Criteria	Assessment Sub-Criteria	EPR Option (1)	Option 3.2C1 (M11 Cycle Track)	Option 3.2C2 (Dublin Road Cycling Route)
Economy	1a Capital Cost			
	1b Transport Reliability and Quality			
Integration	2a Land Use integration			
	2b Residential Population and Employment Catchments			
	2c Transport Network Integration			
	2d Cycle Network Integration			
	2e Traffic Network Integration			
Accessibility and Social Inclusion	3a Key Trip Attractors			
	3b Deprived Geographical Areas			
Safety	4a Road Safety			
Environment	5a Archaeology, and Cultural Heritage			
	5b Architectural Heritage			
	5c Flora and Fauna			
	5d Soils and Geology			
	5e Hydrology			
	5f Landscape and Visual			
	5g Air Quality			
	5h Noise and Vibration			
	5i Land Use Character			

Table 6.7: Cycling Subsection 1 MCA between Loughlinstown Roundabout and Stonebridge Road

MCA Criteria	EPR Option 1	Option 3.2C1	Option 3.2C2
Economy			
Integration			
Accessibility and Social Inclusion			
Safety			
Environment			

Table 6.8: Cycling Subsection 1 MCA Summary

B. Stonebridge Road to Dublin Road/ Shanganagh Road/ Corbawn Lane to Crinken Lane (930m)

The existing provision over this length comprises a general traffic lane in each direction with an advisory cycle lane in both directions from Stonebridge Road to Dublin Road/ Shanganagh Road/ Corbawn Lane junction and the same between Quinn Roundabout to Crinken Lane. There are no advisory cycle lanes in the Shankill Village (between Dublin Road/ Shanganagh Road/ Corbawan Lane to Quinn's Roundabout).

The EPR for this section provided a full suite of two footpaths, two segregated cycle tracks, two bus lanes and two general traffic lanes from Stonebridge Road to Dublin Road/ Shanganagh Road/ Corbawn Lane junction. From Dublin Road/ Shanganagh Road/ Corbawn Lane junction to Crinken Lane the standard cross-section provided for general traffic lane and bus lane in both direction with exception through Shankill village which did not have bus lane for a short section. Possible alternative cycle route on a shared street facility from Corbawn Lane to Quinn's Roundabout and Beech Road was presented in the EPR option.

During the development of the Proposed Scheme (Preferred Route Option), local resident group engagement and the potential impacts on the Shankill village area were considered when determining cycle and bus infrastructure in this section. The Proposed Scheme in this section does not provide for segregated cycling facility from Dublin Road/ Shanganagh Road/ Corbawn Lane to Crinken Lane, however, it provides a more direct route to the cyclists in this section through Shankill village and journey towards Bray. In addition, existing advisory lanes that exist in places are considered too narrow to be retained alongside the new cross section proposals. Whilst no segregated cycle lanes will be provided along here, cyclists will share general traffic lane and buses, in a shared street environment. A 30km/h speed limit would be in place for the village to enhance safety in this shared section of road.

Section 3.4.1.3.2 of the Chapter 3 (Consideration of Alternatives) in Volume 2 of EIAR notes the following on alternatives considered for cycling between this section.

'3.4.1.3.2 Section 3.2C – Cycle Provision Between Crinken Lane and Loughlinstown Roundabout

Due to the number of submissions received during public consultation on the cycle provision along this section, the design for this section was further investigated. The section was split into two sub-sections, with alternative options assessed against the Emerging Preferred Route for each as outlined:

Subsection 2 between Stonebridge Road and Crinken Lane:

- *New Option 3.2C3 (M11 Cycle Track): would be a continuation of the M11 cycle track from Option 3.2C1. The cycle track would go from Stonebridge Road, along Stonebridge Grove and then along the M11 verge to Lordello Road Bridge. It would then go under the bridge and along the green space to Mountain View, continuing to the Elms on to Crinken Lane, eventually rejoining the Dublin Road;*

- *New Option 3.2C4 (Library Road to Stonebridge Close): would bring advisory cycle lanes and quiet street treatment along Stonebridge Road to Library Road and New Vale, continuing along the laneway by Assumpta Park up to Lower Road. The cycle lanes would then pass through an existing wall on to Stonebridge Close and onto the Dublin Road, where they would share road space with other vehicles and buses until Crinken Lane;*

- *New Option 3.2C5 (Library Road / Assumpta Park / Mountain View): would be the same as Option 3.2C4 as far as the laneway at Assumpta Park, where it would then turn onto the lane to the rear of the houses on Assumpta Park continue on to Mountain View, The Elms and Crinken Lane, until rejoining the Dublin Road at the end of Crinken Lane;*

- *New Option 3.2C6 (Dublin Road Cycle Route): would be a continuation of Option 3.2C2 along the Dublin Road. It would not provide any segregated cycle infrastructure, with cyclists sharing bus and general traffic lanes. A speed limit of 30km/h would be in place between Stonebridge Road and the Signal Controlled Bus Priority south of Shankill Village;*

- *New Option 3.2C7 (Corbawn Lane to Stonebridge Road): would provide a short section of segregated two-way cycle track to link the junction at Corbawn Lane to Stonebridge Road. A*

Toucan Crossing would be provided to bring cyclists across the Dublin Road on the northern side of Stonebridge Road. This would provide cycle infrastructure along the GDA Cycle Network Plan Inter Urban Route D4. Between Crinken Lane and the junction at St. Anne's Church, cyclists would share the carriageway with general traffic or buses where bus lanes are provided. As with Option 3.2C6 a 30km/h speed limit would be in place; and

The assessment concluded that New Option 3.2C7 was to be taken forward. Although it would not provide segregated cycling along the entire length, the impact associated with segregated cycling infrastructure on properties and planted areas would be considerable, and this option would provide safer cycling between residential areas and schools on Stonebridge Road, and maintains the viability of the primary cycling route through Shankill through reducing the speed limit to 30km/h.

A combination of Options 3.2C2 and 3.2C7 were brought forward for the Proposed Route Option as they provide safe cycling provision along the GDA Cycle Network Plan Primary Route in this area; minimise the impact on the environment; and respond to input from the local community.'

Table 3.33 shows the summary of the MCA of the above options as noted in Section 6.4.3.11 of the Preferred Route Options Report, part of Supplementary Information.

Table 3.33: Extract from Preferred Route Options Report (Table 6.10)

MCA Criteria	Option 1	Option 3.2C3	Option 3.2C4	Option 3.2C5	Option 3.2C6	Option 3.2C7
Economy						
Integration						
Accessibility and Social Inclusion						
Safety						
Environment						

Table 6.10: Cycling Subsection 2 MCA Summary

Section 3.4.1.3.3 goes on to note the options considered through Shankill village (Section 3.2D Crinken Lane to St. Anne's Roundabout):

'The Emerging Preferred Route for this section would have provided a northbound bus lane between Crinken Lane and Quinn's Road, with a section of northbound bus lane through Shankill between Stonebridge Close and Lower Road, and a southbound bus lane between Lower Road and Crinken Lane. The design in this section was reviewed as part of the development of the Preferred Route Option following consultation feedback, a new topographical survey and a tree survey. Three additional options were assessed as described in the following.

***Route Option 3.2D4** would maintain two traffic lanes for buses and general traffic to share through Shankill Village, with Signal Controlled Bus Priority in place at either side of the village. A northbound bus lane would run from Crinken Lane to a Signal Controlled Bus Priority junction located on approach to Shankill Village, while the southbound bus lane would commence further south. Cycle lanes through Shankill Village would provide segregated cycle facilities between Stonebridge Close and Lower Road, outside which cyclists would share the carriageway with buses and general traffic.*

***Route Option 3.2D5** would maintain two general traffic lanes through Shankill Village, with a northbound bus lane provided between Stonebridge Close and Lower Road, and Signal Controlled Bus Priority introduced either side of the village to provide bus priority through this section.*

***Route Option 3.2D6** would maintain two general traffic lanes through Shankill Village, with Signal Controlled Bus Priority systems in place on the approach either side of the village. Signal Controlled Bus Priority would be provided at St. Anne's Church Junction for southbound buses. A northbound bus lane would be provided from Crinken Lane to a Signal Controlled Bus Priority system on approach to Shankill Village, while the southbound bus lane would recommence at Shanganagh Castle. A 30km/h speed limit would be in place for the village to enhance safety in this shared section of road.*

As with the selection of the Emerging Preferred Route options, each route option was evaluated using a multi-criteria assessment with one of the primary criteria being 'Environment', under which there was a number of subcriteria which each route option was considered against comparatively.

With respect to the Environment criterion, the three new options performed equally well with respect to the Archaeology and Cultural Heritage; Architectural Heritage; and Flora and Fauna sub-criteria. Options 3.2D4 and 3.2D6 performed equally well under the Noise and Vibration sub-criteria. Option 3.2D6 performed the best under the Landscape and Visual, and the Land Use Character sub-criteria.

Overall Option 3.2D6 was deemed to be the most advantageous option. This is due to it minimising the impact to the visual identity of Shankill Village, and maintaining existing footpath widths through the village, with a reduced speed limit providing improved safety. Therefore 3.2D6 was brought forward into the Preferred Route Option.

In addition to the changes through Shankill Village, Signal Control Priority measures which commenced through Shankill Village were extended for southbound buses as far as the Shanganagh Castle grounds (from Quinn's Road Junction to after Crinken Lane Junction) to reduce impact on properties and trees.'

Table 3.34 shows the summary of the MCA of the above options as noted in Section 6.4.4.7 of the Preferred Route Options Report, part of Supplementary Information.

Table 3.34: Extract from Preferred Route Options Report (Table 6.12)

MCA Criteria	EPR Option 2.2D	Option 3.2D4	Option 3.2D5	Option 3.2D6
Economy				
Integration				
Accessibility and Social Inclusion				
Safety				
Environment				

Table 6.12: Section 3.2D MCA Summary

Cycling Options

Section 3.3.3 notes the Cycling Options in Shankill;

'*Consideration of alternative cycling route options was fundamental in the process of identifying the Emerging Preferred Route. In general, the Emerging Preferred Route proposed generally aligns with the primary routes 12/12a on the Greater Dublin Area Cycle Network Plan which is generally routed from Bray North to the City Centre via Shankill, the N11 Bray Road, the N11/R138 Stillorgan Road and the R138 Donnybrook Road / Morehampton Road / Leeson Street. The end of the scheme in Bray aligns with the B1 primary route which runs north / south through Bray from the Vevay Road / Southern Cross Roundabout to the Wilford Roundabout.*

During the Emerging Preferred Route stage, identification of alternative cycle routes separate to the Core Bus Corridor Emerging Preferred Route were considered in Shankill due to the constraints through the village. There were four options assessed as part of the Route 2B assessment between Crinken Lane and St. Anne's Roundabout (Image 3.15). The options assessed were:

- *Option 1 – shared road space with general traffic on Beech Road, Mountain View, Stonebridge Close and Lower Road before using a newly constructed ramp to climb to the Dublin Road;*
- *Option 2 – two-way cycle track through Shanganagh Park, then shared road space with general traffic on St. Anne's Park before taking a ramp to a newly constructed cycle track along the old railway line, connecting back to the Dublin Road at St. Anne's Roundabout;*
- *Option 3 – two-way cycle track through Shanganagh Park, then shared road space with general traffic on St. Anne's Park before taking a ramp to a newly constructed cycle track along the old railway line, before connecting to Dorney Court and link via a cycle track through a*

green space to Dublin Road at St. Anne's Roundabout; and

- *Option 4 – two-way cycle track through Shanganagh Park, then shared road space with general traffic on St. Anne's Park, Foxes Grove, Eaton Wood Green and Dorney Court and link via a cycle track through a green space to Dublin Road at St. Anne's Roundabout.*

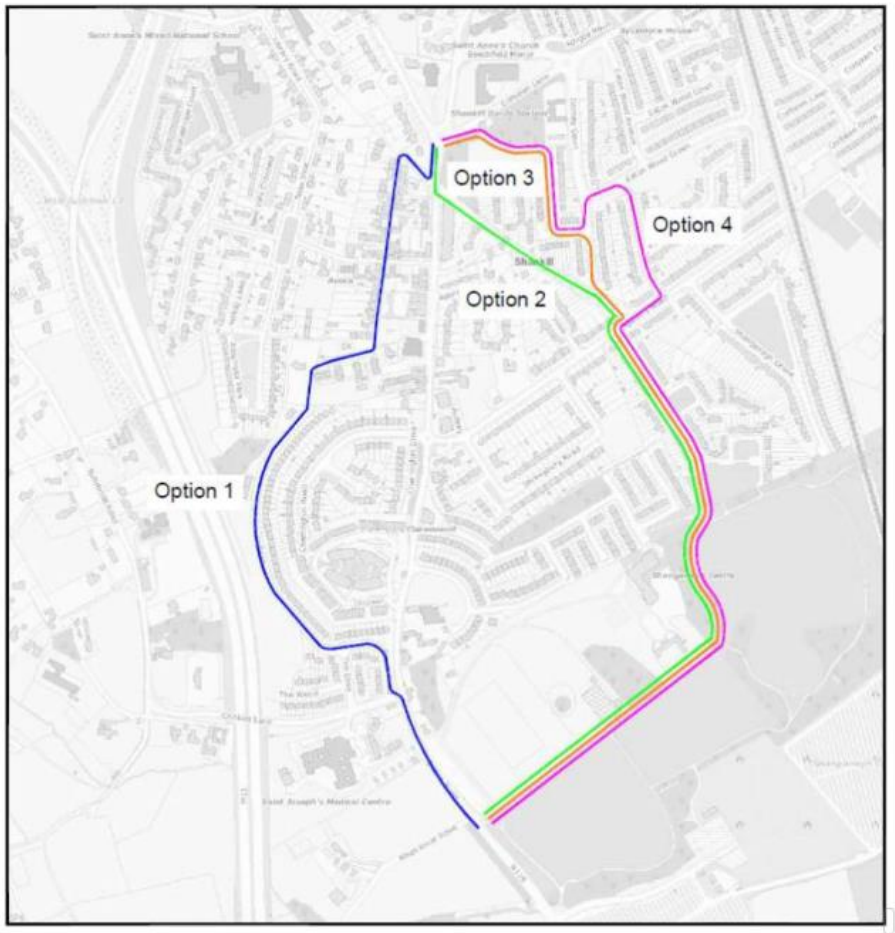


Image 3.15: Alternative Cycle Route Options Through Shankill (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

The assessment concluded that both Option 2 and Option 3 would require extensive land take and the resultant route would be circuitous, while Option 4 would result in a circuitous route which would be difficult for cyclists due to the many turning movements required. Therefore, the assessment concluded that Option 1 was the only viable option, given that it was the shortest and most direct route; it provided a number of opportunities for connections to the village; and it would improve pedestrian and cyclist connectivity and permeability between the residential areas to the south of the village and the schools to the north-east. Therefore Option 1 was brought forward into the Emerging Preferred Route.'

During the development of the Preferred Route option, EPR Option 1 was not considered as it did not meet the Proposed Scheme Objectives to provide a more direct route.

Crinken Lane to Wilford Roundabout

The existing provision over this length comprises a two-lane carriageway with advisory cycle lanes from Wilford Roundabout as far as Shanganagh Cemetery. From here, the cross-section switches to two traffic lanes, a northbound bus lane and a southbound advisory cycle lane until alongside Shanganagh Park. It then transitions back to two lanes with advisory cycle lanes from Shanganagh Park to Crinken Lane.

The Emerging Preferred Route in this section proposed footpaths, segregated cycle tracks, a dedicated bus lane and a general traffic lane in both directions, thus upgrading the existing cycling infrastructure. The Preferred Route Option is in line with the EPR option with further design development.

The Proposed Scheme provides for a full suite of footpath, segregated cycle track, general traffic lane and bus lane in both directions. Cycle tracks and/or footpaths have been brought behind the roadside

treeline where suitable, to maintain the roadside tree canopy along the road. To optimise the protection of the roadside trees in front of Shanganagh Cemetery, a section of the northbound cycle track has been relocated to the eastern side of the route to create a two-way cycle track from St. James Church, behind the roadside trees at Shanganagh Cemetery, and across Shanganagh Park. The northbound cycle track crosses back to the west side of the road before Allies River Road.

3.4.1.3.1 of the Chapter 3 (Consideration of Alternatives) in Volume 2 of EIAR notes the following on the Proposed Scheme in this section:

'The Emerging Preferred Route in this section proposed footpaths, segregated cycle tracks, a dedicated bus lane and a general traffic lane in both directions. The design in this section was reviewed as part of the development of the Preferred Route Option with a view to minimising the impacts while maintaining the necessary level of bus priority and cycle segregation.

Sections of cycle tracks and / or footpaths have been brought behind the roadside treeline where suitable between Quinn's Road and Wilford Junction, to maintain roadside tree canopy. To optimise the protection of the roadside trees in front of Shanganagh Cemetery and Shanganagh Park, a section of the southbound cycle track has been routed behind the roadside trees at Shanganagh Cemetery, and Shanganagh Park. The northbound cycle track follows the Dublin Road. The cycle track along this section was further evaluated and developed to a two-way cycle track routed through the Shanganagh Park and Shanganagh Cemetery'.

The Preferred Route Option (Proposed Scheme) is presented in Appendix A of the Preferred Route Options Report as part of the Supplementary Information.

NTA are satisfied that consideration of reasonable alternatives have been considered in the EIAR to inform the Proposed Scheme in Shankill.

3.9.3.1.3 Alternate N11/M11 Bus Priority Interim Scheme

A number of submissions raised the issue that the N11/M11 scheme is also progressing and should be used as an alternative to Section 3 of the scheme. They noted that Option 2A of the options assessment report along the N11/M11 was the most economically advantageous route.

The N11/M11 Bus Priority Interim Scheme (N11/M11 BPIS) is progressing as a multi-authority project involving Transport Infrastructure Ireland (TII), the National Transport Authority (NTA), Wicklow County Council and Dún-Laoghaire Rathdown County Council.

As part of Project Ireland 2040, the National Development Plan 2021-2030 identifies the protection and renewal of the national road network as a key sectoral priority. This includes the provision for greater use of sections of the national road network by public transport (e.g. bus lanes) to improve overall efficiency and capacity. The N11/M11 is identified as a regional corridor forming part of the Core Bus Network within the National Transport Authority's Transport Strategy for the Greater Dublin Area 2016 – 2035. In order to develop an efficient, reliable and effective bus system, the core bus network should be developed to achieve:

- Continuous priority, where possible, for bus movement on the portions of the Core Bus Network;
- Enhanced bus lane provision on these corridors;
- Removal of current delays on the bus network, enabling the bus to provide a faster alternative to car traffic along these routes; and
- A more efficient core bus system with faster bus journeys means that more people can be moved with the same level of vehicle and driver resources.

The key objectives of the N11/M11 Bus Priority Interim Scheme are:

- Deliver a practicable interim transport solution capable of delivering benefits required in the short/ medium term;

- To deliver a practicable interim transport solution which does not introduce significant constraint on the subsequent development of the N11/M11 Junction 4 to Junction 14 Improvement scheme;
- To increase bus patronage along the N11/M11 corridor and enable sustainable travel to provide a faster and more reliable choice; and
- To support improved access to the Greater Dublin Area for all transport users along the N11/M11 corridor.

The overriding objective of the N11/M11 BPIS is to develop a proposal for the provision of continuous bus priority measures (in both directions) during peak periods on the N11/M11 National Road. Priority facilities can be used by buses/coaches to avoid congested traffic lanes and help to reduce the current unsustainable dependency on the private car.

The N11/M11 BPIS is examining the feasibility of providing dedicated bus lanes along the section of existing N11/M11 route extending from Loughlinstown roundabout in the north to N11 Junction 9 in the south. The project is currently in Phase 2 (Option Selection) and progressing on the development of design options for the provision of bus lanes along the existing N11/M11 route. These assessments will consider both the optimum location for a bus lane within the existing carriageway, the extent of any road widening necessary to accommodate the bus lane and the final extent of bus lanes to be delivered.

The N11/M11 Bus Priority Interim Scheme objectives do not align with that of the Bray to City Centre Core Bus Corridor Scheme (Proposed Scheme) and hence the two schemes are not the same. For example, the N11/M11 Bus Priority Interim Scheme does not provide bus stops between the Loughlinstown roundabout to Bray section and hence does not serve the local travel needs of Shankill.

It is noted that N11/M11 Bus Priority Interim Scheme is included in the DoMinimum and DoSomething traffic modelling for the Proposed Scheme and therefore assessed as part of the Environmental Impact Assessment and Traffic Impact Assessment.

Please refer to response in Section 3.9.3.1.2 above for further details on the Preferred Route Option assessment of the Proposed Scheme through Shankill, including further details on EPR Route Option 2A, which was an option of a dedicated standalone busway running parallel to the M11 between Loughlinstown roundabout to Wilford roundabout with bus stops and pedestrian access connections to Shankill, therefore providing a different objective to that of the N11/M11 BPIS.

NTA are satisfied that the objectives of the N11/M11 BPIS do not align with that of the Proposed Scheme and hence was not considered a suitable alternative to the Section 3 (Loughlinstown Roundabout to Bray North) of the Proposed Scheme.

3.9.3.1.4 Cost Benefit Analysis

Some submissions also raised concerns surrounding the cost benefit of the Proposed Scheme.

Refer to response in Section 3.9.3.2 in this report for further information on the Benefits of the Scheme, and also note below on Cost-Benefit Analysis.

All major publicly funded infrastructure projects, such as the BusConnects Infrastructure Schemes are subject to the Public Spending Code (gov.ie - The Public Spending Code (www.gov.ie)) which requires the production of appropriate economic appraisals and business cases. The Preliminary Business Case for BusConnects schemes is set out at the following link. The document sets out the key costs and benefits of the schemes.

https://www.nationaltransport.ie/planning-and-investment/transport-investment/projects/busconnects/busconnects-dublin-preliminary-business-case/

Pending planning approval, the progression of the Proposed Scheme to construction stage will be subject to formal business case approvals. As noted on NTA's BusConnects Dublin Preliminary Business Case website:

The BusConnects Dublin Preliminary Business Case prepared by NTA was approved by the NTA Board for submission to the Department of Transport (DoT) and onwards submission to the Department of

Public Expenditure and Reform (DPER) for review. Further to DoT and DPER review (including independent review by JASPERS and the Major Projects Advisory Group (MPAG)) elements of the PBC around inflation and costs were updated to inform the Government decision.

In March 2022, the Government granted Approval in Principle to the NTA to enable the submission of statutory consent applications for the Core Bus Corridor elements of the programme to An Bord Pleanála (Decision Gate 1) and to commence the tender process the for the Next Generation Ticketing element of the programme (Decision Gate 2). This Preliminary Business Case reflects the document as considered by Government with a Cover Note which sets out the revisions to inflation assumptions and costs arising from the consideration of the PBC from Government.

Section 16 of the BusConnects Dublin Preliminary Business Case sets out the next steps and approvals:

The current approval being sought is a PSC Gate 1 approval in principle to proceed with CBC statutory processes and a PSC Gate 2 approval to commence the NGT tender process. Individual elements or projects will require further approvals as the BusConnects Dublin programme progresses. For example:

- As further projects or components of these projects (e.g. singular CBCs within a CBC Lot) within the BusConnects Dublin programme (e.g. each CBC Lot) proceed to Decision Gate 2 (Pre-Tender Approval); and
- At Decision Gate 3 (Approval to Proceed) as projects or components of these projects within the BusConnects Dublin programme seek approval to proceed to contract award.

NTA are satisfied that that a cost benefits analysis has been undertaken to inform the Proposed Scheme as per the Public Spending Code guidelines.

3.9.3.2 Benefits of the Scheme

Summary of issue raised

Several submissions suggested that the Scheme benefits do not justify disruption to the area, such as the impact to the environment. They also raised the concern that the Proposed Scheme will provide no benefits to Shankill to pedestrians or cyclists, and minimal journey time benefits and would in fact cause traffic levels to increase.

Response to issue raised

Section 2.2 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, outlines the benefits of the proposed scheme. It notes:

'The need for the Proposed Scheme to respond to current deficiencies in our transport system in the context of the wider GDA transport need is presented in this section of the EIAR. The reasonable alternatives considered as part of this process are addressed in Chapter 3 (Consideration of Reasonable Alternatives).'

Section 2.4 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, outlines the benefits of the proposed scheme. It notes:

'The Proposed Scheme has been designed to facilitate improved efficiency of the transport network through the improvement of the infrastructure for active (walking and cycling) and public transport modes making them attractive alternatives to car-based journeys. Central to the design is the optimisation of roadway space with a focus on the movement of people rather than vehicles along the route and through the junctions.'

It goes on to state:

'The benefits resulting from the 2028 AM Peak Hour people movement assessment shows that there is an increase of 40% in the number of people travelling by bus, an increase of 108% in people walking or cycling, and a reduction of 49% in the number of people travelling by car along the route of the Proposed Scheme.'

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport.

It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that *'there is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year'*. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

Section 6.4.6.2.8.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the general traffic flow difference in the AM Peak Hour. Figure 3.139 below (Diagram 6.26) illustrates the difference in traffic flows on the road links in the AM Peak Hour for the 2028 Opening Year. TIA Sub Appendix A6.4.4 (General Traffic Assessment) in Appendix A6.4 in Volume 4 of this EIAR provides further details of the LAM outputs.

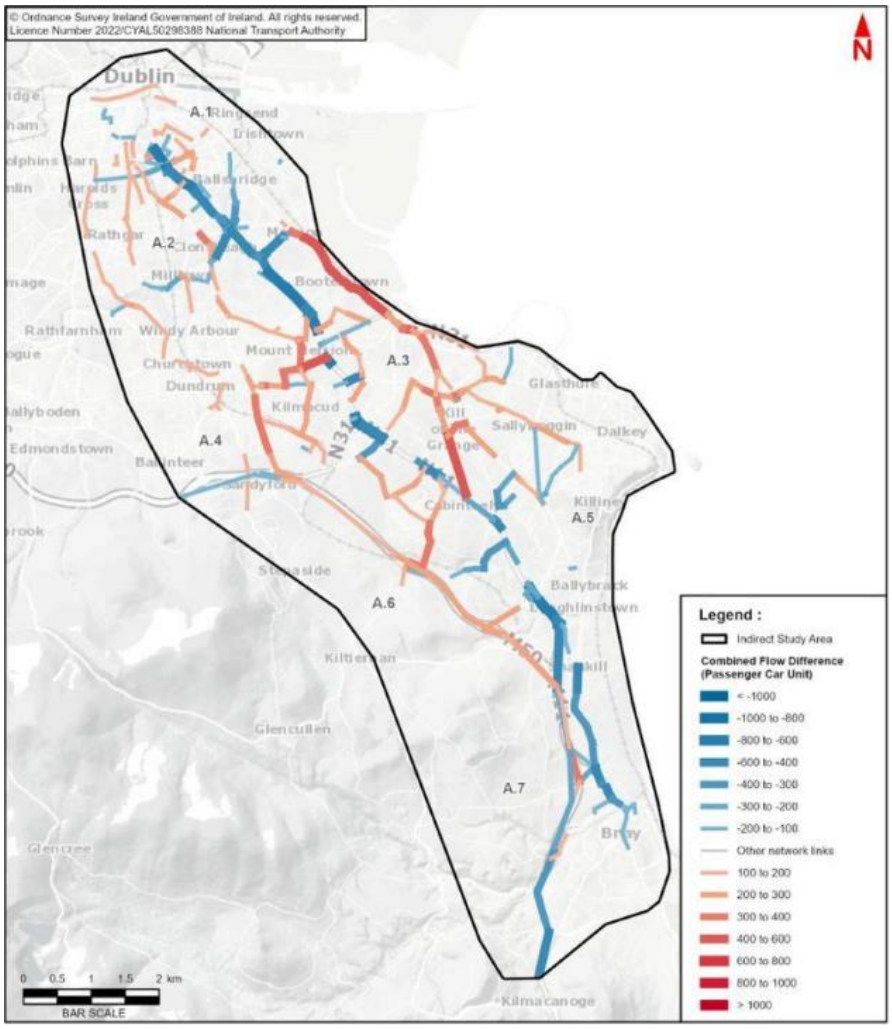


Figure 3.139: Flow Difference on Road Links (DoMinimum vs. DoSomething), AM Peak Hour, 2028 Opening Year (Diagram 6.26)

Figure 3.139 above shows that there is a reduction between -800 to -600 combined flows in Shankill during the AM Peak Hour. Similar reductions can also be seen in the PM Peak Hour (Diagram 6.27).

TIA Sub Appendix A6.1 – Transport Impact Assessment Volume 4 Appendices Part 1 of 4 of EIAR, Section 6.6.3.3.6.2 provides the general traffic flow reductions along road links. Table 6.44 shows that Stonebridge Road experiences a reduction of -436 combined flows during the AM Peak Hour and Table 6.48 shows that Shanganagh Road experiences a reduction of -219 during the PM Peak Hour.

Overall, there is a slight to profound reduction of between -297 and - 1738 combined general traffic flows along the direct study area during the AM Peak Hour in 2028 Opening Year and a slight to significant reduction of between -428 and - 1302 general traffic flows along the direct study area during the PM Peak Hour. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound and Long-Term impact on the direct study area.

Also refer to the response in Section 3.9.3.5 in this report for further information on the Impact on Traffic Flows, Speed Limit, and Traffic Calming in relation to traffic flows.

Section 2.4 of Chapter 2 (Need of the Scheme) of Volume 2 of the EIAR, goes on to note that a key objective of the Proposed Scheme is to enhance the potential for cycling along the route. It states:

'Currently within the existing extents of the Proposed Scheme there are segregated cycle tracks on approximately 47% of the route outbound and inbound respectively. This will increase to 91% in both directions. In addition to this, the significant segregation and safety improvements to walking and cycling infrastructure that is a key feature of the Proposed Scheme will further maximise the movement of people travelling sustainably along the corridor.'

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states:

'Overall, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase. A detailed breakdown of the assessment along each section can be found in Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

The low negative impacts along A837 / R119 Dublin Road are due to the removal of existing substandard advisory cycle lanes due to existing width constraints along these areas. The removal of the existing infrastructure along this section enables improved pedestrian facilities (width) and the provision of combined bus and cycle lanes where possible thus removing cyclists from general traffic.'

Also refer to the response in Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure in relation to cycling infrastructure.

Table 4.1 in Chapter 4 (Scheme Description) of Volume 2 of the EIAR provides key infrastructure improvements along the Proposed Scheme. As noted in the table, the Proposed Scheme will improve the existing bus priority from 69% to 99.6% through combination of bus lanes and signal control priority. The number of pedestrian crossings is increased from 119 to 176 number.

Cumulative journey time savings can be seen in the Proposed Scheme along the Proposed Scheme due to the introduction of signal-controlled priority at junctions which offer active control at intersections and therefore help to reduce congestion.

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR also demonstrates that the Proposed Scheme will deliver average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043 from the implementation of bus priority measures. The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM).

Section 6.4.6.2.5.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR demonstrates the average bus journey time savings, in both the AM and PM peak hour. The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures.

Section 6.4.6.2.5.3 goes on to state:

'Taking into account the provision of bus lanes, and bus stop provision and facilities outlined within this section, Table 6.36 below outlines the bus qualitative assessment along Section 3 of the Proposed Scheme.

Table 6.36: Section 3 – Bus Qualitative Impact During Operational Phase

Section	Chainage	Description of Impact	Magnitude of Impact	Sensitivity	Significance of Effect
Loughlinstown Roundabout to Bray North (Wilford Roundabout)	A14100 - A17420	• Proximate stops rationalised, to optimise spacing and journey times; • Bus stops are located in more convenient locations for communities and access to signalised crossings; • Moderate improvements to bus stop facilities; and • Bus lanes provided along the some of the corridor.	Low	Medium	Positive Moderate

As indicated in Table 6.36 the Proposed Scheme improves the quality of existing bus infrastructure along Section 3 of the Proposed Scheme, which will provide long-term benefits for bus users and aligns with the overarching aim to provide enhanced bus infrastructure on the corridor. The impact for this section of the Proposed Scheme is Low Positive. The sensitivity of environment rating is predominately categorised as 'medium'. This results in a Positive, Moderate and Long-term effect on this section.'

Also refer to the response in Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits in relation to bus services.

The Proposed Scheme will make significant improvements to pedestrian infrastructure through the provision of increased signal crossings, introduction of traffic calming measures, improved accessibility, increased pedestrian directness and increased footpath and crossing widths. Section 2.4 of the Chapter 2 Need of the Scheme states:

'The number of pedestrian signal crossings will increase by approximately 60% as a result of the Proposed Scheme. The scheme design has been developed with cognisance to the relevant accessibility guidance. It is anticipated that the overall quality of pedestrian infrastructure will improve as a result of the Proposed Scheme. This aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.'

It also notes that:

'The Proposed Scheme will address sustainable mode transport infrastructure constraints while contributing to an overall integrated sustainable transport system as proposed in the GDA Transport Strategy 2022-2042. It will increase the effectiveness and attractiveness of bus services operating along the corridor and will result in more people benefiting from faster journey times and improved journey time reliability.'

It goes on to state that:

'In addition to the public transport benefits, the Proposed Scheme will also improve the existing streetscape/urban realm setting along the corridor. This will include the introduction of new and improved landscaping provisions along the corridor, and a complimentary planting regime and streetscape improvements at key locations will also enhance the character of the surrounding built environment along the corridor.'

Section 6.4.6.2.5.1 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states:

'Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.'

Also refer to the response in Section 3.9.3.8 in this report for further information on the Impact on Safety (Pedestrian & Cyclist) in relation to pedestrian infrastructure and safety.

In addition to the benefits to traffic and transport, there will also be environmental benefits from the Proposed Scheme, specifically with respect to air quality, climate, noise, population and human health, as outlined below.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the air quality impact of the Construction and Operational Phases of the Proposed Scheme. Once operational the Proposed Scheme will have an overall Neutral and Long-Term impact on air quality. However, there are some beneficial impacts as described in Section 7.6.2 of Chapter 7:

"*The air dispersion modelling assessment has found that the majority of all modelled receptors are predicted to experience negligible impacts due to the Proposed Scheme, and beneficial impacts are also estimated along the length of the Proposed Scheme. The number of receptors where an exceedance of the NO_2 limit value is predicted decreases as a result of the Proposed Scheme*."

Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

"*The Proposed Scheme has the potential to reduce CO2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively*".

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR assesses the impact as a result of Construction and Operational Phase noise and vibration changes as a result of the Proposed Scheme. As stated in Section 9.6.2, "*Once operational, there will be a Positive to Neutral direct impact along the Proposed Scheme due to a reduction in traffic volumes during both the Opening Year (2028) and the Design Year (2043)*". Figures 9.4 and 9.5 in Volume 3 of the EIAR show the results of the noise modelling during the Operational Phase of the Proposed Scheme, showing both the change in noise during the Opening Year (2028) and during the Design Year (2043) respectively. As shown in Figure 9.4, the majority of the impact along the Proposed Scheme route will be Imperceptible / Positive during the Opening Year, while Figure 9.5 shows a similar result for the Design Year.

Chapter 10 (Population) in Volume 2 of the EIAR describes the impact assessment with respect to the population along the Proposed Scheme, namely assessing the impacts to the communities along the Proposed Scheme and assessing the impacts on commercial activity along the Proposed Scheme. While there will be localised negative impacts with respect to residential, community and commercial land take, the general accessibility impacts (both community and commercial accessibility) will be positive for the majority of communities along the Proposed Scheme with respect to pedestrian, cyclist, bus user and private vehicle accessibility.

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4 Part 3 of the EIAR describes the economic impact assessment carried out for all 12 of the Core Bus Corridors which form part of the wider Dublin BusConnects Core Bus Corridors Project. The leading sentence in the Executive Summary of that report states, "*The evidence suggests the infrastructure work will improve the public realm along the routes with positive impacts on businesses and individuals along the corridors*". The Executive Summary goes on to state that "*Whilst there are a number of potential negative impacts, the majority of the evidence suggests the net impact will be positive*", summarising all of the areas assessed in the report, listing the below items as experiencing positive effects:

- Under the "Local Businesses" heading:
    - Commerce; and
    - Car parking.
- Under the "Public Realm" heading:
    - Improved public realm; and
    - Improved outputs.
- Under the "Health and wellbeing" heading:
    - Walking and cycling;

    - Health; and
    - Productivity.
- Under the “Social cohesion” heading:
    - Improved transport;
    - Better jobs;
    - Better access; and
    - Reduced crime.
- Under the “Adapting to the future” heading:
    - Sustainability;
    - Shopping close to home; and
    - Working from home.

Chapter 11 (Human Health) in Volume 2 of the EIAR describes the assessment undertaken into the potential human health impacts as a result of the Construction and Operational Phases of the Proposed Scheme. The assessment found that in general there will be a beneficial impact on human health across the Proposed Scheme once it is operational. Section 11.6.2 of the Chapter states the following with respect to the residual Operational Phase impacts:

‘Three issues were assessed as likely to be associated with significant residual impacts on human health, all of which were considered positive.

Lack of regular physical activity is a leading cause of chronic disease and premature deaths. The Proposed Scheme will improve opportunities and convenience for walking and cycling, which will support many people in the study area in achieving recommended levels of weekly physical activity, for example as part of an active travel commute to work or education. It will also increase safety and the perception of safety for pedestrians and cyclists, who are more vulnerable to injury and mortality from traffic collisions. Furthermore, by redressing the balance between private car-use and other forms of transport, the Proposed Scheme will improve public transport journey times and reliability, as well as introduce greatly improved active travel infrastructure. This will provide for a more equitable transport experience, including for those without access to a car.

The Proposed Scheme is expected to have a significantly positive contribution to health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users.’

In the absence of the Proposed Scheme, bus services will be operating in a more congested environment, leading to higher journey times and lower reliability for bus journeys. This limits their attractiveness to users, and this will lead to reduced levels of public transport use, making the bus system less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will also significantly limit the potential to grow those modes into the future.

Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR assesses the impact on traffic and transport during both the Construction and Operational Phases of the Proposed Scheme. The Proposed Scheme will result in a number of benefits along the whole corridor with respect to traffic and transport improvements. As described and detailed in Chapter 6, these include:

- A 60% increase in the number of controlled pedestrian crossings;
- An increase in segregated cycle facilities from 47% of the corridor to 91% of the corridor;
- A 45% increase in the total bus priority measures along the entire corridor;
- A Positive, Very Significant and Long-Term impact on people movement;
- A Positive, Significant and Long-Term impact on bus network performance indicators; and
- A Positive, Significant and Long-Term impact with respect to the reduction in general traffic flows along the Proposed Scheme.

In summary, section 2.4 of Chapter 2 (Need of the Scheme) in Volume 2 of the EIAR notes:

‘The Proposed Scheme and its objectives fit within the current planning frameworks that are described in Section 2.3. The Proposed Scheme will help deliver many of the objectives on an international, national, regional and local level. Overall, the Proposed Scheme will make a significant contribution to the overall aims and objectives of BusConnects, the GDA Transport Strategy 2022-2042 and allow the city to grow sustainably into the future, which would not be possible in the absence of the Proposed Scheme.’

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) for further scheme benefits in relation to impacts on the Environment.

NTA are satisfied that there are significant benefits from the Proposed Scheme, particular in Section 3 through Shankill.

3.9.3.3 Impact to Bus Services & Journey Time Benefits

Summary of issue raised

A number of submissions noted that the existing bus services through Shankill are sufficient and that the Scheme does not propose an increase in frequency of service and only minimal journey time improvements.

One submission raises the concern that the increased loading expectations for the scheme would suggest that that the NTA would need to double the current bus service to achieve expected results.

One submission also raised concerns regarding the lack of continuous bus lanes within Shankill as part of the Scheme will limit journey time savings.

One submission raises the concern that there are no bus journey time benefits through Shankill and that the Proposed Scheme will increase traffic flows.

A number of submissions raised concerns over the reduction in bus service from 12 buses per hour to 9 buses per hour through Shankill which is contrary to National Mobility Policy. Submissions have raised concerns regarding the impact to the number of buses within the area, commenting that the reduction would impact the local area's access to amenities, many also suggested an express service from Bray to the City.

Further concerns that the quality of public transport in Shankill will be reduced and will encourage the use of private cars which the respondent implies as being against the established climate change goals.

Response to issue raised

Changes to Existing Bus Services

The Proposed Scheme does not propose a reduction in the existing bus services through the Shankill area, it is focused on infrastructure changes to meeting the Proposed Scheme Objectives.

BusConnects is the National Transport Authority's (NTA) programme to greatly improve bus services in Irish cities. It is a key part of the Government's policy to improve public transport and address climate change in Dublin and other cities across Ireland. BusConnects is a key component within a number of Government and regional policies which include the National Development Plan 2021-2030, Climate Action Plan 2023, the National Planning Framework 2040 and the Greater Dublin Area Transport Strategy 2022-2042. The BusConnects Programme consists of the following and details can be seen in the NTA website: https://busconnects.ie/cities/dublin/

- Core Bus Corridor Infrastructure Works;
- Orbital Corridor Infrastructure Works;
- Network Redesign;
- New Bus Stops and Shelters;
- Park and Ride;
- State of Art Ticketing System; and
- Zero Emissions Bus Fleet.

To inform the preparation of the GDA Transport Strategy 2016 – 2035, the NTA prepared the Core Bus Network Report (NTA 2015) for the Dublin Metropolitan Area, which identified those routes on which there needed to be a focus on high capacity, high frequency and reliable bus services, and where

investment in bus infrastructure should be prioritised and concentrated. The Core Bus Network is defined as a set of primary orbital and radial bus corridors which operate between the larger settlement centres in the Dublin Metropolitan Area.

The Proposed Scheme is part of the Core Bus Corridor Infrastructure Works which will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.

Section 6.4.6.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents the operational impacts for bus passengers and operators. The Proposed Scheme will address sustainable mode transport infrastructure deficits while contributing to an overall integrated sustainable transport system as proposed in the GDA Strategy. It will increase the effectiveness and attractiveness of bus services operating along the corridor and will result in more people availing of public transport due to the faster, more reliable journey times which the Proposed Scheme provides. This in turn will support the future increase to the capacity of the bus network and services operating along the corridor and thereby further increasing the attractiveness of public transport.

On the whole, the Proposed Scheme provides bus journey time benefits and will make a significant contribution to the overall aims of BusConnects that is a key part of the GDA Strategy and will enable the city to grow sustainably into the future. This would not be possible in the absence of the Proposed Scheme.

In the absence of the Proposed Scheme, bus services will be operating in a more congested environment, leading to higher journey times and lower reliability for bus journeys. This limits their attractiveness to users, and this will lead to reduced levels of public transport use, making the bus system less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will also significantly limit the potential to grow those modes into the future.

The Proposed Scheme does not propose to remove any existing bus services and is focused on infrastructure redesign. The Dublin Network Redesign is a separate project currently under consideration by the NTA.

Changes to Passenger Numbers / Modal Shift in Shankill

Section 6.4.6.2.7.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR assesses the resilience of the Proposed Scheme to cater for additional bus service frequency provision whilst maintaining a high level of bus journey time reliability. The EIAR report states that:

'*In this analysis, the service frequency, in both directions of travel, was increased to achieve a 10 buses per hour increase, at the busiest section, to assess whether the Proposed Scheme could cater for this increased service frequency whilst maintaining a high level of journey time reliability'.*

Section 6.4.6.2.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes that the Opening Year 2028 AM scenario shows there is an increase of 40% in the number of people travelling via bus and an increase of 108% in people walking or cycling along the Proposed Scheme during the AM Peak Hour. These are referenced from Table 6.43 Modal Shift of 2028 AM Peak Hour along Proposed Scheme by hourly trips and modal split per scenario, see Table 3.35 and Figure 3.140 (reproduced from Diagram 6.6 in Chapter 6). The results indicate a 44% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 3.35: Modal Shift of 2028 AM Peak Hour Along Proposed Scheme (Table 6.43)

Table 6.43: Modal Shift of 2028 AM Peak Hour Along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Inbound towards the City Centre	AM Peak Period	General Traffic	1,290	40%	660	19%	-630	-49%
		Public Transport	1,830	56%	2,560	73%	730	40%
		Walking	100	3%	120	3%	20	20%
		Cycling	30	1%	150	4%	120	400%
		Combined Walking / Cycling	130	4%	270	8%	140	108%
		Sustainable Modes Total	**1,960**	**60%**	**2,830**	**81%**	**870**	**44%**
		Total (All modes)	**3,250**	**100%**	**3,490**	**99%**	**240**	**7%**

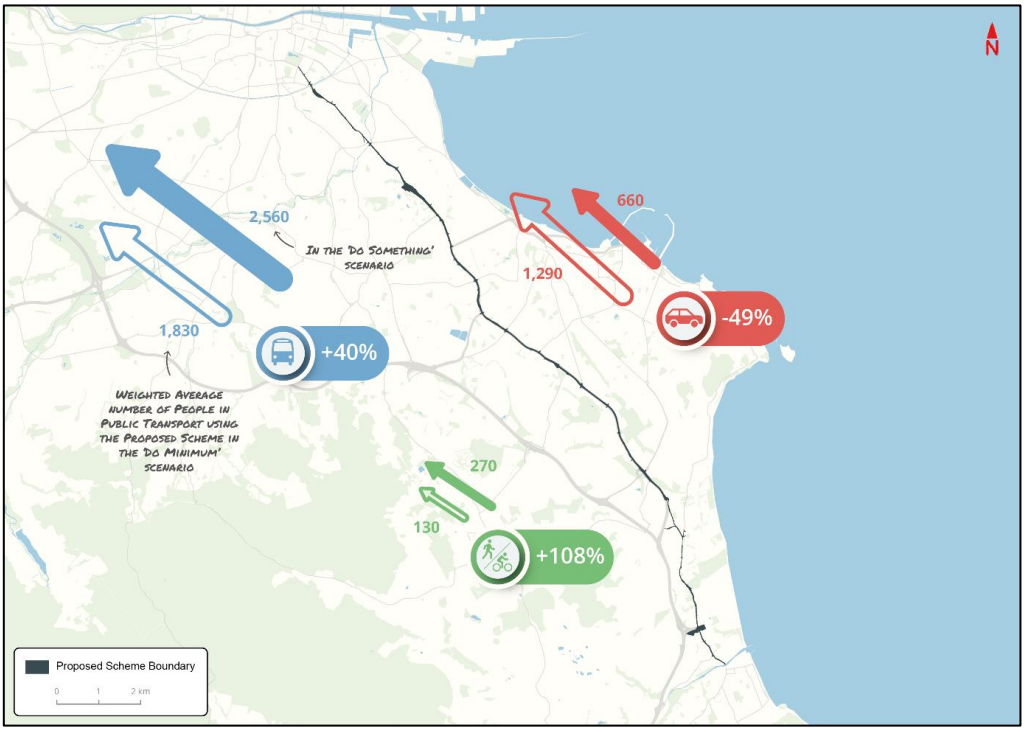


Figure 3.140: Weighted Average People Movement by Mode During 2028 AM Peak Hour

Similarly for the PM scenario, there is an increase of 17% in the number of people travelling via bus and an *'increase of 67% in people walking or cycling along the Proposed Scheme during the PM Peak Hour*'. These are referenced from Table 6.44 Modal Shift of 2028 PM Peak Hour along Proposed Scheme by hourly trips and modal split per scenario, see Table 3.36 and Figure 3.141 (reproduced from Diagram 6.7 in Chapter 6). The results indicate a 21% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Table 3.36: Modal Shift of 2028 PM Peak Hour Along Proposed Scheme (Table 6.44)

Table 6.44: Modal Shift of 2028 PM Peak Hour Along Proposed Scheme

Direction	Time Period	Mode of Transport	Do Minimum		Do Something		Difference	
			Hourly Trips	Modal Split (%)	Hourly Trips	Modal Split (%)	Hourly Trips	Difference (%)
Outbound from the City Centre	PM Peak Period	General Traffic	1,270	38%	670	21%	-600	-47%
		Public Transport	1,930	57%	2,260	70%	330	17%
		Walking	150	4%	160	5%	10	7%
		Cycling	30	1%	140	4%	110	367%
		Combined Walking / Cycling	180	5%	300	9%	120	67%
		Sustainable Modes Total	**2,110**	**62%**	**2,560**	**79%**	**450**	**21%**
		Total (All modes)	**3,380**	**100%**	**3,230**	**100%**	**-150**	**-4%**

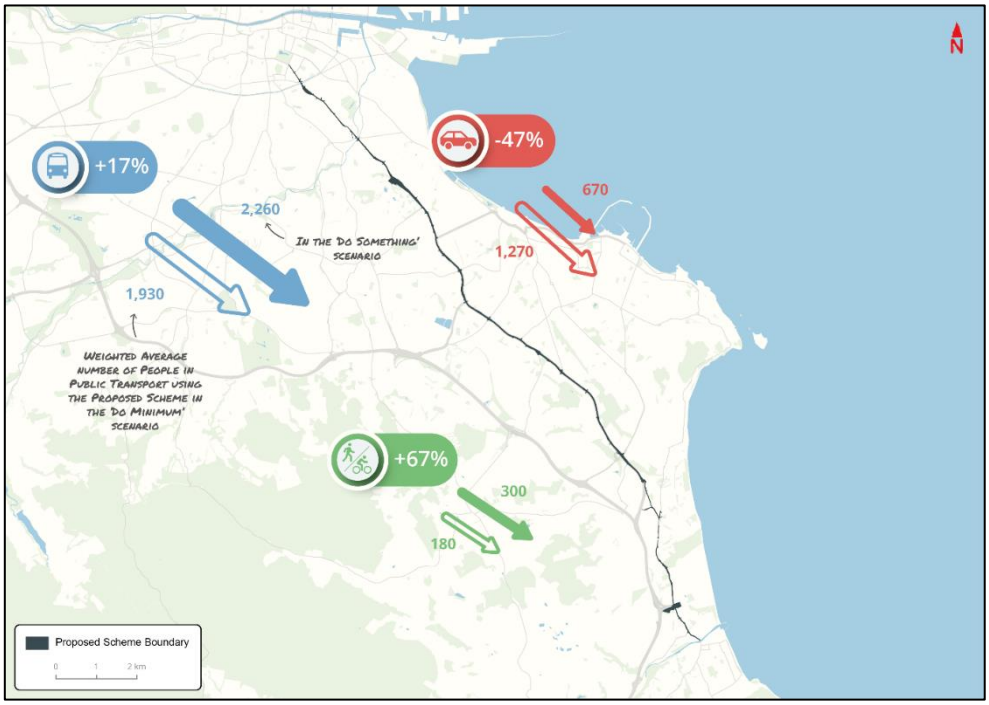


Figure 3.141: Weighted Average People Movement by Mode During 2028 PM Peak Hour

As indicated in Figure 3.141 above, there is a reduction of 47% in the number of people travelling via car, an increase of 17% in the number of people travelling via bus and an increase in 67% in the number of people walking or cycling along the Proposed Scheme during the PM Peak Hour.

It is further noted that the benefits of the Scheme in terms of bus passenger volumes is demonstrated in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. Diagram 6.10 in Section 6.4.6.2.3.1 of the EIAR (reproduced in Figure 3.142 below) presents the passenger loading profile the AM Peak Hour in the inbound direction in 2028.

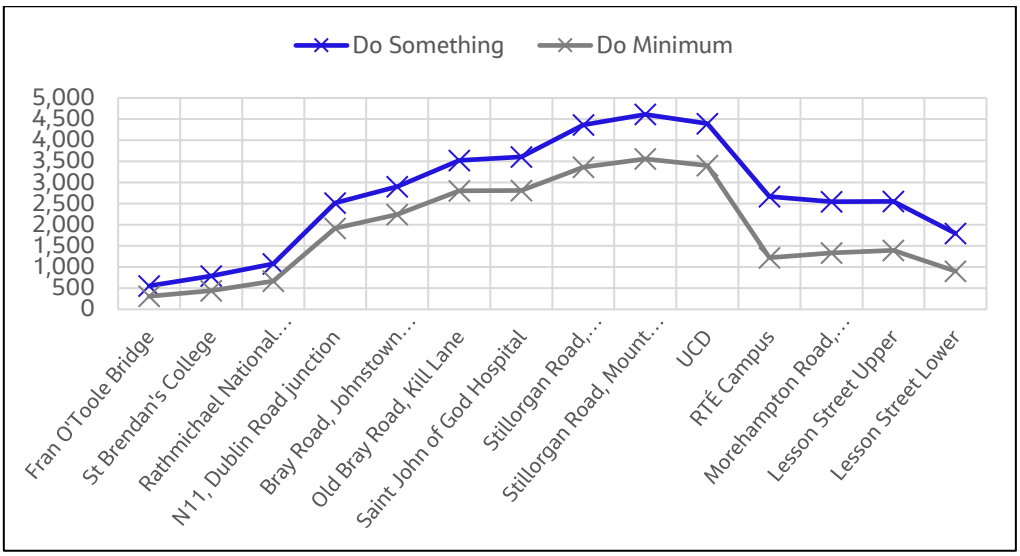


Figure 3.142: Extract from Chapter 6 EIAR 2028 AM Peak Hour Passenger Volume Along Proposed Scheme (inbound direction)

As can be seen in Figure 3.142, a higher level of bus passenger loading can be seen along the Proposed Scheme. The substantial increase in passengers using the corridor at this location as a result of the Proposed Scheme further highlights the need for bus priority measures.

The increase in bus passengers remains at a high level along the Proposed Scheme with approximately 600 to 1,200 additional users on most of the corridor, compared to the Do Minimum scenario.

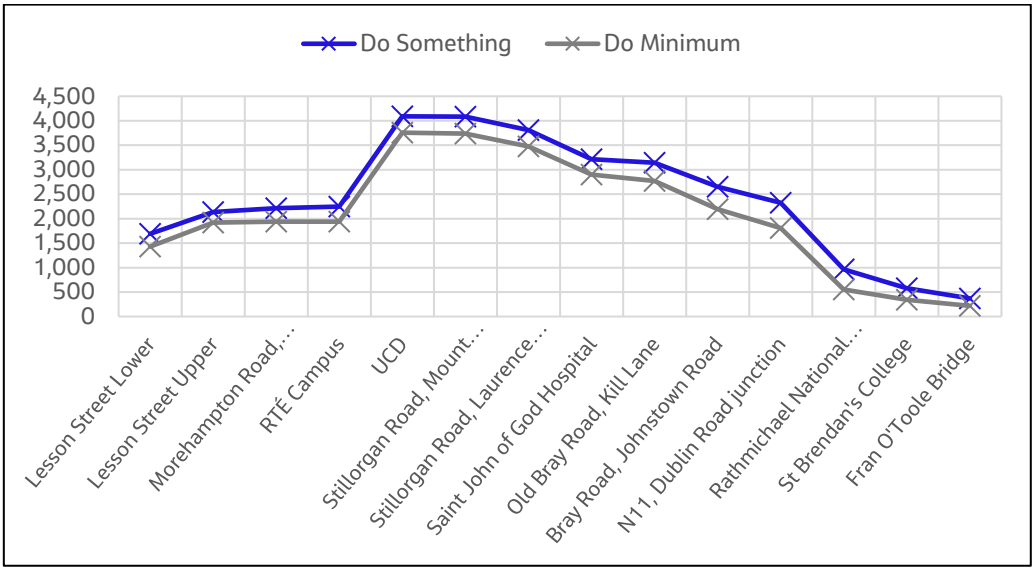


Figure 3.143: Extract from Chapter 6 EIAR 2028 PM Peak Hour Passenger Volume Along Proposed Scheme (Outbound Direction)

Figure 3.143 shows higher levels of bus passenger loadings along the Proposed Scheme with a peak at UCD where the volume of passengers reaches 4,100 in the PM Peak hour, compared to approximately 3,800 in the Do Minimum scenario.

The increase in bus passengers is consistent along the Proposed Scheme with approximately 300 to 400 additional users on the corridor, compared to the Do Minimum scenario.

On the whole, the Proposed Scheme will make a significant contribution to the overall aims of BusConnects that is a key part of the GDA Strategy and will enable the city to grow sustainably into the future. This would not be possible in the absence of the Proposed Scheme.

Bus Priority through Bus Lanes and Signal Control Priority

Table 4.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides key infrastructure improvements along the Proposed Scheme. As noted in the table 4.1, the Proposed Scheme will improve the existing bus priority from 69% to 99.6% through combination of bus lanes and signal control priority.

Table 4.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of EIAR states that the Proposed Scheme will provide 16.1km inbound and 17.1km outbound of bus lanes across the corridor and 2.3km inbound and 1.4km outbound bus priority through signal control priority measures. This is an increase from 12.6km inbound and 12.8km outbound in the DoMinimum scenario. This contributes to an increase of 45% in total bus priority measures in both directions in the Do Something scenario compared to the Do Minimum scenario. Overall, the Proposed Scheme will provide 99.6% bus priority measures along the entirety of the corridor.

Taking into account the provision of bus lanes, signal control priority and bus stop provision and facilities outlined within this section, Table 3.37 below (Table 6.36) outlines the bus qualitative along Section 3 of the Proposed Scheme.

Table 3.37: Section 3 – Bus Qualitative Impact During Operational Phase (Table 6.36)

Table 6.36: Section 3 – Bus Qualitative Impact During Operational Phase

Section	Chainage	Description of Impact	Magnitude of Impact	Sensitivity	Significance of Effect
Loughlinstown Roundabout to Bray North (Wilford Roundabout)	A14100 - A17420	• Proximate stops rationalised, to optimise spacing and journey times; • Bus stops are located in more convenient locations for communities and access to signalised crossings; • Moderate improvements to bus stop facilities; and • Bus lanes provided along the some of the corridor.	Low	Medium	Positive Moderate

As indicated in Table 3.37 above (Table 6.36) the Proposed Scheme improves the quality of existing bus infrastructure along Section 3 of the Proposed Scheme, which will provide long-term benefits for bus users and aligns with the overarching aim to provide enhanced bus infrastructure on the corridor. The impact for this section of the Proposed Scheme is Low Positive. The sensitivity of environment rating is predominately categorised as 'medium'. This results in a Positive, Moderate and Long-term effect along Section 3.

Also refer to Section 3.9.3.4 in this report for further information on the proposals to Upgrade Roundabouts to Signalised Junction and Signal Control Priority.

Bus Journey Time Savings

In relation to issues raised on minimal bus journey time savings, Section 6.4.6.2.5.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows how the Proposed Scheme will impact on bus journey times along the corridor, outputs for the E1 service, which traverses the entire length of the Proposed Scheme, have been extracted from the model. The assessment is based in the context of the full implementation of the BusConnects network re-design in both the Do Minimum and Do Something scenarios, with the Proposed Scheme servicing the E-Spine services. It demonstrates how journey time savings and improved reliability will encourage trips bus.

The Proposed Scheme will deliver an average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043.

This shows average bus journey time savings, in both the AM and PM peak hour. The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures.

Furthermore, results presented in Figure 3.144 below (Chapter 5, Diagram 6.14), suggest an improvement in bus journey time reliability in all 4 core scenarios as indicated by the reduced ranges of journey times achieved with the individual durations focused much closer to the average journey

times (lower standard deviation) in the Do Something scenario (blue dots) with the Proposed Scheme in place compared to the more dispersed range in the Do Minimum scenario (red dots).

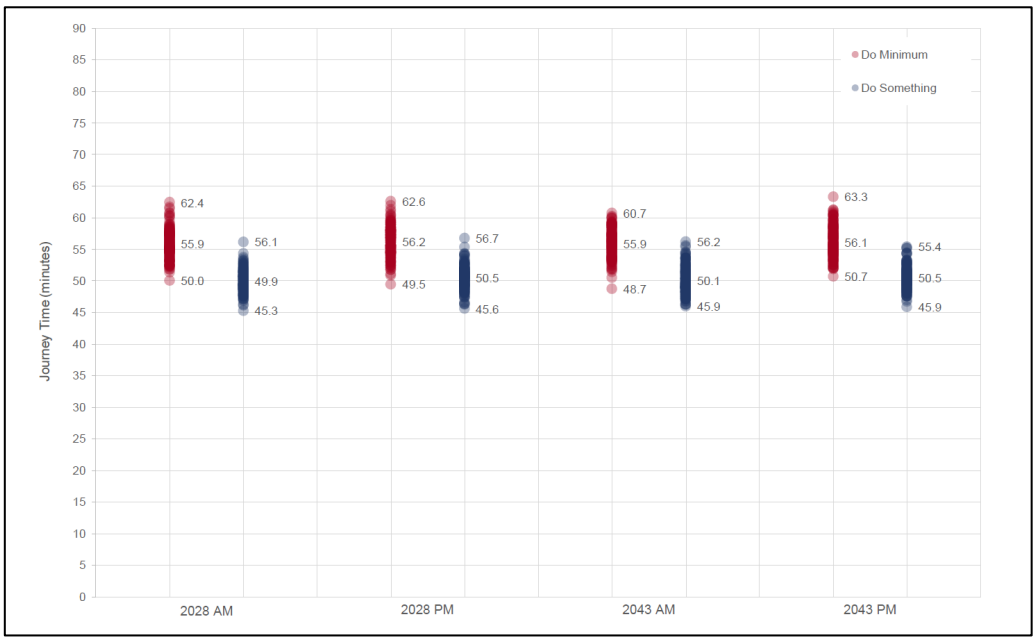


Figure 3.144: E1 Bus Journey Times (Inbound Direction)

The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM). Furthermore, results presented in Figure 3.145 below (Chapter 6, Diagram 6.19), suggest an improvement in bus journey time reliability in all four scenarios as indicated by the reduced ranges of journey times achieved with the durations focused much closer to the average journey times (lower standard deviation) in the Do Something scenario (blue dots) with the Proposed Scheme in place compared to the more dispersed range in the Do Minimum scenario (red dots). Note that the variation in journey times shown above are based on one set of predicted flows for the Do Minimum and Do Something scenario. Traffic flows fluctuate daily which would mean that the variation in journey times would be much greater in the Do Minimum with any increases in traffic flows compared to the protection of journey time reliability provided by the bus priority measures that comprise the Proposed Scheme.

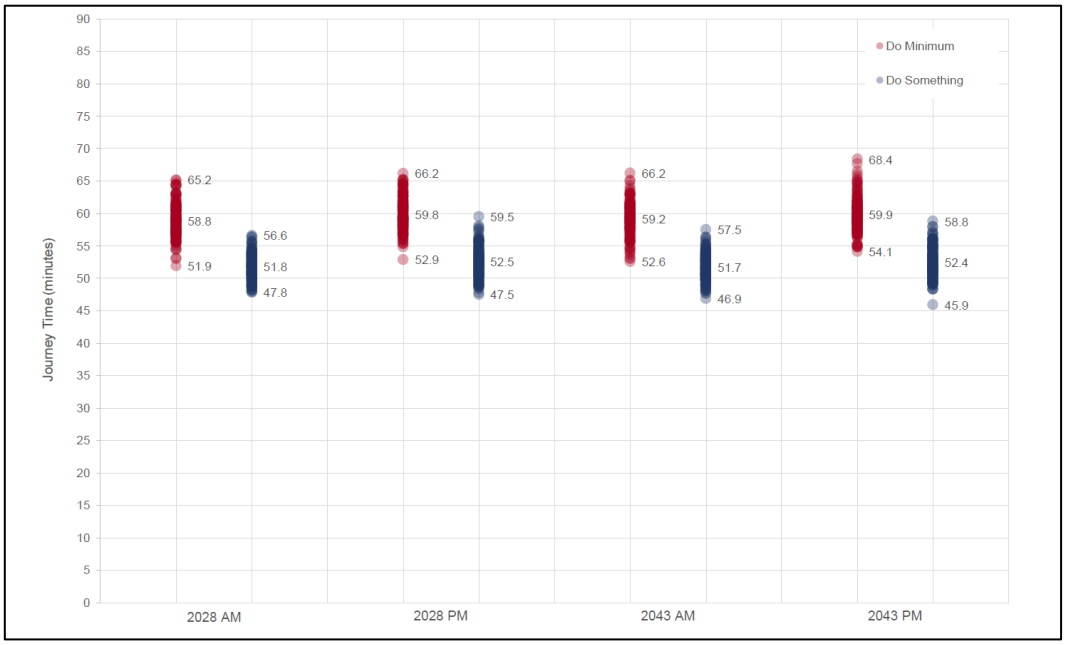


Figure 3.145: E1 Bus Journey Times (Outbound Direction)

Cumulative journey time savings can be seen in the Proposed Scheme along the CBC due to the introduction of signal-controlled priority at junctions which offer active control at intersections and therefore help to reduce congestion.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling in Section 3 (Shankill). It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the general traffic flow difference in the AM Peak Hour. Figure 3.146 below (Diagram 6.26) illustrates the difference in traffic flows on the road links in the AM Peak Hour for the 2028 Opening Year. TIA Sub Appendix A6.4.4 (General Traffic Assessment) in Appendix A6.4 in Volume 4 of this EIAR provides further details of the LAM outputs.

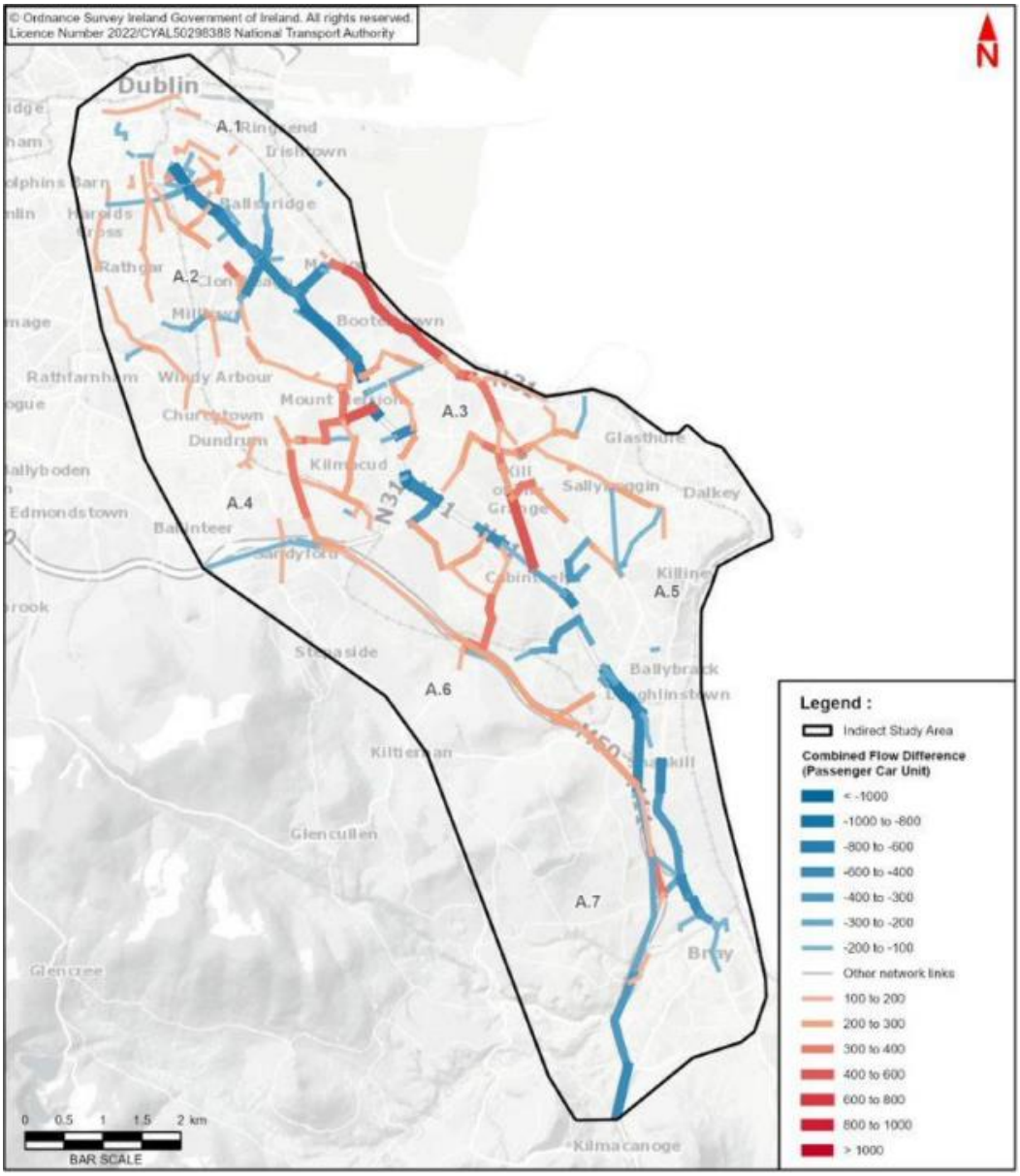


Figure 3.146: Flow Difference on Road Links (DoMinimum vs. DoSomething), AM Peak Hour, 2028 Opening Year (Diagram 6.26)

Figure 3.146 above shows that there is a reduction between -800 to -600 combined flows in Shankill during the AM Peak Hour. Similar reductions can also be seen in the PM Peak Hour (Diagram 6.27).

TIA Sub Appendix A6.1 – Transport Impact Assessment Volume 4 Appendices Part 1 of 4 of EIAR, Section 6.6.3.3.6.2 provides the general traffic flow reductions along road links. Table 6.44 shows that Stonebridge Road experiences a reduction of -436 combined flows during the AM Peak Hour and Table 6.48 shows that Shanganagh Road experiences a reduction of -219 during the PM Peak Hour.

Overall, this reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact on the direct study area. The Proposed Scheme demonstrates that there would be no negative impact on traffic congestion in Section 3 (Shankill).

3.9.3.4 Upgrade Roundabouts to Signalised Junction and Signal Control Priority

Summary of issue raised

A number of submissions raised concerns regarding the removal of roundabouts and replacement with signalised junctions.

One submission queried the compliance with DMURS for the upgrade of the roundabout to signalised junction and its ability to serve future needs. The submissions commented that the changes would remove the free flow of traffic, increase congestion, and create a negative impact on Shankill. Other submissions commented on how it would increase dangers for those crossing due to the number of crossing points.

One submission issue raised regarding the proposed changes to the roundabouts not being in compliance with the Dún Laoghaire Rathdown County Council Special Local Order 148.

A number of submissions raised concerns over the justification of the replacing the St. Annes roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) with traffic signals. They note concern that this will increase traffic congestion and create queues.

A number of submissions raised concerns over the changes to Quinn's Road and that the removal of the roundabout will result in traffic queues and safety issues.

A few submissions commented that the Proposed Scheme does not address the bottleneck in Shankill and there will be still delay to buses and related congestion.

One submission raised concern that the introduction of traffic lights will result in huge backlog of traffic from Loughlinstown roundabout to the village, especially at peak hours.

One submission raised concern on the proposed narrowing to two traffic lanes at Woodbrook estate (near Wilford Roundabout) will result in traffic delays and congestion.

Response to issue raised

Also, refer to Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits.

Also, refer to Section 3.9.3.5 in this report for further information on the Impact on Traffic Flows, Speed Limit, and Traffic Calming.

3.9.3.4.1 Upgrade of Existing Roundabouts to Signalised Junctions

The Proposed Scheme has been designed to achieve the stated objectives, and this allows for all junctions in practice to operate on an adaptive basis, permitting priority to be applied to different modes. The EIAR as submitted has robustly addressed this matter.

Roundabouts listed below are being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians. The roundabout is proposed to be converted to a signal-controlled junction to manage traffic flow, improve bus progression and safe crossing for pedestrian and cyclists.

- St Anne's Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction);
- Quinn's Road Roundabout (Dublin Road/ Quinn Road/ Cherrington Drive junction); and
- Wilford Roundabout.

The upgrade of the roundabout to a signalised junction results in reduced corner radii and narrower lane widths to encourage slow vehicular speeds thus enhancing road safety. Traffic signals provide a safer environment for active travel users, by separating them from traffic and reducing the likelihood of collisions. Traffic signals offer active control for all users at intersections and thus help to reduce congestion by prioritising the necessary traffic streams.

In Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR and the Feasibility Report, the replacement of the roundabouts with the signalised junctions is required due to the following:

- Within Design Manual for Urban Roads Standard (DMURS) where feasible the preference is to replace existing roundabouts with signalised junctions to improve the facilities for vulnerable road users such as pedestrians and cyclists, it also enables bus priority;
- It would be preferrable in terms of journey-time reliability and transport network integration;
- The implementation of signalised junctions allows for safer crossing points for pedestrians and cyclists; and
- The signalised junction location allows for bus priority where bus lanes are constrained along the Proposed Scheme.

DMURS states that:

'Traffic Signals

These can provide a wide range of capacities depending on the widths of the approaches, the presence of bus lanes on approach, cycle times and turning traffic flows. Traffic signal junctions can include pedestrian phases and advanced stop lines for cyclists, thus making them safer. Traffic Signals should generally be used at all junctions between Arterial and Link streets. Where pedestrian activity is particularly high (such as within a Centre or around a Focal Point), designers may apply all-round pedestrian phase crossings with diagonal crossings.

Roundabouts

These have a wide range of capacities depending on the size and geometry of the roundabout, its approaches, and turning traffic flows, but are generally lower than signalised junctions. Large roundabouts are generally not appropriate in urban areas. They require a greater land take and are difficult for pedestrians and cyclists to navigate, particularly where controlled crossings/cycle facilities are not provided, and as such, vehicles have continuous right of way.

The use of large roundabouts (i.e. those with radii greater than 7.5m) should be restricted to areas with lower levels of pedestrian activity. Where large roundabouts currently exist, road authorities are encouraged, as part of any major upgrade works, to replace them with signalised junctions or retrofit them so that are more compact and/or pedestrian and cycle friendly, as is appropriate.'

The above quotes from DMURS are directly applicable to the existing roundabouts on the route of the Proposed Scheme, as listed above. It is clear from the above that the retention of the roundabout would be contrary to the requirements of DMURS. Furthermore, in relation to accomplishing the Proposed Scheme objectives the replacement of roundabout with signalised junctions is essential to achieving the necessary enhanced pedestrian, cyclist, and bus priority infrastructure.

3.9.3.4.2 Replacement of Roundabouts in Compliance with DLRCC SLO148

In relation to the issue raised regarding the proposed changes to the roundabouts not being in compliance with the Dún Laoghaire Rathdown County Council Special Local Order 148, Section 4.3.1.4 of the Appendix A2.1 Planning Report, in Volume 4 of the EIAR, states:

'The Proposed Scheme is consistent with the policies and objectives of the DLRCDP (DLRCC 2022) as set out above and in Appendix 1 (Local Policy). The Proposed Scheme is largely within the existing public road / pavement area and where required, in general, only small portions of those zoning objectives listed above may be necessary to facilitate the Proposed Scheme. However, the main use associated with the zoning objective will remain.'

Section 4.3.1.4 of the Planning Report goes on to state the following response for the Special Local Objective (SLO) 148:

'Specific Local Objective 148 seeks 'To protect and safeguard the roundabouts on the approaches into Shankill village at St. Anne's Church and at the junction of Dublin Road (R119) and Quinn's Road.' The Proposed Scheme, as per EIAR Chapter 4 (Proposed Project Description) seeks to undertake the following:

> *'The roundabout between the Dublin Road, Corbawn Lane, and Shanganagh Road is proposed to be upgraded to a signalised junction with new pedestrian crossing facilities and signal-controlled priority for buses. Corbawn Lane is to be an exit only junction on to Shanganagh Road. A dedicated right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Shanganagh Road into Beechfield Manor is also to be provided.'*
>
> *'The Quinn's Road roundabout is to be upgraded to a signalised junction, and an upgraded signalised junction is proposed at the entrance to the Olcovar development. Footpaths along the Dublin Road at Cherrington Drive and Beech Road are to be retained at their roadside location.'*

As per the EIAR Chapter 3 (Consideration of Reasonable Alternatives) and the Feasibility Report, the replacement of the roundabouts with the signalised junctions is required due to the following:

- *Within DMURS where feasible the preference is to replace existing roundabouts with signalised junctions to improve the facilities for vulnerable road users such as pedestrians and cyclists, it also enables bus priority;*
- *It would be preferrable in terms of journey-time reliability and transport network integration;*
- *The implementation of signalised junctions allows for safer crossing points for pedestrians and cyclists; and*
- *The signalised junction in this location allow for bus priority where bus lanes are constrained along the Proposed Scheme.*

In the context of the above, if the aforementioned roundabouts were retained it would not allow for bus priority and safer crossing for pedestrians and cyclists at these locations. Therefore, the continuous linear operational functioning of the corridor and key project objectives related to safety, sustainable transportation and efficiency of service would be disrupted at these locations which is why the roundabouts must be removed.

In addition to the above, Amendment 45 of the Road Traffic and Roads Act 2023 amends the 1993 Roads Act, giving power to An Bord Pleanála to approve a scheme or proposed road development that contravenes materially any plan. Section 51AA paragraph (c) of the Road Traffic and Roads Act 2023 states:

> *'the scheme or proposed road development should be approved having regard to the transport strategy made under section 12 of the Dublin Transport Authority Act 2008, the regional spatial and economic strategy for the area, guidelines under section 28 of the Act of 2000, policy directives under section 29 of the Act of 2000, the statutory obligations of any local authority in the area, and any relevant policy of the Government, the Minister for Housing, Local Government and Heritage or any Minister of the Government;'*

The Proposed Scheme may be approved notwithstanding Specific Local Objective 148 as it is negated by the GDA Transport Strategy 2022-2042 and the RSES for the Eastern and Midlands region.'

3.9.3.4.3 Signalisation of Dublin Road / Shanganagh Road / Corbawn Lane Junction (St Anne's Roundabout)

Issue no 1:

A number of submissions raised concerns over the justification of the replacing the St. Annes roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) with traffic signals. They note concern that this will increase traffic congestion and create queues.

Refer to responses in Section 3.9.3.4.1 and Section 3.9.3.4.2, and also note below.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, the Proposed Scheme demonstrates that analysis shows that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be minimal impact on traffic congestion.

The Proposed Scheme design at Dublin Road/ Shanganagh Road/ Corbawn Lane junction from the General Arrangement Drawings Chapter 4 (Proposed Scheme Description) in Part 1 of 3 of Volume 3, of the EIAR on Sheet 43 can be seen in Figure 3.147.

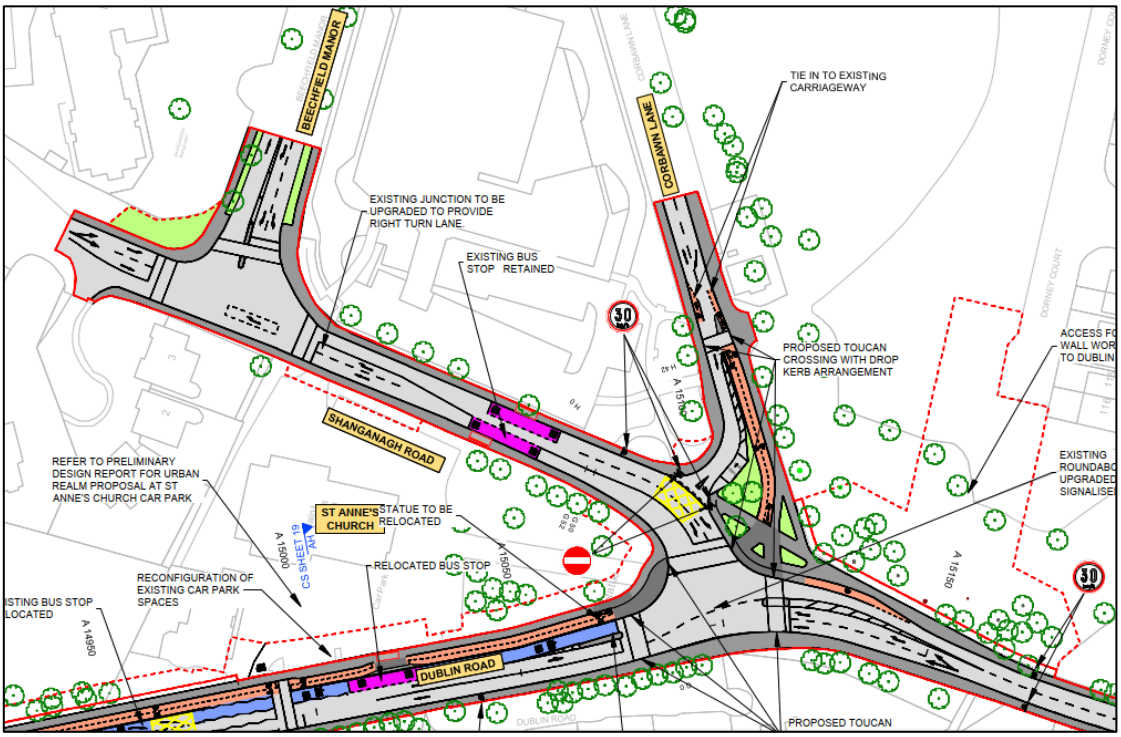


Figure 3.147: Extract from General Arrangement Drawings at Corbawn Lane / Shanganagh Road junction (Sheet 43)

The Proposed Scheme design at this junction allows for an exit from Corbawn Lane to Shanganagh Road to improve overall junction operation efficiency. Figure 3.147 above shows that the exit from Corbawn Lane onto Shanganagh Road is protected by a yellow box junction which will keep the junction clear of queues and ensure westbound traffic can exit at all times. Eastbound traffic is required to make a short diversion via the enhanced Beechfield Manor junction, a total distance of 287m compared with the current 210m, an increase of 77m.

Dublin Road/ Shanganagh Road/ Corbawn Lane junction is being upgraded as part of the Proposed Scheme and a new dedicated right turn lane from Shanganagh Road to Beachfield Manor is proposed and the junction will benefit from additional traffic lanes and pedestrian crossings. This will reduce the risk of queuing back to the upstream to the Dublin Road/ Corbawn Lane junction. A short-left turn flare lane is also proposed at the Beechfield Manor approach to Shanganagh Road to further improve overall junction efficiency.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows the practical reserve capacity (PRC) at Dublin Road / Shanganagh Road / Corbawn Lane junction. The PRC is -4.3% during the AM Peak Hours is and -2.7% during the PM Peak Hours. Although this is slightly over capacity, this suggests that the junction will operate efficiently within capacity and traffic build up will be minimal following the introduction of the Proposed Scheme.

The LinSig results show that the modelling at Dublin Road / Shanganagh Road / Corbawn Lane junction will operate efficiently during all scenarios and therefore there would be no expected delays to occur on the junction. This means that the at Dublin Road / Shanganagh Road / Corbawn Lane junction would operate efficiently.

The results of the Pedestrian Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.33 of Chapter 6 (Traffic & Transport) of the EIAR,

demonstrate that the LoS during the Do Minimum scenario consists of D ratings. During the Do Something scenario, the LoS consists predominantly of the higher of B ratings. Given the quality of the existing pedestrian infrastructure along the Proposed Scheme, the improvements will have a *Positive, Moderate and Long-term* effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

Also, as noted in Table 6.33 the pedestrian improvement at the St Anne Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) demonstrates improved LoS from 'C' to 'B' with *Positive Moderate* impact. Junction of Shanganagh Road with Beechfield Manor shows improved LoS from 'D' to 'B' with *Very Significant* Impact and junction of Dublin Road with Stonebridge shows improved LoS from 'B' to 'A' with *Positive Moderate* impact.

A Level of Service (LoS) assessment was undertaken using an adapted version of the NTA's National Cycle Manual Quality of Service (QoS) Evaluation criteria. The results of the Cycling Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.34 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of C ratings. During the Do Something scenario, the LoS consists predominantly of the higher C ratings. Given the quality of the existing cycling infrastructure along the Proposed Scheme, the improvements will have No Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North.

Also, refer to Section 3.9.3.8 in this report for further information on the Impact on Safety (Pedestrian & Cyclist).

The results of the Bus Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.36 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the Proposed Scheme will have a *Positive, Moderate and Long-term* effect to the quality of the bus infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North, which aligns with the overarching aim to provide enhanced bus infrastructure on the corridor.

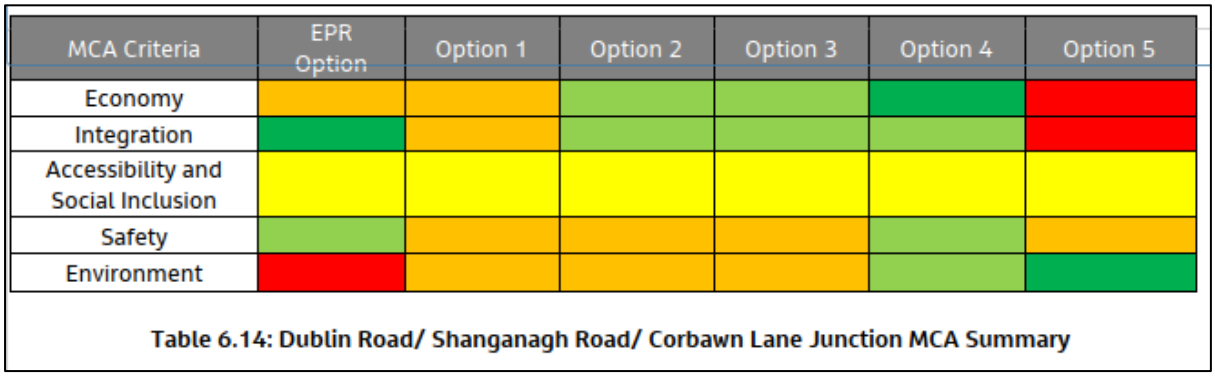
Section 6.4.5.3 of the Preferred Route Options Report part of Supplementary Information describes the assessment of other alternatives considered at Dublin Road/ Shanganagh Road/ Corbawn Lane junction to inform the Proposed Scheme.

'Further assessment was carried out to examine other viable alternative options at the Dublin Road/ Shanganagh Road/ Corbawn Lane junction to mitigate the impact of the traffic restrictions to Corbawn Lane, while achieving the BusConnects objectives. These are discussed below:

- *EPR Option: the ERP Option upgrades existing roundabout to full signalised junction and closure of Corbawn Lane;*
- *Option 1: A fully signalised junction with general traffic entry and exit to and from Corbawn Lane with the Dublin Road / Shanganagh Road junction;*
- *Option 2: A fully signalised junction with some restrictions to general traffic entry and exit to and from Corbawn Lane with the Dublin Road / Shanganagh Road junction, with a northbound Dublin Road slip lane for buses and general traffic;*
- *Option 3: A fully signalised junction with general traffic entry to Corbawn Lane from Shanganagh Road (no general*
- *traffic exit from Corbawn Lane to Shanganagh Road), with a northbound Dublin Road slip lane for buses and general traffic;*
- *Option 4 (PRO)**:** A fully signalised junction with general traffic exit only from Corbawn Lane to Shanganagh Road (no general traffic entry from Shanganagh Road to Corbawn Lane). A dedicated right-turn lane is also proposed from Shanganagh Road onto Beechfield Manor; and*
- *Option 5: Roundabout as existing……*

……..Option 4 (PRO) performs better than other options EPR Option, Option 1, 2, 3 and 5 due to good junction capacity, resilience, bus priority, footprint with least impact and improved cycle and pedestrian provision……

….A summary of the assessment and relative ranking of junction options against the five main assessment criteria is presented in Table 6.14…..



MCA Criteria	EPR Option	Option 1	Option 2	Option 3	Option 4	Option 5
Economy						
Integration						
Accessibility and Social Inclusion						
Safety						
Environment						

Table 6.14: Dublin Road/ Shanganagh Road/ Corbawn Lane Junction MCA Summary

……Following the consideration of the above alternative options, the Option 4 is considered to offer more benefits in comparison to the other options. The Option 4 is therefore the PRO for this junction for the following reasons:

- *It provides journey time reliability for buses;*
- *It provides for good overall junction capacity and resilience for flows fluctuations;*
- *It provides a junction footprint with minimum impact to land;*
- *It provides for improved infrastructure for pedestrians and cyclists; and*
- *It performs well with respect to integration and road safety.'*

The consideration of alternatives concluded the proposed signalisation at Dublin Road / Shanganagh Road / Corbawn Lane junction from the General Arrangement Drawings which are provided as an Appendix to Chapter 4 (Proposed Scheme Description) in Part 1 of 3 of Volume 3, of the EIAR can be seen in Figure 3.149.

NTA are satisfied that signalisation of the Dublin Road / Shanganagh Road / Corbawn Lane junction reduces congestion, reduces the likelihood of accidents, and results in minimal traffic build up.

Issue no 2:

- One submission has raised concern regarding that the Proposed Scheme at Dublin Road/ Shanganagh Road/ Corbawn Lane junction does not treat junctions 37, 38, and 39 as a system but instead as isolated junctions.

The Proposed Scheme design at junction 37 (Dublin Road/ Stonebridge Road) and at junction 38 (Shanganagh Road/ Beechfield Manor), and 39 (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) from the 02-General Arrangement Drawings Chapter 4 (Proposed Scheme Description) Part 1 of 3 of Volume 3 of the EIAR on Sheet 42 and 43 can be seen in Figure 3.148 and Figure 3.149.

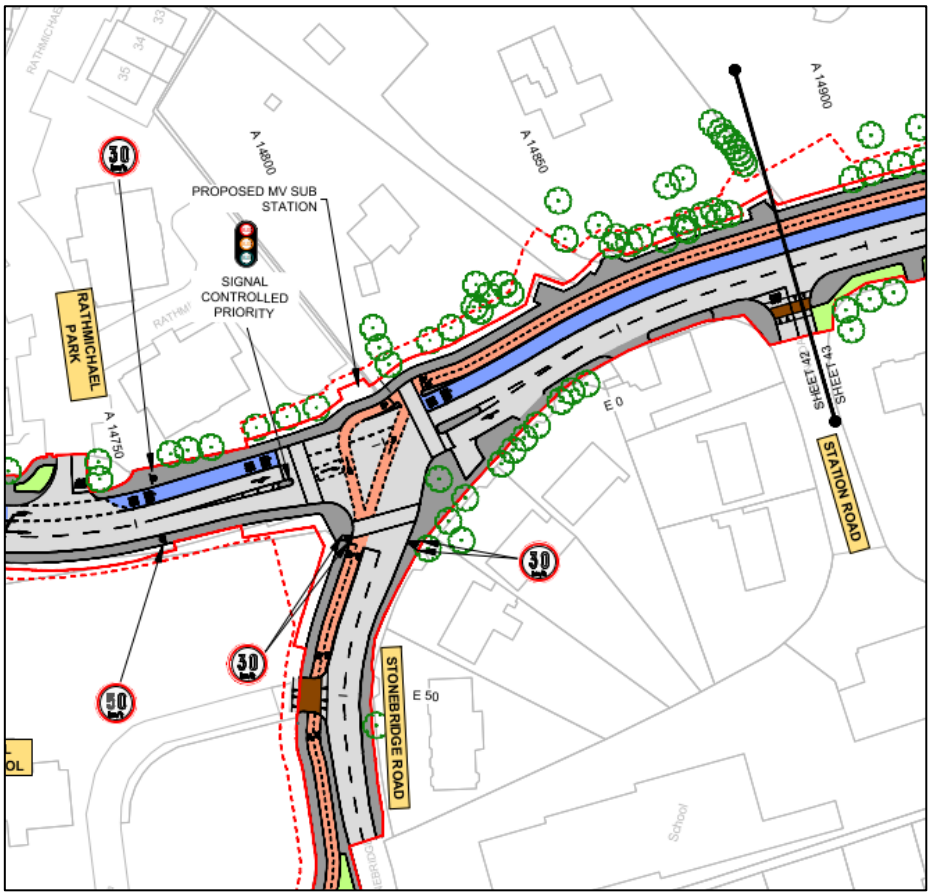


Figure 3.148: Extract from General Arrangement Drawings at junction 37 (Sheet 42)

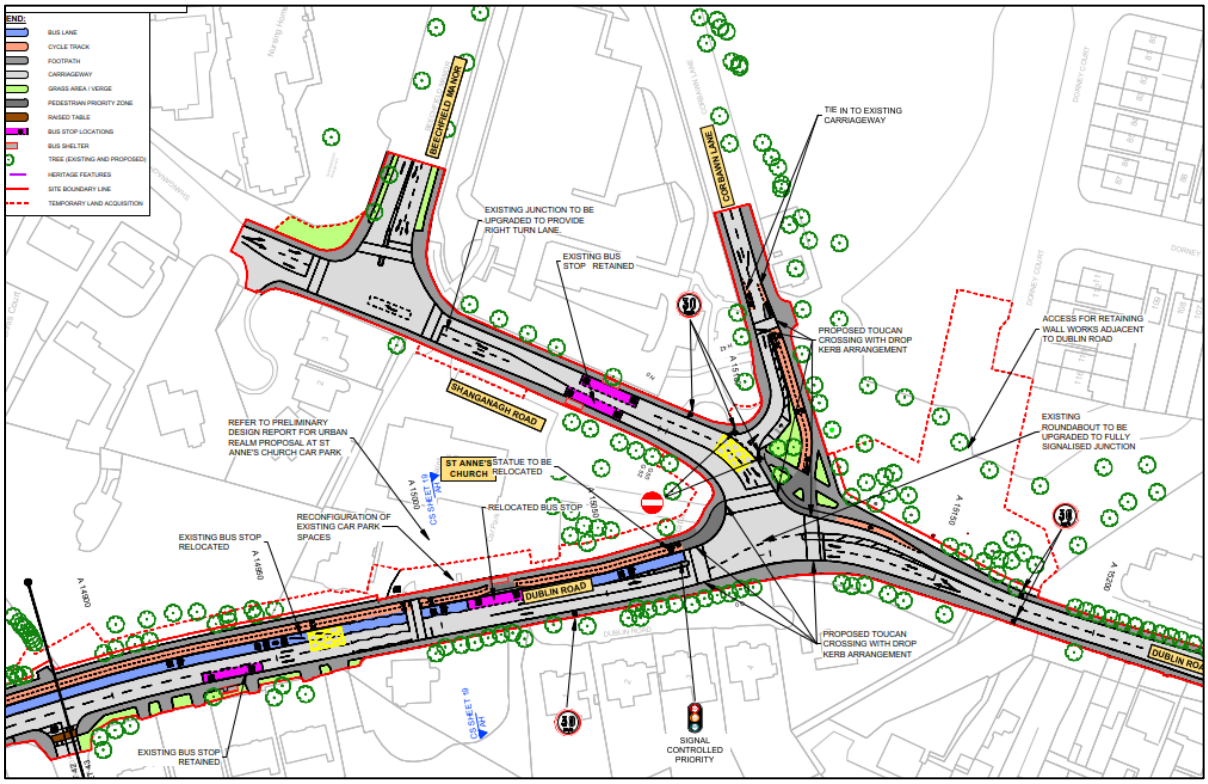


Figure 3.149: Extract from General Arrangement Drawings at junctions 38, and 39 (Sheet 43)

St Anne's Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) is proposed to be upgraded to a signalised junction with new pedestrian crossing facilities and Signal Control Priority (SCP) for buses. Corbawn Lane is to be an exit only junction on to Shanganagh Road. A dedicated

right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Shanganagh Road into Beechfield Manor is also to be provided.

The Dublin Road/ Stonebridge Road junction is modified to include for improved pedestrian, cycle, and bus infrastructure.

SCP is provided in the southbound direction from Dublin Road/ Corbawn Lane. Shanganagh Road junction for busses heading towards Shankill village. SCP is provided in the northbound direction, which commences at Dublin Road junction with Olcovar until north of the Dublin Road/ Stonebridge Road junction.

It is intended to provide a two-way cycle track from Stonebridge Road on the Dublin Road as far as the Dublin Road/ Shanganagh Road/ Corbawn junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road.

A speed limit of 30km/h would be in place on Dublin Road between north of Stonebridge Road and the Signal Controlled Bus Priority south of Shankill Village at the junction with Olcovar. The reduced speed limit will maintain the viability of the primary cycling route through Shankill village and the Dublin Road/ Shanganagh Road/ Corbawn Lane junction.

Section 6.4.5.3 of the Preferred Route Options Report, part of Supplementary Information, gives detail description of the Dublin Road/ Shanganagh Road/ Corbawn Lane junction.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR describes the Proposed Scheme at Dublin Road/ Shanganagh Road/ Corbawn Lane junction 37, 38 and 39 (Page 124 to 130).

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows that the practical reserve capacity (PRC) at Dublin Road / Stonebridge Road junction. The PRC is 16% during the AM Peak Hours is and 18.8% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows that the practical reserve capacity (PRC) at Dublin Road / Shanganagh Road / Corbawn Lane junction. The PRC is -4.3% during the AM Peak Hours is and -2.7% during the PM Peak Hours. Although this is slightly over capacity, this suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows that the practical reserve capacity (PRC) at Shanganagh Road / Beechfield Manor junction. The PRC is 91.1% during the AM Peak Hours is and 65.2% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

The LinSig results show that the modelling of junctions 37, 38, and 39 indicates that the junctions will operate efficiently during all scenarios and therefore there would be no expected delays to occur on the junction. This means that the junction would operate independently without interaction with one another thus do not need to be treated as a system in terms of capacity modelling.

Furthermore, the Proposed Scheme has been designed with a signal strategy coordinated by junction to maximise the opportunity for bus priority at junctions to ensure maximum gains for bus journey time and reliability. This is line with the overall aims and objectives of the Proposed Scheme.

Issue no 3:

- A number of submissions raised concerns over the closure of Corbawn Lane eastwards will cause inconvenience to all residents of Dorney Court, Eaton Wood, Eaton Brae, Clanmawr, Seafield and Corbawn Woods;
- Further concerns were raised that the closure of Corbawn Lane will also increase traffic exponentially at junction 39 onto Beechfield Manor making pedestrian access to the Lidl Shopping Centre virtually impossible particularly for elderly population; and

- A number of submissions raised concerns over the reintroduction of a right-hand turn filter lane from Shanganagh Road onto Beechfield Manor will cause traffic congestion on Shanganagh Road and Dublin Road.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a general traffic impact assessment summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. This assessment has been carried out key junctions and roads. The Proposed Scheme assessment shows that there is limited change to traffic redistribution in the area.

The Proposed Scheme design at this junction allows for an exit from Corbawn Lane to Shanganagh Road to improve overall junction operation efficiency. Figure 3.149 above shows that the exit from Corbawn Lane onto Shanganagh Road is protected by a yellow box junction which will keep the junction clear of queues and ensure westbound traffic can exit at all times. Eastbound traffic is required to make a short diversion via the enhanced Beechfield Manor junction, a total distance of 287m compared with the current 210m, an increase of 77m.

Junction 39 is being upgraded as part of the Proposed Scheme and a new dedicated right turn lane from Shanganagh Road to Beechfield Manor is proposed and the junction will benefit from additional traffic lanes and pedestrian crossings. This will reduce the risk of queuing back to the upstream to the Dublin Road/ Corbawn Lane junction. A short-left turn flare lane is also proposed at the Beechfield Manor approach to Shanganagh Road to further improve overall junction efficiency.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows a positive PRC at Shanganagh Road / Beechfield Manor junction. The PRC is 91.1% during the AM Peak Hour and 65.2% during the PM Peak Hour. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR also shows that the practical reserve capacity (PRC) at Dublin Road / Shanganagh Road / Corbawn Lane junction. The PRC is -4.3% during the AM Peak Hours is and -2.7% during the PM Peak Hours. Although this is slightly over capacity, this suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Issue no 4:

- A number of submissions raised concerns over limiting access to Lidl Shopping Centre will cause traffic congestion and delays.

The Proposed Scheme shows no proposed change to vehicle access at Lidl shopping centre entrance. The most direct route to the Lidl site access remains the same via Beechfield Manor.

Additional pedestrian crossing facilities at the junction of Beechfield Manor and Shanganagh Road will improve access to the Lidl site for those walking from the west. Additional cycle facilities along the Proposed Scheme will improve access to the Lidl site via Corbawn Lane.

Issue no 5:

- A number of submissions raised concerns on impacting emergency services onto Corbawn Lane due the closure of Corbawn Lane; and

- One submission has raised concern over the changes of Corbawn Lane will limit access to Garda Station.

The Proposed Scheme does not suggest the closure of Corbawn Lane to traffic, only a short section at its western extremity becomes one-way exit only. Emergency vehicles would be permitted to contravene this restriction, if deemed necessary, should this not be the case they would make the short diversion via Beechfield Manor adding a minimal amount to any response time.

The route to the Garda Station from Dublin Road has been improved for both pedestrians and cyclists through the inclusion of a proposed toucan crossing with drop kerb arrangement and a two-way cycle track on Corbawn lane. North of Corbawn Lane, vehicular and cycle access remains unchanged, while vehicles have a short diversion from approximately 340m to 410m south of Corbawn Lane adjacent to Dublin Road / Shanganagh Road / Corbawn Lane junction.

Issue no 6:

- Further concerns regarding the impact to accessing the DART, some respondents commented that DART users will need to drive rather than use other options due to the changes.

Section 6.4.3.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, shows that the core reference case (Do Minimum) modelling scenarios (Opening year - 2028 and Design year - 2043) are based on the progressive roll-out of the Greater Dublin Area (GDA) Transport Strategy 2022-2042 (GDA Strategy), with a partial implementation by 2028, in line with National Development Plan (NDP) investment priorities and the full implementation by 2043.

Access to the DART system via sustainable modes will be enhanced by the Proposed Scheme through improvements to pedestrian and cycle routes. By providing enhancements to local walking and cycling routes, such as the two-way cycle track and quitter nature, in terms of traffic, of Corbawn Lane and the additional pedestrian crossings at Beechfield Manor the propensity of users to drive will reduce.

In 2028, other notable Do Minimum transport schemes include the roll out of the DART Programme. The modelling tools that were developed as part of the assessment, do not work in isolation, but instead work as a combined modelling system driven by the NTA's East Regional Model (ERM) as the primary source for multi-model demand and trip growth. Demand information is then passed to the cordoned Local Area Model (LAM), corridor micro-simulation models and junction models which have been refined and calibrated to represent local conditions to a greater level of detail than that contained in the ERM.

Furthermore, the transport modelling results demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 19% during the AM and PM Peak hours of the 2028 Opening Year and 2043 Design Year. Based on the AM and PM peak hours alone, this equates to approximately 10 hours of savings in 2028 and in 2043, when compared to the Do Minimum combined across all buses.

A key benefit of the provision of a resilient BusConnects Service network, one which can provide reliable and consistent journey times, is that it has potential to cater for further significant transfer from private car travel to more sustainable and environmentally friendly travel via public transport. Overall, it is anticipated that the improvements to the network performance along the Proposed Scheme will be Positive, Significant and Long-term.

TIA Sub Appendix A6.2 - Transport Modelling Report) Volume 4 Appendices Part 2 of 4 of the EIAR contains further information on the modelling assumptions contained within the Do Minimum scenario including the full list of transport schemes included.

This demonstrates that the Proposed Scheme will complement the DART system and all other interventions within the GDA strategy enhancing the opportunity to travel by sustainable modes for all parts of a journey.

Issue no 7: Impact on pedestrian and cyclists safety at the proposed junction

- A number of submissions raised concerns over the safety risk to cyclists exiting Corbawn Lane.
- A number of submissions have raised concern on the impact of the reduction in the footways and difficulty to navigate footpaths which will further impact the safety of pedestrians.
- One submission has raised concern regarding no improvements to pedestrian crossings outside Tesco on Dublin Road.

Refer to Section 3.9.3.8 in this report for further information on the Impact on Safety (Pedestrian & Cyclist) and also note below.

Pedestrian Improvement at Dublin Road/ Shanganagh Road/ Corbawn Lane junction

Traffic signals provide more active control for users including active travel, public transport, and traffic by separating pedestrians from traffic to cross the road safely and therefore improves pedestrian safety. Section 6.4.6.1.5.1 in Chapter 6 (Traffic &Transport) of the EIAR states the key infrastructure changes to pedestrian links along Section 3 of the Proposed Scheme include approximately 120m of Shanganagh Road has been widened to achieve improved footway widths.

Section 6.4.6.1.5.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the key pedestrian infrastructure changes along Section 3.

The key infrastructure changes to pedestrian links along Section 3 of the Proposed Scheme at Dublin Road/ Shanganagh Road/ Corbawn Lane are summarised as follows:

- Increased footpath width, crossing width, and pedestrian directness;
- Increased provision of priority crossings across side streets with raised tables;
- Provision of pedestrian crossings on all arms at Shanganagh Road / Beechfield Manor junction, R119 Dublin Road / Lower Road / Cluain Na Gréine Court junction, R119 Dublin Road / Olcovar junction, R119 Dublin Road / Shanganagh Castle development lands entrance junction;
- Provision of new mid-link pedestrian crossings along R837 Dublin Road (north of the R837 Dublin Road / Seaview Park junction), R119 Dublin Road (southeast of the R119 Dublin Road / Allies River Road junction) and R837 Dublin Road (southeast of Shanganagh Cemetery access). This will enable improved connectivity between bus stop and facilities; and
- Approximately 120m of Shanganagh Road has been widened to achieve improved footway widths.

The assessment of the qualitative impacts on the walking infrastructure for Section 3 at Dublin Road / Lower Road junction of the Proposed Scheme are summarised in Table 3.38, along with the accompanying sensitivity for each junction and the resultant significance of effect. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4 - Pedestrian Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

Table 3.38: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase (Extract from Table 6.33)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Seaview Park 3-arm Priority Junction	A14375	E	B	Medium	Negligible	Not Significant
R837 Dublin Road mid-link crossing South of the R837 Dublin Road / Seaview Park Junction	A14450	No existing facility	A	High	Negligible	Positive Slight
R119 Dublin Road / Kentfield 3-arm Priority Junction	A14490	E	B	Medium	Medium	Positive Significant
R119 Dublin Road / Rathmichael Woods 3-arm Priority Junction	A14640 - A14650	C	B	Low	Medium	Positive Moderate
R837 Dublin Road / Stonebridge Road 3-arm Signalised Junction	A14770 - A14810	B	A	Low	High	Positive Moderate
R119 Dublin Road / Station Road 3-arm Priority Junction	A14870 - A14880	E	B	Medium	Negligible	Not Significant
Shanganagh Road / Beechfield Manor 3-arm Signalised Junction	A15000	D	B	Medium	High	Very Significant
Shankill Roundabout	A15070 - A15120	C	B	Low	Medium	Positive Moderate
R119 Dublin Road / Lower Road / Cluain Na Gréine Court 4-arm Staggered Priority Junction	A15300 - A15330	D	A	Medium	Low	Positive Moderate
R119 Dublin Road / Aubrey Park 3-arm Priority Junction	A15300 - A15330	C	B	Low	Low	Positive Slight
R119 Dublin Road / Shankill Village 3-arm Priority Junctions at Accesses	A15350 - A15450	C	B	Low	Low	Positive Slight
R119 Dublin Road mid-link crossing South of the R119 Dublin Road / Aubrey Park Junction	A15460	B	A	Low	Low	Positive Slight

As noted in Table 3.38 above the pedestrian improvement at the St Anne Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane junction) demonstrates improved LoS from 'C' to 'B' with *Positive Moderate impact*. Junction of Shanganagh Road with Beechfield Manor shows improved LoS from 'D' to 'B' with *Very Significant* Impact and junction of Dublin Road with Stonebridge shows improved LoS from 'B' to 'A' with *Positive Moderate* impact.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4 - Pedestrian Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

Cycling Improvement at Dublin Road/ Shanganagh Road/ Corbawn Lane junction

It is intended to provide a two-way cycle track from Stonebridge Road on the Dublin Road as far as the Dublin Road/ Shanganagh Road/ Corbawn junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road.

At the Dublin Road/ Shanganagh Road/ Corbawn Lane junction, the Proposed Scheme improves cyclist safety through the inclusion of a two-way cycle track on Corbawn Lane. This provides connectivity to the two-way cycle track along western side of Dublin Road and beyond.

Table 3.39 below outlines the cycling qualitative assessment along Section 3, with the overall 'DoMinimum' LoS, 'DoSomething' LoS, and the description of impact. TIA Sub Appendix A6.4 – Cycling Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR. provides further detail on the methodology behind each LoS rating given to the 'DoMinimum' and 'DoSomething' scenarios.

Table 3.39: Section 3 Cycling Impact During Operational Phase (Table 6.34)

Table 6.34: Section 3 Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R837 Dublin Road: Loughlinstown Roundabout to R119 Shanganagh Road	A14050 - A15100	C	D	Low	Medium	Negative Moderate
R119 Dublin Road: R119 Shanganagh Road to Quinn's Road	A15100 - A15600	D	D	Negligible	Medium	Not Significant
R119 Dublin Road: Quinn's Road to Allies River Road	A15600 - A16250	C	D	Low	Medium	Negative Moderate
R119 Dublin Road: Allies River Road to Wilford Roundabout	A16250 - A17400	C	A	Medium	Low	Positive Moderate
Section Summary		**C**	**C**	**Negligible**	**Medium**	**Not Significant**

Table 3.39 above demonstrates that, although there are improvements at the Corbawn Lane junction itself when considered in the context of the length between R119 Shanganagh Road to Quinn's Road, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure during the Operational Phase. A detailed breakdown of the assessment along each section can be found in the TIA Sub Appendix A6.4 - Cycling Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

The low negative impacts along R119 Dublin Road are due to the removal of existing substandard advisory cycle lanes due to existing width constraints along these areas. The removal of the existing infrastructure along this section enables improved pedestrian facilities (width) and the provision of combined bus and cycle lanes where possible thus removing cyclists from general traffic.

A speed limit of 30km/h would be in place on Dublin Road between north of Stonebridge Road and the Signal Controlled Bus Priority south of Shankill Village at the junction with Olcovar. The reduced speed limit will maintain the viability of the primary cycling route through Shankill village and the Dublin Road/ Shanganagh Road/ Corbawn Lane junction.

Issue no 8: Traffic Redistribution

- One submission has raised concern regarding that the closure of Corbawn Lane will encourage cars to leave N11 at Commons Road and join Shanganagh Road to get to Corbawn Lane will lead to long delays on Shanganagh Road.

Section 6.4.6.2.8.7 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes that the general traffic impact assessment on the indirect study area has been undertaken by extracting operational capacities from the LAM at the key junctions along road links that have been identified in the threshold impact assessment including Commons Road. The threshold impact assessment has identified that Commons Road experiences an increase in traffic flows.

The results are presented in terms of the significance of the change in Volume / Capacity (V / C) ratio for each junction based on its sensitivity and magnitude of impact. To undertake a robust assessment, the operational capacity outputs have been presented with reference to the worst performing arm of a junction that experiences the maximum V / C ratio.

The overall results of this assessment can be summarised as follows:

- The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and

- No junctions are predicted to experience a significance of effect that is significant or higher.

It should be noted that while there are low impacts to the operational capacity in the indirect study area, this level of congestion is acceptable according to national guidance. Section 3.4.2 of DMURS (2019) recognises that a certain level of traffic congestion is an inevitable feature within urban networks and that junctions may have to operate at saturation levels for short periods of time during the peak hours of the day. Chapter 1 of the Smarter Travel Policy Document also acknowledges that it is not feasible or sustainable to accommodate continued demand for car use. Therefore, it can be concluded that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area.

Furthermore, when considering the junctions along Shanganagh Road that will be directly impacted by the Proposed Scheme, TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows that the practical reserve capacity (PRC) at Dublin Road / Shanganagh Road / Corbawn Lane Junction. The PRC is -4.3% during the AM Peak Hours is and -2.7% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows a positive practical reserve capacity (PRC) at Shanganagh Road / Beechfield Manor junction. The PRC is 91.1% during the AM Peak Hours is and 65.2% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Accordingly, it is determined that there will be an overall Negative, Low and Long-Term effect impact from the redistributed general traffic as a result of the Proposed Scheme. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area. It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.

Issue no 9: Population Growth

- One submission has raised concern that there will be a population increase in the area of around 33% in the next two years and that current designs will not service the large amount of traffic that moves through the area, commenting that the filter lane will not serve enough traffic without the use of Corbawn Lane.

The modelling tools that have been developed as part of the assessment, do not work in isolation, but instead work as a combined modelling system driven by the NTA's East Regional Model (ERM) as the primary source for multi-model demand and trip growth. Demand information is then passed to the cordoned Local Area Model (LAM), corridor micro-simulation models and junction models which have been refined and calibrated to represent local conditions to a greater level of detail than that contained

in the ERM. Therefore, the modelling outputs consider population increase in the base year scenario and also the DoMinimum and DoSomething scenarios.

Further detail on the transport model development process, the traffic data inputs used, the calibration, validation and forecast model development for the suite of transport models can be found in the Transport Modelling Report, TIA Sub Appendix A6.2 (Transport Modelling Report) and TIA Sub Appendix A6.3 (Junction Design Report) in Volume 4 Appendices Part 2 of 4 of EIAR.

3.9.3.4.4 Signal Controlled Priority (SCP) through Shankill including Signalisation of Dublin Road / Quinn's Road / Cherrington Drive Junction

This section covers the proposed upgrades to the existing Dublin Road / Quinn's Road / Cherrington Drive roundabout, including the signal control priority measures to provide bus priority and ensure bus journey time through Shankill bottleneck.

Signal Controlled Priority uses traffic signals to enable buses to get priority ahead of other traffic on single lane road sections, but it is only effective for short distances.

Proposed Scheme SCP through Shankill (North of Stonebridge Road to Cricken Lane) is shown in the General Arrangement Drawings on Sheet 43 (see Figure 3.150), Sheet 44 (see Figure 3.151), Sheet 45 (see Figure 3.152) and Sheet 46 and Dublin Road / Quinn Road / Cherrington Road junction is specifically shown on Sheet 44 (see Figure 3.151) of Appendix to Chapter 4 (Proposed Scheme Description) in Part 1 of 3 of Volume 3, of the EIAR and can be seen in Figure 3.151 and noted below:

- The Proposed SCP in the southbound direction commences at the Dublin Road/ Shanganagh Road/ Corbawn Lane junction up to Dublin Road junction with Shanganagh Castle Housing (near Crinken Lane) chainage A15075 to A16130;
- The Proposed SCP in the northbound direction commences at Dublin Road junction with Olcovar unto north of Dublin Road junction with Stonebridge Road (near Woodbank Housing) Chainage A14630 to A15900;
- Dublin Road / Quinn's Road/ Cherrington Drive roundabout is upgraded to signalised junction. The signalisation of the Dublin Road/ Quinn's Road/ Cherrington Road roundabout to signalised junction co-ordinates with the Signal Control Priority through the Shankill.

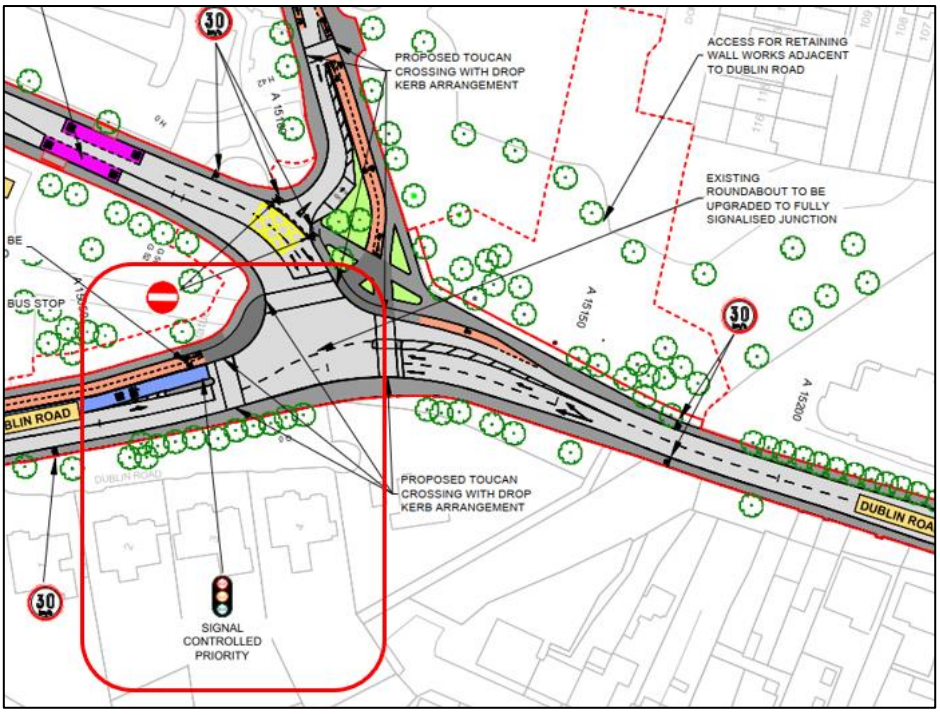


Figure 3.150: Extract from General Arrangement Drawing at Dublin Road/ Shanganagh Road/ Corbawn Lane junction SCP Southbound (Sheet 43)

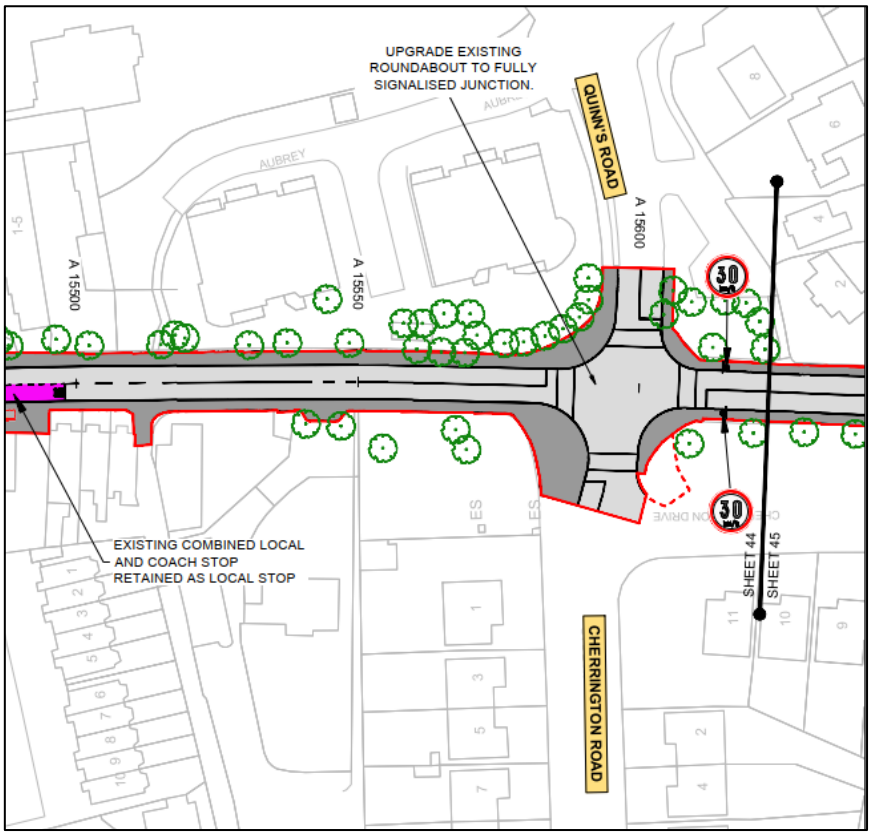


Figure 3.151: Extract from General Arrangement Drawing at Dublin Road/ Quinns Roundabout (Sheet 44)

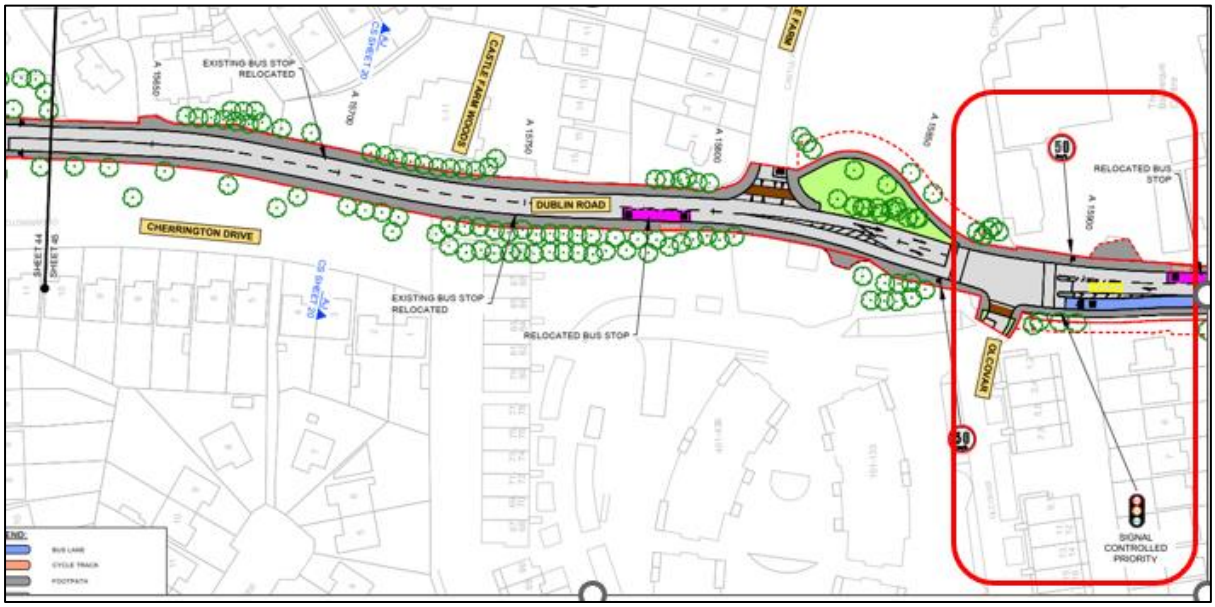


Figure 3.152: Extract from General Arrangement Drawing at Dublin Road/ Olcovar junction SCP Northbound (Sheet 45)

Section 4.3 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, notes the following on the proposed SCP in Shankill:

'Following further engagement with local community in Shankill, the design was amended through the village:

- *Bus lanes and segregated cycle lanes were removed and bus priority is provided through Signal Control Priority (SCP). This proposal will maintain existing footways and current village environment;*

- *Two-way cycle track has been added to link Corbawn Lane to the two schools along Stonebridge Road; and*
- *Move the northbound SCP from the Quinn's Road / Cherrington Drive junction to a new location between Cherrington Drive and Castle Farm, with further development in this area for the provision of a right turning lane at Olcovar'.*

In the context of the above, if the roundabouts were retained it would not allow for bus priority and safer crossing for pedestrians and cyclists at these locations. Therefore, the continuous linear operational functioning of the corridor and key project objectives related to safety, sustainable transportation and efficiency of service would be disrupted at these locations which is why the roundabouts must be removed.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows that the practical reserve capacity (PRC) at Dublin Road / Quinns Road / Cherrington Road junction. The PRC is 86.1% during the AM Peak Hours is and 71.8% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Page 136, 137 and 138 of the Junction Assessment presented in TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

'Bus priority in both directions will be provided via bus detection demands and extensions on the immediate approaches to the junction. Additional priority is achieved via virtual bus lanes through Shankill village. The junctions at Corbawn Lane to the north and Olcovar to the south have bus pre-signal facilities granting buses the opportunity to get ahead of general traffic.'

Section 6.4.6 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR outlines the potential impacts at the Operational phase. Table 6.33 in Section 6.4.6.1.5.1 notes that the pedestrian impact at Shankill roundabouts, as Positive and Moderate. Table 6.34 in Section 6.4.6.1.5.2 notes the cycling impact on R119 Dublin Road, from R119 Shanganagh Road to Quinn's Road (which includes Quinns/ Cherrington Drive roundabout) as Not Significant. Table 6.36 in Section 6.4.6.1.5.3 notes that the bus qualitative impact from Loughlinstown Roundabout to Bray North (Wilford Roundabout) section of the scheme (which includes Shankill roundabout) as Positive and Moderate.

3.9.3.4.5 SCP and Signalisation at Wilford Roundabout

This section covers the proposed upgrades to the existing Wilford roundabout, The Proposed Scheme design at Dublin Road from Wilford Roundabout to Woodbrook College (near Woodbrook Estate) from the General Arrangement Drawings on sheet 49 which are provided as an Appendix to Chapter 4 (Proposed Scheme Description) in Part 1 of 3 of Volume 3, of the EIAR can be seen in Figure 3.153.

Dedicated bus lane with segregated cycle track and footpath is provided in the southbound direction. Signal-controlled bus priority will be used northbound from Wilford Junction for a short distance as far as Woodbrook College to minimise impact to properties and trees.

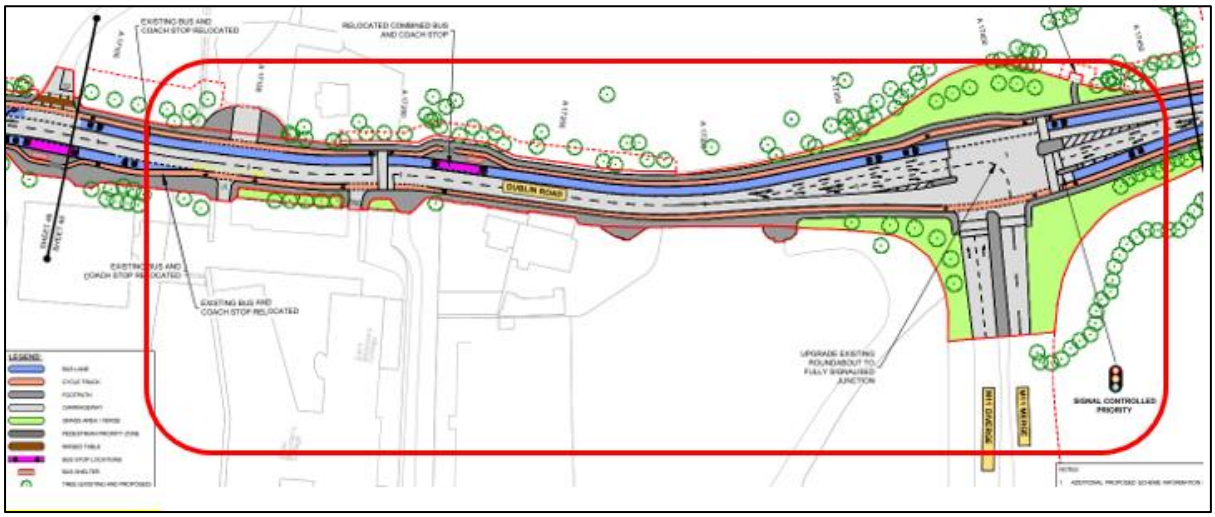


Figure 3.153: Extract from General Arrangement Drawing Dublin Road Wilford Roundabout (Sheet 49)

The Wilford roundabout is being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians. The roundabout is to be signalised and modified to include improved bus infrastructure. The upgrade of Wilford three-arm roundabout to a signalised junction results in reduced corner radii and reduced lane widths to encourage slow vehicular speeds and help maximise control at intersections.

Page 139, 140 and 141 of the Junction Assessment presented in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

'Summary:

Roundabout has been converted to signal controlled junction to improve bus progression and provide safe crossing facilities for pedestrians and cyclists. Signal control will also facilitate linkage to a potential future access to new residential development to the south of the junction. Junction Type 1 can be physically accommodated in southbound and northbound directions. Cycle lanes have been improved and have been taken through the junction. Pedestrian crossings have been improved.

Bus Priority Infrastructure:

Full bus priority provided. Northbound and Southbound buses and cycle movements run together.'

The proposed junction design and signalling has been modelled with existing traffic counts and forecasting to ensure existing and predicted future movements at the junction (including movements in and out of the M11 slip lane) have been taken into account. Staging and signal times have been proposed on the basis considering multiple factors including safety and demand.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at Dublin Road / M11 Wilford junction. The PRC is 12% during the AM Peak Hours is and 27% during the PM Peak Hours. This suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Section 6.4.6 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR outlines the potential impacts at the Operational phase. Table 6.38 in Section 6.4.6.1.6.1 notes that the pedestrian impact at the Dublin Road / M11 junction from Wilford Roundabout to Chapel Lane as Positive and Profound.

Table 6.39 in Section 6.4.6.1.6.2 notes the cycling impact on Dublin Road, from Wilford Roundabout to Chapel Lane as Positive and Significant.

In terms of bus impact, Table 6.36 in Section 6.4.6.1.5.3 notes that the bus qualitative impact in the Loughlinstown Roundabout to Bray North (Wilford Roundabout) section of the Proposed Scheme as Positive and Moderate, while Table 6.41 in Section 6.4.6.1.6.3 notes the bus qualitative impact in the

Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge) section of the Proposed Scheme as Positive and Profound.

3.9.3.4.6 Summary of Assessment

NTA are satisfied that the upgrade of three roundabouts along with SCP within the Section 3 (Loughlinstown to Bray North section) of the Proposed Scheme achieves the scheme objectives of enhancing the capacity and potential of the public transport system with signalised priority and enhances the potential for cycling and walking with safe, segregated facilities.

Taking into account the provision of bus lanes, signal control priority and bus stop provision and facilities outlined within this section, Table 3.40 below (Table 6.36) outlines the bus qualitative assessment along Section 3 of the Proposed Scheme.

Table 3.40: Section 3 – Bus Qualitative Impact During Operational Phase (Table 6.36)

Table 6.36: Section 3 – Bus Qualitative Impact During Operational Phase

Section	Chainage	Description of Impact	Magnitude of Impact	Sensitivity	Significance of Effect
Loughlinstown Roundabout to Bray North (Wilford Roundabout)	A14100 - A17420	• Proximate stops rationalised, to optimise spacing and journey times; • Bus stops are located in more convenient locations for communities and access to signalised crossings; • Moderate improvements to bus stop facilities; and • Bus lanes provided along the some of the corridor.	Low	Medium	Positive Moderate

As indicated in Table 3.40 above (Table 6.36) the Proposed Scheme improves the quality of existing bus infrastructure along Section 3 of the Proposed Scheme, which will provide long-term benefits for bus users and aligns with the overarching aim to provide enhanced bus infrastructure on the corridor. The impact for this section of the Proposed Scheme is Low Positive. The sensitivity of environment rating is predominately categorised as 'medium'. This results in a Positive, Moderate and Long-term effect along Section 3.

The results of the Pedestrian Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.33 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of D ratings. During the Do Something scenario, the LoS consists predominantly of the higher of B ratings. Given the quality of the existing pedestrian infrastructure along the Proposed Scheme, the improvements will have a *Positive, Moderate and Long-term* effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

A Level of Service (LoS) assessment was undertaken using an adapted version of the NTA's National Cycle Manual Quality of Service (QoS) Evaluation criteria. The results of the Cycling Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.34 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of C ratings. During the Do Something scenario, the LoS consists predominantly of the higher C ratings. Given the quality of the existing cycling infrastructure along the Proposed Scheme, the improvements will have No Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North.

3.9.3.5 Impact on Traffic Flows, Speed Limit, and Traffic Calming

Summary of issue raised

A number of submissions raised concern that the area through Shankill becoming a rat run due to the congestion on the N11 and an increased traffic.

Some submissions raised concern that separate bus and traffic lanes will increase traffic and speeds.

A submission suggests that bus stop laybys would support better flow of traffic.

One submission suggested that a ticket validation system could benefit the BusConnects Corridor, as well as traffic monitoring systems and ensure the traffic lights facilitate the flow of both traffic and pedestrians.

Several submissions raised concerns that the Scheme would cause congestion at access to schools in the area.

Some submissions have requested for a 20/25km/h speed limit to remove the need to implement cycle lanes.

A number of submissions requested traffic calming measures in order to improve the local area.

Response to issue raised

Refer to response in Section 3.9.3.4 in this report for further information on the Upgrade Roundabouts to Signalised Junction and Signal Control Priority and also note below.

Traffic Flows through Shankill

In relation to the issue raised that Shankill becoming a rat run due to congestion, the Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Refer to response in Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits, under ‘Changes to Passenger Numbers / Modal Shift’ sub-heading.

Section 6.4.6.2.8.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the general traffic flow difference in the AM Peak Hour. Figure 3.154 below (Diagram 6.26) illustrates the difference in traffic flows on the road links in the AM Peak Hour for the 2028 Opening Year. TIA Sub Appendix A6.4.4 (General Traffic Assessment) in Appendix A6.4 in Volume 4 of this EIAR provides further details of the LAM outputs.

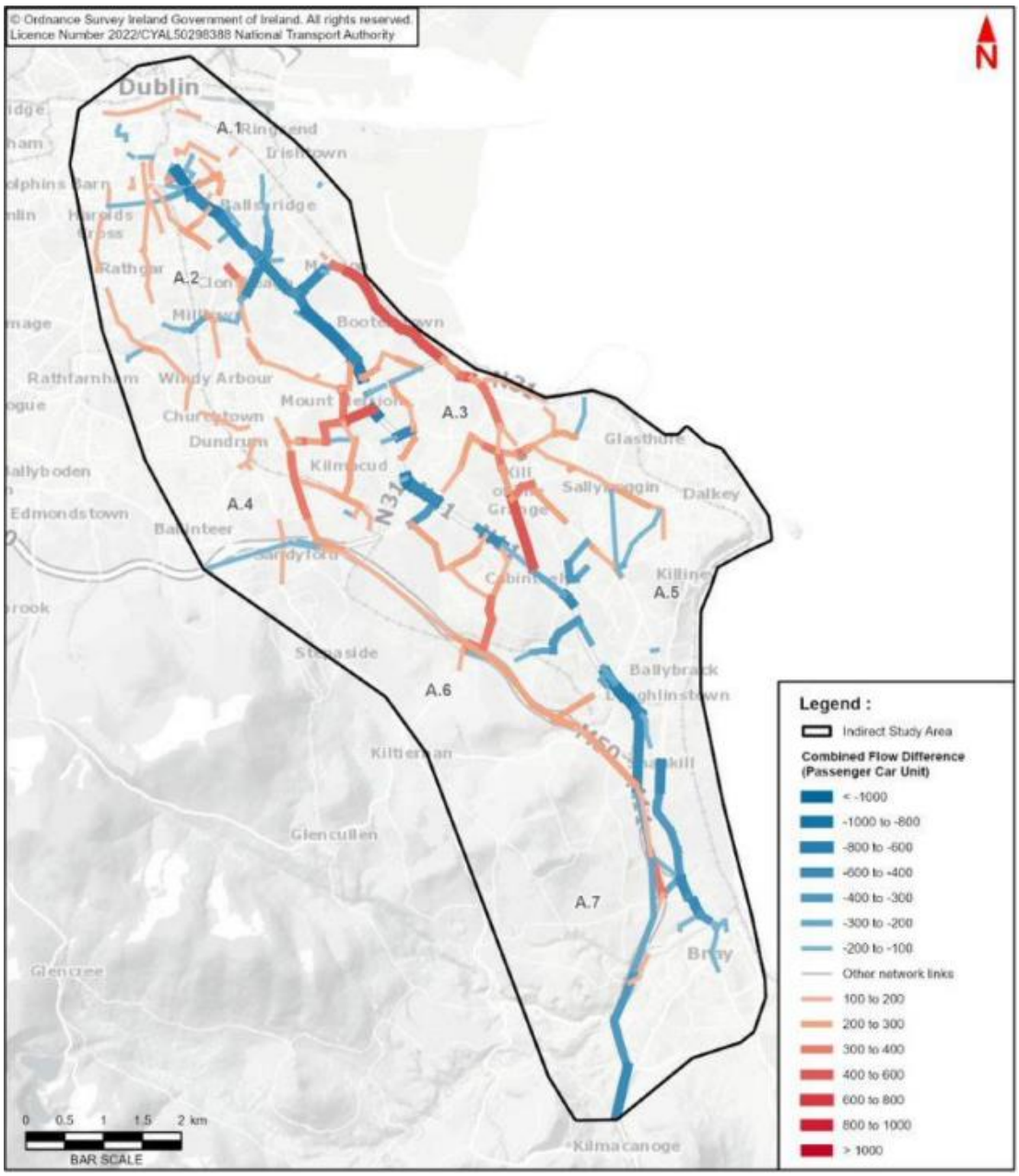


Figure 3.154: Flow Difference on Road Links (DoMinimum vs. DoSomething), AM Peak Hour, 2028 Opening Year (Diagram 6.26)

Figure 3.154 above shows that there is a reduction between -800 to -600 combined flows in Shankill during the AM Peak Hour. Similar reductions can also be seen in the PM Peak Hour (Diagram 6.27).

TIA Sub Appendix A6.1 – Transport Impact Assessment Volume 4 Appendices Part 1 of 4 of EIAR, Section 6.6.3.3.6.2 provides the general traffic flow reductions along road links. Table 6.44 shows that Stonebridge Road experiences a reduction of -436 combined flows during the AM Peak Hour and Table 6.48 shows that Shanganagh Road experiences a reduction of -219 during the PM Peak Hour.

Section 6.4.6.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that there will be an overall reduction in operational capacity for general traffic along the direct study area. Operational capacities were extracted from the LAM at the associated junctions of the key road links to identify the impact that the Proposed Scheme will have on the Volume / Capacity ratios. The results are presented in terms of the significance of the impact to the V / C ratio for each junction based on its sensitivity and magnitude of impact. The results of the assessment demonstrate that the surrounding road network has the capacity to accommodate the redistributed general traffic as a result of the Proposed Scheme.

Overall, this reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact on the direct study area whilst the impact of the redistributed general

traffic along the surrounding road network will be Negative, Moderate and Long-term. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

Modal Shift & Traffic Redistribution

Refer to Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits under the 'Changes to Passenger Numbers / Modal Shift' sub-section.

Bus Laybys

In relation to the suggestion that bus laybys would support better traffic flows, it is noted that they would allow buses to pull in and allow traffic flow, however this imposes difficulty when the bus attempts to re-enter traffic flow. Delays experienced by buses wating to re-enter traffic would increase bus journey times and reduce bus journey time reliability and as such be detrimental to the objectives of the Proposed Scheme namely:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements;
- Support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets; and
- Improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services.

Bus lay-bys can also reduce the footway width at the very place where greater width is needed. Lay-bys should only be used where there is a bus lane or busway, enabling buses to overtake one another, or for bus layover.

Ticketing System

Regarding the suggestion for ticketing system, the second biggest source of bus delays, after traffic congestion, is the payment process at bus stops. Payment of fares by cash is still commonplace, slowing down the boarding time. Even when using the Leap Card, the complexity of payment stages means a high percentage of passengers must interact with the driver, with resultant delays. At busy bus stops these delays can be for several minutes. Multiply by the number of busy stops on a route, and those delays accumulate to add significantly to the overall journey time.

Under BusConnects this process will be simplified and streamlined. The overall proposals will make the fare system simpler, and movement between different bus services seamless and easy, without financial penalty. This will require a move to either a "tag-on" and "tag-off" facility, similar to Luas and DART, or a single "flat fare" approach in order to reduce the need to interact with the driver for fare payments.

As part of this process, cashless operation will be introduced on all buses, to remove the delays caused by cash payments. Currently over 70% of fare payments are made by Leap card. As these increases, the transition to a cashless payment regime will become easier. BusConnects will incorporate the latest developments in account-based ticketing technology, potentially allowing use of credit / debit cards or mobile devices as a convenient means of payment. This will also allow integration with other transport payments such as parking facilities and bicycle hire.

Speed Limit

In relation to the suggestion for a 20/25km/h speed limit to remove the need to implement cycle lane, the Proposed Scheme is introducing a 30km/h speed limit to be put in place for the Shankill village to enhance safety in this shared section of road. The existing speed limit on Dublin Road in Shankill section (Loughlinstown Roundabout to Wilford Roundabout) is 50km/h.

A speed limit of 30km/h would be in place on Dublin Road between north of Stonebridge Road and the Signal Controlled Bus Priority south of Shankill Village at the junction with Olcovar. The reduced speed limit will maintain the viability of the primary cycling route through Shankill village and the Dublin Road/ Shanganagh Road/ Corbawn Lane junction.

It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not identify any speeding and related safety issues at this location.

In considering proposals for the introduction of reduced speed limit along sections of the CBCs i.e. 20-30kph, the primary reference document has been the DTTAS Guidelines for Setting and Managing Speed Limits in Ireland. This document provides guidance to Local Authorities, and other practitioners, in making byelaws in relation to the setting and management of speed limits in Ireland. Specific guidance is provided in relation to the legislative processes involved in setting speed limits, which will not be discussed in this note, as well as detailed guidance on the various scenarios in which special speed limits should be considered.

The default speed limit within a built-up area is 50kph.

The DTTAS guidance states that:

'The immediate response to road safety issues at particular locations should not be the introduction of a Special Speed Limit that is lower than the default speed limit. Engineering measures should be investigated and/or implemented and only supplemented by a Special Speed Limit if necessary.'

Consideration has been given to the above guideline and the existing speed limit of 50kph is considered to be appropriate in the Dublin Road section.

Traffic Calming Measures

The existing speed limit on Dublin Road in Shankill section (Loughlinstown Roundabout to Wilford Roundabout) is 50km/h. The Proposed Scheme is introducing a 30km/h speed limit to be put in place for the Shankill village to enhance safety in this shared section of road.

A speed limit of 30km/h would be in place on Dublin Road between north of Stonebridge Road and the Signal Controlled Bus Priority south of Shankill Village at the junction with Olcovar. The reduced speed limit will maintain the viability of the primary cycling route through Shankill village and the Dublin Road/ Shanganagh Road/ Corbawn Lane junction.

It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not highlight any safety issues with speed limits on Dublin Road in Section 3 of the Proposed Scheme.

In relation to the request for traffic calming measures in order to improve the local area, the Proposed Scheme will implement a number of traffic calming measures that will reduce speeds including improved junction layouts with reduced corner radii, narrow carriageway lane widths, raised table crossings on side roads, proposed speed limit reductions (e.g Shankill village).

The intention in the proposed design is to provide raised tables at all junctions that are not signal controlled. A few very minor side streets are not shown on the General Arrangement Drawings, but it is intended that they would be treated in the same way as all other side roads. These platforms are not required at private entrances which will have footpath crossings as indicated in the Preliminary Design Guidance Booklet for BusConnects.

As stated in Section 4.8 of the Preliminary Design Report, included in the Supplementary Information,

'In line with the Proposed Scheme objectives of improving facilities for walking and cycling, corner radii along the route have been reduced where appropriate in order to lower the speed at which vehicles can turn corners, and to increase inter-visibility between users.

Junctions are where the actual and perceived risk to both cyclists and pedestrians are highest and usually represent the most uncomfortable parts of any journey. In order to provide a design whereby vehicles navigate through turns at a reduced speed, thereby reducing the risk of serious collisions, kerb and footway buildouts have been included on the majority of the designed junctions along the route, thus adhering to design guidance given within the DMURS document, where it is stated:

Build-outs should be used on approaches to junctions and pedestrian crossings in order to tighten corner radii, reinforce visibility splays and reduce crossing distances."

The corner radius is often determined by swept path analysis. While swept path analysis should be considered, the analysis may overestimate the amount of space needed and / or the speed at which the corner is taken. The design balanced the size of the corner radii with user needs, pedestrian safety and cyclist safety and the promotion of lower operating speeds. In general, on junctions between Arterial and/or Link streets a maximum corner radius of 6m was applied. Which will generally allow larger vehicles, such as buses and rigid body trucks, to turn corners without crossing the centre line of the intersecting road.'

NTA are satisfied that reasonable measures have been considered to reduce traffic flows in Shankill from the implementation of the Proposed Scheme.

3.9.3.6 Deficiency in Traffic and Transport Assessment

Summary of issue raised

A number of submissions queried the extent of research completed into the local traffic flows and movements within Shankill.

One submission also raised the concern around the age of the data being used in the assessment.

Response to issue raised

Detail / Age of Data

The TIA has two distinct parts, qualitative methods which consider the physical changes to transport networks and quantitative methods which are based upon traffic modelling.

Quantitative Assessment Data Collection

In relation to the issue on the extent of research into the local traffic flows, the TIA Sub Appendix A6.1 – Transport Impact Assessment Report Volume 4 Appendices Part 1 of 4 of EIAR, Section 4.1.2 provides an overview of the data collection exercise undertaken to facilitate the calibration and validation of the Local Area Model (LAM), Proposed Scheme micro-simulation and junction models.

Existing data sources were reviewed to identify available traffic counts and locate gaps in observed information across the model area. This review was used to define a specification for additional counts which were commissioned for the area. The combination of new commissioned counts, and existing available information, provided a comprehensive dataset for calibration and validation.

Existing Data Review (Gap Analysis)

A review of existing traffic survey data available for the model area was undertaken from the following sources:

- NTA Traffic Count Database: A mixture of Automatic Traffic Counts (ATC) and Junction Turning Counts (JTC) from previous studies covering a range of years; and
- TII Automatic Traffic Counters (ATCs): Permanent TII ATCs located on national strategic roads across the network with data publicly available online.

The NTA, Dublin City Council and the other local authorities undertake periodic counts within their administrative areas in connection with their own local schemes. These surveys are conducted throughout the year and a limited set of data was available within the area of the Proposed Scheme.

Information on bus passenger volumes was already available and included in the modelling process as part of the ERM base model calibration and validation, which includes the annual canal and M50 cordon counts as well as ticketing data.

Commissioned Traffic Survey Data

In relation to the issue on the age of the data that was used, due to the scale of the CBC Infrastructure Works, the Proposed Scheme required a full set of consistent updated traffic counts for a neutral period e.g. November / February when schools, colleges were in session. Traffic surveys were undertaken in November 2019 and February 2020 (Pre-Covid) with the surveyed counts used as inputs to the model

calibration and validation process of the strategic model and micro-simulation model. The two types of counts used in the study are Junction Traffic Counts (JTCs) and Automatic Traffic Counts (ATCs). As the traffic data was collected in November / December 2019 and February 2020, prior to the Government Covid announcement on 12th March 2020, it is considered that the traffic assessment contained in the EIAR, and the traffic data upon which it is based, represents a reasonable basis for the assessment.

The JTCs are 24-hour counts broken down into 15-minute segments over a full day. All main junctions along the Proposed Scheme have been included and provide information on the volume, and types of vehicles, making turning movements at each location. This data is utilised within the models to ensure that the flow of vehicles through the main junctions on the network is being represented accurately.

The ATCs were taken for an entire week. In some cases, the ATC counts were repeated for a second week to account for data-collection issues. The vehicle categories surveyed are motorcycles, cars, LGVs, OGV 1, OGV 2 and PSVs.

The ATC data provides information on:

- The daily and weekly profile of traffic within the study area of the Proposed Scheme; and
- Busiest time periods and locations of highest traffic demand on the network.

TIA Sub Appendix A6.1 – Transport Impact Assessment Report Volume 4 Appendices Part 1 of 4 of EIAR, Section 4.3 describes how the multi-tiered transport modelling approach has been adopted.

Transport Modelling Methodology

The NTA's East Regional Model (ERM) was the primary modelling tool and provided the overarching information on forecast travel demand for each mode of transport. The ERM was supported by other modelling tools which provide more granular level traffic information and allow for detailed and refined modelling at a local network and junction level. For this purpose, a cordoned corridor-wide, road (motorised vehicle only) based Local Area Model (LAM) in combination with a multi-modal corridor micro-simulation model and local junction models have been used which work in tandem with the NTA's East Regional Model (ERM).

Through the multi-tiered transport modelling approach, the following modes of transport have been considered:

- Public Transport including inter-urban rail, suburban rail, DART, light rail (Luas), bus, and MetroLink;
- Traffic including private car, taxis and goods vehicles;
- Walking; and
- Cycling.

Further detail on the modelling can be found in TIA Sub Appendix 1 - Transport Modelling Report Volume 4 Appendices Part 1 of 4 of the EIAR which details the model development, data inputs, calibration and validation and forecast model development for the suite of models used to support the assessment.

A list of the modelling tools that were used to inform the TIA and used within the assessment of the Proposed Scheme include:

- NTA Regional Modelling System (RMS) and East Regional Model (ERM): allows for the appraisal of a wide range of potential future transport and land use alternatives;
- Local Area Model (LAM): support the detailed assessment of the Proposed Scheme and to provide an appropriate level of detail required to inform the various disciplines and levels of decision making within the Proposed Scheme Infrastructure Works e.g. capturing the impact of redistribution of traffic on streets and roads not included within the strategic detail of the ERM;
- Proposed Scheme Micro-Simulation Model: The 'end-to-end' corridor micro-simulation model has been developed to assist in the operational validation of the scheme designs and to provide visualisation of scheme operability along with its impacts and benefits; and

- Junction Design Models: support the assessment of the Proposed Scheme comprises of the individual junction design models that have been developed for junctions along the Proposed Scheme.

Calibration and Validation

As outlined in the TIA Sub Appendix A6.2 - Transport Modelling Report Volume 4 Appendices Part 1 of 4 of EIAR, Section 6.6 describes the Proposed Scheme calibration and validation summary.

The summary of the performance of the LAM in the vicinity of the Proposed Scheme route is detailed below:

- The LAM calibrates and validates well against link counts along the route of the proposed scheme for all time periods;
- The LAM calibrates and validates well against turning counts for all time periods; and
- The modelled journey times from the LAM in the vicinity of the Proposed Scheme is representative of observed journey times, with the cumulative journey time profiles matching well for all time periods.

NTA are satisfied that reasonable data methodologies have been considered in the EIAR to inform Proposed Scheme.

3.9.3.7 Impact on Cycle Infrastructure

Summary of issue raised

A number of submissions raised concerns regarding the lack of continuous cycle lanes, commenting that the current cycle lanes were also being removed. Some submissions noted that the removal of cycle lanes resulted in a failure to meet a stated fundamental objective of the Proposed Scheme. Furthermore, a submission commented that cycle facilities are being removed along the Shankill section of the route, not enhanced.

The submission notes lack of cycling in Dublin Road between Loughlinstown Roundabout to Stonebridge Road and turns existing cycle path into a cul-de-sac.

A submission commented that the Proposed Scheme goes against the NTA's own advice from the NCDM (2023) where it states sharing road space is only safe for low speeds and volumes. Another submission commented that cyclists will be forced to share a road space and therefore a significant safety risk will be posed, going against DLRCC Development Plan which promotes segregated cycle facilities.

A submission raised concern that there is no cycle link to DLRCC coastal routes. A submission suggested that the Scheme should increase cycle lanes to public transport such as Luas and DART and not through Shankill.

One submission raised the concern that where cycle lanes are only available intermittently with road crossings required, this may cause safety issues.

There was also a location-specific submissions, which are summarised and responded to in its own sub-section following the below response (Sub-Section 3.9.3.7.1 below).

Response to issue raised

Proposed Scheme Cycling Improvement

Refer to response in Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill related to Options Assessment in Shankill and also note below.

Section 6.4.6.1.7.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that the Proposed Scheme will provide 33.4km of inbound and outbound segregated cycle facilities which is an increase from 8.0km and 9.4km respectively in both directions in the Do Minimum scenario. In turn, there will be

a decrease in non-segregated cycle facilities in the Do Something scenario compared to the Do Minimum as these facilities will be upgraded to segregated facilities in most cases.

Overall, total cycle facilities (segregated and non-segregated) will be increased to 91% of the whole route as part of the Proposed Scheme. The proportion of the corridor with segregated facilities (including quiet street treatment) will increase from 47% in the Do Minimum to 91% in the Do Something scenario.

One of the core aims of the Proposed Scheme is to:

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

However, with the noted difficulty of achieving both bus and cycling facilities through this section in Shankill, cycle infrastructure has been provided 'wherever practicable' to achieve the objective of the Proposed Scheme, and consequently the need to achieve the bus priority as the primary objective.

Table 4.1 from Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, provides the key statistics for the pedestrian and cycle infrastructure improvements over the Proposed Scheme, as presented in Table 3.41 below.

Table 3.41: Extract from Chapter 4 EIAR (Table 4.1)

Table 4.1: Summary of Changes as a Result of the Proposed Scheme

Total Length of Proposed Scheme	18.5km	
Bus Priority	**Existing (km)**	**Proposed Scheme (km)**
Bus Lanes		
Inbound	12.6	16.1
Outbound	12.8	17.1
Bus Priority through Traffic Management		
Inbound	0	2.3
Outbound	0	1.4
Total Bus Priority (both directions)	25.4	36.9 (+45%)
Bus Measures		
Proportion of Route with Bus Priority Measures	69%	99.6%
Cycle Facilities – Segregated		
Inbound	8.0	16.5
Outbound	9.4	16.9
Cyclist Facilities – Non-segregated		
Inbound	7.5	0.4
Outbound	7.4	0.0
Cyclist Facilities – Overall		
Total Cyclist Facilities (both directions)	32.3	33.8 (+5%)
Proportion Segregated (including Quiet Street Treatment)	47%	91%
Other Features		
Number of Pedestrian Signal Crossings	119	176
Number of Residential Properties with Land Acquisition	Not applicable	56

Cycling Infrastructure in Shankill

In relation to concerns raised over the level of improvements to cycle facilities in Section 3, the Proposed Scheme does not provide for segregated cycling facility between Loughlinstown Roundabout and Stonebridge Road, however, it provides a more direct route to the cyclists in this Section to approach Shankill and journey towards Bray. Whilst no segregated cycle lanes will be provided along here, cyclists will share the combined bus and cycle lanes, and therefore be segregated from general traffic. In addition, existing advisory lanes that exist in places are considered too narrow to be retained alongside the new cross section proposals. The removal of the existing infrastructure along this section enables improved pedestrian facilities (width) and the provision of combined bus and cycle lanes where possible thus segregating cyclists from general traffic.

At Loughlinstown Roundabout, the two-way cycle track in the southbound direction will transition into the bus lane at the toucan crossing (see Figure 3.155), which provides a safe transition point. Similarly, northbound cyclists in the bus lane will transition into the two-way cycle track at the toucan crossing.

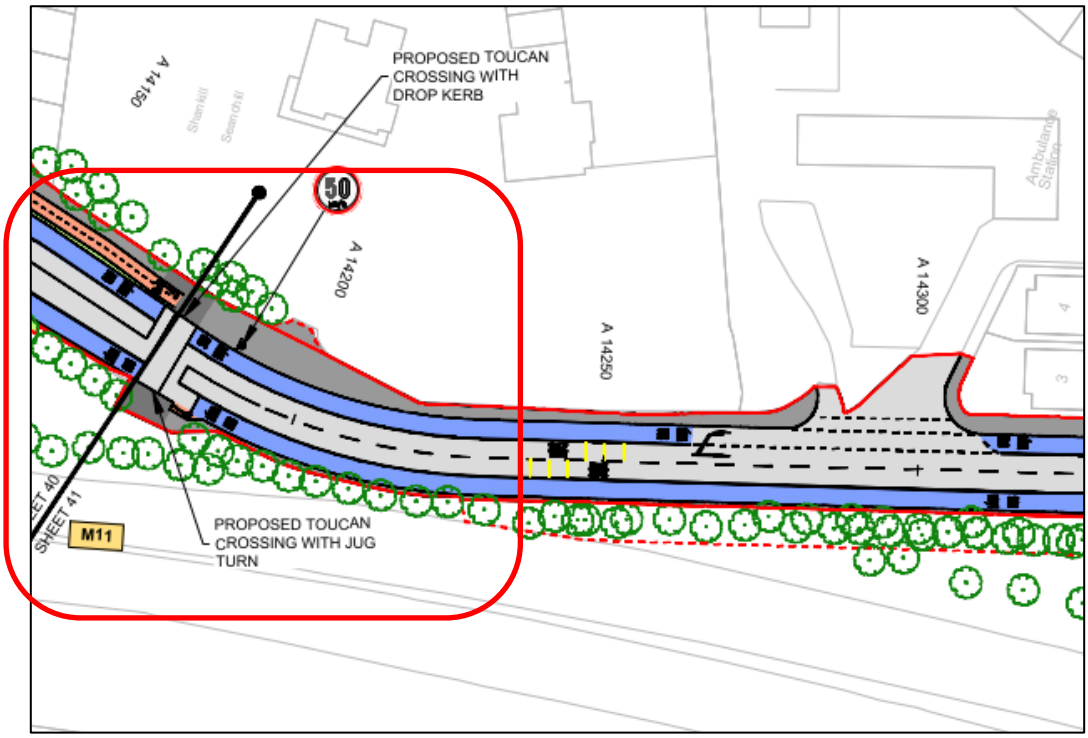


Figure 3.155: Extract from General Arrangement Drawing at Loughlinstown Roundabout (Sheet 41)

A two-way cycle track has been provided from Stonebridge Road on the Dublin Road as far as the Shanganagh Road junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road.

South of Stonebridge Road up to Crinken Lane, where bus lanes are not continuous in both directions due to existing constraints, SCP has been proposed to ensure bus priority. Signal Controlled Bus Priority has been proposed between the St Anne's Church / Corbawn Lane junction and Rathmichael Woods in the northbound direction.

The roundabout between the Dublin Road, Corbawn Lane, and Shanganagh Road is proposed to be upgraded to a signalised junction with new pedestrian crossing facilities and SCP for buses and connection for cyclists with Corbawn Lane.

The Proposed Scheme in this section does not provide for segregated cycling facility from the junction of Dublin Road/ Shanganagh Road/ Corbawn Lane to Crinken Lane, however, it provides a more direct route to the cyclists through Shankill village and journey towards Bray. In addition, existing advisory lanes that exist in places are considered too narrow to be retained alongside the new cross section proposals. Whilst no segregated cycle lanes will be provided along here, cyclists will share general traffic lane with buses, in a shared street environment. A 30km/h speed limit would be in place for the village to enhance safety in this shared section of road. Refer to response in Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits under the 'Changes to Passenger Numbers / Modal Shift' sub-section.

From Crinken Lane onwards till Wilford junction segregated cycle tracks are provided in both directions. At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two Toucan Crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line. The northbound cyclists cross the Dublin Road at the Shanganagh Cemetery where a new toucan crossing is proposed. The two-way cycle track continues through the park and cemetery. The northbound cycle track then crosses back to the west side of the road before Allies River Road where a new toucan crossing is provided.

Section 6.4.6.1.5.2 in Chapter 6 (Traffic & Transport) describes the cycling infrastructure improvements along Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) of the Proposed Scheme.

'The following section sets out the qualitative impacts on the cycling infrastructure along Section 3 of the Proposed Scheme. The results are summarised in Table 6.34 along with the accompanying sensitivity for each section and the resultant significance of impact.

The key cycling improvements along Section 3 of the Proposed Scheme can be summarised as follows:

- *Proposed 2.5m wide two-way cycle track adjacent to the R837 Dublin Road southbound carriageway between the R837 Dublin Road / Stonebridge Road Junction and Shankill Roundabout for approximately 300m;*
- *Proposed two-way cycle track along Stonebridge Rd, running along the northern verge to serve Rathmichael National School and continuing through existing trees at Rathbeg to a new toucan crossing by Stonebridge Lane to terminate at St Anne's National School. The cycle track also continues from the Stonebridge Road / Dublin Road junction along the eastern side of the Dublin Road as far as Corbawn Lane;*
- *Proposed 2m wide one-way cycle track adjacent to the northbound carriageway between the R119 Dublin Road / Crinken Lane Junction and south of the R119 Dublin Road / Allies River Road Junction, to replace the existing advisory cycle lane;*
- *Proposed 2m wide one-way cycle track adjacent to the southbound carriageway between the R119 Dublin Road / Aughmore Lane and south of the R119 Dublin Road / Allies River Road Junction, to replace the existing advisory cycle lane;*
- *Proposed two-way cycle track adjacent to the southbound carriageway between south of the R119 Dublin Road / Allies River Road Junction and the R119 Dublin Road / Shanganagh Cemetery Junction for approximately 200m;*
- *Proposed cycle track adjacent to the northbound carriageway and southbound carriageway between R119 Dublin Road / Shanganagh Cemetery Junction and Wilford roundabout to replace the existing cycle lanes / combined bus and cycle lanes;*
- *Upgrading roundabouts along Section 3 (Shankill roundabout, R119 Dublin Road / Quinn's Road / Cherrington Road roundabout and Wilford roundabout) to signalised junctions. Proposed cycle tracks / lanes at the Shankill roundabout and Wilford roundabout; and*
- *Positioning the proposed cycle tracks to bypass behind the bus stops along Section 3.*

However, due to the width restrictions along Section 3 of the Proposed Scheme, removal of some existing substandard advisory cycle lanes are required at the following locations:

- *Existing substandard advisory cycle lanes along R837 Dublin Road between Loughlinstown Roundabout and the R837 Dublin Road / Stonebridge Road Junction to be removed to accommodate combined bus and cycle lanes in both directions for the majority of the carriageway. Whilst no segregated cycle lanes will be provided along here, cyclists will share the combined bus and cycle lanes and therefore be segregated from general traffic; and*
- *Existing cycle lanes along R119 Dublin Road between R119 Dublin Road / Quinn's Road / Cherrington Road roundabout and the R119 Dublin Road / Crinken Lane Junction to be removed to accommodate a northbound bus lane between R119 Dublin Road / Olcovar Road Junction the R119 Dublin Road / Crinken Lane Junction. Whilst no segregated cycle lanes will be provided along here, northbound cyclists will share the combined bus and cycle lane, where present, and therefore be segregated from general traffic.*

Table 6.34 outlines the cycling qualitative assessment along Section 3, with the overall 'DoMinimum' LoS, 'DoSomething' LoS, and the description of impact. Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR provides further detail on the methodology behind each LoS rating given to the 'DoMinimum' and 'DoSomething' scenarios.

Table 6.34: Section 3 Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R837 Dublin Road: Loughlinstown Roundabout to R119 Shanganagh Road	A14050 - A15100	C	D	Low	Medium	Negative Moderate
R119 Dublin Road: R119 Shanganagh Road to Quinn's Road	A15100 - A15600	D	D	Negligible	Medium	Not Significant
R119 Dublin Road: Quinn's Road to Allies River Road	A15600 - A16250	C	D	Low	Medium	Negative Moderate
R119 Dublin Road: Allies River Road to Wilford Roundabout	A16250 - A17400	C	A	Medium	Low	Positive Moderate
Section Summary		**C**	**C**	**Negligible**	**Medium**	**Not Significant**

Table 6.34 demonstrates that along Section 3, the Proposed Scheme will largely result in negligible or low negative impacts along three of the four sections and a medium positive impact along one section. The significance of these impacts range from moderate negative to moderate positive.

Overall, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase.

The low negative impacts along A837 / R119 Dublin Road are due to the removal of existing substandard advisory cycle lanes due to existing width constraints along these areas. The removal of the existing infrastructure along this section enables improved pedestrian facilities (width) and the provision of combined bus and cycle lanes where possible thus removing cyclists from general traffic.'

Also, in relation to the locations where segregated cycling facilities have not been provided, Section 4.5.3.5 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR states:

'At the following locations in this section of the Proposed Scheme, segregated cycling facilities have not been provided as a result of specific site constraints:

- *Dublin Road – Loughlinstown Roundabout to Stonebridge Road (approximately 700m):*
    - *Impacts including land take to residential properties were not considered appropriate. The proposed bus lanes along this section will be shared with cyclists.*
- *Dublin Road – St Anne's junction to Crinken Lane (approximately 930m):*
    - *Local resident group engagement and the potential impacts on the Shankill village area were considered when determining cycle and bus infrastructure in this area. In addition, existing advisory lanes that exist in places are considered too narrow to be retained alongside the new cross section proposals. Cyclists will use the general traffic lanes alongside general traffic and buses, with a speed limit reduction proposed over this section.'*

Refer to response in Section 3.9.3.1.1 in this report for further information on the Need for the Proposed Scheme in Shankill (Policy Context).

Section 2.2.1 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR goes on to note in relation to pedestrian network as part of the GDA Transport Strategy 2016-2035 and cycle network as part of the GDA Cycle Network Plan 2013 and *2022 Greater Dublin Area Cycle Network.*

'It is noted that in preparing the GDA Transport Strategy (2022 - 2042) the NTA also carried out a review of the GDACNP. This review culminated in the preparation of the 2022 Greater Dublin Area Cycle Network which was published alongside the GDA Transport Strategy (2022 - 2042). With respect to the Proposed Scheme, the 2022 Greater Dublin Area Cycle Network is broadly aligned with the GDACNP 2013.

- *The R837 Dublin Road between the Loughlinstown Roundabout and the St. Anne's Church Roundabout is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as a Primary Route in the GDACNP 2013;*

- *Stonebridge Road between the M11 and the R837 Dublin Road is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as an Inter-Urban Route in the GDACNP 2013;*

- *Shanganagh Road is identified as a Primary Route in the 2022 Greater Dublin Area Cycle Network. This was identified as a Secondary Route in the GDACNP 2013;*

- *Corbawn Lane is identified as a Feeder Route in the 2022 Greater Dublin Area Cycle Network. This was identified as a Primary/Secondary Route in the GDACNP 2013;*

- *The section through Bray (R761 Dublin Road/Castle Street) is identified as a Primary Route in the 2022 Greater Dublin Area Cycle Network. This route was identified as a Primary/Secondary Route in the GDACNP 2013;*

It is noted that each of the changes listed above support and reinforce the need for the delivery of cycling infrastructure along the route of the Proposed Scheme.

The GDA Transport Strategy 2022-2042 states that key elements of the Cycling Network Plan for the GDA will be delivered as part of the Core Bus Corridor schemes.'

The Proposed Scheme, which is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network for the area, addresses the deficiency in the segregated cycling infrastructure currently available in Section 3 Loughlinstown Roundabout to Bray North.

A Level of Service (LoS) assessment was undertaken using an adapted version of the NTA's National Cycle Manual Quality of Service (QoS) Evaluation criteria. The results of the Cycling Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.34 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of C ratings. During the Do Something scenario, the LoS consists predominantly of the higher C ratings. Given the quality of the existing cycling infrastructure along the Proposed Scheme, the improvements will have No Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North.

Overall, it is anticipated that there will be No Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment along each section can be found in Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

Compliance with Cycle Design Manual (CDM) on Shared Space

In relation to the section of road through the Section 3 of the Proposed Scheme where no segregated cycle track has been provided, Section 4.5.3.5 of Chapter 4 (Proposed Description) in Volume 2 of the EIAR, states:

'At the following locations in this section of the Proposed Scheme, segregated cycling facilities have not been provided as a result of specific site constraints:

- *Dublin Road – Loughlinstown Roundabout to Stonebridge Road (approximately 700m):*
    - *Impacts including land take to residential properties were not considered appropriate. The proposed bus lanes along this section will be shared with cyclists.*
- *Dublin Road – St Anne's junction to Crinken Lane (approximately 930m):*
    - *Local resident group engagement and the potential impacts on the Shankill village area were considered when determining cycle and bus infrastructure in this area. In addition, existing advisory lanes that exist in places are considered too narrow to be retained alongside the new cross section proposals. Cyclists will use the general traffic lanes*

alongside general traffic and buses, with a speed limit reduction proposed over this section.'

Section 3.4.1.3.2 of Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR notes that,

'Due to the number of submissions received during public consultation on the cycle provision along this section, the design for this section was further investigated. The section was split into two sub-sections, with alternative options assessed against the Emerging Preferred Route for each as outlined:

- *Subsection 1 between Loughlinstown Roundabout and Stonebridge Road:*
- *Subsection 2 between Stonebridge Road and Crinken Lane'*

Refer to response in Section 3.9.3.1.2 on Consideration of Alternatives and Options Assessment in Shankill, and also the sub-heading 'Cycling Options', in this report for details on the cycling route options assessment though Shankill i.e. St Anne to Cricken Lane and also note below.

Loughlinstown Roundabout to Stonebridge Road

Various options were assessed for cycle solutions through Shankill, these are covered in the Preferred Route Options Report in the Supplementary Information of the EIAR. Section 6.4.3 describes the options assessment of the cycle provision between Crinken Lane and Loughlinstown Roundabout. Section 6.4.3.5 of the Preliminary Route Options Report covers the conclusion of Sub-Section 1, from Loughlinstown Roundabout to Stonebridge Road, and states:

'From this assessment, the option taken forward was new Option 3.2C2 – Dublin Road Cycling Route for the Cycling subsection 1. Although this option does not provide segregated cycle infrastructure along this section, it is considered the most appropriate solution to bring forward over this section taking into account the impact of cycle infrastructure on adjacent properties and planted areas, the associated requirement for specific structural earthwork solutions along the M11, and input from the local community.'

From the Loughlinstown roundabout to the Dublin Road / Stonebridge Road junction, the existing advisory cycle lanes have been removed and replaced with a shared cycle lane / bus lane, while keeping cyclist separated from the general traffic lane. This allows for bus priority over general traffic, but the shared lane reduces the overall land acquisition. Advisory cycle lanes are marked by a broken white line which allows motorists to enter or cross the lane.

Advisory cycle lanes were an option available to designers under the National Cycle Manual, however, are not included in the recently published Cycle Design Manual 2023 which notes the following in Section 4.2.8:

"The use of narrow advisory cycle lanes with dashed edge lines are no longer recommended."

While the scheme design was carried out in advance of the publication of the Cycle Design Manual 2023, this statement reflects a recent move in the industry away from the provision of narrow, advisory cycle lanes, which the Proposed Scheme design has taken account of.

Section 4.2.9.5 of the Cycle Design Manual 2023 state:

'Cyclists are usually permitted to use with-flow and contraflow bus lanes. Whilst not specifically a cycle facility, bus lanes can offer some degree of protection for cyclists as they significantly reduce the amount of interaction with motor traffic.'

Stonebridge Road to Crinken Lane

Section 6.4.3.11 of the Preferred Route Options Report in the Supplementary Information of the EIAR covers the conclusion of subsection 2, from Stonebridge Road to Crinken Lane, and states:

'From this assessment, the option taken forward was new Option 3.2C7 – Corbawn Lane to Stonebridge Road for the cycling subsection 2. Although this does not provide segregated cycle infrastructure along the entire length of this section, the impact of providing segregated cycling infrastructure on adjacent properties and planted areas was considerable. Following local community engagement, Option 3.2C7 was developed to provide safer cycling between residential areas and the two schools on Stonebridge

Road. It also provides cycling infrastructure along a section of GDA CNP Inter Urban Route D4 and provides a cycle link from the western side of the M11 along Stonebridge Road across the main traffic route and towards Shankill DART station. The GDA CNP primary route through Shankill is still viable, and a speed limit of 30kph will be introduced from Stonebridge Road to the Signal Controlled Bus Priority proposed south of Shankill village.'

Section 6.4.3.11 goes on to state:

'A combination of Options 3.2C2 and 3.2C7 for the cycling subsection 1 and 2 is the PRO for the cycle route between Loughlinstown Roundabout and Crinken Lane for the following reasons:

- *It provides for safe cycle provision along the GDA CNP Primary Route in this area;*
- *It minimises the impact on the environment; and*
- *It responds to the input from the local community.'*

St. Annes's Roundabout to Crinken Lane

The design through this section of the Proposed Scheme is to maintain the existing road cross-section and current public realm through the Shankill village. Section 6.4.4.6 of the Preferred Route Option Report describes this option as:

'Two general traffic lanes would be maintained through Shankill village with Signal Controlled Bus Priority systems in place on the approach either side of the village. In the southbound direction, Signal Controlled Bus Priority would be provided at Dublin Road/ Shanganagh Road/ Corbawn Lane Junction. The northbound bus lane would continue from Crinken Lane to a Signal Controlled Bus Priority on approach to Shankill village, while the southbound bus lane would recommence at Shanganagh Castle. In-line bus stops would artificially hold traffic back from passing buses at stops, reinforcing bus priority. A 30kph speed restriction is proposed for the village section to enhance safety over this shared section which is urban in nature.'

Although no dedicated bus lanes or segregated cycle routes are provided through the village centre, this option addresses strong community engagement around this issue. Traffic calming measures such as the proposed signal-controlled junctions, the proposed 30kph speed limit and the in-line bus stops have been utilised to make the shared space safer for cyclists and enhances the village urban environment for the movement of people along and across the street.

Section 4.5.3.8.2 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, details the proposed landscaping and urban realm features through Shankill Village, which will lead to further traffic calming. The design proposals include:

'Through Shankill Village, four pedestrian crossings on Dublin Road will be enhanced by introducing concrete set paving. This will be applied at a pedestrian crossing at the Quinn's Road junction and one just south of Corbawn Lane which will define the start / end to the village core.'

Section 6.4.4.7 of the Preferred Route Option Report states that compared to other options, this solution *'…will provide wider footways, traffic speed restrictions, and maintain the current village environment. The GDA CNP primary route through Shankill is still viable, and a speed limit of 30kph will be introduced from Stonebridge Road to the Signal Controlled Bus Priority proposed south of Shankill village.'*

It goes on to state that this is the Preferred Route Options for the St. Annes's Roundabout to Crinken Lane section for the following reasons:

- *'It minimises the impact to the visual identity of Shankill village and addresses community feedback; and*
- *It maintains existing footway widths through the village, with a reduced speed limit providing improved road safety.'*

It is also noted that:

'The NTA are committed to considering wider Shankill cycling solutions as a scheme separately in the future in collaboration with DLRCC.'

NTA is satisfied that reasonable alternatives have been considered for cycling in Shankill and the Proposed Scheme meets the objectives and provides for improved cycling infrastructure from the existing, while maintaining bus priority.

It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not highlight any safety issues with the Proposed Scheme cycling design at this location.

Providing Cycle Lanes to Public Transport Links / DLRCC Coastal Routes

This section is in relation to the queries raised about the provision of cycle lanes to other transport links. Providing cycle lanes to other key transport links such as Luas and DART, and DLRCC Coastal Routes, are outside the scope of BusConnects, although the Proposed Scheme will provide enhancements on the quality of the cycle infrastructure which will promote cycling access to the Luas and DART.

Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR outlines the need for the Bray to City Centre Core Bus Corridor Scheme. The objectives outlined relating to enhancing capacity of the public transport system and enhancing safe infrastructure for cycling are underpinned by the central concept and design philosophy of People Movement. People Movement is the concept of the optimisation of roadway space and/or the prioritisation of the movement of people over the movement of vehicles along the route and through the junctions along the Proposed Scheme. The aim is to reduce journey times for modes of transport with higher person carrying capacity modes (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

Safety of Cyclists cross-over from bi-directional cycle tracks to continue to one-directional cycle tracks

In relation to the submission that raised concerns surrounding the safety of cycling infrastructure that required cyclists to cross the general traffic lanes to access the continuation of the cycle track going from online to offline or vice-versa, the below outlines the safety of the proposed cycling infrastructure at location of Shanganagh Park/ Shanganagh Cemetery on Dublin Road.

The Proposed Scheme design at Shanganagh Park and Shanganagh Cemetery is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.156 below.

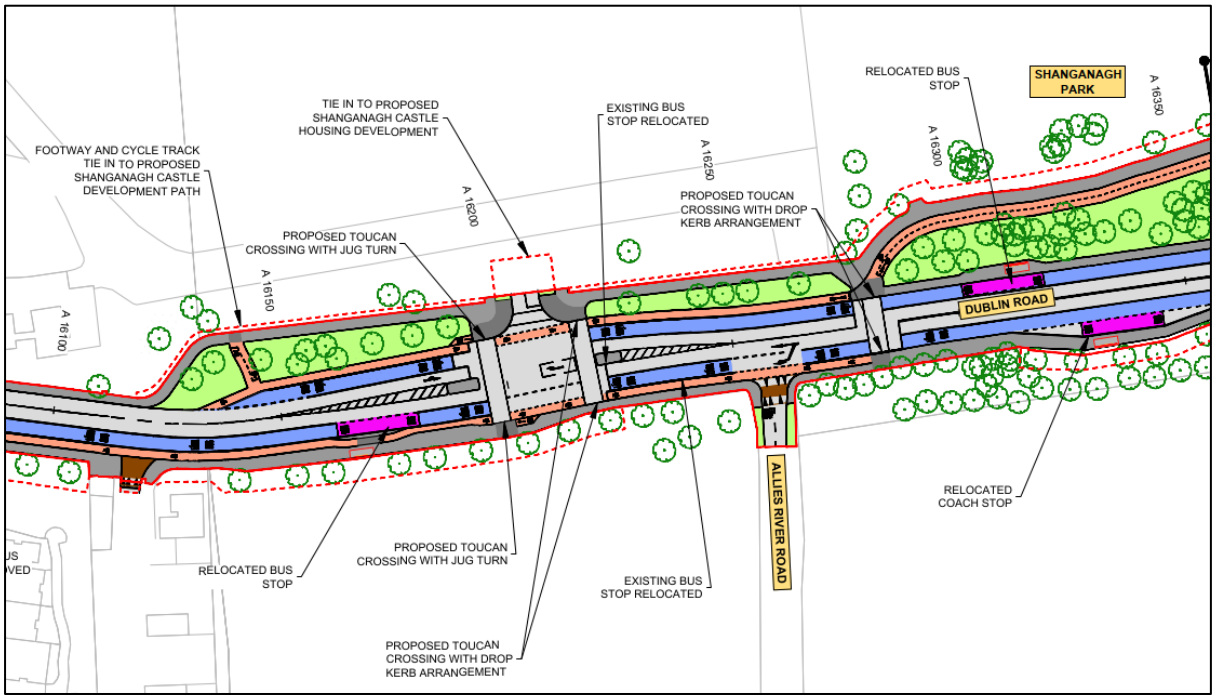


Figure 3.156: Extract from General Arrangement Drawing at Shanganagh Castle (Sheet 46)

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two Toucan Crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line. The northbound cyclists cross the Dublin Road at the Shanganagh Cemetery where a new toucan crossing is proposed. The two-way cycle track continues through the park and cemetery. The northbound cycle track then crosses back to the west side of the road before Allies River Road where a new toucan crossing is provided. The toucan crossings allow for safe cross over for the cyclists in the other direction.

At the Dublin Road junction with Shanganagh Park/ Shanganagh Cemetery (see Figure 3.157), the two-way cycle track crosses the Shanganagh Park Road and raised table with 'Pedestrian Priority Zone' either side is provided to facilitate uncontrolled crossing point for cyclists and traffic calming for safety.

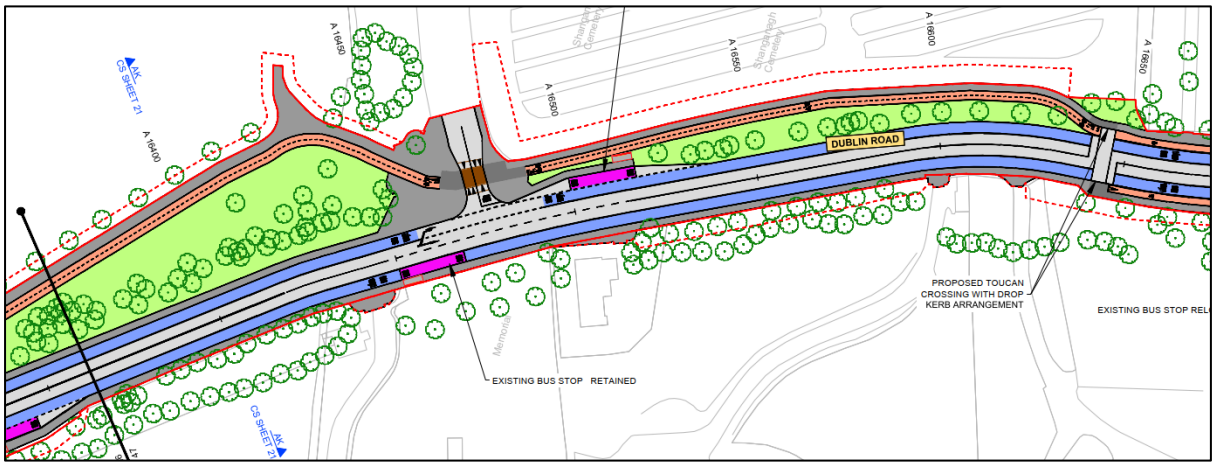


Figure 3.157: Extract from General Arrangement Drawing at Shanganagh Park/ Cemetery (Sheet 47)

Section 6.4.6.1.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that along Section 3 (Loughlinstown Roundabout to Bray North), demonstrates that along Section 3, the Proposed Scheme will largely result in negligible or low negative impacts along three of the four sections and a medium positive impact along one section. The significance of these impacts' ranges from moderate negative to moderate positive. Overall, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase.

In particular the cycling along the Section 3 (between Dublin Road Allies River Road to Wilford Roundabout) shows a positive moderate impact, as noted in Table 6.3.4 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, with improved LoS A from exiting LoS C demonstrating Positive Moderate impact. This improvement of the proposed 2-way cycle track, replaces the existing advisory cycle lane.

The findings of the cycling assessment fully align with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to *'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable'.*

The NTA is satisfied that the Proposed Scheme makes significant improvements in the cycling Infrastructure through Shankill, improving safety for cyclists and enhancing the potential for cycling along the Proposed Scheme.

3.9.3.7.1 Stonebridge Road

Summary of issue raised

One submission raised the issue that Stonebridge Road is not wide enough to accommodate bus route and incoming traffic from both schools, St Annes and Rathmichael. Proposed Scheme will create congestion in Stonebridge Road. Also noting that the bridge overpassing the M50 and the old railroad bridge are not planned to be modified in any way.

One submission queried the Proposed Scheme at Stonebridge Road and connecting the two Schools.

Response to issues raised

The Proposed Scheme design at Stonebridge Road includes an offline two-way cycle track to provide a cycle link between the two schools on Stonebridge Road and up to residential developments off Corbawn Lane. The Proposed Scheme layout, showing the two-way cycle track linking from Stonebridge Road, through Dublin Road and up to Corbawn Lane is shown in the 02-General Arrangement Drawings Chapter 4 (Proposed Scheme Description) Part 1 of 3 of Volume 3 of the EIAR in Figure 3.158 and Figure 3.159 below.

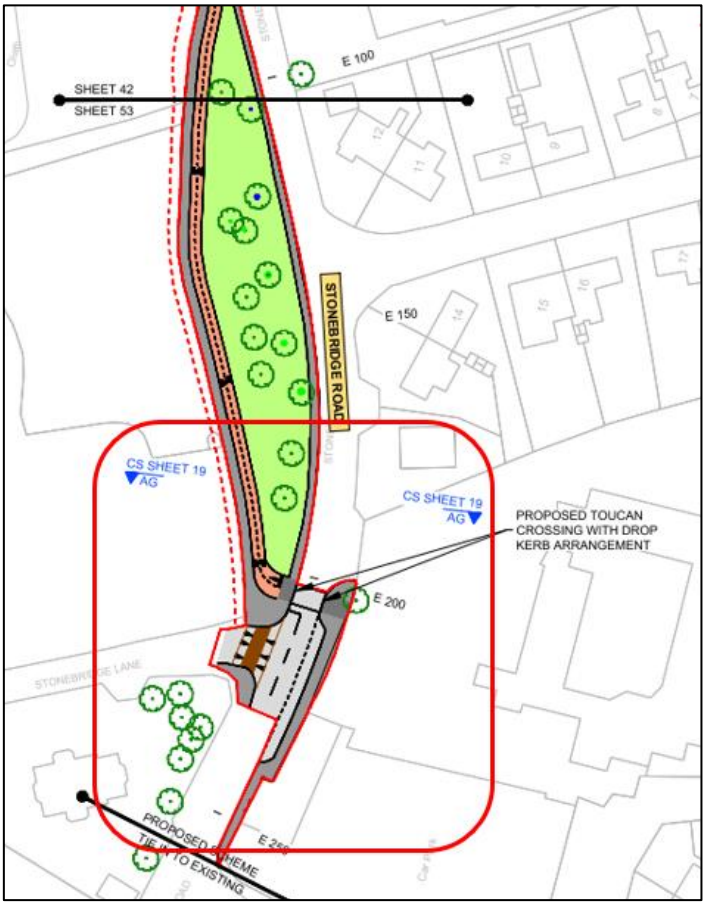


Figure 3.158: Extract from General Arrangement Drawings at Stonebridge Road (Sheet 53)

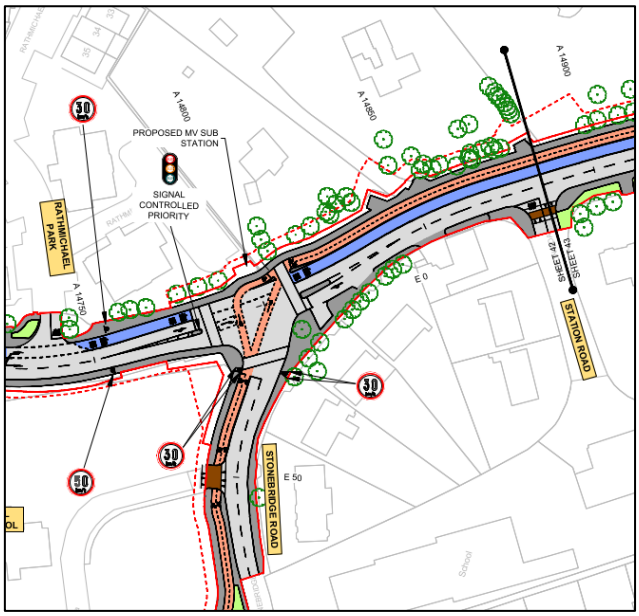


Figure 3.159: Extract from General Arrangement Drawings at Stonebridge Road / Dublin Road (Sheet 42)

The Dublin Road/ Stonebridge Road junction is modified to include for improved pedestrian, cycle, and bus infrastructure.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of EIAR shows a positive practical reserve capacity (PRC) at Dublin Road / Stonebridge Road junction. The PRC is 16% during the AM Peak Hours and 18.8% during the PM Peak Hours. This suggests the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

A two-way cycle track is proposed from Stonebridge Road on the Dublin Road as far as the Dublin Road/ Shanganagh Road/ Corbawn junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road. A footpath runs parallel to the two-way cycle track in the southwest direction.

The two-way cycle path and footpath along the north side of Stonebridge Road is routed through the proposed Stonebridge Wood residential development site and tie-in to existing at junction with Stonebridge Lane, where a toucan crossing is proposed to provide a safer controlled crossing point for the St Anne's National School and a raised table at the junction with Stonebridge Road, as shown in Figure 3.159 above. Although some tree removal is required, the overall impact on the group is minimised. 'No-dig' construction methods are to be utilised where the paths run through root protection areas.

Section 4.5.3.5 in Chapter 4 (Proposed Scheme Description) Vol 2 of EIAR notes the following:

'Cycling is to be provided from Dublin Road – Stonebridge Road to Corbawn Lane (approximately 0.5km) as follows:

1. *Two-way cycle track on the eastern side of Dublin Road and northern side of Stonebridge Road, offset from the carriageway; and*
2. *Signal-controlled crossings provided at all junctions through a combination of parallel pedestrian / cycle crossing and shared toucan crossings.'*

In relation to the proposed changes at Stonebridge Road, the existing road cross section at this location is retained, which comprises of two general traffic lanes with a footway on each side. The Proposed Scheme will not alter the existing road layout. There is no existing bus services and no new bus services or bus lanes proposed along Stonebridge Road as part of the Proposed Scheme. The addition of the segregated cycle facility has the potential to reduce the need for drop-off/pickup of children by car with the added benefit of reducing vehicular traffic on Stonebridge Road.

Temporary land acquisition will be required at the Stonebridge Wood Development, throughout the process the NTA with continue to liaise with the Developer as the Scheme progresses.

3.9.3.8 Impact on Safety (Pedestrian & Cyclist)

Summary of issue raised

Several submissions raised concerns on the proposed narrowing of footpaths and inclusion of four lanes within the carriageway will increase traffic speeds and cause safety issues for pedestrians and vulnerable road users when crossing at uncontrolled crossings.

Submissions raised concern on the impact on pedestrian safety due to narrowing of footpaths, replacement of roundabouts to junctions, and buses adjacent to narrow footpaths.

Submissions raised concern that the Scheme objectives are not being met due to the removal of cycle lanes, and pedestrian safety.

One submission commented on the negative impact on disabled as well as wheelchair users due to the removal of parking spaces and changes to the footway.

Another submission queried why a Stage F Road Safety Audit (RSA) was never carried out on the initial route options assessed, which will highlight any safety features within each option. One submission raised concerns the traffic management within Shankill will cause massive inconvenience and danger to residents.

One submission commented that traffic management within Shankill will cause massive inconvenience and danger to residents.

Another submission commented on the risk of cyclists having to share a road space and goes against DLRCC Development Plan and NTAs CDM (2023).

One submission commented that median islands and additional signalised crossing will be essential to allow vulnerable users to use the area.

There were also a number of location-specific submissions, which are summarised and responded to in their own sub-sections following the below response (Section 3.9.3.8.1 to 3.9.3.8.4 of this report).

Response to issues raised

Refer also to response in Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure for improvements in cycle infrastructure that will increase safety for cyclists travelling through the Proposed Scheme.

The Proposed Scheme will make significant improvements to pedestrian infrastructure through the provision of increased signal crossings, introduction of traffic calming measures, improved accessibility, increased pedestrian directness and increased footpath widths and reduced crossing widths. Section 2.4 of the Chapter 2 Need of the Scheme states *'The number of pedestrian signal crossings will increase by approximately 60% as a result of the Proposed Scheme. The scheme design has been developed with cognisance to the relevant accessibility guidance. It is anticipated that the overall quality of pedestrian infrastructure will improve as a result of the Proposed Scheme. This aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.'*

Table 4.1 from Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, provides the key statistics for the pedestrian and cycle infrastructure improvements, refer to Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure.

Pedestrian Infrastructure in Shankill (footpath width and crossings)

Section 6.4.6.1.5.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the key infrastructure changes to pedestrian links along Section 3 of the Proposed Scheme which are summarised below:

- Increased footpath width, crossing width, and pedestrian directness;

- Increased provision of priority crossings across side streets with raised tables;
- Provision of pedestrian crossings on all arms at Shanganagh Road / Beechfield Manor junction, R119 Dublin Road / Lower Road / Cluain Na Gréine Court junction, R119 Dublin Road / Olcovar junction, R119 Dublin Road / Shanganagh Castle development lands entrance junction;
- Provision of new mid-link pedestrian crossings along R837 Dublin Road (north of the R837 Dublin Road / Seaview Park junction), R119 Dublin Road (southeast of the R119 Dublin Road / Allies River Road junction) and R837 Dublin Road (southeast of Shanganagh Cemetery access). This will enable improved connectivity between bus stop and facilities; and
- Approximately 120m of Shanganagh Road has been widened to achieve improved footway widths.

The assessment of the qualitative impacts on the walking infrastructure for Section 3 of the Proposed Scheme are summarised in Table 3.42 below (Table 6.33), along with the accompanying sensitivity for each junction and the resultant significance of effect. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

Table 3.42: Section 3 – Significance of Effects for Pedestrian Impact During Operational Phase (Table 6.33)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Seaview Park 3-arm Priority Junction	A14375	E	B	Medium	Negligible	Not Significant
R837 Dublin Road mid-link crossing South of the R837 Dublin Road / Seaview Park Junction	A14450	No existing facility	A	High	Negligible	Positive Slight
R119 Dublin Road / Kentfield 3-arm Priority Junction	A14490	E	B	Medium	Medium	Positive Significant
R119 Dublin Road / Rathmichael Woods 3-arm Priority Junction	A14640 - A14650	C	B	Low	Medium	Positive Moderate
R837 Dublin Road / Stonebridge Road 3-arm Signalised Junction	A14770 - A14810	B	A	Low	High	Positive Moderate
R119 Dublin Road / Station Road 3-arm Priority Junction	A14870 - A14880	E	B	Medium	Negligible	Not Significant
Shanganagh Road / Beechfield Manor 3-arm Signalised Junction	A15000	D	B	Medium	High	Very Significant
Shankill Roundabout	A15070 - A15120	C	B	Low	Medium	Positive Moderate
R119 Dublin Road / Lower Road / Cluain Na Gréine Court 4-arm Staggered Priority Junction	A15300 - A15330	D	A	Medium	Low	Positive Moderate
R119 Dublin Road / Aubrey Park 3-arm Priority Junction	A15300 - A15330	C	B	Low	Low	Positive Slight
R119 Dublin Road / Shankill Village 3-arm Priority Junctions at Accesses	A15350 - A15450	C	B	Low	Low	Positive Slight
R119 Dublin Road mid-link crossing South of the R119 Dublin Road / Aubrey Park Junction	A15460	B	A	Low	Low	Positive Slight

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Stonebridge Close 3-arm Priority Junction	A15460 - A15470	C	B	Low	Low	Positive Slight
R119 Dublin Road / Quinn's Road / Cherrington Road Roundabout	A15580 - A15620	C	A	Medium	Negligible	Not Significant
R119 Dublin Road / Castle Farm 3-arm Priority Junction	A15800 - A15820	D	B	Medium	Negligible	Not Significant
R119 Dublin Road / Olcovar 3-arm Priority Junction	A15860 - A15880	D	A	Medium	Negligible	Not Significant
R119 Dublin Road / Crinken Lane 3-arm Priority Junction	A16000 - A16050	C	B	Low	Negligible	Not Significant
R119 Dublin Road / Aughmore Lane 3-arm Priority Junction	A16100 - A16130	D	C	Low	Negligible	Not Significant
R119 Dublin Road / Shanganagh Castle development lands entrance (proposed by others)	A16180 - A16220	F	A	High	Low	Positive Moderate
R119 Dublin Road / Allies River Road 3-arm Priority Junction	A16250 - A16290	D	B	Medium	Low	Positive Moderate
R119 Dublin Road mid-link crossing Southeast of the R119 Dublin Road / Allies River Road Junction	A16280	No existing facility	A	High	Low	Positive Moderate
R837 Dublin Road mid-link crossing Southeast of Shanganagh Cemetery access	A16640 - A16650	No existing facility	A	High	Low	Positive Moderate
R119 Dublin Road / Shanganagh Cemetery Junction 3-arm Priority Junction	A16450 - A16500	F	B	High	Low	Positive Moderate
R119 Dublin Road / Mullen's Laurel Park 3-arm Priority Junction (north)	A17080 - A17100	E	B	Medium	Low	Positive Moderate
R119 Dublin Road / Mullen's Laurel Park 3-arm Priority Junction (south)	A17140 - A17150	E	B	Medium	Low	Positive Moderate
Wilford Roundabout	A17360 - A17420	F	C	Medium	Medium	Positive Significant
Section Summary		**D**	**B**	**Medium**	**Low**	**Positive Moderate**

The results of the Pedestrian Qualitative Assessment on Section 3 of the Proposed Scheme (between Loughlinstown Roundabout to Bray North) in Table 6.33 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of D ratings. During the Do Something scenario, the LoS consists predominantly of the higher of B ratings. Given the quality of the existing pedestrian infrastructure along the Proposed Scheme, the improvements will have a *Positive, Moderate and Long-term* effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme between Loughlinstown Roundabout to Bray North, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

It is further noted that Appendix I1 of the Preliminary Design Report within the Supplementary Information includes an Accessibility Audit Report which assessed the existing situation along the route of the Proposed Scheme to identify existing issues and problems for people with mobility impairment. A number of issues including issues with parking provision, drainage, footpath levels, crossing points and tactile paving surfaces, among others were highlighted during this audit. The Proposed Scheme will address these issues and will provide significantly improved facilities for vulnerable road users.

Pedestrian and Cycling Safety at Protected Junctions

Refer to response in Section 3.1.3.6 on Traffic Calming under 'Cycling at Protected Junction' and also note below.

Refer to Section 3.9.3.4 in this report for further information on Upgrade Roundabouts to Signalised Junction and Signal Control Priority on the proposed typical protected signalised junction layout.

Where practicable, DMURS recommends that designers provide pedestrian crossings that allow pedestrians to cross the street in a single, direct movement. To facilitate road users who cannot cross in a reasonable time, the desirable maximum crossing length without providing a refuge island is 19m. This is applicable at stand-alone pedestrian crossings as well as at junctions.

Straight pedestrian crossings have been provided through refuge islands only where the island is 4m wide or more. Refuge islands are minimum width of 3m where staggered crossings are provided.

Where space allows, crossing lengths have been minimised by accommodating a suitable landing area for pedestrians between the road carriageway and cycle track, with the cycle track crossing controlled by mini-zebra markings. This reduced pedestrian crossing distance will have the added benefit of improving overall junction performance due to reduced intergreen times.

Along the Proposed Scheme, pedestrian crossings varying from 2.4m in width have been incorporated throughout the design. Larger pedestrian crossings widths have been allocated in areas that are expected to accommodate a high number of non-motorised users.

At signalised junctions and standalone pedestrian crossings, the footway is to be ramped down to carriageway level to facilitate pedestrians who require an unobstructed crossing. At minor junctions, raised table are provided at the mouth of each pedestrian crossing and is to be designed in accordance with standards. Audio units are to be provided on each traffic signal push button.

Formal crossing points are to be provided on the upstream side of bus stop islands, consisting of an on-demand signalised pedestrian crossing with appropriate tactile paving, push buttons and LED warning studs. A secondary informal crossing should be provided on the desire line on the downstream side of the island.

The Proposed Scheme will provide major improvements at almost all of the large number of junctions along the scheme, where pedestrian crossing distances will be shortened through removal of left-turn slip lanes and tightening of corners. Multi-stage pedestrian crossings will be simplified to single stage crossings at as many junctions as possible.

It is further noted that the Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information, did not highlight any safety issues with the proposed arrangement and safety of cyclists.

A Stage F Road Safety Audit was also carried out at the Feasibility and Route Selection phase and recommendations were taken on board to inform the Proposed Scheme. The Feasibility and Options Report is included in Appendix M of the Preferred Route Option Report as part of the Supplementary Information to the EIAR.

Impact on Parking

Section 6.4.6.1.5.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the impact on some existing parking and loading locations along Section 3.

The contents of Table 3.43 below (Table 6.37) shows a summary of the parking, disabled parking and loading spaces during both the Do Minimum and Do Something scenarios and the resulting changes along Section 3.

Table 3.43: Section 3 – Overall Changes in Parking / Loading Spaces (Table 6.33)

Table 6.37: Section 3 – Overall Changes in Parking / Loading Spaces

Street	Parking Type	Number of Parking Spaces		
		Do Minimum	Do Something	Change
Shankill Roundabout / St Anne's Church	Disabled Permit Parking	3	3	0
	Informal Parking	83	83	0
	Side Street Parking	179	179	0
Shankill Village	Disabled Permit Parking	1	1	0
	Informal Parking (Designated Free Parking) (Off Street)	16	16	0
Stonebridge Road	Loading / Unloading (Designated)	6	6	0
Total		**288**	**288**	**0**

As shown in Table 3.43 above, the proposed amendments to parking / loading will result in no overall loss to car parking spaces at Shankill Village. The impact of the changes along Section 3 is assessed as Negligible and Long-term.

Safety During the Construction Phase

During the Construction Phase of the Proposed Scheme, Section 5.8.1 of Chapter 5 (Construction), in Volume 2 of the EIAR, states:

'The measures set out in Section 8.2.8 of the Traffic Signs Manual (DTTAS 2019) will be implemented, wherever practicable, to ensure the safety of all road users, in particular pedestrians (including able-bodied pedestrians, wheel-chair users, mobility impaired pedestrians, pushchair users) and cyclists. Therefore, where footpaths or cycle facilities are affected by construction, a safe route will be provided past the works area, and where practicable, provisions for matching existing facilities for pedestrians and cyclists will be made. Where this is not practicable, pedestrians will be directed to use the footpath on the opposite side of the road, crossing at controlled crossing points.'

Existing and Proposed Pedestrian Crossings

In Section 6.3.4.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the existing pedestrian crossings along Section 3.

There are several controlled pedestrian crossings along Section 3 of the Proposed Scheme which benefit from tactile paving and dropped kerbs which can be found at the following locations:

- A signalised direct crossing North of R837 Dublin Road is provided, adjacent to the M11;
- The three-arm R837 Dublin Road / Stonebridge Road junction provides three signalised crossings. There are two direct crossings across R138 Dublin Road and there is one indirect crossing across Stonebridge Road which staggered by a pedestrian refuge island;
- A signalised direct crossing South of R837 Dublin Road is provided, adjacent to the M11; and
- A signalised direct crossing North of R119 Dublin Road is provided, adjacent to Aubrey Park lane.

Uncontrolled crossings across priority junctions at side roads benefit from dropped kerbs. The locations of the pedestrian crossings are illustrated in Figure 6.3c in Volume 3 of this EIAR.

Further details of the baseline pedestrian facilities (i.e. routing, directness, accessibility, crossing and footpath widths) at each junction along Section 3 of the Proposed Scheme is included in Appendix A6.4.1 (Pedestrian Impact Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

In Section 6.4.6.1.5.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the proposed pedestrian crossing along Section 3 which is a provision of new mid-link pedestrian crossings along R837 Dublin Road (north of the R837 Dublin Road / Seaview Park junction), R119 Dublin Road (southeast of the R119 Dublin Road / Allies River Road junction) and R837 Dublin Road (southeast of Shanganagh Cemetery access). This will enable improved connectivity between bus stop and facilities.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

In relation to the impact of construction works and traffic management on safety, refer to the response in Section 3.9.3.20 in this report for further information on the Impact During Construction.

3.9.3.8.1 Seaview Park

Summary of issue raised

One commented that a number of accidents have already happened when exiting Seaview and more would occur with the new proposed change, concerns were raised in particular for the impact on the less able and elderly.

One submission raised concerns regarding the placement of the signal-controlled crossing to the north of Seaview Park, commenting that due to the increasing traffic speed and number of bus users there are additional dangers on the route.

One submission noted that it will be impossible to cross the four lanes to catch a bus, especially for vulnerable road users.

Response to issues raised

Figure 3.160 below shows an extract from the General Arrangement Drawings with a new toucan crossing proposed to the north of the existing/retained bus stops to the south of Seaview Park. This will allow for a safe crossing point for bus users coming from either direction.

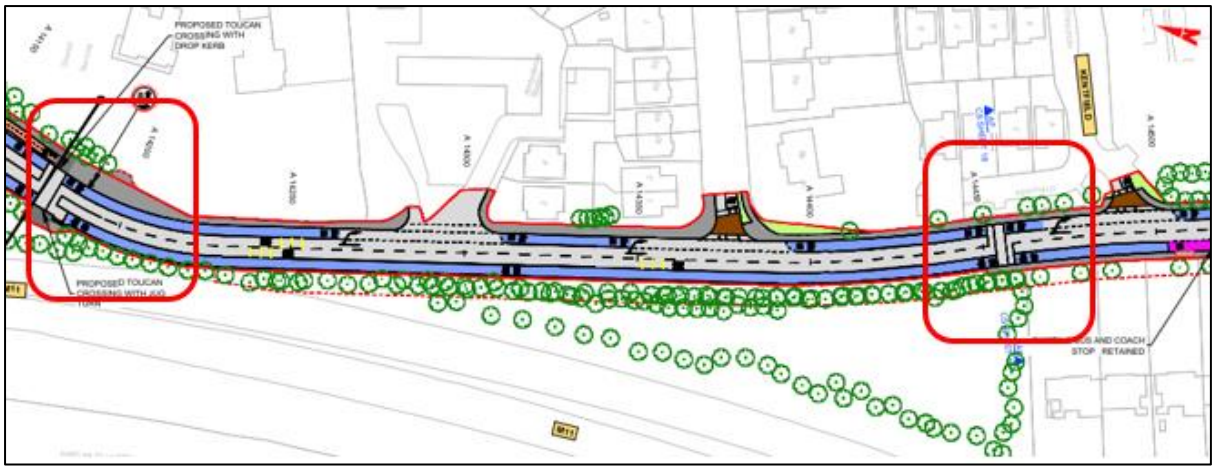


Figure 3.160: Extract from General Arrangement Drawings at Seaview Park (Sheet 41)

In relation to the location of the pedestrian controlled crossing to the north of Seaview Park, there is no proposed change to the location of the toucan crossing south of Loughlinstown Roundabout as part of the Proposed Scheme. The toucan crossing will allow for a safe crossing for pedestrians, cyclists and vulnerable road users.

The two signalised crossings are located within a distance of 250m and meet the pedestrian desire lines at this location of Dublin Road.

It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not identify any safety issues related to pedestrian crossings at this location.

The assessment of the qualitative impacts on the walking infrastructure for Section 3 at Dublin Road / Lower Road junction of the Proposed Scheme are summarised in Table 3.44, extract from Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, along with the accompanying sensitivity for each junction and the resultant significance of effect.

Table 3.44: Pedestrian Impact During Operational Phase (Table 6.33 of Chapter 6 of the EIAR)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Seaview Park 3-arm Priority Junction	A14375	E	B	Medium	Negligible	Not Significant
R837 Dublin Road mid-link crossing South of the R837 Dublin Road / Seaview Park Junction	A14450	No existing facility	A	High	Negligible	Positive Slight
R119 Dublin Road / Kentfield 3-arm Priority Junction	A14490	E	B	Medium	Medium	Positive Significant
R119 Dublin Road / Rathmichael Woods 3-arm Priority Junction	A14640 - A14650	C	B	Low	Medium	Positive Moderate
R837 Dublin Road / Stonebridge Road 3-arm Signalised Junction	A14770 - A14810	B	A	Low	High	Positive Moderate
R119 Dublin Road / Station Road 3-arm Priority Junction	A14870 - A14880	E	B	Medium	Negligible	Not Significant
Shanganagh Road / Beechfield Manor 3-arm Signalised Junction	A15000	D	B	Medium	High	Very Significant
Shankill Roundabout	A15070 - A15120	C	B	Low	Medium	Positive Moderate
R119 Dublin Road / Lower Road / Cluain Na Gréine Court 4-arm Staggered Priority Junction	A15300 - A15330	D	A	Medium	Low	Positive Moderate

As noted in Table 3.44 above the pedestrian crossing improvement on Dublin Road in vicinity of Seaview Park demonstrates improved LoS A with overall Positive Slight impact.

3.9.3.8.1 Carezza

Summary of issue raised

The submission also raises a concern, that is teamed with above, over the footfall in this immediate area, stating that pedestrians / cyclists use the petrol station, church and two schools in the close vicinity, highlighting concerns over the number of people crossing without travelling further to use the dedicated pedestrian crossing. The submission suggests adding another pedestrian crossing.

Response to issues raised

With regards to the pedestrian crossings on Dublin Road in vicinity of the property of Carezza, three improved pedestrian crossings are proposed on Dublin Road from Dublin Road/ Stonebridge Road junction to Dublin Road/ Shanganagh Road/ Corbawn Lane junction within a distance of 300m and meet the pedestrian desire lines at this location of Dublin Road. These are located at:

- Dublin Road/ Stonebridge Road junction (at the Petrol Station)
- St Anne's Church (near Carezza)
- Dublin Road/ Shanganagh Road/ Corbawn Lane junction

It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not identify any safety issues related to pedestrian crossings at this location.

The assessment of the qualitative impacts on the walking infrastructure for Section 3 at Dublin Road / Lower Road junction of the Proposed Scheme are summarised in Table 3.45 along with the accompanying sensitivity for each junction and the resultant significance of effect.

Table 3.45: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase (Extract from Table 6.33)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Seaview Park 3-arm Priority Junction	A14375	E	B	Medium	Negligible	Not Significant
R837 Dublin Road mid-link crossing South of the R837 Dublin Road / Seaview Park Junction	A14450	No existing facility	A	High	Negligible	Positive Slight
R119 Dublin Road / Kentfield 3-arm Priority Junction	A14490	E	B	Medium	Medium	Positive Significant
R119 Dublin Road / Rathmichael Woods 3-arm Priority Junction	A14640 - A14650	C	B	Low	Medium	Positive Moderate
R837 Dublin Road / Stonebridge Road 3-arm Signalised Junction	A14770 - A14810	B	A	Low	High	Positive Moderate
R119 Dublin Road / Station Road 3-arm Priority Junction	A14870 - A14880	E	B	Medium	Negligible	Not Significant
Shanganagh Road / Beechfield Manor 3-arm Signalised Junction	A15000	D	B	Medium	High	Very Significant
Shankill Roundabout	A15070 - A15120	C	B	Low	Medium	Positive Moderate
R119 Dublin Road / Lower Road / Cluain Na Gréine Court 4-arm Staggered Priority Junction	A15300 - A15330	D	A	Medium	Low	Positive Moderate
R119 Dublin Road / Aubrey Park 3-arm Priority Junction	A15300 - A15330	C	B	Low	Low	Positive Slight
R119 Dublin Road / Shankill Village 3-arm Priority Junctions at Accesses	A15350 - A15450	C	B	Low	Low	Positive Slight
R119 Dublin Road mid-link crossing South of the R119 Dublin Road / Aubrey Park Junction	A15460	B	A	Low	Low	Positive Slight

As noted in Table 3.45 above the pedestrian improvement on Dublin Road in vicinity to the property of Carezza (from Dublin Road/ Stonebridge Road junction to Dublin Road/ Shanganagh Road/ Corbawn Lane junction) demonstrates improved LoS with overall Positive Moderate impact.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

3.9.3.8.2 Shanganagh Cemetery

Summary of issue raised

One response raised the safety concern for pedestrians alighting the bus coming from Bray, attempting to visit the cemetery.

Response to issues raised

Two new toucan crossings are proposed on Dublin Road at Shanganagh Park (Chainage 16+280) and at the southern end of the Shanganagh Cemetery (Chainage 16+500) within a distance of 250 meters in the upstream and downstream of the bus stop, which are deemed to be sufficient to meet pedestrian movement and are shown in Figure 3.161 and Figure 3.162.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with pedestrian safety at the junction with Shanganagh Park.

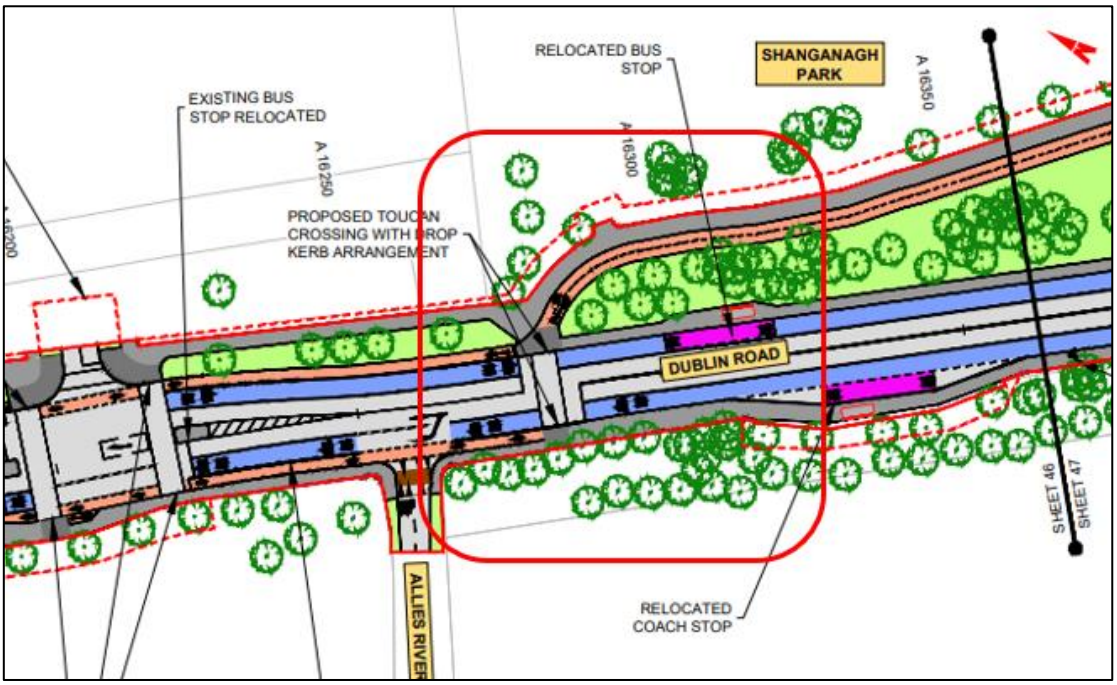


Figure 3.161: Extract from General Arrangement Drawings showing Proposed Toucan Crossing at Chainage 16+280 (Sheet 47)

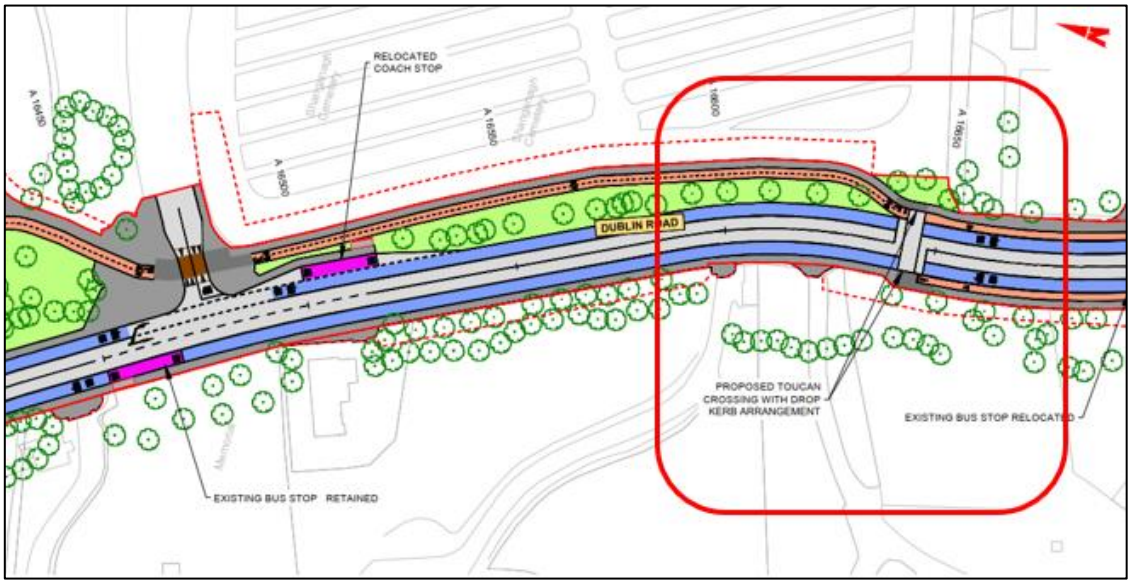


Figure 3.162: Extract from General Arrangement Drawings showing Proposed Toucan Crossing at Chainage 16+500 (Sheet 47)

The assessment of the qualitative impacts on the walking infrastructure for Section 3 at Dublin Road near Shanganagh Cemetery of the Proposed Scheme are summarised in Table 3.46 below, along with the accompanying sensitivity for each junction and the resultant significance of effect.

Table 3.46: Pedestrian Impact During Operational Phase (Table 6.33 of Chapter 6 of the EIAR)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Allies River Road 3-arm Priority Junction	A16250 - A16290	D	B	Medium	Low	Positive Moderate
R119 Dublin Road mid-link crossing Southeast of the R119 Dublin Road / Allies River Road Junction	A16280	No existing facility	A	High	Low	Positive Moderate
R837 Dublin Road mid-link crossing Southeast of Shanganagh Cemetery access	A16640 - A16650	No existing facility	A	High	Low	Positive Moderate
R119 Dublin Road / Shanganagh Cemetery Junction 3-arm Priority Junction	A16450 - A16500	F	B	High	Low	Positive Moderate
R119 Dublin Road / Mullen's Laurel Park 3-arm Priority Junction (north)	A17080 - A17100	E	B	Medium	Low	Positive Moderate

As noted in Table 3.46 above the pedestrian crossing improvement on Dublin Road in vicinity of Shanganagh Cemetery demonstrates improved LoS A with overall Positive Moderate impact.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.

3.9.3.8.3 Crinken to Woodbrook

Summary of issue raised

Another submission commented on the lack of central reservation between Crinken and Woodbrook, commenting that there will be no reservation for 17 metres, which causes concerns to how residents will cross safely given the amenities on both sides on the road.

Response to issues raised

Refer to above response in Section 3.9.3.8 and also note below:

New toucan/ pedestrian crossings are proposed at Dublin Road between Crinken Lane to Woodbrook Downs and deemed sufficient to meet the pedestrian desire line.

- Existing pedestrian crossing at ch: 16+075;
- Proposed toucan crossing at the new Shanganagh Castle Housing junction at ch: 16+200;
- Proposed toucan crossing north entrance to Shanganagh Park at ch: 16+275;
- Propose toucan crossing at south end of Shangangh Cemetery at ch: 16+650; and
- Proposed toucan crossing at the new junction at Woodbrook Downs/ Woodbrook SHD at ch: 16+850.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with pedestrian safety at the junction with Shanganagh Park.

The assessment of the qualitative impacts on the walking infrastructure for Section 3 at Dublin Road from Crinken Lane to Woodbrook Downs of the Proposed Scheme are summarised in Table 3.47 below, along with the accompanying sensitivity for each junction and the resultant significance of effect.

Table 3.47: Pedestrian Impact During Operational Phase (Table 6.33 of Chapter 6 of the EIAR)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Crinken Lane 3-arm Priority Junction	A16000 - A16050	C	B	Low	Negligible	Not Significant
R119 Dublin Road / Aughmore Lane 3-arm Priority Junction	A16100 - A16130	D	C	Low	Negligible	Not Significant
R119 Dublin Road / Shanganagh Castle development lands entrance (proposed by others)	A16180 - A16220	F	A	High	Low	Positive Moderate
R119 Dublin Road / Allies River Road 3-arm Priority Junction	A16250 - A16290	D	B	Medium	Low	Positive Moderate
R119 Dublin Road mid-link crossing Southeast of the R119 Dublin Road / Allies River Road Junction	A16280	No existing facility	A	High	Low	Positive Moderate
R837 Dublin Road mid-link crossing Southeast of Shanganagh Cemetery access	A16640 - A16650	No existing facility	A	High	Low	Positive Moderate
R119 Dublin Road / Shanganagh Cemetery Junction 3-arm Priority Junction	A16450 - A16500	F	B	High	Low	Positive Moderate
R119 Dublin Road / Mullen's Laurel Park 3-arm Priority Junction (north)	A17080 - A17100	E	B	Medium	Low	Positive Moderate

As noted in Table 3.47 above the pedestrian crossing improvement on Dublin Road Crinken Lane to Woodbrook Downs demonstrates improved LoS with overall Positive Moderate impact.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4 - Pedestrian Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

3.9.3.8.4 Raised walkway at the Bridge, Shankill Village

Summary of issue raised

One submission suggested that the footpaths on the bridge are eliminated with raised walkways added on each side of the bridge wall.

Response to issues raised

Regarding the suggestion for raised walkways added on each side of the bridge at the Dublin Road southbound arm of Dublin Road/ Shanganagh Road/ Corbawn Lane junction, existing footpath widths will be improved as part of the Proposed Scheme. The Proposed Scheme will provide for a desirable minimum width footpath of 1.8m and a cycle track north of the bridge in the southbound direction, by reducing the width of the traffic lane. The northbound footpath at this location is 1.8m, while narrowing to 1.6m at the pinch point, as seen in Figure 3.163 below.

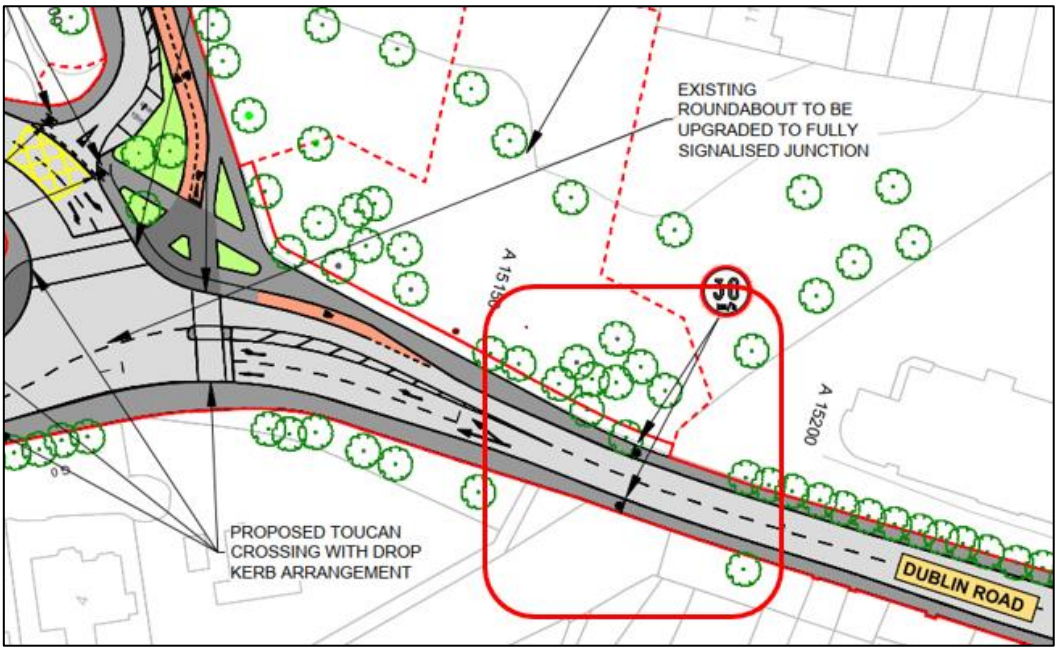


Figure 3.163: Extract from General Arrangement Drawings at the Bridge, Dublin Road (Sheet 43)

Section 6.4.6.1.5.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the pedestrian infrastructure along Section 3. The assessment of the qualitative impacts on the walking infrastructure for Section 3 of the Proposed Scheme are summarised in Table 3.48 below (Table 6.33), along with the accompanying sensitivity for each junction and the resultant significance of effect. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4 - Pedestrian Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

Table 3.48: Section 3 – Significance of Effects for Pedestrian Impact During Operational Phase (Table 6.33)

Table 6.33: Section 3 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R119 Dublin Road / Seaview Park 3-arm Priority Junction	A14375	E	B	Medium	Negligible	Not Significant
R837 Dublin Road mid-link crossing South of the R837 Dublin Road / Seaview Park Junction	A14450	No existing facility	A	High	Negligible	Positive Slight
R119 Dublin Road / Kentfield 3-arm Priority Junction	A14490	E	B	Medium	Medium	Positive Significant
R119 Dublin Road / Rathmichael Woods 3-arm Priority Junction	A14640 - A14650	C	B	Low	Medium	Positive Moderate
R837 Dublin Road / Stonebridge Road 3-arm Signalised Junction	A14770 - A14810	B	A	Low	High	Positive Moderate
R119 Dublin Road / Station Road 3-arm Priority Junction	A14870 - A14880	E	B	Medium	Negligible	Not Significant
Shanganagh Road / Beechfield Manor 3-arm Signalised Junction	A15000	D	B	Medium	High	Very Significant
Shankill Roundabout	A15070 - A15120	C	B	Low	Medium	Positive Moderate
R119 Dublin Road / Lower Road / Cluain Na Gréine Court 4-arm Staggered Priority Junction	A15300 - A15330	D	A	Medium	Low	Positive Moderate
R119 Dublin Road / Aubrey Park 3-arm Priority Junction	A15300 - A15330	C	B	Low	Low	Positive Slight
R119 Dublin Road / Shankill Village 3-arm Priority Junctions at Accesses	A15350 - A15450	C	B	Low	Low	Positive Slight
R119 Dublin Road mid-link crossing South of the R119 Dublin Road / Aubrey Park Junction	A15460	B	A	Low	Low	Positive Slight

Table 3.48 above shows that from Dublin Road/ Shanganagh Road/ Corbawn Lane junction to R119 Dublin Road / Lower Road junction, the significance of pedestrian infrastructure is positive.

Table 3.49 below presents that the traffic lane width narrows to accommodate footway width.

Table 3.49: Section 3 – Reduced Standard Cross Sections (Table 4.15)

Table 4.15: Reduced Standard Cross Sections on Section 3 – Loughlinstown Roundabout to Bray North (Wilford Roundabout)

Location	Design Element	DMURS	Design	Justification
A14180 – A14640	Footpath (southbound)	2.0m	Varies Approx. 1.6m – 2m	Footpath narrows to a pinch point of 1.6m to match existing.
E20 – E80	Footpath (northbound)	2.0m	Varies Approx. 1.2m – 2m	Footpath narrows to a pinch point of 1.2m as alignment matches existing kerb line and boundary wall to avoid land take.
E205 – E260	Footpath (northbound)	2.0m	Varies Approx. 1.6m – 2m	Footpath narrows to a pinch point of 1.6m as alignment matches existing kerb line and boundary wall to avoid land take.
A14810 – A15075	Footpath (northbound)	2.0m	Varies Approx. 1.6m – 2m	Footpath narrows to a pinch point of 1.6m in front of Applegreen petrol station to match existing.
G145 – G175	Footpath (northbound)	2.0m	Varies Approx. 1.8m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.
H45 – H80	Cycle track (2-way)	3.5m	3m	3.0m 2-way cycle track is provided over a length of 45m to avoid land take.
H45 – H80	Cycle track (northbound)	2.0m	Varies Approx. 1.2m	Cycle track narrows to 1.2m to tie-in to combined traffic lane.
A15115 – A15160	Traffic Lane (southbound)	3.0m	Varies 2.2m – 3.0m	Traffic lane width narrows at pinch point to accommodate the cycle track and avoid impact to the bridge.
A15160 – A15800	Footpath (northbound)	2.0m	1.6m	Footpath narrows locally at pinch point.
A15175 – A15205	Footpath (southbound)	2.0m	Varies Approx. 1.8m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.
A15495 – A15510	Footpath (northbound)	2.0m	Varies Approx. 1.5m – 1.8m	Footpath locally narrows to approximately 1.8m over 15m in length with a 1.5m pinch point to tie into existing boundary.
A15605 – A15630	Footpath (southbound)	2.0m	Varies Approx. 1.8m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.
A15800 – A15865	Footpath (northbound)	2.0m	Varies Approx. 1.5m – 3.5m	Footpath narrows to a pinch point of 1.6m due to alignment of existing boundary wall at Sherrington Lodge.
A15925 – A16035	Footpath (southbound)	2.0m	Varies Approx. 1.5m – 2m	Footpath narrows to a pinch point of 1.5m due to alignment of existing boundary wall at Crinken College.

Overall, it is anticipated that there will be a Positive, Moderate and Long-term effect to the quality of the pedestrian infrastructure along Section 3 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in TIA Sub Appendix A6.4 - Pedestrian Infrastructure Assessment Volume 4 Appendices Part 2 of 4 of EIAR.

3.9.3.9 Review of Design Alternatives

Summary of issue raised

A number of submissions made suggestions of alternative solutions, including:

Minor Works:

- Suggestion that minor local road improvement measures/road widening, such as at the junction of Old Dublin Road and Stonebridge Road, and other local pinch points, would have similar scheme benefits with less impact;
- Suggestion that a reduction in bus stops or use of hub bus stops would have similar scheme benefits with less impact;

Traffic Management / Enforcement:

- Suggestion that general traffic management solutions could be used to improve journey times;
- Suggestion that a co-ordinated traffic light policy would improve traffic flows;
- Suggestion that camera enforcement on bus lanes would help reliability of bus routes.

- Suggestion that there should be an increase in Dart frequency and speed of trains.

Alternative Design:

- Suggestion that design alternatives used on other coastal DLRCC Schemes, where they are proposing one way traffic and dedicated cycle lanes, would be a better solution;

- Suggestion that using the example of Sydney Road Traffic Laws to help improve continuous flow of traffic, such as no right turn movements, and no parking in the opposite direction to traffic, would help traffic flows.

- The provision of a local shuttle/feeder bus service running a circle route utilising the N11/M11 to connect passengers to core services and thereby limiting the number of buses passing through Shankill has also been suggested.

Response to issue raised

Minor Works

In relation to the suggestion that similar benefits could be gained from minor road widening at junctions such as the Old Dublin Road / Stonebridge Road junction and other pinch points, it is noted that this would not cover the Proposed Scheme objectives and Need for the Scheme, as outlined in Section 3.9.3.1 on Need for the Proposed Scheme in this report. It is also noted that the impact to Shankill village was minimised where possible with reduced cross sections and use of signal prioritisation of buses as detailed in Section 3.9.3.4 on the Upgrade Roundabouts to Signalised Junction and Signal Control Priority in this report.

In relation to the suggestion of reducing the number of bus stops within the Proposed Scheme, this would go against the Proposed Scheme objectives of '*enhancing… the potential of the public transport network'*, and '*improving connectivity*'. If the number of bus stops were reduced, this would make the bus service less accessible.

Traffic Management / Enforcement

In relation to alternative solutions such as traffic management and traffic light policies, refer to response in Section 3.9.3.4 in this report for further information on the Upgrade Roundabouts to Signalised Junction and Signal Control Priority for details on the signalisation of junctions on the Proposed Scheme to benefit the overall traffic flows.

Camera enforcement, however, is under the remit of An Garda Síochána and is outside the scope and objectives of the Proposed Scheme.

Alterations to the frequency and speed of DART trains is also outside the scope and objectives of the Proposed Scheme.

Alternative Design

In relation to proposing one-way traffic routes, the coastal DLRCC Schemes are to facilitate a short routes in the area for those travelling in that local area between Sandycove Avenue and Newton Avenue, the aim of BusConnects is to is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor, an overall length of approximately 18.5km. One-way traffic routes would hinder bus journey time reliability and punctuality.

In relation to the suggestion that design solutions used in Australia could be proposed. The review and improvement of design standards is a continuous objective of the NTA and the various responsible government bodies. However, at present this suggestion would not align with the current guidelines and standards and is not part of the scope of the Proposed Scheme planning application.

In relation to the suggestion of a local shuttle/feeder bus service running a circle utilising the N11/M11 to connect passengers to core services and thereby limiting the number of buses passing through Shankill, please refer to response in Section 3.9.3.1.3 in this report for further information on the Alternate N11/M11 Bus Priority Interim Scheme. One of the objectives of the Proposed Scheme is to

enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movements over general traffic movements to support all corridors. The need for the Proposed Scheme is supported by the objective of the GDA Transport Strategy to provide continuous bus priority, as far as is practicable, along the core bus route, that supports a more efficient and reliable bus service with lower journey times. The Proposed Scheme does not propose to remove any existing bus services and is focused on infrastructure redesign. The Dublin Network Redesign is a separate project currently being rolled out by the NTA.

3.9.3.10 Adequacy of Environmental Assessment

Summary of issue raised

A number of submissions raised concerns regarding the level of environmental assessment carried out through Shankill. Concerns included:

- The EIAR is not comprehensive;
- Surveys and documentation of environmental impacts are not sufficient or transparent, and demonstrate a lack of local knowledge;
- Desktop surveys were not sufficient on their own to identify the presence of certain species;
- The Arboricultural Impact Assessment understated the level of tree loss, and downplayed the number of trees to be removed by grouping them; and
- Concerns regarding the lack of proper assessment in accordance with the Environmental Assessment Directive or Habitats Directive.

Response to issue raised

A full and comprehensive Environmental Impact Assessment Report has been prepared to fully assess and present the impacts of the Proposed Scheme. Chapter 1 (Introduction) in Volume 2 of the EIAR describes the EIA Process (Section 1.5) outlining all requirements for the completion of an EIAR in accordance with the EIA Directive (Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment) and Section 50 of the Roads Act 1993, as amended by S.I. No. 279/2019 - European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations 2019.

The EIAR was prepared in accordance with a number of EIA Guidance documents (as listed in Section 1.5.2), including:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (Environmental Protection Agency 2022);
- Environmental Impact Assessment of Projects – Guidance on the Preparation of the Environmental Impact Assessment Report (European Commission 2017);
- The Department of Housing, Planning and Local Government (DHPLG) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DHPLG 2018); and
- National Roads Authority (NRA) Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA 2008).

Additionally, specific guidance was used for individual topic assessments where appropriate and necessary, as outlined in each individual chapter.

Table 1.3 (refer to Table 3.50 below) in Chapter 1 provides the EIAR Structure, listing all volumes and chapters in the EIAR (as included below).

Table 3.50: Extract from EIAR Chapter 1 (Table 1.3)

Table 1.3: EIAR Structure

EIAR Chapter	Description
Volume 1: Non-Technical Summary	
NTS	Summary of the EIAR in non-technical language.
Volume 2: Main Report	
Chapter 1	Introduction
Chapter 2	Need for the Proposed Scheme
Chapter 3	Consideration of Reasonable Alternatives
Chapter 4	Proposed Scheme Description
Chapter 5	Construction
Chapter 6	Traffic & Transport
Chapter 7	Air Quality
Chapter 8	Climate
Chapter 9	Noise & Vibration
Chapter 10	Population
Chapter 11	Human Health
Chapter 12	Biodiversity
Chapter 13	Water
Chapter 14	Land, Soils, Geology & Hydrogeology
Chapter 15	Archaeological & Cultural Heritage
Chapter 16	Architectural Heritage
Chapter 17	Landscape (Townscape) & Visual
Chapter 18	Waste & Resources
Chapter 19	Material Assets
Chapter 20	Risk of Major Accidents and / or Disasters
Chapter 21	Cumulative Impacts & Environmental Interactions
Chapter 22	Summary of Mitigation & Monitoring Measures
Chapter 23	Summary of Significant Residual Impacts
Volume 3: Figures	
Figures	Graphics and plans supporting the EIAR chapters, illustrating the Proposed Scheme and environmental information.
Volume 4: Appendices	
Appendices	Technical reference information supporting the EIAR chapters, such as technical reports compiling calculations and detailed background data.

Section 1.5.10 in Chapter 1 provides the details of all of the competent experts involved in carrying out the assessments and authoring the individual chapters.

An overview of the EIAR and its main findings are included in the Non-Technical Summary in Volume 1 of the EIAR. Mitigation and monitoring measures have been proposed where potential significant impacts have been identified for each environmental topic, with these measures compiled in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR, with the Construction Phase measures also replicated within Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR. A summary list of all predicted significant residual impacts is provided in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR.

The assessments undertaken within the EIAR are based on information gathered through both desk studies and a series of comprehensive surveys. Surveys undertaken to inform the impact assessments include:

- Walkovers carried out by all specialists to inform all EIAR chapters;
- Traffic counts;
- Air monitoring;
- Noise monitoring;
- Population walkover to identify all commercial businesses on the route;

- A range of ecology surveys;
- Tree surveys; and
- Photographs for the creation of photomontages.

There were additional surveys undertaken to inform the design of the Proposed Scheme including topographic surveys, drone surveys, accessibility surveys, and a ground investigation survey.

Several of the submissions summarised above make specific references to the adequacy of the ecology and tree surveys. There were comprehensive ecology and tree surveys undertaken across multiple dates by experts in those fields as described in the following.

Chapter 12 (Biodiversity) in Volume 2 of the EIAR describes the assessment of impacts on biodiversity as a result of the construction and operation of the Proposed Scheme. Section 12.2.3.2 of Chapter 12 describes the full suite of ecological surveys undertaken to inform the impact assessment. Table 12.2 in Chapter 12 (refer to Table 3.51 below) lists all surveys undertaken over a five year period between 2018 and 2023.

Table 3.51: Extract from EIAR Chapter 12 (Biodiversity) (Table 12.2)

Table 12.2: Ecological Surveys and Survey Dates Between 2018 and 2023

Survey	Survey Date(s)	Surveyor Reference
Habitat survey	June to August 2018 August 2020 May 2022 August 2022 Limited survey around Woodbrook Side Lodge - March 2023	Scott Cawley Ltd.
Mammal surveys (excluding bats)	June to August 2018 August 2020 April 2022 Limited survey around Woodbrook Side Lodge - March 2023	Scott Cawley Ltd.
Bat surveys	Walked transect activity surveys June to August 2018 September and October 2019 May 2020 July 2020 July to August 2021 Identification of potential roost features (PRFs) June to August 2018 August 2020 March 2022 March 2023 Building Inspection January 2023 (external) March 2023 (internal and external)	Scott Cawley Ltd.
Wintering bird survey	November 2020 to March 2021 October 2021 to April 2022	Scott Cawley Ltd.
Amphibian habitat suitability assessment	June to August 2018 August 2020 March 2022	Scott Cawley Ltd.
Reptile habitat suitability assessment	June to August 2018 August 2020 March 2022	Scott Cawley Ltd.

Chapter 12 goes on to further describe each survey with reference to any applicable guidance. A series of figures were also produced to map the findings of the surveys as relevant. The surveys are described in Chapter 12 in the following sections:

- Habitat surveys described in Section 12.2.3.3;
- Mammals (excluding bats) described in Section 12.2.3.4;

- Bats described in Section 12.2.3.5, including walked transect surveys, building inspections, and tree surveys;
- Wintering bird surveys described in Section 12.2.3.6;
- Reptile surveys described in Section 12.2.3.7; and
- Amphibian surveys described in Section 12.2.3.8.

Chapter 12 also includes a number of figures which map out the survey results in Volume 3 of the EIAR, including:

- Figure 12.1.1 (Ecological Study Areas: Bat Activity Transect Routes);
- Figure 12.1.2 (Ecological Study Areas: Wintering Bird Transect Routes);
- Figure 12.5 (Habitat Survey Results – Fossitt 2000 Habitat Classification);
- Figure 12.6 (Non-Native Invasive Plant Species Survey Results);
- Figure 12.7.1 (Bat Survey Results: Bat Activity Survey Results);
- Figure 12.7.2 (Bat Survey Results: Potential Roost Feature Survey Results);
- Figure 12.7.3 (Mammal, Aquatic and Riparian Survey Results); and
- Figure 12.8 (Wintering Bird Survey Results).

In addition to the above described ecology surveys, a comprehensive tree survey was undertaken by a suitably qualified arboricultural specialist. The Arboricultural Impact Assessment is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR, and comprises an Arboricultural Impact Assessment and Method Statement, a Tree Constraints Plan, a Tree Schedule, and Tree Impact Plans. As outlined in the report, surveys were undertaken '*between Friday 17th July and Thursday 30th August 2020. Further surveys of additional sites were undertaken on Monday 30th November and Tuesday 1st December 2020, Monday 29th November and Tuesday 30th November 2021, and 20th and 21st March 2023*.' The tree surveys were undertaken in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations. As outlined in the Executive Summary of the Report:

'*The proposal will require the removal of 359 individual trees, 41 tree groups or parts of tree groups and ten hedges or parts of hedges, that comprise 30 of high quality, 135 of moderate quality and 245 of low quality. The age class of these trees, groups of trees and hedges includes 15 young, 144 semimature, 113 early mature, 134 mature and four over mature.*

A total of 41 trees are recommended to be removed and replaced irrespective of the proposal, due to physiological or structural decline, meaning they cannot realistically be retained in the context of current land use for longer than 10 years, or for reasons of safety because they pose and unacceptable risk to persons or property. It is recommended that where possible these trees are replaced with new trees of better quality, as good arboricultural practice.'

In addition to the EIAR, an Appropriate Assessment was also undertaken by suitably qualified ecologists, and a Natura Impact Statement (NIS) was completed for the Proposed Scheme and submitted to ABP. As stated in Section 1 (Introduction) of the NIS:

'*This NIS has been prepared in accordance with the provisions of Part XAB of the Planning and Development Act, 2000 (as amended) ("the 2000 Act") and in accordance with the requirements of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive)*.

It considers the implications of the Proposed Scheme, on its own and in combination with other plans or projects, for European sites1 in view of the conservation objectives of those sites. It includes a scientific examination of evidence and data to identify and assess the implications of the Proposed Scheme for any European sites in view of the conservation objectives of those sites. The NIS considers whether the Proposed Scheme, by itself and in combination with other plans or projects, would adversely affect the integrity of any European sites. In reaching a conclusion in this regard consideration is given to any mitigation measures necessary to avoid or reduce any potential negative impacts.

This NIS has been prepared following an assessment in view of best scientific knowledge of the potential for, the Proposed Scheme to have significant effects, either individually or in combination with other plans or projects on European sites, set out in an Appropriate Assessment (AA) Screening Report.

A Screening for AA was undertaken and a determination was prepared by the NTA (both published on the NTA website). The AA Screening concluded that "there is the possibility for significant effects on the following European sites, in the absence of mitigation, either arising from the project alone, or in combination with other plans and projects, as a result of hydrological impacts, hydrogeological impacts, invasive species and disturbance and displacement impacts: South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA.'

Section 10 (NIS Conclusion) states the following:

'*It has been objectively concluded by Scott Cawley Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Scheme and the effective implementation of the mitigation measures proposed that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion*.'

The NTA are satisfied that the surveys that were undertaken in order to inform the EIAR were appropriately scoped and undertaken by suitably qualified experts, to the level required in order to inform a full and robust assessment of impacts. The NTA are satisfied that the EIAR and NIS submitted with the application are comprehensive.

3.9.3.11 Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape)

Summary of issue raised

A number of submissions raised concerns regarding the environmental impact through Shankill as a result of both the construction and operation of the Proposed Scheme. A number raised concerns about the Proposed Scheme going against local and wider policy and planning efforts including the DLRCC Tree Strategy and the DLRCC Biodiversity Action Plan.

There were a number of submissions which raised concern that the NTA are under reporting the number of trees to be removed in the proposal and note that at least 400 trees through Shankill, from the Loughlinstown Roundabout to Woodbrook, would need to be cut down to accommodate the proposals. Submissions questioned the grouping of trees without identifying and assessing the number and condition of each individual tree, suggesting that this was done to downplay the number of trees actually being removed.

A number of submissions raised concerns regarding the impact of the removal of hundreds of mature trees through Shankill. They noted that these trees have both a visual benefit and an environmental function for filtering noise and traffic pollution. One submission also raised concern that the removal of trees would impact the remaining trees by impacting on root systems, reducing their ability to sustain other trees in times of stress. Submissions also noted that trees are significant for carbon sequestration, wildlife, climate mitigation, and health and wellbeing. One submission also went on to note the Tree Strategy comments that new trees are very difficult to establish due to the hostile environment, street services, and vandalism.

Numerous submissions queried the lack of clarity on the preservation of trees, specifically within temporary land acquisition areas, commenting that there is concern is these trees are to be felled and if they would be replaced in existing condition.

Some submissions raised concerns regarding the impact on trees, hedgerows, habitats on top of the increasing urbanisation of Shankill. The submissions raise various concerns in relating to this including, the impact to the increase in noise, air pollution, loss in biodiversity, loss of habitat for species and loss

of green space, as well as private gardens. Many submissions continued to discuss the impact to species due to a loss in habitat and crossing points, some queried the impact to species which live in the area, including a number of rare bird and bat species. A number of submissions noted it is currently an offense to kill or injure a bat and there is no information of how this will be avoided should their habitat be destroyed.

Another submission raised concern regarding the impact to specific species, as well as some that protected, including bats, black-headed gulls, herring gulls, and the common lizard. The submission went on to comment that the mixed woodland near Seaview will be majorly impacted, which is a concern to a significant number of species within the area that call this area home.

There were also a number of location-specific submissions, which are summarised and responded to in their own sub-sections following the below response (Section 3.9.3.11.1 to 3.9.3.11.6 of this report).

Response to issue raised

As outlined in the previous response, a robust and comprehensive EIAR and NIS have been submitted to ABP which describes the assessment of the impacts anticipated as a result of both the Construction and Operational Phases of the Proposed Scheme. Assessments were carried out with consideration of local, regional, national and international policies. The assessments and surveys were undertaken, and the landscaping design completed with consideration of the DLR Trees: A tree strategy for Dún Laoghaire-Rathdown, and the Dún Laoghaire-Rathdown Biodiversity Action Plan as described in their relevant assessment chapters and reports. The below sub-sections describe the specific assessments for the environmental issues raised in the above summarised submissions.

Trees

As outlined previously, a comprehensive tree survey was undertaken in order to inform the landscape design and the impact assessment for the Proposed Scheme. Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 Part 4 of the EIAR describes the comprehensive tree survey undertaken in order to assess the impacts of the Proposed Scheme and provides a detailed overview of the proposed tree losses in order to facilitate the construction of the Proposed Scheme. Table 2 of Appendix A17.1 summarising the total removals is provided below. As shown below, the majority of trees / hedges to be removed have been assessed as Category C trees which are of low arboricultural quality. Of these proposed removals, Appendix A17.1 also states that '*A total of 41 trees are recommended for removal and replacement irrespective of the proposed development, due to severe physiological or structural decline that means they cannot realistically be retained in the context of current land use for longer than 10 years, or due to a high likelihood of failure that poses an unacceptable risk to persons to property*'.

Table 2. Summary of tree removals by quality.

	Category A	Category B	Category C	Total
Trees	29	121	209	**359**
Groups	1	14	26	**41**
Hedges	0	0	10	**10**
Total	**30**	**135**	**245**	**410**

Appendix A17.1 includes the report, a Tree Constraints Plan showing all trees and tree groups by category along the Proposed Scheme (which shows the section through Shankill on Sheets 4 to 15), a Tree Schedule listing and describing all trees and tree groups mapped in the Tree Constraints Plan, and the Tree Removal Plan (which again shows the section through Shankill on Sheets 4 to 15). The information from the Tree Removal Plan is also shown in the Landscape General Arrangement drawings (drawing set 05 accompanying Chapter 4) in Volume 3 of the EIAR, with the section through Shankill between Loughlinstown and Wilford Roundabouts being shown on Sheets 40 to 49. All of the proposed new and replacement planting (as outlined in the following section on Biodiversity with respect to habitat mitigation) is also shown and detailed in the Landscape General Arrangement drawings. Where trees are lost through Shankill, it is proposed to replace as close to the areas of loss as space would allow.

Section 5 of the arboricultural impact assessment report describes mitigation and improvement measures including the following:

'*New planting should include a varied age and mix of tree species that are chosen with consideration to local site and environmental conditions, native environment, future use of the site, provision of ecosystem services and contribution that can be made to local communities. The aim should be to plant the 'right tree in the right place' to create a tree population that is both functional and resilient.*

Where it is proposed to create new green space, or where opportunities exist for new planting, consideration should also be given to the provision of succession planting to ensure continuous canopy cover in the local landscape, especially where there is an ageing tree population with little or no sign of recent tree planting.

The identification of category U trees (those that have a useful life expectancy of less than 10 years, or that are unsuitable for retention because they pose a risk of failure and injury to persons or damage to property) also provides an opportunity to offer replacement planting to enhance and improve the quality of trees along the CBC.'

The Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement drawings. These proposed quantities to be planted are:

- 551 trees;
- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;
- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

As described in Section 3.9.3.1.2, 'Consideration of Alternatives and Options Assessment in Shankill', a robust alternatives assessment has been undertaken, including refinement of the design through Shankill in an attempt to reduce impacts as far as possible on trees and the environment, while still meeting the objectives of the Proposed Scheme. A description of the alternatives assessment is included in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR, with further details provided in the Preferred Route Option Report included in the Supplementary Information.

The location-specific sections below (Section 3.9.3.11.1 to Section 3.9.3.11.5) outline the specific tree impacts and mitigation measures at those locations. The biodiversity, climate and visual effects of the tree impacts as a result of the Proposed Scheme are discussed below under their own sub-sections.

Biodiversity

Comprehensive assessments have been carried out on the impact on biodiversity through Section 3 of the Proposed Scheme (Loughlinstown Roundabout to Bray North (Wilford Roundabout)). Chapter 12 (Biodiversity) in Volume 2 of the EIAR describes the assessment on the potential biodiversity impacts as a result of both the construction and operation of the Proposed Scheme. The assessment was carried out based on a desk study and ecological surveys (as outlined in the previous Section 3.9.3.10 'Adequacy of Environmental Assessment') carried out between 2018 and 2023 (as described in Section 12.2.3.2 in Chapter 12). Chapter 12 is supplemented by Figures 12.1 to 12.8 in Volume 3 of the EIAR, which map the survey results and habitats along the Proposed Scheme.

The assessment evaluates the potential for impact on ecological receptors including designated sites, habitats, plant species, mammals, birds, reptiles, amphibians, fish and invertebrates. The assessment considered the impacts of:

- Habitat loss and fragmentation including loss of roosting, foraging, breeding and resting sites and habitats;

- Habitat severance and barrier effects;

- Habitat and food source degradation as a result of:
    - Surface water / groundwater quality impacts;
    - Impacts on the hydrological regime;
    - Introducing / spreading non-native invasive species; and
    - Air quality impacts.
- Disturbance and displacement including as a result of lighting, noise and increased human activity; and
- Mortality risks.

Section 12.4.3 of Chapter 12 describes the potential Construction Phase impacts on biodiversity with Table 12.19 summarising all those potential impacts, and Section 12.4.4 of Chapter 12 describes the potential Operational Phase impacts with a summary provided in Table 12.20. The assessment identifies a number of potentially significant impacts at the local geographic scale, which are largely as a result of habitat degradation and loss, and disturbance to fauna species.

The Shankill submissions raise a number of specific issues with respect to biodiversity through Shankill, mentioning the importance of the area to a range of species including bats and other mammals, birds, reptiles (common lizard) and insects, and the potential for impact on these species as a result of habitat loss and tree removal. Chapter 12 describes the impact assessments undertaken for all species, as summarised in the following paragraphs, with a description of mitigation measures proposed following.

Bats

The potential Construction Phase impact on bats is described in Section 12.4.3.4.1 of Chapter 12, and describes the potential impacts associated with roost loss, habitat loss as a result of fragmentation of foraging / commuting habitat and commuting routes, and installation of temporary working lighting which may cause disturbance to flight patterns. The assessment does not identify any potential significant impacts on bats through Shankill during the Operational Phase given the location in an already highly disturbed landscape (the existing habitat already lines a busy road with existing vehicle and pedestrian traffic and existing artificial lighting).

With respect to the potential for roost loss during construction, Section 12.4.3.4.1.1 of Chapter 12 states the following:

'*There are no confirmed bat roosts located within the footprint of the Proposed Scheme. Several trees which have been identified as being suitable to support roosting bats will be lost as a result of the Proposed Scheme. Refer to Section 12.3.8.1.7 and Figure 12.7.2 for descriptions and their locations. The Proposed Scheme will not result in the loss of any known breeding / resting sites for any bat species, however, it will result in the removal of 19 potential roost sites in the form of the above mentioned PRF trees. Therefore, in the absence of mitigation, there is potential for the felling of these trees to result in direct harm and pose a mortality risk to bats, should bats be present in the trees at the time of felling. This could result in a significant negative effect on the conservation status of bats at the local geographic level*.'

With respect to habitat loss as a result of fragmentation of foraging / commuting habitat and commuting routes during construction Section 12.4.3.4.1.2 states the following:

'*Removal of suitable habitat for foraging and / or commuting bats (e.g. scattered trees and parkland, dry meadows and grassy verges, scrub, mixed broadleaved woodland and treelines / hedgerows) within the footprint of the Proposed Scheme is calculated as approximately 4.17ha on a permanent basis and 4.06ha on a temporary basis. Habitat removal will occur within a highly disturbed urban environment with low numbers of species records. The affected habitats are not for the most part considered to provide significant contributions to CSZs of roosts located outside of the footprint of the Proposed Scheme. The effect of habitat fragmentation and the barrier effect associated with the construction of the Proposed Scheme is therefore considered to be significant at the Local Geographic level only*.'

Finally, with respect to the need for temporary construction lighting Section 12.4.3.4.1.3 of Chapter 12 states:

'*The bulk of the existing corridor is largely illuminated by regularly spaced lighting columns for much of its length and therefore the requirement for lighting to accommodate construction works during night-time will be limited, in areas where existing light levels are low and of short duration. The effect of the additional lighting is therefore considered to be significant at a local level only and temporary*.'

Refer to the Mitigation Measures section below for a description of proposed mitigation measures to reduce the potential for impact on bats.

Other Mammals

The biodiversity assessment also includes the assessment of impacts on other mammals relevant to Shankill including badger, otter, and other mammals (hedgehog, Irish hare, Irish stoat, pine marten, pygmy shrew, red squirrel, fox and rabbit). The potential Construction Phase impacts on mammals are described in Section 12.4.3.4 of Chapter 12, with the potential locally significant impacts being similar across the different mammal types, namely disturbance / displacement, loss of habitat and habitat degradation. Table 12.19 in Chapter 12 summarises all of the potential (pre-mitigation) impacts during the Construction Phase, with Table 3.52 below providing an extract of that table showing the mammal assessments.

Table 3.52: Extract from EIAR Chapter 12 (Biodiversity) (Table 12.19)

Table 12.19: Summary of Potential Construction Phase Impacts (Pre-mitigation)

Ecological Receptor	Ecological Valuation	Potential Impacts	Potential Significance
Badger	Local Importance (Higher Value)	Disturbance / displacement (lighting)	Likely significant effect at the local geographic scale
Otter	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale
Marine mammals (Annex I species of nearby SACs: harbour porpoise, harbour seal and grey seal)	International Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale
Marine mammals (all other marine mammals)	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale
Other mammal species protected under the Wildlife Acts	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale

Potential Operational Phase impacts are described in Section 12.4.4.4 of Chapter 12, with the potential impacts being similar, being mainly associated with habitat degradation and disturbance / displacement. Table 12.20 in Chapter 12 summarises all of the potential (pre-mitigation) impacts during the Operational Phase, with Table 3.53 below providing an extract of that table showing the mammal assessments.

Table 3.53: Extract from EIAR Chapter 12 (Biodiversity) (Table 12.20)

Table 12.20: Summary of Potential Operational Phase Impacts (Pre-mitigation)

Ecological Receptor	Ecological Valuation	Potential Impacts	Potential Significance
Badger	Local Importance (Higher Value)	Disturbance / displacement (lighting)	Likely significant effect at the local geographic scale
Otter	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale
Marine mammals (Annex I species of nearby SACs: harbour porpoise, harbour seal and grey seal)	International Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale
Marine mammals (all other marine mammals)	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale
Other mammal species protected under the Wildlife Acts	Local Importance (Higher Value)	None	N/A

Refer to the Mitigation Measures section below for a description of proposed mitigation measures to reduce the potential for impact on other mammals.

Birds

The potential Construction Phase impact on birds are described in Section 12.4.3.5 of Chapter 12, assessing both breeding birds (Section 12.4.3.5.1) and wintering birds (Section 12.4.3.5.2). With respect to the impacts of habitat loss on breeding birds Chapter 12 states the following:

'*The habitat areas that will be lost as a result of the Proposed Scheme form a relatively small part of larger expanses of similar habitat types and mosaics in the wider locality. Parks and greenspaces form a vital resource for breeding birds within an urban setting. These areas of suitable breeding bird nesting and/or foraging habitat available in the wider locality of the Proposed Scheme (i.e., from approximately 0.3 to 2km from these existing sites located within the footprint of the Proposed Scheme) include:*

- *Parks and greenspaces with hedgerow, treeline and/or scrub boundaries such as Loughlinstown Woods pNHA, St. Stephens Green, Iveagh Gardens, Leeson Park, Herbert Park, Elm Park golf course, UCD, Cabinteely Park, Kilbogget Park, Deerpark and Shanganagh Park;*
- *Woodland such as that present in Loughlinstown Woods pNHA; and*
- *Sections of the watercourses both upstream and downstream of the Proposed Scheme.*

None of the habitat areas to be lost are unique to the locality and, either individually or collectively, are not likely to support a significant proportion, or the only population, of any given breeding bird species locally. Although a temporary decline in overall breeding bird abundance could potentially occur at a very local level (i.e., the footprint of the Proposed Scheme), this is unlikely to affect the local range of the breeding bird species present nor is it likely to affect the ability of these breeding bird populations to maintain their local populations in the long-term.'

Similar to the assessment of breeding birds, on the subject of habitat loss and the impact on wintering bird feeding sites, Chapter 12 states the following:

'*There are also large areas of suitable foraging and/or roosting habitat available for these wintering bird species both adjacent to, and in the wider locality of the Proposed Scheme (i.e., beyond the 300m study area, from approximately 300m from existing sites located within the footprint of the Proposed Scheme) including:*

- *Parks and greenspaces such as Loughlinstown Woods pNHA, St. Stephen's Green, Iveagh Gardens, Leeson Park, Herbert Park, Elm Park, UCD, Cabinteely Park, Kilbogget Park, Deerpark and Shanganagh Park; and*
- *Wetland habitat associated with South Dublin Bay and River Tolka Estuary SPA, and North Dublin Bay SPA.*

It is very likely that these wintering bird species currently utilise these and other suitable lands in the wider area to a similar and/or greater intensity.

The small numbers of wintering birds which are disturbed during construction will likely be displaced to suitable sites in the surrounding environment, such as those listed above, and therefore impacts are not considered to be significant beyond the local level. There will be no land take at any site with suitability for wintering birds. Therefore, in consideration of these factors, an increase in short-term disturbance or displacement effects will not affect the conservation status of any wintering bird species and will not result in a significant negative effect, above the local level.'

During the Operational Phase, the main impacts on breeding birds will be as a result of disturbance / displacement, with Section 12.4.4.5.1.1 of Chapter 12 stating the following:

'*Localised disturbance effects on breeding birds will most likely be of greater impact at areas where greater quantities of vegetation may be lost than the remainder of the scheme (e.g., UCD campus bus interchange plaza, and sections of the treeline (WL2) along both sides Dublin Road towards the Wilford Junction roundabout). The removal of screening vegetation is likely to result in reduced height vegetation or complete lack of screening from the Proposed Scheme. This could result in localised displacement, owing to the decreased screening effect of habitats outside the Proposed Scheme. It is therefore considered that there may be a temporary significant effect on breeding birds at a local scale,*

until such a time that newly planted vegetation, such as treelines, establish and the screening effect is restored.'

'*Although the Proposed Scheme is predicted to have a long-term effect on local breeding bird populations, even at a local level, this is not predicted to affect the ability of local breeding bird species to persist within their current ranges or to maintain their populations long-term. Therefore, the Proposed Scheme is not likely to affect the conservation status of breeding bird species and will not result in a likely significant negative effect, at any geographic scale*.'

Similarly for wintering birds, Section 12.4.4.5.2.1 of Chapter 12 states the following on the potential for disturbance / displacement:

'*The only area directly adjacent to the Proposed Scheme which was considered to have potential to support wintering birds was the Shanganagh Park amenity grassland. Survey evidence revealed low usage of the site, by a small number of SCI or wintering bird species. The removal of vegetation to allow the widening of the footpath to accommodate a cycle path, does not contribute to significant loss of foraging territory for wintering birds, nor does it extend significantly further into the area used by wintering birds from its current extent. As any operational noise increases are not likely to alter the existing baseline noise effect on wintering birds in the locality, effects of noise disturbance can also be excluded.*

Therefore, any displacement of wintering birds from habitat areas during the Operational Phase of the Proposed Scheme is not likely to affect the conservation status of wintering bird species and will not result in a likely significant negative effect, at any geographic scale.'

Refer to the Mitigation Measures section below for a description of proposed mitigation measures to reduce the potential for impact on birds.

Reptiles

The potential Construction Phase impacts on the common lizard is described in Section 12.4.3.6 of Chapter 12 with respect to both disturbance and mortality risk, and habitat severance / barrier effect as follows:

'*Site clearance works have the potential to result in disturbance to, and the direct mortality of, common lizard. Given the relatively low area of potentially suitable habitat for common lizard in the wider study area, the number of individuals that would potentially be at risk is low and would be unlikely to affect the local populations in the long-term. Therefore, disturbance or mortality risk are not likely to affect the species' conservation status or result in a significant negative effect, at any geographic scale*.'

'*The temporary to short-term physical disruption of the existing landscape during site clearance and construction could fragment habitat used by common lizard. As a temporary to short-term impact, this is unlikely to present a significant barrier to the movement of the species such that it would affect the local common lizard population in the long-term. Therefore, habitat severance during construction and any associated barrier effect are not likely to affect the species' conservation status and are not predicted to result in a significant negative effect to the common lizard, at any geographic scale*.'

Similarly, during the Operational Phase, the assessment of the potential for impact on the common lizard as a result of habitat severance and mortality risk caused by the Proposed Scheme (Section 12.4.4.6) is not assessed to be significant on any geographic scale given that the existing road would already be acting as a barrier and mortality risk.

Insects

Invertebrates were considered in the biodiversity impact assessment as described in Chapter 12. Section 12.3.13 of Chapter 12 describes the baseline with respect to invertebrates including white-clawed crayfish, freshwater molluscs, marsh fritillary butterfly and other invertebrates (e.g. butterflies, damselflies, dragonflies and bees). As described in Section 12.3.13, freshwater molluscs are the only invertebrates considered in the impact assessment. As described in Section 12.3.13.4 of Chapter 12:

'*Loss of natural and semi-natural habitats has been a key driver in decline of pollinators who require a balanced diet from a range of plant species throughout their active foraging season, which lasts from early spring until late autumn (Trinity College Campus 2017). Isolated and fragmented sites which are*

adjacent to the route of the Proposed Scheme include: Loughlinstown Woods pNHA, St. Stephen's Green, Iveagh Gardens, Leeson Park, Herbert Park, Elm Park, UCD, Kilbogget Park, Deerpark, Shanganagh Park and Cabinteely Park. These other invertebrate species favour species-rich semi-natural grasslands and meadows, upland heathland and sand dunes. Habitats within close proximity to the Proposed Scheme which correspond to species requirements include areas of ornamental planting along roadsides, parkland, canals, and gardens. Such habitats are fragmented and highly disturbed and are therefore deemed unsuitable for significant populations of Red listed invertebrates (Biesmeijer et al., 2006; Öckinger et al., 2009). As such, other invertebrates are not considered further in the assessment.'

Mitigation Measures

Section 12.5 of Chapter 12 describes the mitigation and monitoring measures required to reduce / remove the identified potential impacts. These mitigation measures are also replicated in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and the Construction Phase mitigation is further replicated in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 Part 1 of the EIAR. Proposed mitigation measures for the reduction of impacts as a result of habitat loss and fragmentation during the Construction Phase include the following:

'*Where practicable, areas of vegetation including habitats of Local Importance (Higher Value), (i.e., mixed broadleaved woodland (WD1), scattered trees and parkland (WD5), hedgerow (WL1), treeline (WL2) and immature woodland (WS2) habitat types), which lie within the footprint, or along the boundary of the Proposed Scheme, will be retained. Proposed planting incorporated into the Proposed Scheme will be implemented by the appointed contractor, shown as design mitigation, is listed below and displayed on the Landscaping General Arrangement drawings (BCIDE-JAC-LA-0013_XX_00-DR-LL-9001) in Volume 3 of this EIAR. These areas will be protected for the duration of construction works and fenced off at an appropriate distance.*

To mitigate loss of habitat, proposed planting incorporated into the Proposed Scheme will be implemented by the appointed contractor listed below. This planting is listed below and displayed on the Landscaping General Arrangement drawings BCIDB-JAC-ENV-LA-0013_XX-DR-LL-0001 in Volume 3 of this EIAR:

- *551 trees planted;*
- *1,662m of proposed hedgerow;*
- *3,942m^2 of proposed species-rich grassland;*
- *1,721m^2 of proposed ornamental planting;*
- *4,153m^2 of proposed native tree planting; and*
- *25,050m^2 of proposed amenity grassland planting.*'

With respect to the potential impact on bats during the Construction Phase, which is the subject of a number of Shankill submissions, there are a number of required mitigation measures described (Section 12.5.1.4.1), including:

- Protection of bats during vegetation clearance;
- Pre-construction surveys to identify bat roosts;
- Installation of bat boxes;
- New tree and hedge planting; and
- Measures to reduce the impacts of light.

There are also specific mitigation measures included for badger (Section 12.5.1.4.2), otter (Section 12.5.1.4.3) and other mammals (Section 12.5.1.4.5), including the following measure:

'*Where possible, habitats of importance providing refuge / shelter to other protected mammals such as scattered trees and parkland, treeline and hedgerow habitat types, which lie within the footprint, or along the boundary of the Proposed Scheme, that are not directly impacted will be retained. These areas will*

be protected for the duration of construction works and fenced off at an appropriate distance. Vegetation to be retained is shown on the Landscaping General Arrangement drawings (BCIDB-JAC-LA-0013 _XX_00-DR-LL-0001) in Volume 3 of this EIAR. Similar to the mitigation for breeding birds, tree removal, particularly where understorey vegetation is abundant will be undertaken outside of the bird nesting season, but as late in the wintering season (e.g., February) so as to give small resting mammals such as hedgehog that might be hibernating a chance at moving.'

Mitigation measures for birds are described in Section 12.5.1.5 with similar mitigation measures described with respect to new and replacement planting and protection of existing vegetation, including the following:

'*Where practical, vegetation (e.g., hedgerows, trees, scrub, bankside vegetation and grassland) will not be removed, between the 01 March and the 31 August, to avoid direct impacts on nesting birds.*

Where the construction programme does not allow this seasonal restriction to be observed, then these areas will be inspected by a suitably qualified ecologist as engaged by the appointed contractor, for the presence of breeding birds prior to clearance.

Areas found not to contain nests will be cleared within three days of the nest survey, otherwise repeat surveys will be required. Vegetation clearance will not commence where nests are present, works will resume when birds have fledged and nests are no longer in use, or an agreement is reached with the NPWS.'

Following the implementation of the mitigation measures contained in Chapter 12 (and replicated in Chapter 22 and Appendix A5.1), the biodiversity impact assessment concludes with respect to the Construction Phase '*the Proposed Scheme will not result in any significant residual effects above the local scale on the KERs identified (see Table 12.21) on its own, or cumulatively together with other proposed developments*', with the potential local significant impacts being as a result of the localised impacts on habitats and disturbance / displacement during construction. Following the completion of construction, during the Operational Phase, Chapter 12 states that '*the Proposed Scheme will not result in any significant residual effects on the KERs identified (Table 12.22) on its own, or cumulatively together with other proposed developments*'.

Climate

As outlined above, a number of submissions raised the issue of climate impact and carbon emissions, with a particular emphasis in some submissions on climate impacts associated with tree loss. Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'the Proposed Scheme has the potential to reduce CO_2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively.'

Specifically in relation to the carbon footprint of the Construction Phase, Section 8.5.1.1 of Chapter 8 (Climate) in Volume 2 of the EIAR states:

'*The Proposed Scheme is estimated to result in total Construction Phase CO_2eq emissions of 15,652 tonnes embodied CO_2eq for materials over a 36-month period. The IEMA Guidance (IEMA 2022) states that 'Carbon budgets allow for continuing economic activity, including projects in the built environment, in a controlled manner'. Thus, projects which have a carbon footprint are not necessarily significant provided that the projects are compatible with net zero by 2050 and the full range of mitigation measures are employed to minimize the carbon footprint. Given that the construction of the Proposed Scheme itself will lead to operational GHG emission reductions overall then the Construction Phase should be viewed as compatible with net zero emission targets. Thus, the assessment of significance for the Construction Phase of the Proposed Scheme, taken on its own is deemed to have a minor adverse impact given that the Construction Phase emissions are equivalent to an annualised total of 0.014% of Ireland's non-ETS 2020 target and 0.087% of the 2030 Transport Emission Ceiling. The potential impact*

to climate due to embodied carbon emissions during the Construction Phase, prior to mitigation, will be Negative, Minor Adverse and Short-Term.'

Specifically with respect to tree and vegetation clearance, the impact of this has been assessed under the heading of 'Land Use Change', with the assessment described in Section 8.3.4.1.2 of Chapter 8 as '*The change in land use associated with the Proposed Scheme, including the felling and planting of trees and vegetation, has been calculated using the methodology outlined in Chapter 4 (Forest Land) of the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (IPCC 2006). Land use change is also appropriately assessed using the same methodology*'. During the Construction Phase the impact from land use change is recorded in Section 8.5.1.4 as '*The Construction Phase of the Proposed Scheme is predicted to result in the temporary removal of grassland to facilitate the two construction compounds. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme leading to a Not Significant impact*', with the Operational Phase impact being described in Section 8.5.2.3 as '*The Operational Phase of the Proposed Scheme will not result in any significant changes to land use. Thus, there will be a negligible impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme*'.

Air Quality

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. The focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figure 7.1 (Monitoring Locations) in Volume 3 of the EIAR show the locations of air monitoring points along the Proposed Scheme, with four locations shown through the Shankill section of the Proposed Scheme (Sheet 4). The four monitoring locations which informed the air quality assessment were as follows:

- Seaview Park (Reference CBC0013DT005);
- 51 Beechfield Manor (Reference CBC0013DT004);
- Shankill Credit Union (Reference CBC0013DT003); and
- Quinns Road / Shrewsbury Road (Reference CBC0013DT002).

Figures 7.3 to 7.8 in Volume 3 of the EIAR map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) from traffic during the Construction Phase (Figures 7.6 to 7.8) and Operational Phase (Figures 7.3 to 7.5). For the section of the Proposed Scheme through Shankill (Sheet 4 in each Figure), the significance of the change at the nearest sensitive receptors is negligible for each pollutant during both the Construction and Operational Phases.

With respect to potential dust impacts, Chapter 7 has assessed the potential impacts related to dust during the Construction Phase of the Proposed Scheme. Section 7.2.4.4 of Chapter 7 describes the approach to the Construction Phase assessment undertaken and specifically describes dust as follows: '*The greatest potential impact on air quality during the Construction Phase is from construction dust emissions, PM_{10}/$PM_{2.5}$ emissions and the potential for nuisance dust. Dust is characterised as encompassing PM with a particle size of between 1 micron and 75 microns (1µm to 75µm). Deposition of dust typically occurs in close proximity to the source and with IAQM Guidance (IAQM 2014) defining a maximum impact area of 350m from the dust-generating activity. Sensitivity to dust depends on the duration of the dust deposition, the dust-generating activity, and the nature of the deposit. Therefore, a higher tolerance of dust deposition is likely to be shown if only short periods of dust deposition are expected and the dust-generating activity is either expected to stop or move on*'. The assessment considered the sensitivity to dust soiling with respect to people and property, human health, and ecology; and assessed four major dust-generating activities, namely demolition, earthworks, construction, and track out.

Section 7.4.2.1 describes the impact assessment and conclusions with respect to construction dust. The summary of the assessment states '*In accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Construction Phase dust emissions pre-mitigation are overall Negative, Not Significant and Short-term*', and provides a summary table (see Table 3.54 below) of the risk of dust impacts in order to inform the need for mitigation.

Table 3.54: Extract from Chapter 7 of EIAR (Table 7.24)

Table 7.24: Summary of Dust Impact Risk Used to Define Site-Specific Mitigation

Potential Impact	Dust Emission Magnitude			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Low Risk	High Risk	High Risk	High Risk
Human Health	Low Risk	Medium Risk	Medium Risk	Medium Risk
Ecological	Low Risk	Medium Risk	Medium Risk	Medium Risk

Section 7.5.1 describes the required Construction Phase mitigation measures, with specific dust mitigation listed as follows:

'*In order to minimise dust nuisance impacts, a series of mitigation measures that are applicable to the Construction Phase of the Proposed Scheme will be implemented by the appointed contractor. In summary, the mitigation measures will include:*

- *Public roads affected by the Proposed Scheme will be regularly inspected for cleanliness and cleaned as necessary;*
- *Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays (or similar dust suppression methods) will be used as required if particularly dusty activities associated with the construction contract are necessary during dry or windy periods;*
- *During movement of dust-generating materials both on and off site, trucks will be covered with tarpaulin and before entrance onto public roads, trucks will be checked to ensure the tarpaulins are properly in place; and*
- *The appointed contractor will provide a site hoarding of 2.4m height along noise sensitive boundaries, at a minimum, at the Construction Compounds which will assist in minimising the potential for dust impacts off-site.*

The appointed contractor will keep the effectiveness of the mitigation measures under review and revise them as necessary. In the event of dust nuisance occurring outside the works boundary associated with the Proposed Scheme, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem.'

Section 7.6.1 describes the predicted residual impacts following the implementation of the proposed mitigation measures. Specifically with respect to dust it states, '*When the dust minimisation measures detailed in the mitigation section of this Chapter are implemented, fugitive emissions of dust from the site will be insignificant and pose no nuisance at nearby receptors. Thus, there will be no significant residual Construction Phase dust impacts*'.

Noise

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR assesses the impact as a result of changes to noise and vibration caused by both the Construction and Operational Phases within the study area. The focus is on noise sensitive receptors which will bound the Proposed Scheme and those along diverted traffic routes within the study area. Figure 9.2 (Noise Monitoring Locations) in Volume 3 of the EIAR show the locations of noise monitoring points along the Proposed Scheme, with 15 locations shown through the Shankill section of the Proposed Scheme (Sheet 11 and 12). The 15 monitoring locations which informed the noise assessment are listed in Table 9.4 in Chapter 9 (shown in Table 3.55 below).

Table 3.55: Extract from EIAR Chapter 9 (Biodiversity) (Table 9.4)

Table 9.4: Noise Monitoring Locations – Loughlinstown Roundabout to Bray North (Wilford Roundabout)

Location	Description of Survey Location
Unattended Monitoring Locations	
CBC0013UNML001 Note 1	Rear garden of residential property, 5m from façade with direct line of sight to R837 Dublin Road. Located approximately 55m from R837 road and 35m from M11 motorway road edge.
CBC0013UNML002	In front residential garden separated from R837 Dublin Road by wall. Located approximately 7m from R837 road edge and 18m from residential façade.
CBC0013UNML003	In front residential garden, in line with property façade and separated from R119 Dublin Road by wall. Located approximately 6m from R119 road edge.
CBC0013UNML004	In front residential garden, in line with property facade and separated from R119 Dublin Road by wall. Located approximately 12m from R119 road edge.
CBC0013UNML005	In front residential garden separated from R119 Dublin Road by wall. Located approximately 10m from R119 road edge and 5m from residential façade.
Attended Monitoring Locations	
CBC0013ANML011	Green area to northwest Parc na Silla Rise housing estate to west of M11 road, in line with closest facades of properties facing onto M11. Located approximately 40m from M11 road edge.
CBC0013ANML012	On footpath in National School to northwest of R837 Dublin Road / Stonebridge Road junction, in line with façade of school facing onto R837 Dublin Road. Located approximately 25m from R837 Dublin Road.
CBC0013ANML013	In carpark of Church located to northeast of R837 Dublin Road / R119 Shanganagh Road roundabout junction. Located approximately 45m from R837 road edge.
CBC0013ANML014	On footpath at entrance to residential property along cul de sac to west of Shankill Roundabout at R837 Dublin Road / R119 Dublin Road junction. Located approximately 15m from R8237 road edge, Separated from road by short wall running along length of properties overlooking the R837 Dublin Road.
CBC0013ANML015	Grass verge to southwest of R119 Dublin Road / Cherrington Road junction, in line with façade of residential properties facing onto R119 Dublin Road. Located approximately 33m from R119 road edge.
CBC0013ANML016	On footpath to north of R119 Dublin Road / Castle Farm junction, in line with closest residential facades facing onto R119 Dublin Road. Located approximately 15m from R119 Dublin Road.
CBC0013ANML017	Grass verge to south of Beech Road housing estate, in line with residential facades facing onto R119 Dublin Road. Located approximately 30m from R119 road edge.
CBC0013ANML018	Grass area 110m to southeast of R119 Dublin Road / Crinken Lane junction. Located in line with façade of residential property facing onto R119 Dublin Road. Located approximately 30m from R119 road edge, separated from R119 by 6ft wall, comparable to residential properties to east of this section of the R119.
CBC0013ANML019	On footpath in line with façade of Crinken Church facing into R119 Dublin Road. Located approximately 30m from R119 road edge.
CBC0013ANML020	In carpark of a Secondary School, 175m to northwest of R119 Dublin Road / M11 slip road. Located approximately 10m from R119 road edge.

Note 1: An attended noise survey was also undertaken at CBC0013UNML001, logged for a period of three-hours in the front garden of the property. The three-hour survey results are summarised in Table 9.22.

Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with the section through Shankill (Sheet 6 and 7) mapped with an impact significance rating ranging between Slight-Moderate (between Loughlinstown Roundabout and the St. Anne's Church junction, and Not Significant to Imperceptible / Positive between the St. Anne's Church junction and the Wilford Junction. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Not Significant to Imperceptible / Positive through Shankill. The modelled impact improves in places in the Design Year modelling to Imperceptible / Positive through the whole section.

Aside from construction traffic, Construction Phase noise from the works has also been assessed in Section 9.4.3.2 of Chapter 9, which describes the potential temporary impacts associated with general road works; road widening, upgrade and utility diversion works; landscaping; boundary treatments; piling; retaining walls; and additional structural works. These impacts will be greatest at the nearest sensitive receptors, with the potential impacts reducing the further the receptor is from the noise source.

Construction noise mitigation measures are set out in Section 9.5 in Chapter 9 and are also summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR.

During the Construction Phase, Section 9.5.1.1 states that:

'*The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228–1 (BSI 2014a) and European Communities Noise Emissions by Equipment for Use Outdoors (Amendment) Regulations 2006 (S.I. No 241/2006).*'

It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 (BSI 2014a)'*.

Section 9.5.1.1 also states that:

'*BS 5228–1 includes guidance on several aspects of construction site practices, which include, but are not limited to:*

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1. states that:

'*The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.9 and Table 9.12). Reference to Table 9.46* [Summary of Potential Construction Phase Noise Impacts] *indicates that intrusive works occurring within 65m of NSLs will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e. daytime or evening).'* [Note - Table 9.9 of Section 9.2.4.1 of Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme and Table 9.12 of Section 9.2.4.1 of Chapter 9 sets out the recommended construction vibration thresholds for buildings].

Section 9.5.1.1.4 in Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR sets out the proposed working hours and states:

'*It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state:

'*The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.46), other construction activities will be scheduled to not result in significant cumulative noise level.'*

Section 9.6.1 of Chapter 9 summarises the residual Construction Phase impacts as follows:

'*Given the linear nature of the works, noise emissions related to construction works will be of a temporary nature at any one area as the works progress along the length of the Proposed Scheme. The application of the proposed noise thresholds and restricted hours of operation, along with the implementation of appropriate noise control measures, will ensure that noise impact is controlled within acceptable limit values.*

During the Construction Phase of the Proposed Scheme, noise levels at properties closest to working areas will be temporarily increased. The most appropriate noise mitigation measures for each work area will be determined taking account of the various control measures included within Section 9.5.1.1, and the CEMP in Appendix A5.1 in Volume 4 of the EIAR and Chapter 5 (Construction). The various

mitigation measures will be selected in order to control CNLs to within the limit values included in Table 9.8 as far as practicable.

Once the various mitigation measures are put in place, noise impacts associated with the Construction Phase will be Negative, Not Significant to Moderate and Temporary during all key Construction Phases during daytime periods.'

Section 9.6.2 of Chapter 9 summarises the residual Operational Phase impacts as follows:

'*The Proposed Scheme aligns with the policy objectives of The Dublin Agglomeration NAP 2018 – 2023 (DCC; FCC; SDCC; DLRCC 2018) to reduce traffic noise exposure to populations across the city through the incorporation of improved public transport, increasing bus, train and bicycle journeys and the replacement of diesel fleet to electric and natural gas fleet. The results of the noise assessment for the Operational Phase confirms that with the introduction of the various measures included as part of the Proposed Scheme, a reduction in traffic noise can be achieved along the Proposed Scheme where highest existing traffic noise levels are experienced. The various design measures associated with the Proposed Scheme also align with the various intervention measures recommended within the WHO Environmental Noise Guidelines (WHO 2018) to reduce traffic noise exposure across populations.*

There are no significant residual Operational Phase noise or vibration impacts associated with the Proposed Scheme, whilst meeting the scheme objectives set out in Chapter 1 (Introduction).'

Landscape & Visual

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the potential landscape and visual impacts of the Proposed Scheme during both the Construction and Operational Phases. The assessment considers the impact on the overall character of the study area, the impacts on streetscape elements and visual impacts.

Section 17.4.3.1.3 of Chapter 17 describes the Construction Phase impact on townscape and streetscape character through the Shankill section of the Proposed Scheme as follows:

'*The baseline townscape is of very high sensitivity and construction of the Proposed Scheme will involve very substantial works along the road corridor. The Construction Phase involves demolition, excavation and construction works to kerbs, road carriageways, footpaths, junctions, surfacing and parking, utilities, and drainage features. The works will also involve long sections of temporary and permanent acquisition from Loughlinstown Roundabout to north of Shankill Village and from south of Shankill Village to Wilford Roundabout. This acquisition and associated works will give rise to substantial disruption, removal of existing boundaries, including established and historic stone walls, tree planting, and planting belts at a range of properties including residential, community / institutional, agricultural, public park and cemetery. The works will involve land acquisition from several residential properties, including established parkland properties such as Askefield House, Beauchamp House and Woodbrook House, which have attractive boundaries / stone walls and planted boundaries with the road corridor. Impact on the residential properties will remove sections of existing boundary walls and entrances, sections of driveway and established trees and hedgerows.*

The construction works will alter the existing streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Construction Phase on this section is assessed to be Negative, Very Significant / Profound and Temporary / Short-Term.'

Section 17.4.4.1.3 of Chapter 17 describes the Operational Phase impact on townscape and streetscape character through that same section as follows:

'*The baseline townscape is of very high sensitivity and operation of the Proposed Scheme will involve very substantial changes along this section, with widening of the road corridor, permanent acquisition from 23 residential properties as well from Rathmichael parish National School, St. Anne's Church, and Shanganagh Park and Cemetery, with resultant setback of boundaries and continuing effects from loss of mature trees / plantings removed during the Construction Phase. However, there will be provision of substantial replacement planting to consolidate the boundaries and woodland edges throughout this section. Screening planting will be restored to the boundaries of all impacted residential properties. Over the long-term there will be a reduction of the negative effects associated with removal of trees and*

other vegetation. The Operational Phase will not alter the existing townscape character, but will substantially alter the local streetscape amenity across much of this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Moderate and Long-Term.'

Chapter 17 also considered impacts on specific streetscape elements including trees and vegetation. It assesses the impact on Tree Preservations Orders and Objectives. No trees subject to a Tree Preservation Order will be significantly impacted by construction or operation of the Proposed Scheme, however there will be impacts on Tree Preservation Objective as described in Section 17.4.3.2.6 of Chapter 17:

'*Construction works will require the removal of trees subject to tree preservation objectives at Thingwall (Dublin Road), Woodbank (Dublin Road), Rathmichael Parish National School (Dublin Road), St. Anne's House (Dublin Road), Shanganagh Park and Cemetery, Woodbank Estate and Corke Lodge. The works will result in substantial removal of mature trees from these properties. The sensitivity is very high and the magnitude of change will be very high.*

The potential townscape / streetscape and visual impact of the Construction Phase on tree preservation objectives is assessed to be Negative, Very Significant and Short-Term.'

Section 17.4.4.2.6 of Chapter 17 describes how the impact will be reduced over time as new planting becomes established:

'Operation of the Proposed Scheme will not impact further on tree protection designations, however, the effects resulting from loss of trees removed during the Construction Phase will remain. Replacement trees are proposed where feasible and the negative effects will be reduced over the long-term as the proposed replacement trees mature. The sensitivity is very high and the magnitude of change will be high.

The potential townscape / streetscape and visual impact of the Operation Phase on tree designations is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Significant and Long-Term.'

Chapter 17 also assesses the general impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 of Chapter 17 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below.

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist*.'

'*Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist*.'

'*The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase*.'

As summarised in Table 17.9 of Chapter 17, the Construction Phase impact on trees and vegetation is predicted to be Negative, Very Significant, Short-Term. As summarised in Table 17.10 in Chapter 17, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Moderate / Significant, Long-Term.

3.9.3.11.1 Seaview Park

Summary of issue raised

Submissions raised concerns regarding the removal of trees between the Dublin Road and the M11 Motorway near Seaview Park, due to them being used as a mitigation measure for noise abatement from the motorway, stating that the removal of these trees would make the noise unbearable.

Response to issues raised

The Landscape General Arrangement drawings (drawing set 05 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. The area at Seaview Park is shown on Sheet 41. An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 (Aboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, it is proposed to remove part of a mixed species group (Tree Number G0481 P) which is described as a '*Linear mixed species group comprising sycamore, ash, cherry and field maple that extends length of road behind stone wall*' and has been assessed as a Category B2 group (of moderate value and conservation, with its value being mainly landscape).

Sheet 41 of the Landscape General Arrangement Drawings (included in Figure 3.164) show the replanting proposals at that location, describing the change in that area as '*Front face of woodland block removed. Existing boundary wall re-built and set back. New native planting behind wall to repair the front face of the broader tree belt*.' The drawing also shows close to 40 new / replacement trees to be planted along the edge of the wooded area, with a mix of species proposed, namely Acer Campestre, Quercus Robur, Betula Pendula, Sorbus Torminalis and Acer Pseudoplatanus.

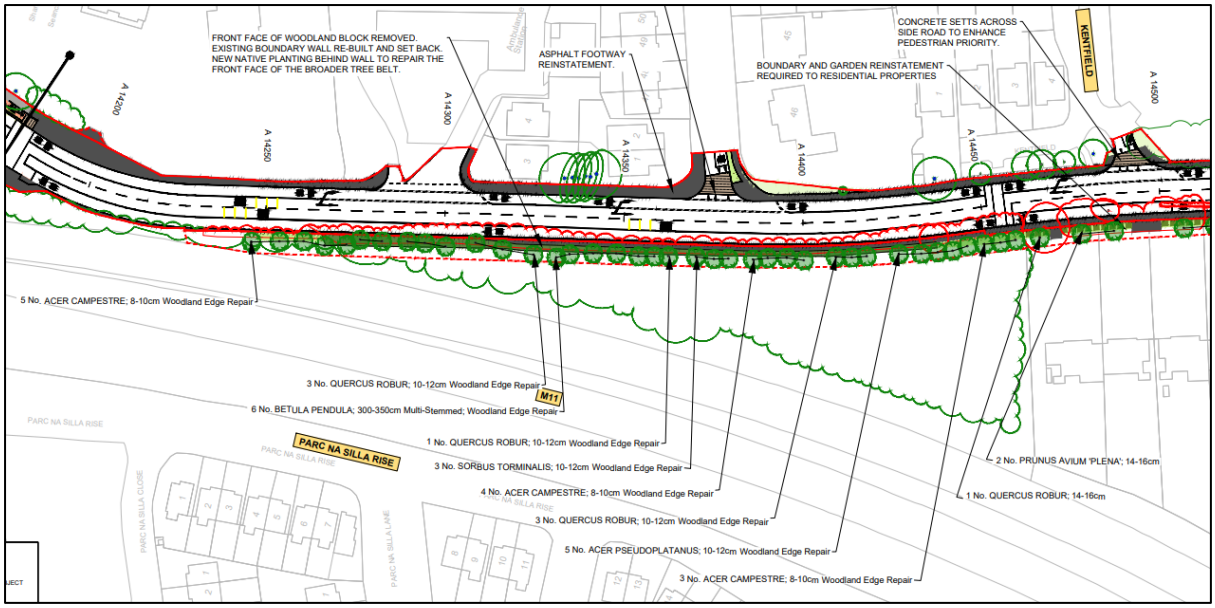


Figure 3.164: Extract from Landscape General Arrangement Drawings (Sheet 41)

The landscape and visual impact associated with tree removal and impacts on wooded areas is described in Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, and the impact with respect to biodiversity is assessed in Chapter 12 (Biodiversity) in Volume 2 of the EIAR, both being described in the preceding section of this report, Section 3.9.3.11 under 'Landscape and Visual' and 'Biodiversity' headings.

It should be noted that vegetation is not generally relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening. The existing trees at this location will be retained where possible with replacement planting proposed to replace any losses and repair the front of the woodland in front of Seaview Park. It should also be noted that there have been a number of changes made to the design at this location in order to minimise impact where possible. Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR

describes the alternatives considered through the design process, with the area specifically described in Section 3.4.1.3.4 as follows:

'*The Emerging Preferred Route for this section would have provided a full suite of two footpaths, two segregated cycle tracks, two bus lanes and two general traffic lanes from St. Anne's Church Roundabout to Loughlinstown Roundabout. The design in this section was reviewed as part of the development of the Preferred Route Option following consultation feedback, updated topographical survey information and a tree survey. Options were assessed for combinations of Signal Controlled Bus Priority in order to reduce the impact on adjacent properties and trees.*

Following the first Non-Statutory Public Consultation, taking comments from the public and local community feedback into account, the cycle tracks on this section were removed from the design due to the additional impact that the 4m of cross-section had on adjacent lands and properties.'

3.9.3.11.2 Beech Road

Summary of issue raised

A submission highlighted the importance of a row of trees directly in front of houses on Beech Road, stating that the local community work together to maintain the area and families play there. It also states that the wall and trees protect houses from the road, with that protection being removed under the current plans.

Response to issues raised

The Landscape General Arrangement drawings show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting at Beech Road on Sheet 45. An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 (Aboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, it is proposed to remove the following:

- A mixed species group (Tree Number G0258) which is described as 'Mixed species understorey group comprising ash, sycamore and beech', and has been assessed as a Category B2 group (of moderate value and conservation, with its value being mainly landscape);
- Two lime trees (Tree Numbers T0259 & T0261) which have been assessed as Category B1 trees (of moderate value and conservation, with its value being mainly arboricultural);
- Two Monterey pine trees (Tree Numbers T0260 & T0262) with one assessed as Category B1 (of moderate value and conservation, with its value being mainly arboricultural) and the other assessed as Category C1 (of low value and conservation, with its value being mainly arboricultural); and
- A eucalyptus tree (Tree Number T0263) which has been assessed as a Category B1 tree (of moderate value and conservation, with its value being mainly arboricultural).

Sheet 45 of the Landscape General Arrangement Drawings (included in Figure 3.165) show the replanting proposals at that location, describing the proposals in that area as 'R*einstatement of boundary planting using native trees and hardy ornamental shrubs*' and '*New boundary wall built to the back of realigned footway using existing stone where possible*'. The drawing also shows approximately 10 new / replacement trees to be planted along the front of Beech Road.

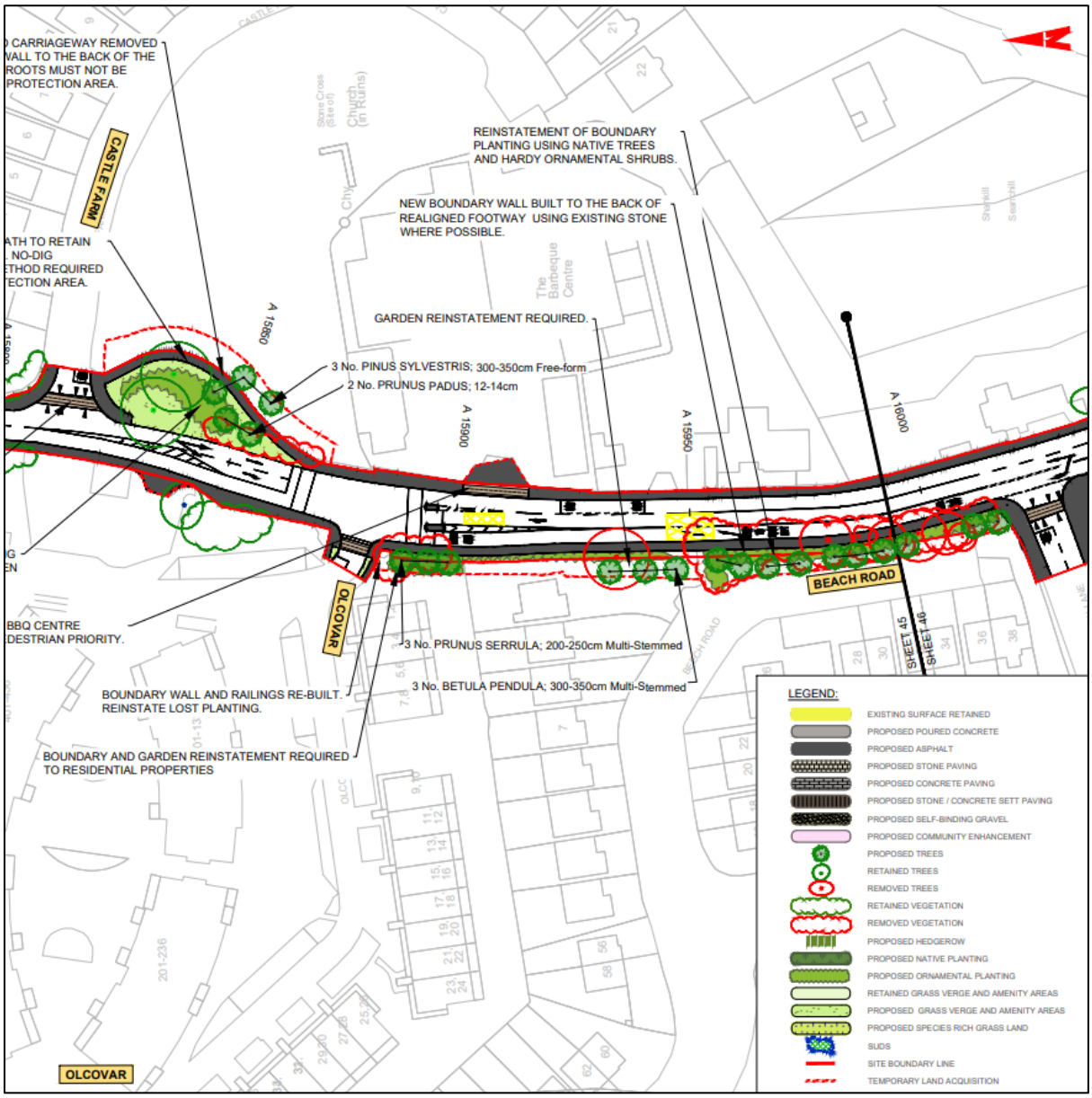


Figure 3.165: Extract from Landscape General Arrangement Drawings (Sheet 45)

The proposed reinstatement of the boundary along the front of Beech Road is also shown in the Photomontages which have been included in Figure 17.2 in Volume 3, Part 3 of 3 of the EIAR. The proposed view in the View 11 (Figure 17.2.11.2) photomontage (see Figure 3.166 below) shows the reinstatement of the boundary, with repositioned boundary wall and replacement boundary planting following time for new planting to become established.

Figure 3.166: Extract from Photomontage View 11 Proposed (Figure 17.2.11.2)

Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR list all mitigation measures required to manage and reduce impacts from the Proposed Scheme, with the Construction Phase measures also listed within Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR. With respect to heritage features such as the boundary wall in front of Beech Road (Mitigation Number AH11) states:

'*Mitigation will include recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR*.'

Given that the wall and trees will be reinstated at this location, the main impacts at that location will arise during the Construction Phase, with impacts reducing as the reinstated boundary wall and replacement planting become established, providing a similar level of screening from the main road.

3.9.3.11.3 Rathmichael Woods

Summary of issue raised

One submission raised concern that the footpath and proposed ramp at the entrance to Rathmichael Woods would damage the root structure of their two mature beech trees located adjacent to the Dublin Road. The submission states that an arborist noted no building or construction should be allowed within 20 feet of root structure or it would compromise the overall health and stability of the trees.

The submission also noted that the scale of the trees are not accurate on the drawings.

Response to issues raised

There is no road widening proposed into the property, which is subject of the submission, and therefore will be no impact on the existing boundary wall or the trees located within that boundary wall. The extent of works in the immediate area outside the wall will entail at most, some road overlay works on the existing road and some footpath construction.

As shown in the Landscape General Arrangement drawings (Sheet 42) (see Figure 3.167 below), the two trees at the corner of the property are to be retained. Those trees were identified and included in the Arboricultural Assessment (Appendix A17.1 in Volume 4, Part 4 of 4 of the EIAR). As seen in Figure 3.167 below, the existing trees (both retained and removed) are shown to scale in the Landscape

General Arrangement drawings. Tree markers in other drawings included in Volume 3, Part 1 and 2 of 3 of the EIAR are indicative of location only and do not show the scale of the trees.

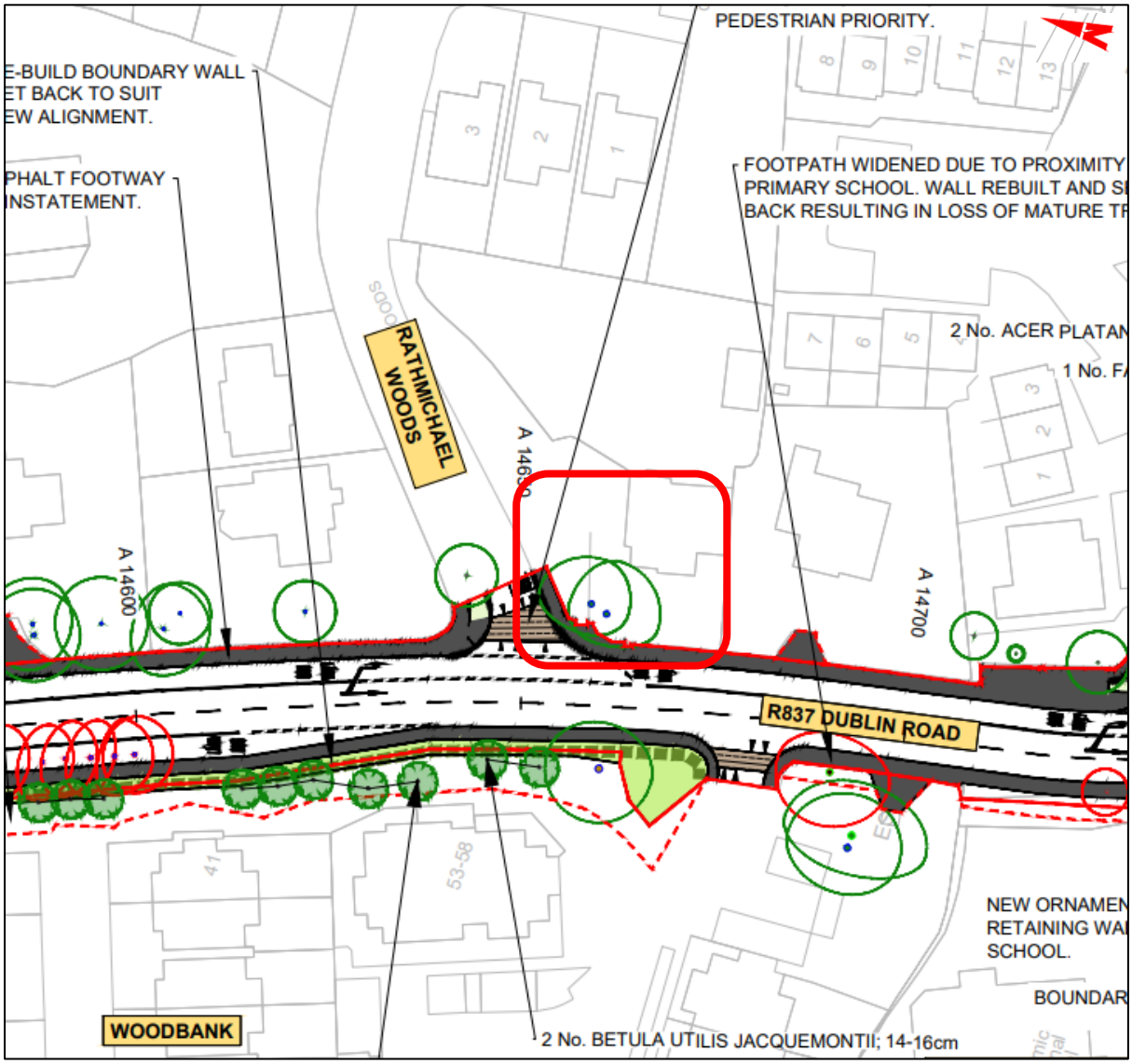


Figure 3.167: Extract from Landscape General Arrangement Drawings (Sheet 42)

Where boundaries and trees are to be retained, there are mitigation measures described within the EIAR to ensure their protection during construction. Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR list all mitigation measures required to manage and reduce impacts from the Proposed Scheme, with the Construction Phase measures also listed within Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR. With respect to heritage features such as the boundary wall and fence of the property at Rathmichael Woods (Mitigation Number AH24) states:

'*Mitigation to offset the risk of damage will include recording, protection and monitoring of the structures or boundaries (as relevant) prior to, and for the duration of the Construction Phase. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.*'

With respect to protection of the trees during construction, the Mitigation Number LV1 states:

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BSI 2012). Works required within the root protection*

area (RPA) of trees to be retained will follow a project-specific arboricultural methodology for such works, which will be prepared / approved by a professional qualified arborist. For details of trees to be retained refer to the Tree Protection Plans which are contained within the Arboricultural Impact Assessment (Appendix A17.1 in Volume 4 of this EIAR).'

3.9.3.11.4 Woodbank Estate

Summary of issue raised

Several submissions raised concerns regarding impact from the loss of trees and green space in front of Woodbank, and concern about the protection of the foliage and root system of the retained trees in that area.

One submission raised the concern that the removal of woodland between the M11 and R837 near Loughlinstown Roundabout, would expose the Woodbank residents to noise and pollution from 8 lanes of traffic.

Response to issues raised

The Landscape General Arrangement drawings show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting at Woodbank Estate on Sheet 42. An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 (Aboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, it is proposed to remove nine lime trees (Tree Numbers T0467 to T0475). One of those is assessed as Category A1 (of high value and conservation, with its value being mainly arboricultural), six are assessed as Category B1 (of moderate value and conservation, with its value being mainly arboricultural), one which is assessed as a Category B2 tree (of moderate value and conservation, with its value being mainly landscape), and one assessed as Category C1 (of low value and conservation, with its value being mainly arboricultural).

Sheet 42 of the Landscape General Arrangement Drawings (included in Figure 3.168) show the replanting proposals at that location, with 15 new trees proposed in Woodbank of a range of species including Betula pendula, Pyrus calleryana 'Chanticleer', Ulmus 'New Horizon' and Betula utilis jacquemontii, as well as new hedgerow to the rear of the repositioned boundary wall. The drawing also describes the proposals at the front of Woodbank as follows, '*Minor path realignment where required. Reinstate native hedge to boundary along with new tree planting*' and '*Re-build boundary wall set back to suit new alignment*'.

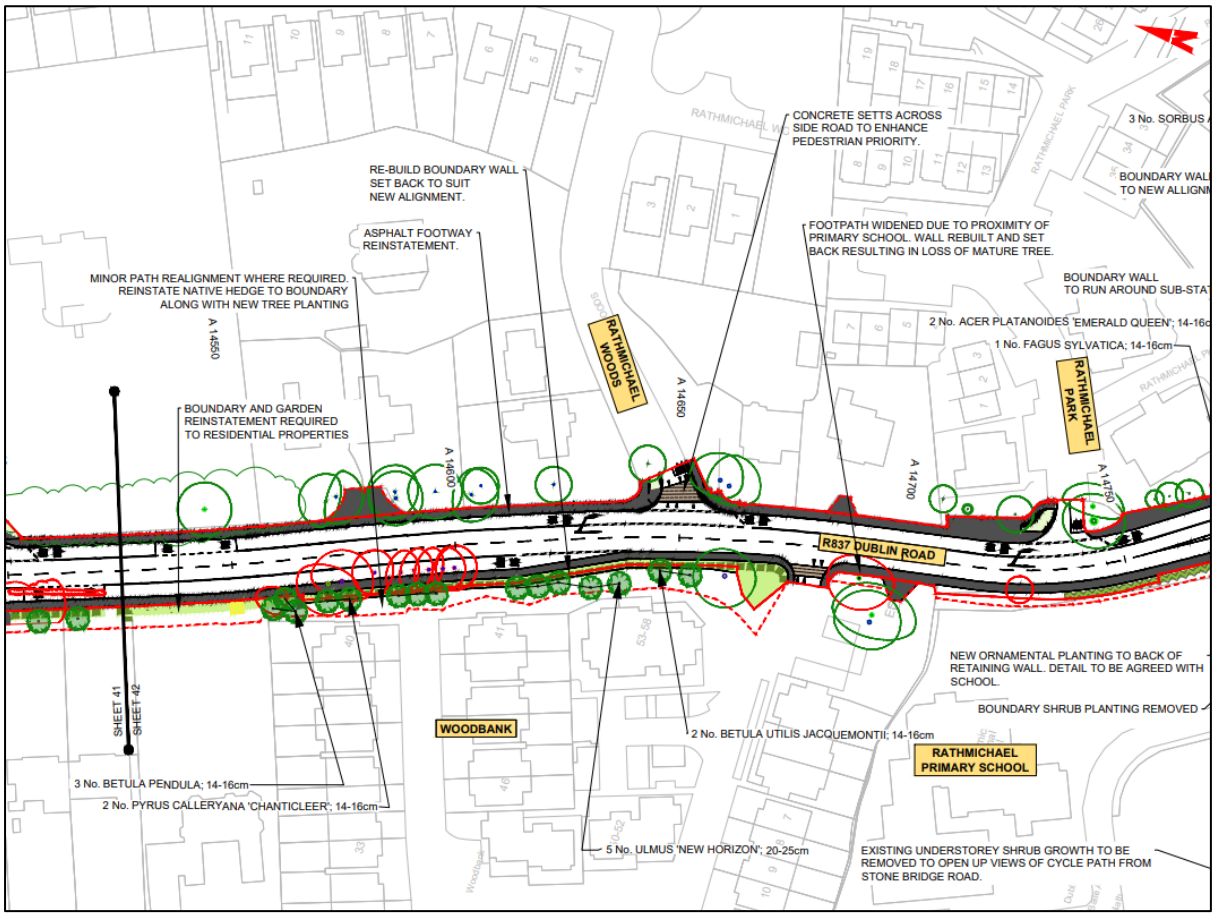


Figure 3.168: Extract from Landscape General Arrangement Drawings (Sheet 42)

As outlined previously, trees are only proposed to be felled where required to construct the Proposed Scheme, with the nine lime trees in Woodbank needing to be removed to allow space for the road to be widened. It should be noted that there is no proposal to remove any trees located between Woodbank Estate and the M11 as part of the Proposed Scheme, therefore maintaining the existing situation on the western edge of the estate. The tree removals close to Loughlinstown Roundabout and the resulting potential impacts on residents at that location (Seaview Park) are described in Section 3.9.3.11.1 above.

As outlined previously in other similar responses, trees and vegetation will be retained where possible, and where not possible, replacement planting and landscaping has been proposed to mitigate the losses. As outlined previously (e.g. in the Rathmichael Woods response in Section 3.9.3.11.3 above), mitigation measures have been described within the EIAR for the protection of retained trees and vegetation, and with respect to any works within root protection areas.

3.9.3.11.5 Dorney Court

Summary of issue raised

The submission raised the concern that the extent of damage to trees in Dorney Court is not clear.

Response to issues raised

The Landscape General Arrangement drawings show the area at Dorney Court on Sheet 43. As shown on Sheet 43 (see Figure 3.169 below), there is only one tree which will require removal, described on the drawing as follows '*Existing mature beech tree structurally poor and recommended to be felled due to proximity of road*'. It is proposed to retain all other trees in Dorney Court. Sheet 43 also includes a description of the works requirements in that area as follows:

'*Structural improvements to retaining wall in this area will require protection to all tree trunks and ground protection matting to avoid soil compaction. Removal of small lower branches and localised shrub clearance may be necessary for safe access. All works to existing vegetation shall be minimised.*'

The Arboricultural Impact Assessment (Appendix A17.1 in Volume 4, Part 4 of 4 of the EIAR) describes that tree (Tree Number T1617) as a mature beech tree of poor structural quality, describing it as '*Single ivy clad stem, broad spreading crown, kretschmaria deusta at base, vertical split in stem at base, hollow with decay, crown dieback and deadwood*' recommending that it is felled and replaced due to its poor quality.

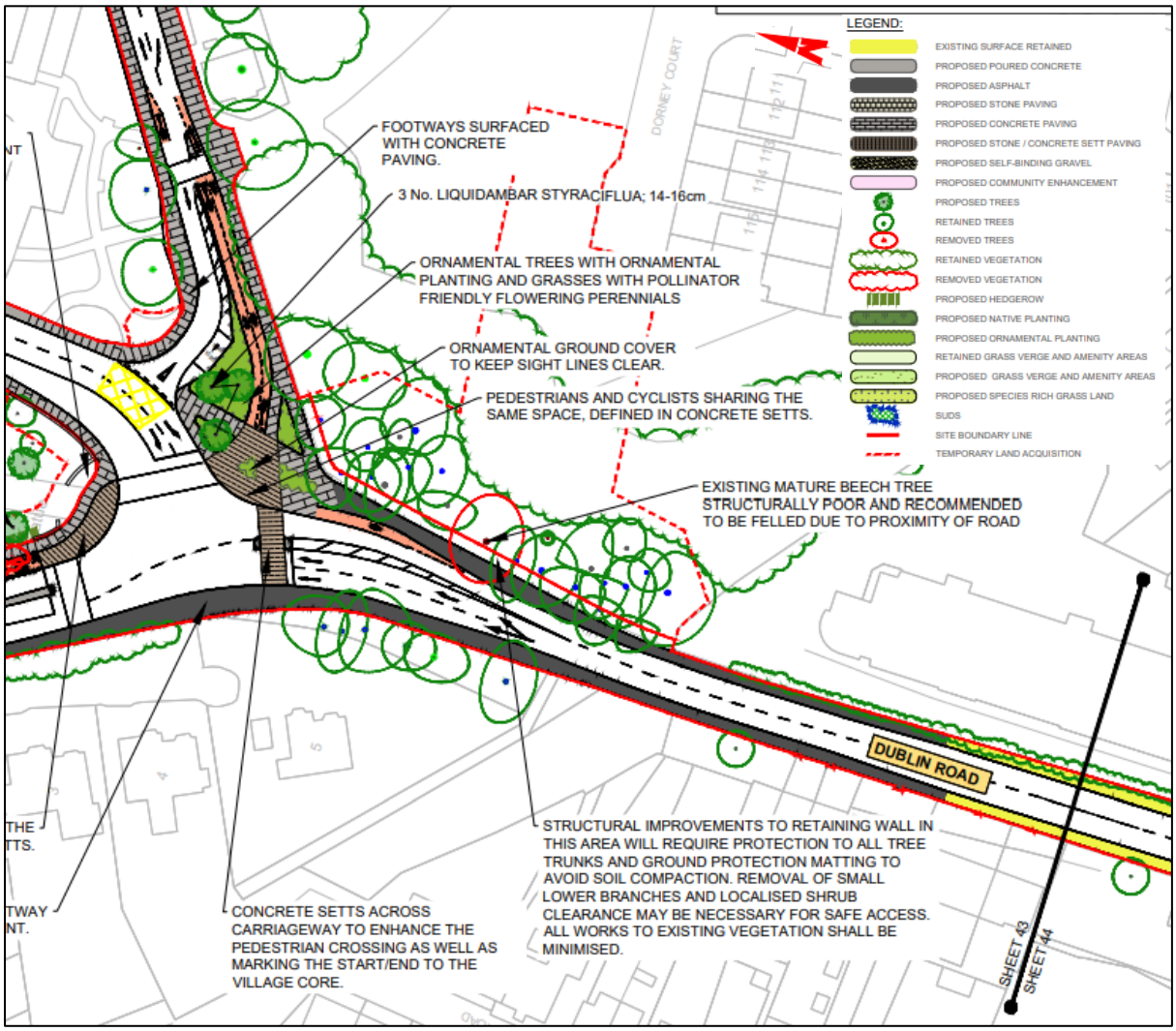


Figure 3.169: Extract from Landscape General Arrangement Drawings (Sheet 43)

3.9.3.11.6 Olcovar

Summary of issue raised

The submission raised the concern that the Proposed Scheme will have a negative impact on noise pollution, air pollution and night-time light pollution.

Response to issues raised

In relation to the noise impacts as a result of the Proposed Scheme, Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at the entrance to Castle Farm on the opposite side of the Dublin Road from Olcovar (Reference Number CBC0013ANML016) and an unattended noise monitoring location just south of Olcovar opposite Beech Road (Reference Number CBC0013UNML003), both in close proximity to the location of the Woodbank Estate as shown in Figure 9.2 (Sheet 12) in Volume 3 of the EIAR.

Figure 9.3 of Chapter 9 (Noise & Vibration) in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with Dublin Road near Woodbank (Sheet 7)

mapped with an impact significance rating of Not Significant. Figures 9.4 and 9.5 (Noise & Vibration) in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the Dublin Road in front of Woodbank shown on Sheet 7 of both figures. The modelling shows an Imperceptible / Positive impact for both years.

As the assessment described in Chapter 9 has not identified any significant noise impacts related to traffic once the Proposed Scheme is constructed and operational, there are no specific mitigation measures proposed for the Operational Phase. Section 9.6.2 of Chapter 9 states the following with respect to residual operational noise impacts:

'*The results of the noise assessment for the Operational Phase confirms that with the introduction of the various measures included as part of the Proposed Scheme, a reduction in traffic noise can be achieved along the Proposed Scheme where highest existing traffic noise levels are experienced. The various design measures associated with the Proposed Scheme also align with the various intervention measures recommended within the WHO Environmental Noise Guidelines (WHO 2018) to reduce traffic noise exposure across populations*.'

With respect to air pollution, refer to the Air Quality part of Section 3.9.3.11.

With respect to night time light pollution, the Street Lighting drawings (drawing set 09 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR, Sheet 45 shows the street lighting design at Olcovar. No new street lighting is proposed along the Dublin Road at this location, although the existing lighting column on the Dublin Road closest to the property will move slightly closer to the property as shown in Figure 3.170 and described in Section 4.6.13 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR as follows, '*In locations where road widening and/or additional space in the road margin is required, it is proposed that the public lighting columns will be replaced and relocated to the rear of the footpath to eliminate conflict with pedestrians, eliminating pedestrian obstruction*', going on to state that '*Lighting schemes will comply with the Guidance Notes for the Reduction of Light Pollution (Institution of Lighting Professionals 1992)*'. This will result in a similar level of night time lighting as the existing situation along the Dublin Road.

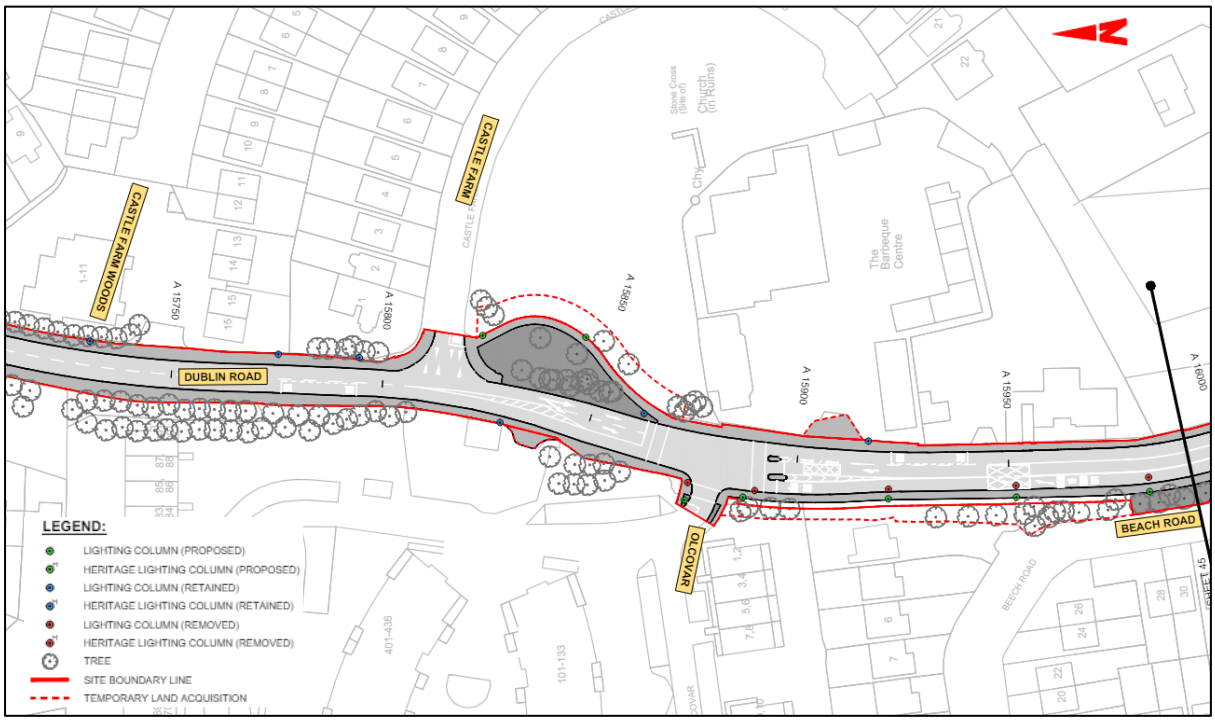


Figure 3.170: Extract from Street Lighting drawings (Sheet 45)

3.9.3.11.1 Kiltuc

Summary of issue raised

The submission raised concerns regarding the loss of land, the removal / impact on a 200+ year old boundary wall and loss of 8+ mature trees.

Response to issues raised

The Proposed Scheme works would require the loss of mature trees along the outline of the property garden, immediately behind the existing boundary wall. New trees are proposed in the residual green area, behind the proposed new boundary wall and the reinstatement of the garden.

The Proposed Scheme landscape design at the location of Kiltuc is shown in the 05-Landscape Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.171.

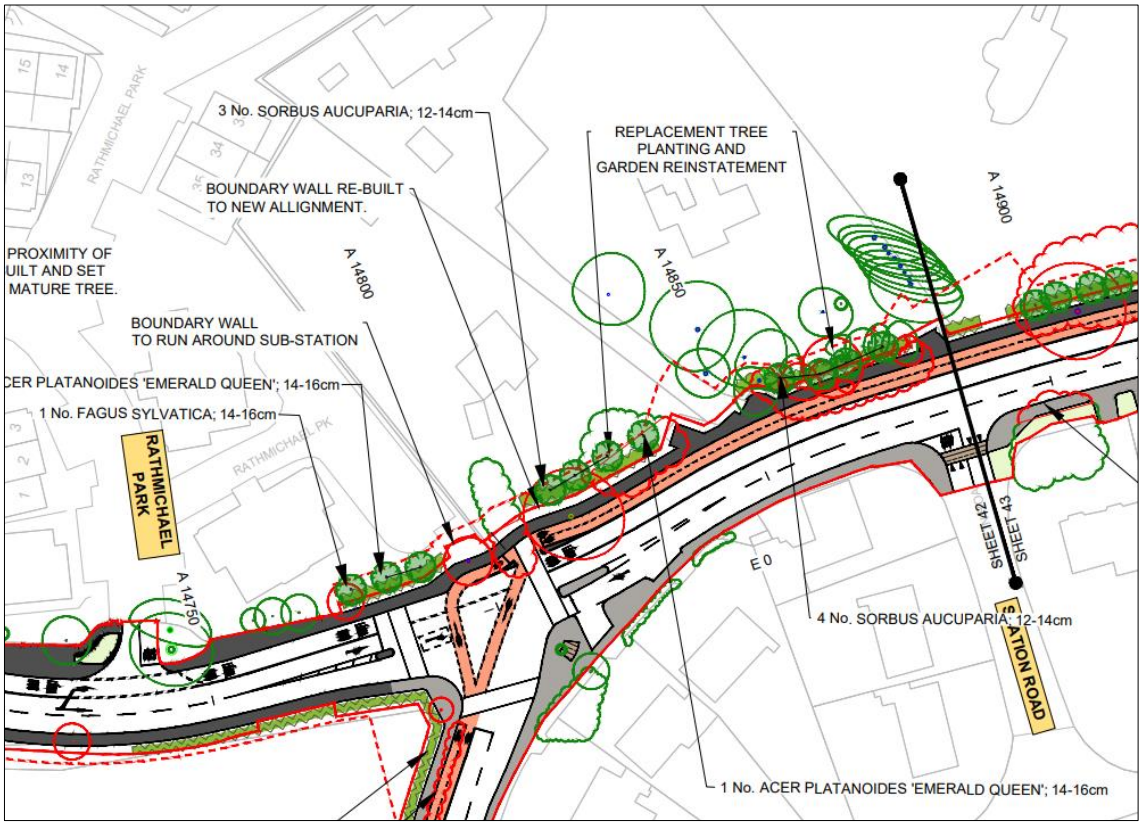


Figure 3.171: Extract from Landscape Drawings at Kiltuc on Dublin Road (Sheet 42)

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes an inventory of all trees on the Proposed Scheme, with all trees at this location assessed for age, quality, and usable life expectancy. It should be noted that trees with a stem diameter less than 75mm (when measured at 1.5m above ground) and ornamental garden plants are not surveyed. The surveyed trees are located behind the existing stone boundary wall, the most notable of which is a Category A grade hornbeam. The proposed replacement tree planting and reinstatement of the garden is described in Figure 3.171.

The following new trees are proposed to be planted inside of the new set back boundary wall of the property at Kiltuc on Dublin Road.

- 3 no. Sorbus aucuparia; and
- 1 no. Acer platanoides ‘Emerald Queen’.

These new trees will be planted to give sufficient space for light and to become fully established. In addition to the individual trees, general garden reinstatement will include ornamental shrubs, hedges and grass the detail of which will be agreed in further consultation with the landowner.

The CPO of lands at this location at Kiltuc will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states:

'W*here properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

3.9.3.11.2 Carezza

Summary of issue raised

The submission raised concerns regarding the impact to approximately *'30 trees – possibly more'* in the property outline, opposed to the *'3 trees'* shown in the Proposed Scheme plans, this is mainly due to the planned removal of the boundary wall and the associated impacts on the trees thereafter. The respondents did note a tree survey meeting has not resulted in any further discussion.

Response to issues raised

The Proposed Scheme works would require the loss of mature trees along the outline of the property garden, immediately behind the existing boundary wall. New trees are proposed in a similar location, behind the proposed new boundary wall at the property frontage and the reinstatement of any impacts to the garden.

The Proposed Scheme Landscape design at the location of Carezza is shown in the 05-Landscape Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.172.

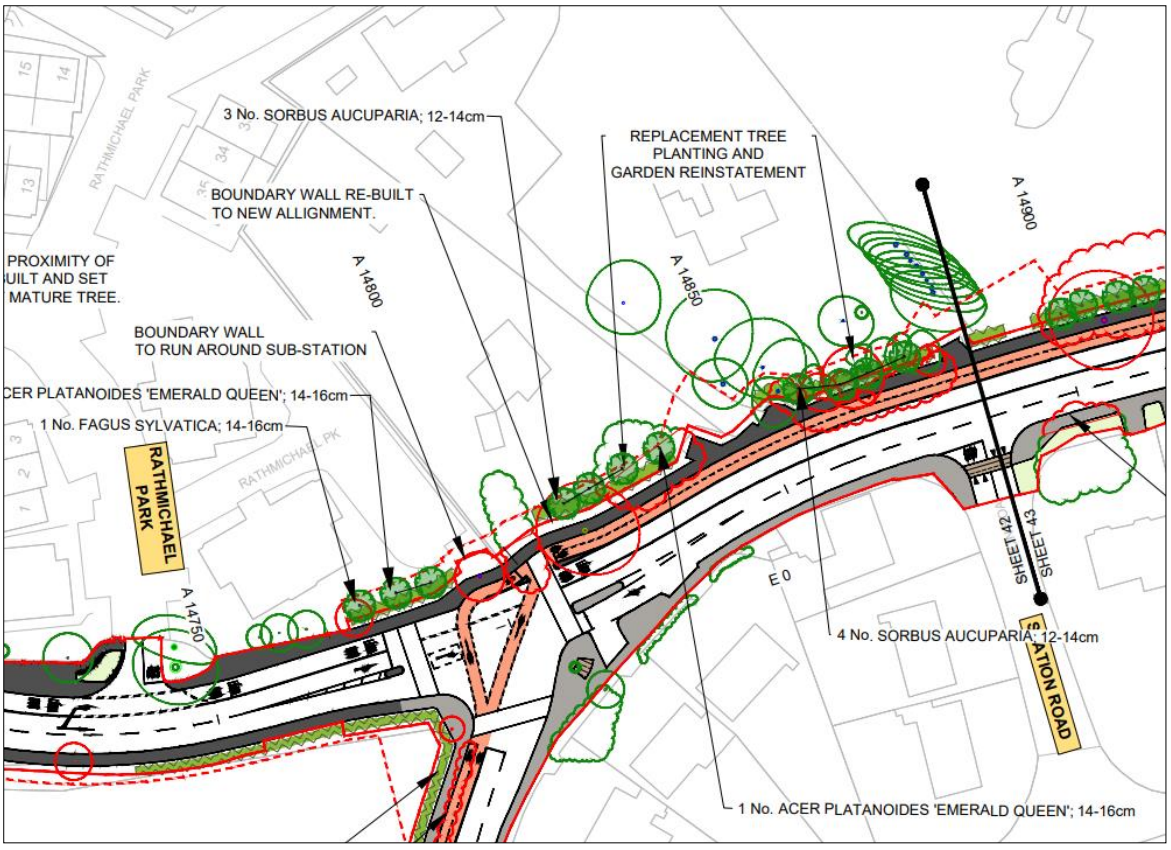


Figure 3.172: Extract from Landscape Drawings at Carezza on Dublin Road (Sheet 42)

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes an inventory of all trees on the Proposed Scheme, with all trees at this location assessed for age, quality and usable life expectancy. It should be noted that trees with a stem diameter less than 75mm (when measured at 1.5m above ground) and ornamental garden plants are not surveyed. The surveyed trees are located behind the existing stone boundary wall, the most notable of which are a category A grade Douglas Fir, a category B grade Sitka

spruce, a category B grade Norway maple. As a result of the proposed scheme 1no. category B grade tree, 4no. category C grade trees and a densely planted group of circa 32no. category C grade Leylandii trees will need to be removed. A number of other trees mature trees set slightly further back will be retained. The proposed replacement tree planting and reinstatement of the garden is described in Figure 3.172, with four new sorbus aucuparia trees proposed to be planted inside of the new set back boundary wall of the property at Carezza on Dublin Road.

These new trees will be planted within the space around the retained trees and will be given sufficient space for light and to become fully established. In addition to the individual trees, general garden reinstatement will include ornamental shrubs, hedges and grass the detail of which will be agreed in further consultation with the landowner.

The CPO of lands at this location at Carezza will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states:

'W*here properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

3.9.3.11.3 Narrow Meadow

Summary of issue raised

The submission raised concerns regarding the negative impact that the CPO would have on the property, specifically mentioning the concern related to the impact and associated relocation of the property frontage and trees as part of the Proposed Scheme.

Response to issues raised

The Proposed Scheme works would require the partial removal of mature ornamental hedges that are behind the existing property boundary wall along the line of the driveway of Narrow Meadow.

The Proposed Scheme Landscape design at the location of Narrow Meadow is shown in the 05-Landscape Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.173.

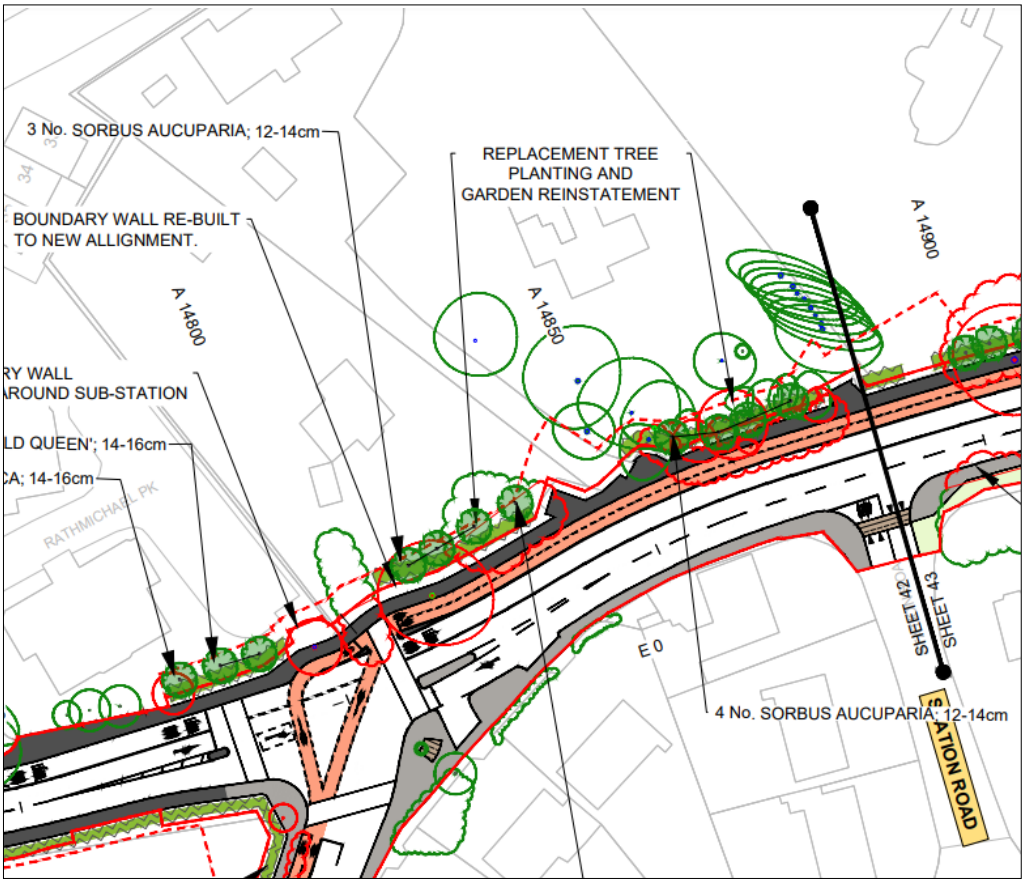


Figure 3.173: Extract from Landscape Drawings at Narrow Meadow on Dublin Road (Sheet 42)

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes an inventory of all trees on the Proposed Scheme, with all trees at this location assessed for age, quality and usable life expectancy. It should be noted that trees with a stem diameter less than 75mm (when measured at 1.5m above ground) and ornamental garden plants are not surveyed. The surveyed trees are located within the gardens of both neighbouring properties and are in close proximity to the Narrow Meadow driveway. Based on the topographical information and Tree Survey data, there are no trees affected that sit within the Narrow Meadow land ownership. However, the hedges that form an edge to the driveway will be affected.

The proposed replacement tree planting and reinstatement of the gardens at this location is described in Figure 3.173 as 'Replacement tree planting and garden reinstatement'.

In addition to the individual trees planted within the neighbouring gardens, other garden reinstatement will include ornamental shrubs, hedges and grass the detail of which will be agreed in further consultation with the landowner.

The CPO of lands at this location at Narrow Meadow will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states: 'W*here properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees, and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

3.9.3.12 Impact to Green Amenity Areas

Summary of issue raised

A number of submissions raised concerns regarding the impacts to green amenity areas in Shankill.

There were a number of location-specific submissions, which are summarised and responded to in their own sub-sections following the below response (Section 3.9.3.12.1 to 3.9.3.12.4 of this report).

Response to issue raised

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the visual impact of the Proposed Scheme during both the Construction and Operational Phases. With respect to Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout) of the Proposed Scheme, Section 17.4.4.1.3 describes the impact on townscape and streetscape character, stating the following:

'The baseline townscape is of very high sensitivity and operation of the Proposed Scheme will involve very substantial changes along this section, with widening of the road corridor, permanent acquisition from 23 residential properties as well from Rathmichael parish National School, St. Anne's Church, and Shanganagh Park and Cemetery, with resultant setback of boundaries and continuing effects from loss of mature trees / plantings removed during the Construction Phase. However, there will be provision of substantial replacement planting to consolidate the boundaries and woodland edges throughout this section. Screening planting will be restored to the boundaries of all impacted residential properties.

It goes on to rate the impact significance as follows:

'Over the long-term there will be a reduction of the negative effects associated with removal of trees and other vegetation. The Operational Phase will not alter the existing townscape character, but will substantially alter the local streetscape amenity across much of this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Moderate and Long-Term.'

3.9.3.12.1 Shanganagh Park

Summary of issue raised

One submission raised concern that Shanganagh Park is a valuable local amenity area for the community and the Proposed Scheme will reduce this area.

Response to issue raised

The Proposed Scheme design at Shanganagh Park is presented in the 02-General Arrangement Drawings Sheet 46 & Sheet 47, and 04-Typical Cross Sections Sheet 21, in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.174 and Figure 3.175. The Dublin Road has been widened along the western edge of the park to facilitate the bus lanes in each direction. The majority of the trees along the western boundary of the park have been retained by taking the proposed cycle track further into the park. As shown in Figure 3.174, the proposed works within the land take at Shanganagh Park comprise an offline segregated footpath and cycle track which connects into the existing network of paths within the park. A portion of this land is an existing path, so the additional hard surface extends west. This ensures an existing parallel avenue of trees just south of the sports pitches are left untouched. This additional connectivity enhances the local community amenity facility for pedestrians and cyclists, and also enables new tree planting within the landscaped green space between Dublin Road and the proposed offline footpath/cycle track. The proposed segregated footpath and cycle track alignment has been prepared with the knowledge that Dún Laoghaire-Rathdown County Council have developed a masterplan for the development of Shanganagh Park. This masterplan, in part, seeks to relocate new play areas, increase the tree planting along the western boundary where exiting play facilities exist and introduce a wetland pond aligned with a new western entrance with re-positioned piers.

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape).

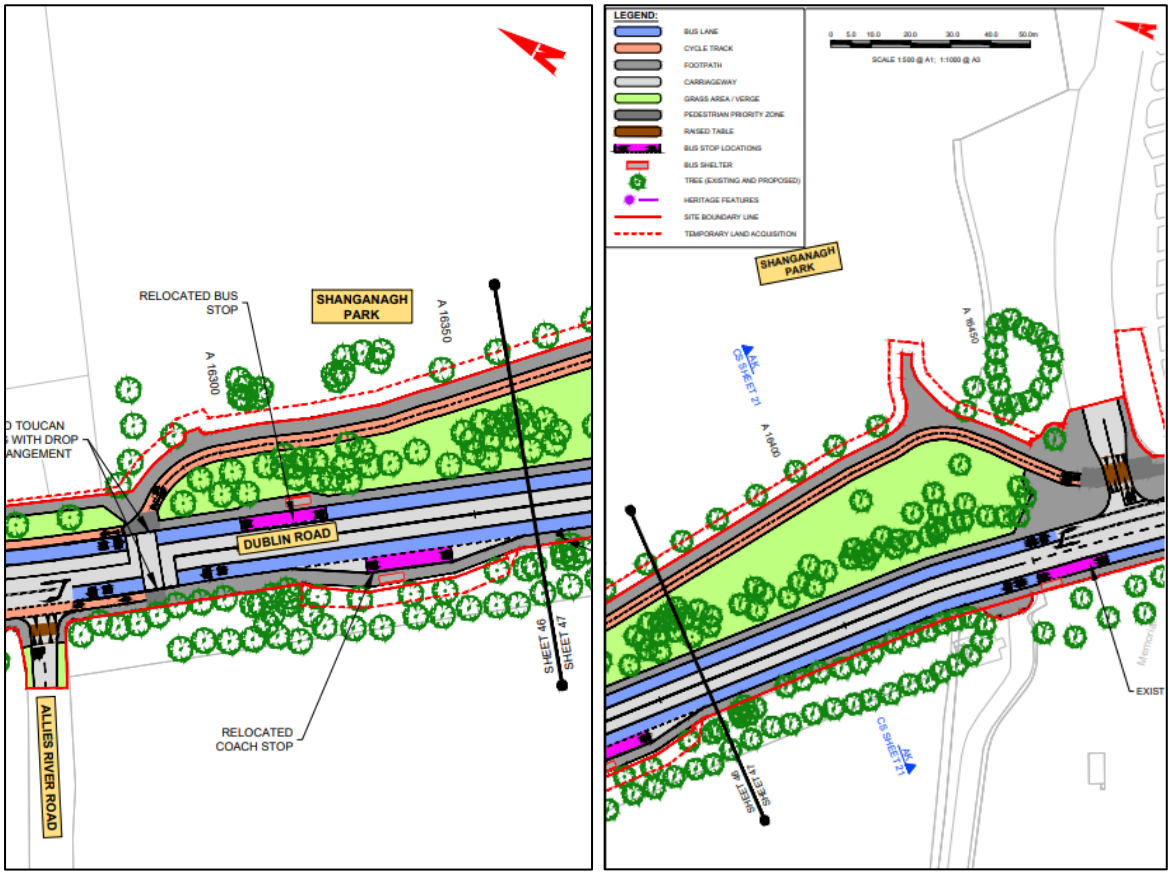


Figure 3.174: Extract from General Arrangement Drawings at Shanganagh Park (Sheet 46 & 47)

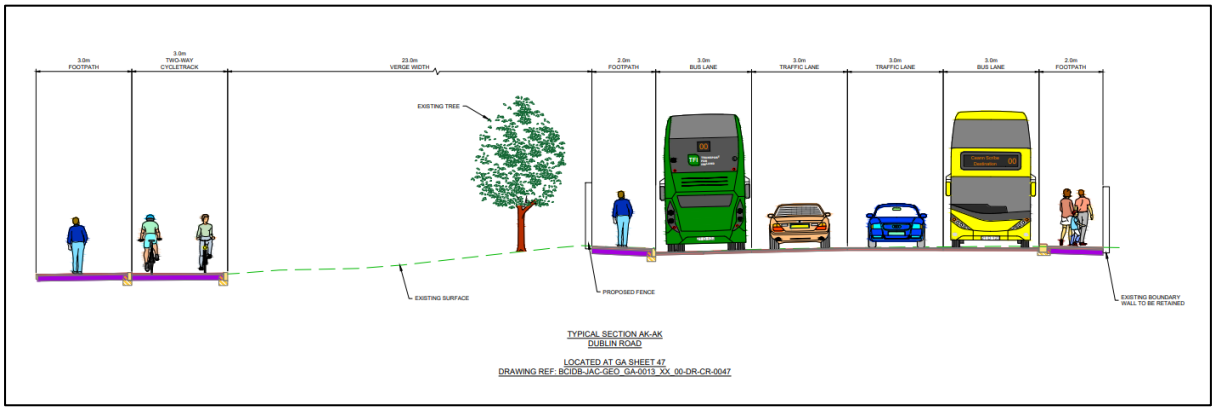


Figure 3.175: Extract from Typical Cross-section Drawings (Sheet 21)

3.9.3.12.2 Woodbank

Summary of issue raised

Other submissions raised concerns that local children may be impacted with loss of places to play, specifically within Woodbank.

Response to issue raised

Figure 3.176 below shows an aerial image at Woodbank estate, showing the extent of the permanent and temporary land acquisition in relation to the existing green area and existing footpath. As part of the Proposed Scheme, the permanent land take is required to allow for construction of bus lanes in each direction. The land take at this location has been minimised by allowing for a combined bus and

cycle lane on Dublin Road, rather than the full optimum CBC cross-section with both cycle track and bus lane. Figure 3.176 shows the proposed road cross section in the area in 04-Typical Cross Sections Sheet 18, in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

The existing green space parallel to Dublin Road acts as a buffer to the existing row of mature trees. The proposed scheme will require those specific trees to be removed and replacement tree planting set further back in the remaining green space. The space will function in the same way manner all be it with a reduced width. The Woodbank amenity space is located further west in the core of the development surrounded by the residential units. It consist of a small naturalised play area and open grassed area with ornamental style planting.

Figure 3.176: Aerial view at Woodbank with extents of Permanent and Temporary Land Acquisition

The temporary land take shown in Figure 3.176 is required just for the duration of the construction period to allow working space for the construction works and boundary works. Temporary land take will be returned after construction, allowing for retention of a large portion of the existing green amenity space. Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed.'

The Proposed Scheme landscape design at Woodbank is presented in the 17-Landscaping General Arrangement Drawings Sheet 42 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.177. This shows the extent of existing trees to be removed and retained, and locations of proposed trees within the remaining retained green space.

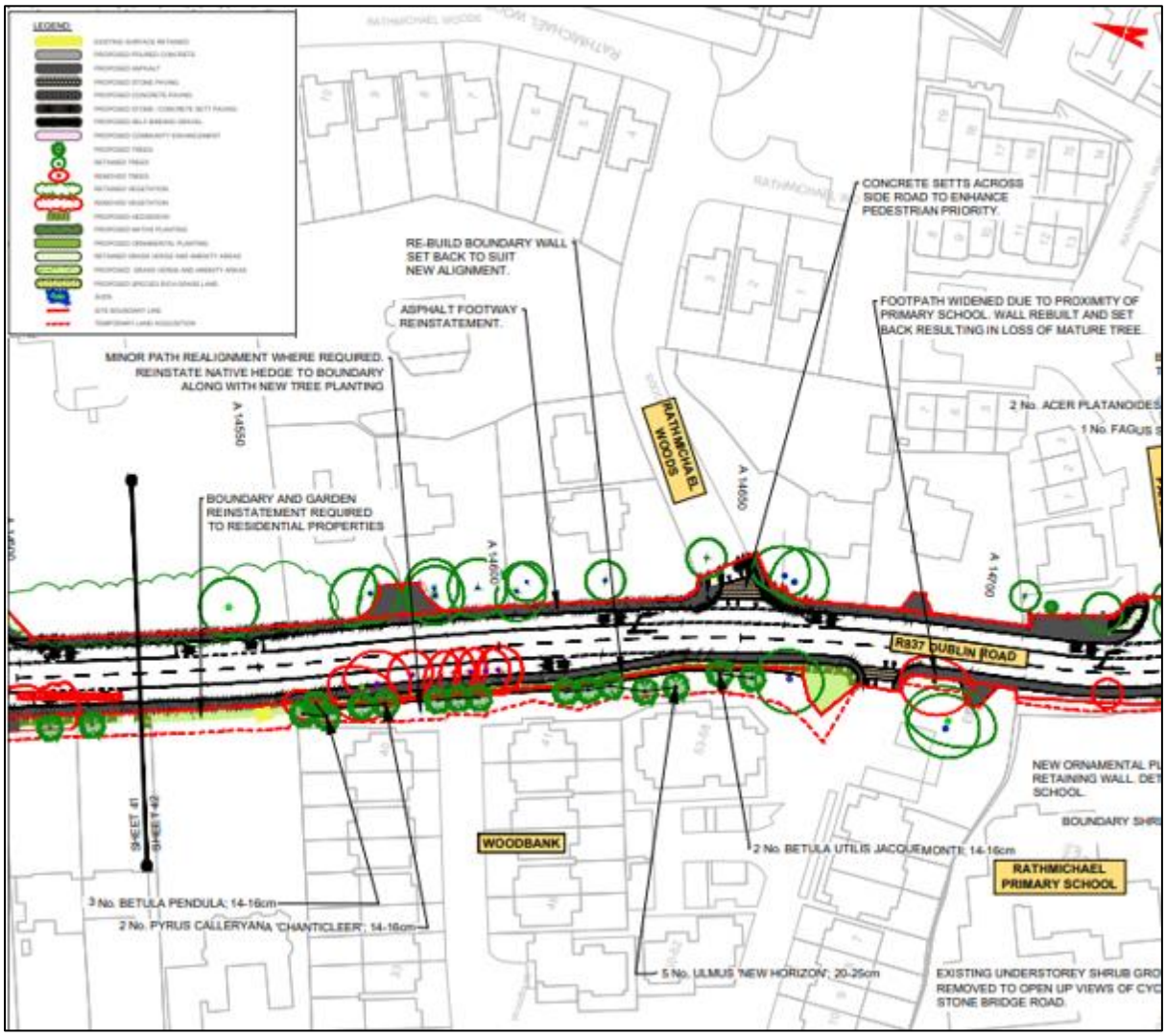


Figure 3.177: Extract from Landscaping General Arrangement Drawings at Woodbank (Sheet 42)

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape).

3.9.3.12.3 Stonebridge Wood

Summary of issue raised

Some submissions raised concerns regarding the impact on the green area near Stonebridge Wood, due to the introduction of a cycle and footpath through the development.

One submission noted that this area was designated for a playground as part of the Stonebridge Wood development plans and would be used as a community amenity space.

One submission noted that the cycle track could be beneficial but should not take away from local amenities like playgrounds.

Response to issue raised

Refer to Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure to see further details on the Proposed Scheme at Stonebridge Road.

The Proposed Scheme design at Stonebridge Wood is presented in the 17-Landscaping General Arrangement Drawings Sheet 53, and 04-Typical Cross Sections Sheet 21, in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.178. A portion of land is proposed to be acquired for the Proposed Scheme from Stonebridge Wood. As shown in Figure 3.178, the proposed works within the land take at Stonebridge Wood comprise local amenity facilities for pedestrians and cyclists. The proposed offline alignment at this location has been designed to minimise the impact on the exiting trees at Stonebridge Wood. Specific 'no-dig' construction methods will be applied to ensure the rootzones of trees are protected. As well as providing a safe and lit connection to the new residential development, this two-way cycle track continues through General Arrangement Drawings Sheet 42 and Sheet 43 to link the two schools on Stonebridge Road with Corbawn Lane.

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape).

The NTA acknowledge the positive and constructive liaison that has occurred with the Stonebridge Developer throughout the design and planning process to date. It is noted that throughout the project there have been several communications (letter, emails and telephone calls) with the Developer with regard to the Proposed Scheme co-ordination with the Stonebridge Development.

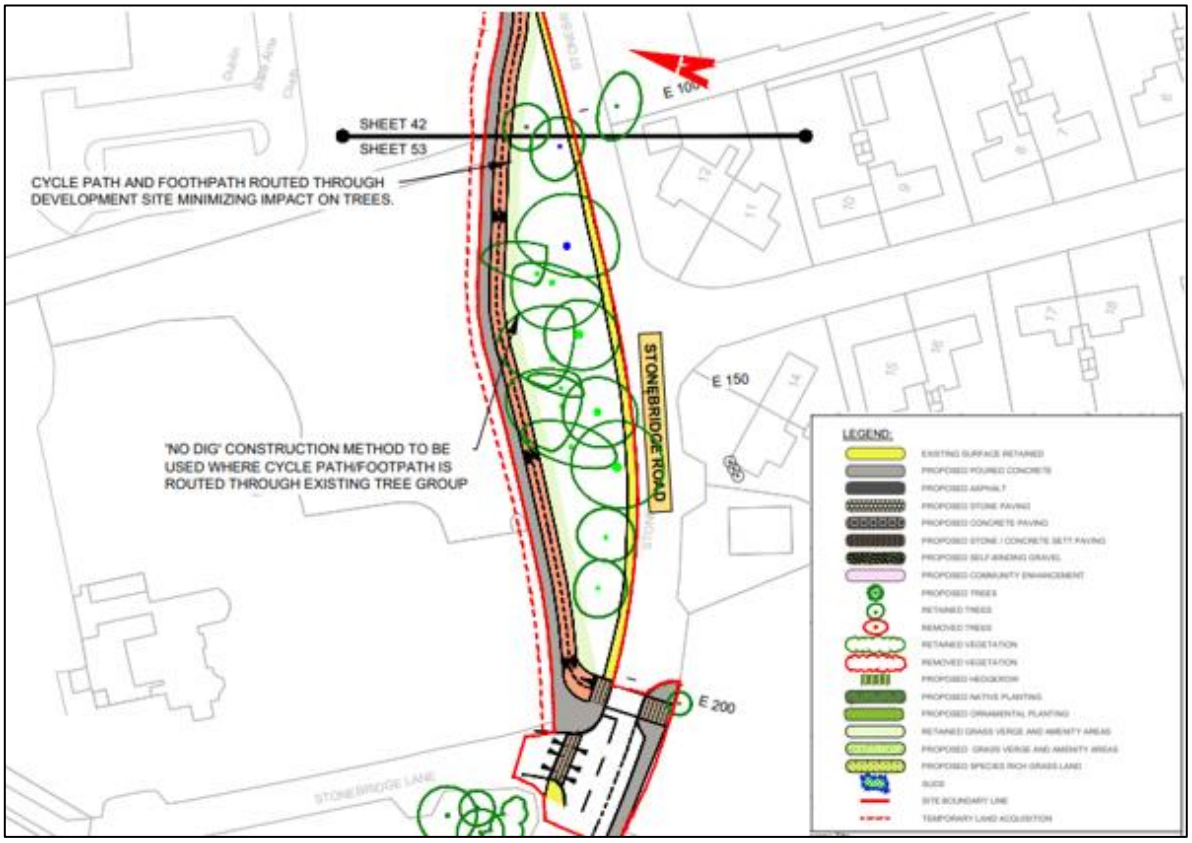


Figure 3.178: Extract from Landscaping General Arrangement Drawings at Stonebridge Wood (Sheet 53)

3.9.3.12.4 Olcovar

Summary of issue raised

The submission raised the concern that the acquisition of lands at Olcovar will result in a loss of amenities.

Response to issue raised

Refer to Section 3.9.4.2 on Insufficient Land Take Details in the CPO and Consultation in this report for further details on Proposed Scheme at Olcovar and detail of the permanent and temporary land acquisition plots.

Figure 3.179 below shows an aerial image at Olcovar estate, showing the extent of the permanent and temporary land acquisition in relation to the existing green area and existing footpath. The only area of green amenity space in Olcovar impacted by the Proposed Scheme is to the south of the estate entrance. The main Olcovar amenity spaces are located further north, adjacent to the boundary, and in the core of the development surrounded by the residential units.

As part of the Proposed Scheme, the permanent land take is required to allow for construction of bus lanes in each direction. The land take at this location has been minimised by allowing for shared space for all vehicles on Dublin Road, rather than the full optimum CBC cross-section with both cycle track and bus lane.

Figure 3.179: Aerial view at Olcovar with extents of Permanent and Temporary Land Acquisition

The 05-Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR shows the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Figure 3.180 below, shows Sheet 45 of the Landscaping General Arrangement Drawings, which shows the section of the Proposed Scheme at Olcovar, including areas of tree removal and locations and details of proposed new tree and vegetation planting along the boundary wall of the estate, south of the entrance.

The existing green space parallel to Dublin Road acts as a buffer to the existing row of mature trees. The proposed scheme will require those specific trees to be removed and replacement tree planting set

further back in the remaining green space. The space will function in the same way manner all be it with a reduced width.

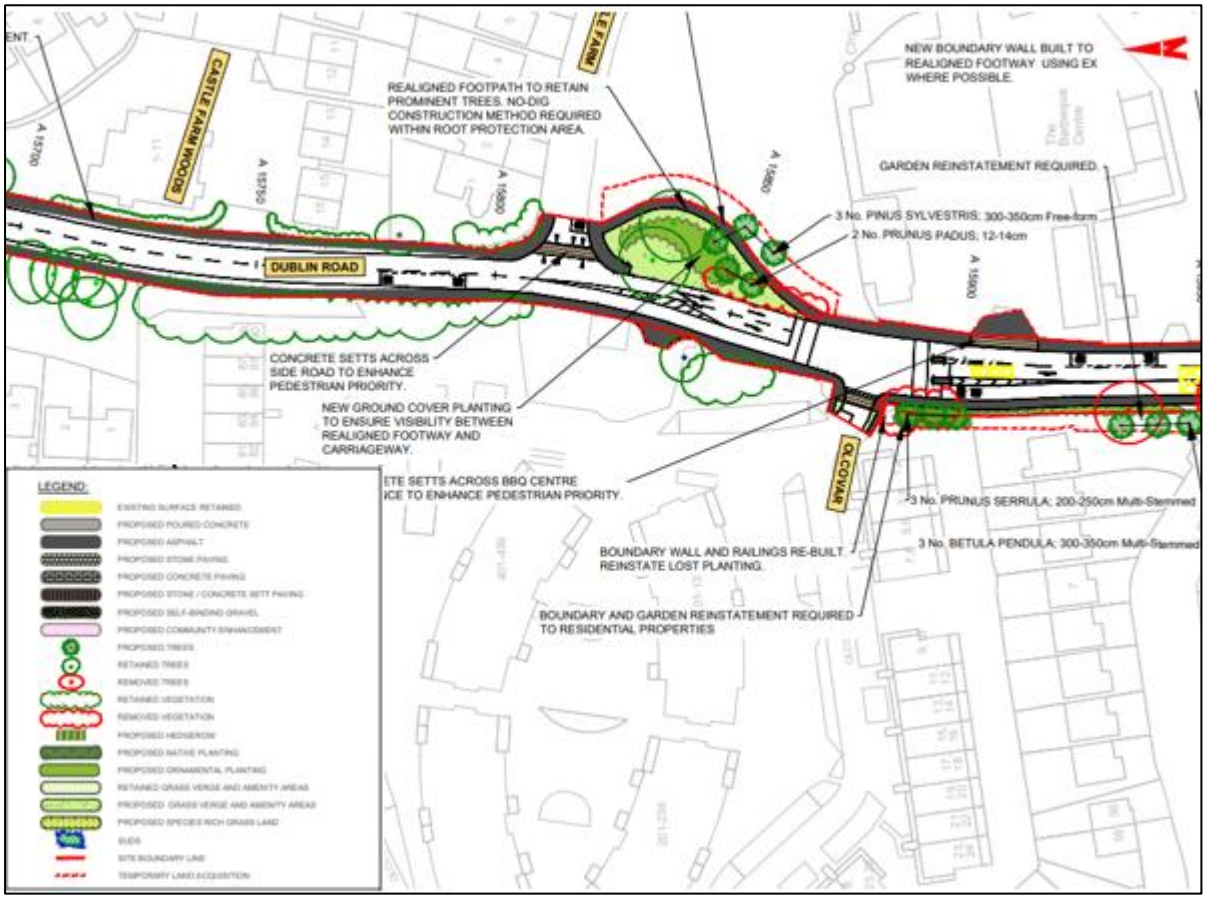


Figure 3.180: Extract from Landscaping General Arrangement Drawings at Olcovar (Sheet 45)

3.9.3.13 Impact to Shankill Village & Community

Summary of issue raised

Some submissions commented that the Proposed Scheme will negatively impact the local community, transforming the corridor and causing detachment within the community, jeopardising the thriving community.

Other submissions commented that the Proposed Scheme will impact the social, economic, and environmental fabric of the local community, and limit improvements to public realm.

Several submissions raised concern that the Proposed Scheme will mean Shankill will no longer feel like a village.

Another commented that the Proposed Scheme prioritises commuters through Shankill rather than the residents who live there.

Response to issue raised

Chapter 10 (Population) in Volume 2 of the EIAR describes the community impact of the Proposed Scheme. The methodology for the assessment of community impacts is described in Section 10.2.4.1 of Chapter 10, where the assessment considered the potential for impacts on community amenity ('*the perceived character or attractiveness of an area*'), and community land use and accessibility (land take on community receptors, and the ability of users to access community facilities and residential properties). The study area for the community assessment is based on "community areas", based on the CSO 2016 parish boundaries. All such areas within are intersected by, or adjacent to, the Proposed Scheme were included in the community impact assessment. These community areas are shown in

Figure 10.1 in Volume 3 of the EIAR, with the section of the Proposed Scheme between Loughlinstown Roundabout and the Wilford Roundabout being in Shankill and Little Bray community areas.

Section 10.4.4.1.2 of Chapter 10 describes the Operational Phase impacts as a result of changes to community land use and accessibility. Table 10.15 (refer to Table 3.56 below) summarises all Operational Phase impacts for the Proposed Scheme, with the community assessment impacts identified as follows for both Shankill and Little Bray community areas:

- Community amenity – Negative, Not Significant and Short-Term;
- Community land take – Negative, Not Significant to Slight and Long-Term; and
- Community accessibility:
    - Pedestrians – Positive, Moderate to Very Significant and Long-Term;
    - Cyclists – Not Significant to Positive, Moderate and Long-Term;
    - Bus users – Positive, Moderate to Profound and Long-Term; and
    - Private vehicles – Positive, Moderate and Long-Term.

Table 3.56: Extract from Chapter 10 (Population) (Table 10.15)

Table 10.15: Summary of Operational Phase Significant Residual Impacts

Assessment Topic	Predicted Impact (Residual Impacts) for Community Areas	Significant Residual Impact (Receptor Specific)
Community Assessment		
Community amenity	Negative, Not Significant and Short-Term – University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray Neutral and Short-Term – Westland Row, Blackrock, Newtownpark, Johnstown – Killiney and Bray	N/A
Community land take	Negative, Not Significant to Slight and Long-Term – Donnybrook, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Shankill and Little Bray.	Negative, Significant and Long-Term – 5, 6, 7 Dublin Road; Crinken Lodge; 1 Aughmore Lane; Beauchamp Lodge; and 4 Beech Road Negative, Moderate and Long-Term – Side Lodge, Woodbrook (this would change to Negative, Profound and Long-Term if replacement property is not rebuilt)
Community accessibility	**Pedestrians** Positive, Moderate to Very Significant and Long-Term – University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray. Neutral and Long-Term – Westland Row, Blackrock, Newtownpark, Johnstown – Killiney and Bray. **Cyclists** Not Significant to Positive, Moderate and Long-term – University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray. Neutral and Long-Term – Westland Row, Blackrock, Newtownpark, Johnstown – Killiney and Bray. **Bus Users** Positive, Moderate to Profound and Long-Term – University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray. Positive, Slight and Long-term – Westland Row, Blackrock, Newtownpark, Johnstown – Killiney and Bray. **Private Vehicles** Positive, Moderate and Long-Term – University (Newman) Church, Haddington Road, Rathmines, Donnybrook, Merrion Road, Booterstown, Mount Merrion, Kilmacud – Stillorgan, Foxrock, Cabinteely, Ballybrack – Killiney, Loughlinstown, Shankill and Little Bray. Negative, Slight and Long-Term – Westland Row, Blackrock, Newtownpark, Johnstown – Killiney and Bray.	

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4 Part 3 of the EIAR describes the economic impact assessment carried out for all 12 of the Core Bus Corridors which form part of the wider Dublin BusConnects Core Bus Corridors Project. The leading sentence in the Executive Summary of that report states, '*The evidence suggests the infrastructure work will improve the public realm along the routes with positive impacts on businesses and individuals along the*

corridors'. The Executive Summary goes on to state that '*Whilst there are a number of potential negative impacts, the majority of the evidence suggests the net impact will be positive*', summarising all of the areas assessed in the report, listing the below items as experiencing positive effects:

- Under the "Local Businesses" heading:
    - Commerce; and
    - Car parking.
- Under the "Public Realm" heading:
    - Improved public realm; and
    - Improved outputs.
- Under the "Health and wellbeing" heading:
    - Walking and cycling;
    - Health; and
    - Productivity.
- Under the "Social cohesion" heading:
    - Improved transport;
    - Better jobs;
    - Better access; and
    - Reduced crime.
- Under the "Adapting to the future" heading:
    - Sustainability;
    - Shopping close to home; and
    - Working from home.

The case studies and evidence gathered within the report, as well as the assessment described within Chapter 10 suggest generally positive community impacts for Shankill following completion of the Construction Phase.

3.9.3.14 Changes to Working Patterns

Summary of issue raised

A number of submissions noted that there has been a significant shift in work and learning patterns towards a more hybrid setting since the pandemic. Concerns were raised that these changes have not been taken into consideration within the plans.

Response to issue raised

The following is noted in Section 2.1 of Chapter 2 of the EIAR, in relation to the effect of COVID-19:

'The COVID-19 pandemic brought about a short-term change in travel patterns in the Greater Dublin Area (which led, for example, to fewer people using public transport and more people working from home). Travel demand and patterns of travel have now started to return to pre-pandemic levels and are anticipated to grow in line with population growth. The impacts on travel demand and patterns of travel are still dependent on the quality of the transport system, in particular the reliability of a bus service that is not constrained by general traffic congestion.'

Section 2.1 of Chapter 2 describes the need for investment in sustainable infrastructure, stating that:

'Private car dependence has resulted in significant congestion that has impacted on quality of life, the urban environment and road safety. The population of the Greater Dublin Area (GDA) is projected to rise by 25% by 2040 (National Planning Framework, 2018), reaching almost 1.5 million. This growth in

population will increase demand for travel necessitating improved sustainable transport options to facilitate this growth.

Without intervention, traffic congestion will lead to longer and less reliable bus journeys throughout the region and will affect the quality of people's lives. The Proposed Scheme is needed in order to enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor through the provision of enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region.'

Section 3.2.2 of Chapter 3 of Volume 2 of the EIAR, in relation to the effect of COVID-19 states:

'The most recent published figures for 2022 have shown that public transport passenger numbers are largely recovered to pre-pandemic levels. The figures presented that across the public transport network are 98% of prepandemic levels. Specifically, Dublin city area bus services carried 12.7m in November 2022, compared to 12.9m in November 2019 representing a 99% recovery.

In summary it is considered that the short-term changes to travel patterns caused by the Covid-19 pandemic does not impact on the objectives of the scheme to reduce car dependency in the Greater Dublin Area and remains particularly relevant in light of anticipated population growth into the future.

3.9.3.15 Public Consultation and Engagement

Summary of issue raised

A number of submissions requested further community engagement and consultation and that the proposals should be in collaboration with the community, ensuring their needs and preferences are considered.

A submission raised concern that there is a lack of consideration for public and community consultation into the route selection which is contradictory to the Aarhus Convention.

Response to issue raised

As noted in Section 1.6.1 of Chapter 1 (Introduction) in Volume 2 of the EIAR:

'Public participation has been an integral part of the iterative development of the Proposed Scheme from the outset. Pre-application public consultation was carried out, in three phases (one in relation to Emerging Preferred Route (EPR) consultation and two in relation to the Preferred Route Option (PRO) consultation), to inform the public and stakeholders of the development of the Proposed Scheme from an early stage and to seek feedback and participation throughout its development. The BusConnects Infrastructure team has undertaken a comprehensive consultation and engagement process with stakeholders, landowners and members of the public throughout the development of the Proposed Scheme.

The primary objective of the non-statutory public consultation process was and is to provide opportunities for members of the public and interested stakeholders to contribute to the planning and design of the Proposed Scheme and to inform the development process. Public participation in the planning and design of the Proposed Scheme was encouraged from an early stage through on-the-ground engagement and information and media campaigns.

The early involvement of the public and stakeholders ensured the views of various groups, individuals and stakeholders were taken into consideration throughout the development of the Proposed Scheme and in the preparation of this EIAR.

The non-statutory consultation process assisted in:

- *The establishment of a sufficiently robust environmental baseline for the Proposed Scheme and its surroundings;*
- *The identification, early in the process, of specific concerns and issues relating to the Proposed Scheme so that they could be appropriately accounted for in the design and assessment scope; and*
- *Ensuring the appropriate involvement of the public and stakeholders in the assessment and design process.*

The consultation process involved engagement from:

- *Emerging Preferred Route (EPR) Option Consultation; and*
- *Preferred Route Option (PRO) Consultations.*

More specific information relating to the pre-application phases of public consultation, issues which emerged and the manner in which they informed the iterative development of the Proposed Scheme are outlined in the sections which follow.'

In terms of adherence to the Aarhus Convention, Ireland ratified the Aarhus Convention in June 2012 and it entered into force in Ireland in September 2012. Prior to that ratification, Ireland had to ensure that all the provisions of the Convention were implemented in national law, which took a number of years, and involved over 60 pieces of legislation.

Accordingly, Ireland's obligations under the Aarhus Convention have been fully incorporated into Irish legislation and include rights of access to information on the environment, rights of participation in planning determinations, rights of access to adequate review procedures and various other rights.

These are now statutory provisions, which are binding on all applicable parties.

In relation to transport infrastructure projects, the applicable statutory provisions are set out in the relevant planning and transport legislation, which include requiring major projects to seek planning consent from An Bord Pleanála. Those application processes for large infrastructure schemes provide for a statutory process requiring the making available for public review all of the applicable information set out in the legislation and permitting the making of submissions in relation to the proposals to the determining body, being An Bord Pleanála.

Thereafter, the legislation provides for the holding of an Oral Hearing, enabling direct public engagement and participation in the decision-making process.

As part of the scheme development stage, various non-statutory public consultation processes have been undertaken. These processes are in excess of the requirements of the Aarhus Convention, whose obligations are already enshrined in Irish legislation including "statutory public consultations" which is the stage that the project has now reached.

In May 2017 the NTA launched the BusConnects Programme and then in June 2018 published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of Core Bus Corridor Routes across Dublin.

Since the commencement of the non-statutory period of the CBC Infrastructure Works, there has been a total of three rounds of non-statutory public consultation.

The term "non-statutory" is used to describe the public consultation which occurred from [2018 to 2022] because this consultation process with the public and interested stakeholders was undertaken by the NTA on a voluntary basis and was not required by law. The purpose of this process was to inform the public and stakeholders of the evolution of the proposal from an early stage and to seek feedback on the design proposals.

This is in contrast with the statutory consultation period which ran from 15 August 2023 to 10 October 2023 during which an opportunity was provided to members of the public, as well as certain prescribed bodies to make submissions to An Bord Pleanála in accordance with Section 51 of the Roads Act 1993 (as amended).

Full details of the consultation undertaken as part of the Proposed Scheme is presented in The Public Consultation Report 2018 (Parts 1 and 2), included as Supplementary Information to the EIAR.

First Round of Non-Statutory Public Consultation – The first round of non-statutory public consultation on the Emerging Preferred Route Options was from November 2018 until March 2019 divided into three phases. The reason it was divided into three phases was primarily due to the fact that the BusConnects Infrastructure team carried out all aspects of the first round without external design service providers having been appointed at that stage. Moreover, the BusConnects Infrastructure team sought to gain maximum engagement from the public from the commencement of the CBC Infrastructure Works to raise awareness, establish relationships and gain immediate insight and knowledge of the issues at an early stage.

It was also important that at the start of the non-statutory consultation that considerable time and resources were dedicated by the BusConnects Infrastructure team to initiate contact with potential impacted properties. Each of the potentially impacted property owners were offered the opportunity to meet with members of the BusConnects Infrastructure team on a one-to-one basis which meant a significant amount of resources had to be dedicated to this process.

Second Round of Non-Statutory Public Consultation – The non-statutory public consultation for the Preferred Route Options ran from March 2020 to April 2020 as Ireland entered the first lockdown due to the Covid-19 pandemic. The consultation continued in deference to the number of online submissions received during this period. A number of public facing elements of the consultation were cancelled in line with Government health guidelines, however, all other elements of the consultation including online versions of the brochures, supporting documentation were available. Other communication tools including the Freephone, email and digital aspects remained active for submissions to be received.

Third Round of Non-Statutory Public Consultation – This round of non-statutory public consultation for the Preferred Route Options from November 2020 to December 2020 was added due to the disruption caused to the second-round consultation process. It was important that further engagement was facilitated to communicate design development changes prior to concluding the determination of the Preferred Route Options. Methods had emerged whereby traditional public information events could be replaced by virtual online alternatives to offset the restrictions that continued associated with the Covid-19 Pandemic. Accordingly, all elements of the public consultation and stakeholder engagement were conducted virtually or online in line with the Government health guidelines.

The Public Consultation Report (Parts 1 and 2) includes further information on the three rounds of Non-Statutory Public Consultation outlined above. It also includes details related to the Public Consultation Events, Community Forum Meetings, and Residents Groups Meetings that occurred as part of the consultation process for the Proposed Scheme.

Individual public consultation brochures are provided under Appendix N, O and P of the Preferred Route Options Report part of the Supplementary Information.

Individual consultation reports are provided as Appendix B and C of the Preferred Route Options Report part of the Supplementary Information

- First Round of Non-Statutory Public Consultation Report
- Second and Third Round of Non-Statutory Public Consultation Report

Non-statutory property referencing letters - In March- April 2023 a non-statutory property referencing letters were posted to the impacted landowners through registered post to confirm their interest in the property. During this period NTA had communication with the impacted landowners.

Statutory round of public consultation -As part of the statutory public consultation in addition to the notices required by statute to be published in the newspaper, public notices were also placed at 176 locations along the route of the Proposed Scheme so as to ensure that members of the public in the area who may not have noticed the statutory newspaper notice or whose lands were not being acquired and so were not part of the CPO process were informed of the Proposed Scheme.

The National Transport Authority (NTA) has applied under Section 51(2) of the Roads Act 1993 (as amended) to An Bord Pleanála for approval in relation to a proposed road development consisting of the construction of the Bray to City Centre Core Bus Corridor Scheme. The application was made to An Bord Pleanála on the 4th of August 2023. An application for confirmation of the associated Compulsory Purchase Order under Section 76 of, and the Third Schedule to, the Housing Act 1966 (as amended) was submitted to An Bord Pleanála on the 11th of August 2023. Impacted landowners were served CPO Statutory Notice on 10th August through registered post.

A 12 week statutory consultation period was allowed for relevant stakeholders for queries/ concerns both written (email/ letter) and telephonic conversation with the NTA, from the period 15th August 2023 until 10th October 2023. During this period NTA had communication with the impacted landowners. The landowners were advised that any objection to the Compulsory Purchase Order should be made in writing to An Bord Pleanála (Strategic Infrastructure Division), 64 Marlborough Street, Dublin 1, D01 V902, must reach the said Board before 5.30pm on October 10th 2023 and encouraged all parties to ensure that, if they so wish, that they make a submission/observation to An Bord Pleanála.

As stated in Section 3.3 of Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR, the development and finalisation of Preferred Route Option *'Informed by feedback from the overall public consultation process, continuing stakeholder engagement and the availability of additional design information'.*

Section 3.4.2.3 of Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR, in relation to key changes to Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) following the Draft Preferred Route Consultation (March 2020), states:

'Key changes for the Proposed Scheme implemented in the design of the draft Preferred Route Option for Section 3 include:

- *From the Dublin Road / Stonebridge Road Junction north to the Loughlinstown Roundabout, the necessary widening is entirely to the west of the carriageway to minimise impact to properties and trees;*
- *South of the Shankill Main Street, the design was revised to move the northbound Signal Control Priority from Quinn's Road / Cherrington Drive Junction to a new location between Cherrington Drive and Castle Farm. The design was further developed after the draft Preferred Route Option for provision of right-turning lane at Olcovar and signalisation of Olcovar Junction;*
- *The proposal to introduce a lower speed limit of 30km/h through the village (from Olcovar Junction to St. Anne's Church) helping to reduce speed of through traffic and improve safety;*
- *At Shanganagh Park and Cemetery, the design was further developed to move both northbound and southbound cycle track into the Shanganagh Park and along the Shanganagh Cemetery boundary along with the southbound footpath, which allowed protection of the roadside trees in front of Shanganagh Park and Shanganagh Cemetery in addition to reduced impact on the Shanganagh Park play area. The design was co-ordinated and integrated with the Shanganagh Park Masterplan;*
- *The route alignment was further developed taking into consideration other third-party developments, refined bus stops and bus priority provisions for the section of the route that runs from Shankill Village and Wilford Junction;*
- *Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to near Woodbrook College to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here. In this section widening has been provided in the east side; and*
- *Inclusion and further development of new junctions at proposed and approved housing development sites south of Shankill at Shanganagh Castle and Woodbrook Strategic Housing Development and associated bus stops.'*

Section 3.4.3 of Chapter 3 (Reasonable Alternatives) in Volume 2 of the EIAR, notes the key changes to the scheme following the updated Draft Preferred Route Consultation (November 2020). Extracts in relation to the Shankill Community area state:

- *'The design has been co-ordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook. These developments have been considered when assessing the most appropriate local alignment, bus priority and bus stops while taking into consideration retention of significant mature trees. The junction with the proposed Woodbrook Strategic Housing Development was further developed after the draft Preferred Route Option;*
- *The layout of the proposed St. Anne's Church Junction (Corbawn Lane) was reviewed and revised through a number of iterations to take on board public concerns around traffic movement. The junction is proposed to be signalised as part of the Proposed Scheme;*
- *South of the Shankill Main Street, the design was revised to move the northbound Signal Control Priority from Quinn's Road / Cherrington Drive Junction to a new location at Olcovar Junction to reduce impact on properties and trees. It also includes provision for a right-turning lane at, and signalisation of, the Olcovar Junction;*

- *Rebuilding of the Woodbrook Side Lodge residential property at a new location east of its current location at the southern end of the Woodbrook estate, following its demolition to accommodate the road widening in North Bray is included as part of the Proposed Scheme;'*

3.9.3.16 Impact to Health & Wellbeing

Summary of issue raised

Some submissions raised concerns regarding the impact to the physical and mental wellbeing of residents as a result of the changes made within the local area.

Others raised concerns regarding the lack of social improvements within the Scheme.

Response to issue raised

With respect to potential health impact, Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential impact of the Proposed Scheme during both the Construction Phase and the Operational Phase. In particular, Section 11.4.4 of the Chapter covers the potential health impacts of the Proposed Scheme once in place and fully operational. The Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.7).

Chapter 11 (Human Health) of Volume 2 of the EIAR provides an assessment of the potential human health impact of the Proposed Scheme during both the Construction Phase (Section 11.4.3) and the Operational Phase (Section 11.4.4). Section 11.1 (Introduction) states that '*This assessment has been carried out according to best practice and guidelines relating to human health, and in the context of similar large-scale transport infrastructural projects*', with the Chapter going on to state in Section 11.2.4.2 that:

'*The characteristics of the Proposed Scheme have been considered and the potential pathways between aspects of the construction and operation of the Proposed Scheme and health outcomes (beneficial and adverse) have been mapped out... Due to the nature of impacts on human health, many of these are indirect. The assessment of the Operational Phase of the Proposed Scheme has focused on those potential impacts most likely to be influenced by the Proposed Scheme, namely air quality, noise, community severance, social use of outdoor space, physical activity levels, access and risk of injuries. For the identification of construction impacts, reference has been made to the other environmental topic assessments to identify the aspects of the environment likely to be affected, and then a further consideration has been made as to whether there is a likely pathway between those impacts and human health outcomes.*'

The Construction Phase health impacts are summarised in Section 11.4.3.7 (Table 11.7), while the Operational Phase health impacts are summarised in Section 11.4.4.9 (Table 11.8). A description of the mitigation and monitoring measures proposed during both the Construction and Operational Phases are described in Section 11.5 of the Chapter.

Section 11.6 describes the predicted residual impacts after mitigation measures have been incorporated. With respect to Construction Phase residual impacts the Chapter states:

'*No significant residual impacts on health are predicted.*'

With respect to Operational Phase residual impacts the Chapter states:

'*Three issues were assessed as likely to be associated with significant residual impacts on human health, all of which were considered positive.*

Lack of regular physical activity is a leading cause of chronic disease and premature deaths. The Proposed Scheme will improve opportunities and convenience for walking and cycling, which will support many people in the study area in achieving recommended levels of weekly physical activity, for example as part of an active travel commute to work or education. It will also increase safety and the perception of safety for pedestrians and cyclists, who are more vulnerable to injury and mortality from traffic collisions. Furthermore, by redressing the balance between private car-use and other forms of transport, the Proposed Scheme will improve public transport journey times and reliability, as well as introduce greatly improved active travel infrastructure. This will provide for a more equitable transport experience, including for those without access to a car.

The Proposed Scheme is expected to have a significantly positive contribution on health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users.

The significant positive impacts which are expected to arise in the Operational Phase fully align with the relevant objectives of the Proposed Scheme identified in Section 11.1'.

3.9.3.17 Impact to Business

Summary of issue raised

A number of submission raised concerns about the impact of the Proposed Scheme on local businesses.

Response to issue raised

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 Part 3 of the EIAR. Table 3.57 below shows an extract from Appendix A10.1 showing businesses in Shankill with ID numbers for reference.

Table 3.57: Extract from Appendix A10.1 (Schedule of Commercial Businesses) showing businesses in Shankill

ID	Name	Address	Business Type
175	Applegreen	Shankill Rd, Shankill, Dublin, D18 N2N1, Ireland	Petrol Station
176	St Anne's Roman Catholic Church	Shanganagh Rd, Shankill, Dublin 18, Ireland	Catholic Church
177	Core Credit Union	Main St, Shankill, Dublin, D18 DY84, Ireland	Credit Union
178	Tesco Express	The Bridge, Main Street, Shankill, Dublin, Ireland	Supermarket
179	The Bridge	Shanganagh, Dublin, Ireland	Offices
180	Gold Fever - Harmonique	Dublin Rd, Shankill, Dublin, D18 YRT7, Ireland	Beauty Salon
181	Andrew's Chinese Takeaway Shankill	2 Main St, Shankill, Dublin, Ireland	Takeaway
182	Shankill An Post	Violet House, Dublin Rd, Shanganagh, Dublin 18, Ireland	Post Office
183	Gremma	Shanganagh, Dublin, Ireland	Homeware
184	Shankill Pharmacy	Violet House, Main Street, Shankill, Dublin 18, Ireland	Pharmacy
185	Ceira Lambert Hair Consultancy	Violet House, Main St, Shankill, Dublin, Ireland	Hairdresser
186	BoyleSports Bookmakers	Dublin Rd, Shankill, Dublin, D18 XP11, Ireland	Betting Shop
187	Lloyds Pharmacy	Main St, Shankill, Dublin, Ireland	Pharmacy
188	Spar	Shanganagh, Dublin, Ireland	Supermarket
189	Barnardos	Dublin Road R119, Shankill, Dublin, Ireland	Takeaway
190	Paddy Power	Ground Floor, Osprey Court, Shankill, Dublin Road, Ireland	Betting Agency
191	CHAMPS	Dublin Rd, Shankill, Dublin, Ireland	Barber Shop
192	Brady's Shankill	Dublin Road R119, Shankill, Dublin, Ireland	Pub
193	Brady's Wine Store	Dublin Road R119, Shankill, Dublin, Ireland	Off Licence
194	P.M. O'Loughlin Foods	The Barbeque Centre, Dublin Rd, Shankill, Dublin 18, Ireland	Butchers
195	The Shankill Market	BBQ Centre Bray Road 18, Shankill, Dublin, Ireland	Fruit and Vegetable Shop
196	Alteration Rooms	The Barbeque Centre, Old Bray Road, Shankill, Dublin, D18 E6F9, Ireland	Tailor
197	Bakelicious	The Barbeque Centre, Dublin Rd, Shankill, Dublin 18, Ireland	Bakery
198	Shanganagh Marble & Stone Centre	Dublin Road, Opp. Shanganagh Cemetery, Shankill, Dublin, A98 Y642, Ireland	Shop
199	Crinken Church	R119, Dublin Rd, Shankill, Co. Dublin, Ireland	Church
200	Woodbrook College	Dublin Rd, Woodbrook Glen, Bray, Co. Dublin, Ireland	School
201	Windsor Bray Nissan	Dublin Road Dublin Rd, Cork Great, Bray, Co. Dublin, A98 FC96, Ireland	Ca Dealer
202	Circle K Beechwood	Dublin Rd, Cork Great, Bray, Co. Dublin, Ireland	Petrol Station
203	Ferndale Cars	Dublin Rd, Dublin road, Bray, Co. Dublin, A98T044, Ireland	Car Dealer

The businesses in the Shankill Community area were not assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in the aforementioned sections. The impact of land take on commercial receptors across the Shankill community area as a whole is considered *Negative, Not Significant to Slight and Short-Term* during the Construction Phase and *Negative, Not Significant and Long-Term* during the Operational Phase.

As per Chapter 10 (Population) Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR, numerous case studies have been done to understand the impact of similar schemes on that of local businesses. It was found in Ireland, that businesses have a tendency to overestimate the impact of cars on their business. For example, a survey undertaken of businesses on Henry Street showed that they perceived 40% of customers arrived by bus whereas the actual percentage was 49%.

Another example was businesses perceiving that 6% of customers would walk to Henry Street whereas the actual percentage was 19%.

The conclusion from these studies in Section 2 of this report states:

'*Evidence from studies in Ireland and internationally suggest that reductions in the numbers of car journeys to the shops should not lead to a reduction in footfall as traders typically overestimate the importance of cars. Many shoppers are already arriving using sustainable transport options and therefore should be quick to take advantage of new transport options. There may be some disruption to business during the construction phase, however once the new routes are open footfall should return to normal and may in fact rise.'*

Additionally, research was undertaken for shoppers of Henry Street and Grafton Street to understand how much was spent in shops by people arriving different modes of transport. On average, it was found that car spending was more per trip. However, due to the frequency of visits by bus, bike and walking, the average spend was higher.

The conclusion for this in Section 2 – The Impact on Local Businesses states:

'*There is strong international evidence to suggest that the proposed improvements will lead to further increases in the use of sustainable transport. This should, in turn, more than compensates for reductions in visits by car users. Whilst spend per visitor may fall slightly, the overall spend rises due to the increased overall footfall. This effect should occur as soon as the new proposed routes open with shoppers choosing to make even more use of sustainable transport decisions.*

Whilst there is limited evidence of the impact during the construction work, none of the evidence suggested an increase in business insolvency or a departure of businesses from the area during construction works.'

3.9.3.18 Impact to Heritage & Architecture

Summary of issue raised

Some submissions raised concerns regarding the built environment of Shankill, and the removal of historic stone-based walls which are a feature in the area. Submissions also raised concerns regarding the potential impacts on historical sites and cultural heritage throughout Shankill.

Response to issue raised

The NTA will prepare detailed accommodation works plans in consultation with impacted landowners upon confirmation of the CPO by An Bord Pleanála. Section 4.6.18.1 of Chapter 4 Proposed Scheme Description describes the approach for boundary treatment. To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics.

With respect to the impact on heritage through Section 3 of the Proposed Scheme (Loughlinstown Roundabout to Bray North (Wilford Roundabout)), comprehensive assessments have been carried out on the impacts on archaeological, cultural and architectural heritage. There have been no significant residual heritage impacts identified within Section 3 of the Proposed Scheme.

Chapter 15 (Archaeological & Cultural Heritage) in Volume 2 of the EIAR describes the assessment with respect to the potential for impacts on archaeology and cultural heritage as a result of both the construction and operation of the Proposed Scheme. All features which were identified and assessed are shown in Figure 15.1 in Volume 3 of the EIAR (Sheets 20 to 25), and each feature shown in Figure 15.1 is further described and detailed within Appendix A15.1 (Inventory of Archaeological and Cultural Heritage Sites) in Volume 4 Part 3 of the EIAR.

Section 15.4.3.3 of Chapter 15 describes the potential Construction Phase impact through Shankill. It states that there are no national monuments or non-designated archaeological sites through this section, but describes the impact on recorded archaeological sites / monuments (Record of Monuments and Places (RMP) / Sites and Monuments Record (SMR) sites as follows:

'In Shanganagh townland the Proposed Scheme runs through the designated ZAP for Kiltuck Church (RMP DU026-054, Figure 15.1 Sheet 23 of 26 in Volume 3 of this EIAR). Early ecclesiastical sites can be quite large and can contain numerous archaeological sites and features extending quite a distance from any upstanding remains such as a church. These can comprise of burials, structures, enclosures and associated settlement activity. There is a potential that archaeological features or deposits may survive below ground beneath the road surface and in the greenspace associated with Castle Farm Estate where a footpath is proposed. Groundbreaking works at these locations will impact on any features that may survive below ground. The RMP site has a medium sensitivity value and the magnitude of impact is medium, and as the potential includes the discovery of human remains therefore the potential impact is Negative, Significant, Permanent.'

With respect to the potential Construction Phase impacts on cultural heritage, the chapter states the following:

'*During the construction and landscaping works there will be a temporary impact on the setting of the mosaic art set into the footpath along the length of the western side of Shankill Main Street (CBC0013CH004, Figure 15.1 Sheet 22 of 26 in Volume 3 of this EIAR). The artworks will require protection from any adverse impacts for the duration of the works and if necessary, they can be temporarily removed to ensure their protection. This feature has a low sensitivity value, and the magnitude of impact is medium, resulting in a Negative, Slight, Temporary impact*.

The upstanding cultural heritage sites such as the distinctive boundary walls which form part of the historic character of this section of the Proposed Scheme, and cultural heritage sites of architectural interest are assessed in Chapter 16 (Architectural Heritage).'

Section 15.5.1 of Chapter 15 describes the mitigation and monitoring measures proposed during the Construction Phase to address the potential impacts identified. These measures are also replicated in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 Part 1 of the EIAR. The general mitigation measures for the whole Proposed Scheme include measures such as:

- '*The NTA will procure the services of a suitably-qualified archaeologist as part of its Employer's Representative team administering and monitoring the works*'; and
- '*The appointed contractor will make provision for archaeological monitoring to be carried out under licence to the DHLGH and the NMI, and will ensure the full recognition of, and the proper excavation and recording of, all archaeological soils, features, finds and deposits which may be disturbed below the ground surface. All archaeological issues will be resolved to the satisfaction of the DHLGH and the NMI*'.

Specific mitigation measures for the Shankill section of the Proposed Scheme are described in Section 15.5.1.5, with the potential impact on archaeological heritage as described above mitigated through the following specific measure:

'*Archaeological monitoring (as defined in Section 15.5.1.1) under licence will take place, where any preparatory ground-breaking or ground reduction works are required (as defined in Section 15.4.1), at the following location:*

- *At the site of Kiltuck Church (RMP DU026-054) in Shanganagh.*

In this area there is a possibility to disturb intact archaeological layers and material. Licensed archaeological excavation, in full or in part, of any identified archaeological remains (preservation by record) or preservation in situ will be undertaken.'

The mitigation for the potential cultural heritage impacts is described as follows:

'*The mosaics along Shankill Main Street (CBC0013CH004) will be lifted carefully and stored during construction and either reinstated in their original location or to an appropriate alternative location within the village*.'

As a result of the above mitigation measures, Chapter 15 concludes by stating that '*No significant negative residual impacts have been identified either in the Construction or Operational Phase of the Proposed Scheme*'.

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment with respect to the potential for impacts on architectural heritage as a result of both the construction and operation of the Proposed Scheme. All features which were identified and assessed are shown in Figure 16.1 in Volume 3 of the EIAR (Sheets 20 to 25), and each feature shown in Figure 16.1 is further described and detailed within Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of the EIAR.

Section 16.4.3 of Chapter 16 describes the potential Construction Phase impacts on architectural heritage, describing the impacts on each of the following topics:

- Protected Structures (Section 16.4.3.1);
- Architectural Conservation Areas (Section 16.4.3.2);
- Conservation Areas (Section 16.4.3.3);
- National Inventory of Architectural Heritage (NIAH) Structures (Section 16.4.3.4);
- Designed Landscapes (Section 16.4.3.5);
- Other Structures (Section 16.4.3.6); and
- Street Furniture (Section 16.4.3.7), including post boxes, lamp posts, statuary and other street furniture, and paving and surface treatments.

Table 16.16 in Chapter 16 provides a summary of the potential Construction Phase impacts on architectural heritage features, broken down by scheme section, identifying both direct and indirect impacts. Specifically it identifies potential direct impacts as follows:

- Direct, Negative, Not Significant, Temporary impacts on the following features:
    - Carezza, Dublin Road (Reference CBC0013BTH064);
    - Saint Anne's Shankill (Reference DLR RPS 1800); and
    - Shanganagh Castle Demesne (Reference NIAH 2556).
- A Direct, Negative, Not Significant, Long-Term impact on Shanganagh Park in the demesne of Shanganagh Castle (Reference NIAH 2556 RMP DU026-120, DLR RPS 1845, 2089, NIAH 60260149);
- Direct, Negative, Slight, Temporary impacts on the following features:
    - Granite rubble wall on the west side of the Dublin Road in Shankill (Reference CBC0013BTH068);
    - Demesne wall of Sherrington House (Reference CBC0013BTH040, NIAH 60260153);
    - Boundary wall to the north of Allies River Road (Reference CBC0013BTH035);
    - Boundary wall to the South of Allies River Road (Reference CBC0013BTH034); and
    - The replacement boundary wall to Woodbrook House Demesne (Reference NIAH 5676).
- Direct, Negative, Moderate, Temporary impacts on the following features:
    - Saint Anne's Catholic Church Shankill (Reference RMP DU026-109, DLR RPS 1805, CBC0013BTH062);
    - Statue of Our Lady Saint Anne's Church Shankill (Reference CBC0013BTH233, RMP DU026- 109, DLR RPS 1805, NIAH 60260114);
    - Rubble wall to the north of Castle Farm Dublin Rd Shankill (Reference CBC0013BTH045);
    - Demesne wall of Crinken House (Reference CBC0013BTH037, CBC0013BTH036, DLR RPS 2074, NIAH 6026015);
    - Boundary to Askefield House (Reference CBC0013BTH032, DLR RPS 1860);
    - Demesne wall of Beauchamp House (Reference CBC0013BTH030, NIAH 2552, DLR RPS 1862);

  - Demesne wall of Corke Lodge (Reference CBC0013BTH025, DLR RPS 1869); and
  - The demesne wall of Woodbrook House Demesne (Reference CBC0013BTH024, NIAH 5676).

- A Direct, Negative, Moderate, Permanent impact on the boundary wall to Kiltuc Church (Reference RMP DU026-054001, CBC0013BTH043); and
- A Direct, Negative, Significant, Temporary impact on the milestone at Crinken (Reference DCC RPS 1858, NIAH 60260172).

Section 16.4.4 of Chapter 16 describes the potential Operational Phase impacts on architectural heritage, laid out similarly to Section 16.4.3 as described above. The assessment identified no direct significant effects on any features of architectural heritage interest through the Shankill section once the Proposed Scheme is operational, with all impacts identified as indirect and not significant to slight, as summarised in Table 16.17 in Chapter 16.

Section 16.5.1 of Chapter 16 describes the Construction Phase mitigation measures required to reduce the impact on each type of structure identified as being impacted. These measures are also replicated in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4 Part 1 of the EIAR. The mitigation measures for direct impacts on heritage features / historic fabric generally includes measures such as '*recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR*'. Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of the EIAR describes the mitigation measures in more detail for each type of historic fabric, namely:

- Architectural Heritage Buildings and Structures;
- Boundary Treatments;
- Historic Paving and Surface Treatments; and
- Statues and Other Street Furniture.

The mitigation measures as described in Section 16.5.1 of Chapter 16 reduces all of the potential impacts through the Shankill section to Not Significant or Slight, as summarised in Table 16.18. Chapter 16 concludes that there are no predicted residual Construction or Operational Phase impacts as a result of the Proposed Scheme through the Shankill section (i.e. Loughlinstown Roundabout to Bray North (Wiflord Roundabout)). Over the whole Proposed Scheme, the only predicted significant residual impact on any heritage feature occurs in Section 4 (Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge)) as a result of the demolition and reinstatement of Woodbrook Side Lodge, boundary wall and entrance gates (Reference DLR RPS 1874, NIAH 5676, CBC0013BTH021).

3.9.3.19 Impact on Property Values

Summary of issue raised

Some submissions raised the concern that the Proposed Scheme will impact property values.

Response to issue raised

The aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. The Proposed Scheme will greatly improve transport services for all that live along the route of the Proposed Scheme, by providing significantly improved sustainable transport options.

Furthermore, it is an objective of the Proposed Scheme to ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

Chapter 10 (Population) Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of the EIAR assesses the potential economic impact of the Core Bus Corridors, which includes consideration of the impact on property value. In Section 3 of the report, and specifically the section on 'The impact on property values', the conclusion states that:

'*The public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors. Evidence shows that investing in public realm creates nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area. The evidence suggests that all public realm improvements generate value, regardless of the size of the investment or the neighbourhood. Residents along the corridors will also see a measurable increase in their quality of life, with evidence showing that residents are willing to pay more for an improved public realm.*'

Based on the above text, it is believed that a combination of improved connectivity as a result of the dedicated public transport infrastructure being rolled out by the Proposed Scheme as well as public realm improvements, will not have a negative impact on values of residential properties along the scheme.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.9.3.20 Impact During Construction

Summary of issue raised

A number of submission raised the concern of disruption to traffic, pedestrians and access to properties during construction. They also raised concerns that the project timelines and construction working hours were unclear.

Response to issue raised

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) in Volume 2 of the EIAR:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

Additionally, Section 5.2.1.2 of Appendix A5.1 (CEMP) in Volume 4, Part 1 of 4, states that an objective of the Construction Traffic Management Plan is to ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.

Section 5.8.1 of Chapter 5 (Construction) of Volume 2 of this EIAR notes the following:

'The measures set out in Section 8.2.8 of the Traffic Signs Manual (DTTAS 2019) will be implemented, wherever practicable, to ensure the safety of all road users, in particular pedestrians (including able-bodied pedestrians, wheel-chair users, mobility impaired pedestrians, pushchair users) and cyclists. Therefore, where footpaths or cycle facilities are affected by construction, a safe route will be provided past the works area, and where practicable, provisions for matching existing facilities for pedestrians and cyclists will be made. Where this is not practicable, pedestrians will be directed to use the footpath on the opposite side of the road, crossing at controlled crossing points.'

As stated in Section 5.1:

'A Construction Environmental Management Plan (CEMP) has also been prepared and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to the

commencement of the Construction Phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval.'

Section 5.10.1.1, Construction Traffic Management Plan (CTMP), goes on to state:

'The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CTMP the manner in which it is intended to effectively implement all the applicable mitigation measures identified in this EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála, should they grant approval.'

Section 5.2 of the Construction Environmental Management Plan (CEMP) included in EIAR Volume 4 Appendix A5.1, contains the Construction Traffic Management Plan (CTMP). Section 5.2.1.2 of this document outlines the objectives of the CTMP as follows:

- *'Outline minimum road safety measures to be undertaken, including site access/egress locations, during the works;*
- *Provide measures that respond to all road user needs including public transport, pedestrians, cyclists and vehicular traffic;*
- *Ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme;*
- *Demonstrate to the NTA, the appointed contractor and suppliers, the need to adhere to the relevant guidance documentation for such works; and*
- *Identify objectives and measures for inclusion in the management, design and construction of the Proposed Scheme to control the traffic impacts of construction insofar as it may affect the environment, local residents and the public in the vicinity of the construction works.'*

Project Timelines

In relation to project timelines, Section 5.4 of Chapter 5 (Construction) in Volume 2 of the EIAR states:

'An indicative programme for the Proposed Scheme is provided in Table 5.2. The total Construction Phase duration for the overall Proposed Scheme is estimated at approximately 36 months. However, construction activities in individual sections will have shorter durations as outlined in Section 5.3. The programme identifies the approximate duration of works at each section. The location of each section/sub-section along the Proposed Scheme is shown in Figure 5.1 in Volume 3 of this EIAR.

Table 5.2: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300	■	■	■	■	■							
Section 1b	15 months	1,300		■	■	■	■	■						
Section 2a	15 months	5,800		■	■	■	■	■						
Section 2b	12 months	5,700	■	■	■	■								
Section 3a	12 months	1,270					■	■	■	■				
Section 3b	9 months	500							■	■	■			
Section 3c	18 months	1,800					■	■	■	■	■	■		
Section 4a	12 months	300								■	■	■	■	
Section 4b	9 months	400										■	■	■
Section 4c	9 months	350								■	■	■		

In order to achieve the overall programme duration, it will for the most part, be necessary to work on more than one section/sub-section at any one time. The programme has been prepared with a view to providing as much separation as practicable between sections under construction at any given time. This has been done in order to minimise traffic disruption and facilitate the ease of movement of sustainable modes, bus services and goods along the Proposed Scheme.'

Section 5.3.3 of Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities in Section 3a (Loughlinstown Roundabout to Shanganagh Road), Section 3b (Shanganagh Road to Quinn's Road), and Section 3c (Quinn's Road to Bray North (Wilford Roundabout)). Sheet 7 and Sheet 8 of Figure 5.1 (Work Location Drawing) in Volume 3 of the EIAR shows the location of the sub-sections related to the Shankill area. As shown in the indicative Proposed Scheme construction programme in Table 5.2 above, the expected construction duration for Sections 3a, 3b, and 3c will be approximately 12 months, 9 months and 18 months, respectively. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

Construction Working Hours

In relation to the Construction Working Hours, Section 5.10.2 of Chapter 5 (Construction) in Volume 2 of the EIAR, states:

'It is generally envisaged that construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16:30hrs on Saturdays. Night-time and Sunday working will be required to facilitate street works that cannot be undertaken during daytime/evening conditions. The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas.'

Refer also to response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) for further detail on the impact of the Construction Phase of the Proposed Scheme on Air Quality and Noise.

3.9.3.21 Impact of Road Closures

Summary of issue raised

Some submissions have commented on the impact of road closures and preventing the circular trips to the village.

Response to issue raised

Section 6.4.5.4 in Chapter 6 (Traffic & Transport) describes the potential construction impact of the Proposed Scheme.

Construction of the Proposed Scheme has the potential to impact people's day-to-day activities along the corridor. The Construction Strategy (Chapter 5 (Construction)) developed for the Proposed Scheme identifies impactful activities, considers their effect, and identifies mitigation measures to reduce or remove their impact insofar as practicably possible.

For construction activities on or adjacent public roads, all works will be undertaken in accordance with Department of Transport's 'Traffic Signs Manual, Chapter 8 Temporary Traffic Measures and Signs for Roadworks' and associated guidance. Chapter 5 (Construction) contains temporary traffic management proposals for the Proposed Scheme. These proposals maintain safe distance between road users and road workers, depending on the type of construction activities taking place and existing site constraints. Temporary diversions, and in some instances temporary road closures, may be required where a safe distance cannot be maintained to undertake works necessary to complete the Proposed Scheme. All road closures and diversions will be determined by the NTA, who may liaise with the local authority and An Garda Síochána, as necessary. The need for temporary access restrictions will be confirmed with residents and businesses prior to their implementation.

Existing public transport routes will be maintained throughout the duration of the Construction Phase of the Proposed Scheme (notwithstanding potential for occasional road closures / diversions as described in Chapter 5 (Construction) of this EIAR. Wherever practicable, bus services will be prioritised over general traffic. However, the temporary closure of sections of existing dedicated bus lanes may be required to facilitate the construction of new bus priority infrastructure that is being developed as part of the Proposed Scheme. It is also likely that some existing bus stop locations may need to be temporarily relocated to accommodate the works. In such cases operational bus stops will be safely accessible to all users. The impact is considered to have a Negative, Slight and Temporary effect to public transport users.

The Proposed Scheme will be constructed to ensure the mitigation of disturbance to residents, businesses and existing traffic. Localised temporary lane or road closures may be required for short periods. Details of illustrative temporary traffic management measures to facilitate construction of the Proposed Scheme are included in Chapter 5 (Construction). All road closures and diversions will be determined by the NTA, who may liaise with the local authority and An Garda Síochána, as necessary. It should be noted that access will be maintained for emergency vehicles along the Proposed Scheme, throughout the Construction Phase.

3.9.3.22 Request for Oral Hearing

Summary of issue raised

A number of submissions have requested that an oral hearing is held.

Response to issue raised

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.9.3.23 Support for the Scheme

Summary of issue raised

A number of submissions stated that they are in support of the overall BusConnects Scheme.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support improvement of bus services.

3.9.4 Other Issues Raised and Responses

3.9.4.1 Insufficient Detail & Constitutional Rights

Summary of issue raised

The submission also noted that it would be premature for the Bord to make decision with this amount of detail as it would be an infringement on Constitutional Rights to quiet enjoyment of property.

Response to issue raised

The submission makes an assertion that the proposed scheme would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property due to lack of design put forward as part of the Planning application.

The CPO itself and the statutory notice served therein set out that the lands are being acquired for the purposes of the Bray to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 (Introduction) in Volume 2 of the EIAR. They are also explained below in response to this objection.

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

Powers of NTA and Statutory basis for the CPO Application

Refer to response in Section 3.1.4.1 on the Constitutional requirements of CPO on Powers of NTA.

Purpose of the CPO of the land

Please refer to response Section 3.9.3.12 in this report for further information on the Impact to Green Amenity Areas under the Woodbank, which notes details of the purpose of the CPO for the proposed works and cross-section required for the CPO of the Proposed Scheme at Woodbank.

Figure 3.181 shows the CPO plot at the property at Woodbank, Dublin Road from Deposit Maps sheet 011, as part of the Compulsory Purchase Order to the EIAR.

As part of Proposed Scheme, the lands at plot numbers 1110(1).1e and 1110(2).1e are permanently acquired for widening of the Dublin Road carriageway and relocation of boundary wall at Woodbank estate, hence meeting the objectives of BusConnects.

As part of Proposed Scheme, the lands at plot number Plot 1110(3).2e and 1110(4).2e are proposed to be temporary compulsorily acquired for the purpose of construction works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

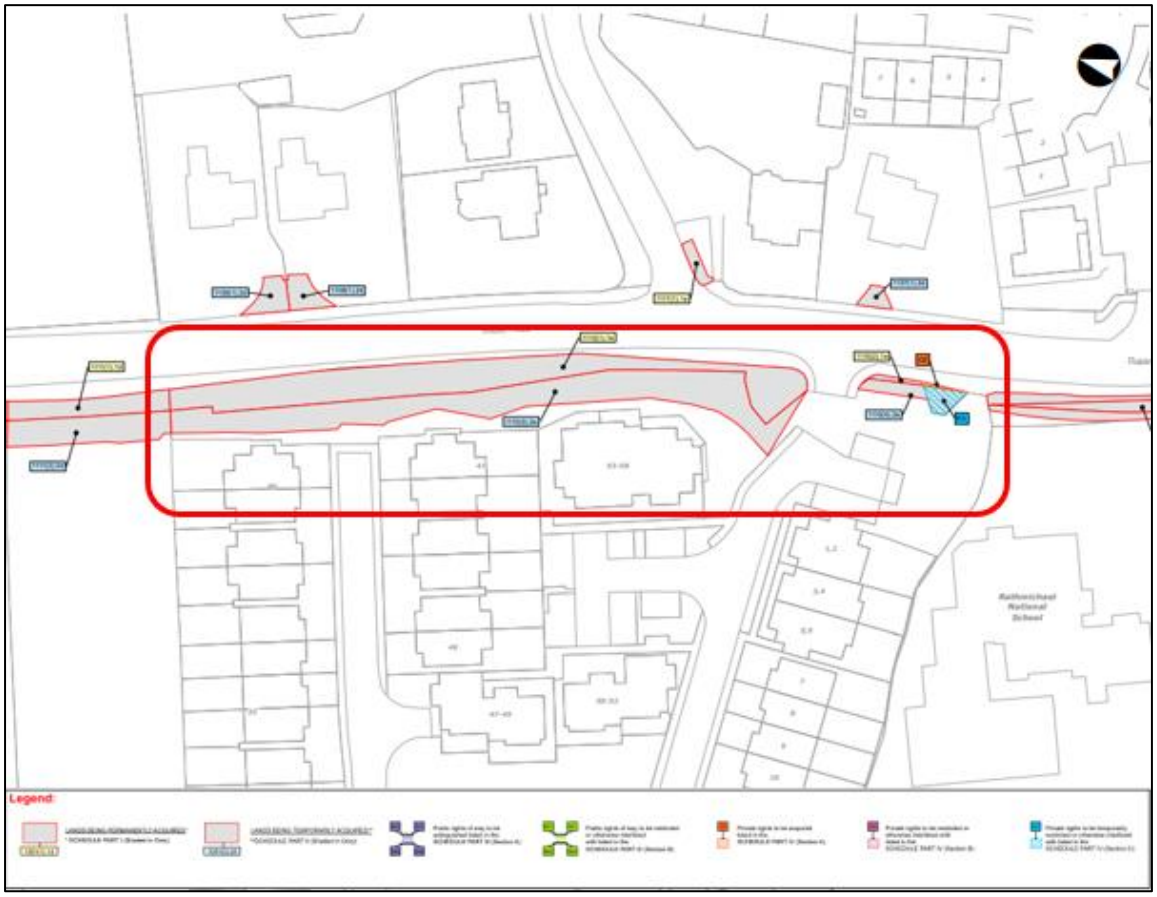


Figure 3.181: Extract from Deposit Map at Woodbank, Dublin Road (Sheet 011)

Proposed Scheme Details

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 3 notes details for the Proposed Scheme at Shankill.

The design details are also shown in Chapter 4 (Proposed Scheme Description) Part 1 and Part 2 of 3 Figures in Volume 3 of EIAR.

Chapter 5 (Construction) in Vole 2 of EIAR describes the construction activities along the Proposed Scheme.

Additionally, the Preliminary Design Report and the associated Appendices of the PDR, part of Supplementary information, also gives description of the design details of the Proposed Scheme.

The design of the Proposed Scheme has been developed to a stage where all potential environmental impacts can be identified, and a fully informed environmental impact assessment has been carried out.

EIAR Assessment

The Environmental Impact Assessment Report (EIAR) has assessed the impacts of the Proposed Scheme in each of the assessment chapters and summarised the predicted significant residual impacts in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of EIAR. As described in Chapter 1 (Introduction) in Volume 2 of the EIAR, the EIAR for the Proposed Scheme has been prepared in accordance with the requirements of the EIA Directive and all applicable Irish legislation, as well as 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency in 2022.

Please refer to response Section 3.9.3.10 in this report for further information on Adequacy of Environmental Assessment.

Constitutional Rights

Refer to response in Section 3.1.4.1 on Constitutional requirements of CPO and also note below.

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of EIAR Chapter 3 Reasonable Alternatives provides a detailed summary of this, with further details provided in the Preferred Route Option Report provided in the Supplementary Information submitted with the application for the Proposed Scheme. In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. Section 3.3 of Chapter 3 of the EIAR set out that design development and assessment work was carried on this section of the Proposed Scheme. The design development in Section 3 to inform the Proposed Scheme is documented in Section 6.5 of the Preferred Route Option Report, part of Supplementary Information.

Please refer to response in Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill covering the alternatives considered and design development to inform the Proposed Scheme, in particular section between Loughlinstown Roundabout to Stonebridge Road.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.9.4.2 Insufficient Land Take Details in the CPO and Consultation

Summary of issue raised

One submission raised the concern that the CPO received did not detail the exact amount of land to be compulsorily acquired at Olcovar.

The submission raised the concern that they had requested more details of the proposal, on behalf of their client, after receiving the CPO, however they never received any response from the NTA that was specific to the property.

Response to issue raised

The CPO and Schedule has been prepared in accordance with the requirements under the Section 76 of the Third Schedule of the Housing Act 1966 (as extended and amended). Deposit Maps are prepared for the Proposed Scheme and individual landowner maps have been issued to the impacted landowner with the CPO pack. The CPO Schedules states the following:

- *'The land described in Part I of the CPO Schedule hereto and coloured grey on the said deposited maps is land being permanently acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense; and*
- *The land described in Part II of the CPO Schedule hereto and coloured grey on the said deposited maps is land being temporarily acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense'.*

It is noted that throughout the project there have been several communications (letter, emails and telephone calls) with the interested parties with regard to the Proposed Scheme at their property.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

As part of Proposed Scheme, the lands at plot numbers 1085(1).1a, 1085(2).1d, 1085(3).1e, are permanently acquired to tie into the entrance to Olcovar estate. Plot 1085(4).1e is permanently acquired to allow the Dublin Road to be widened locally to provide a signal-controlled bus gate, to allow bus priority along the section of the Dublin Road that does not have a separate bus lane, hence meeting the objectives of BusConnects.

As part of Proposed Scheme, the lands at plot number Plot 1085(5).2e is proposed to be temporary compulsorily acquired for the purpose of construction works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

Figure 3.182 below shows the CPO plot at the property at Olcovar, Dublin Road from Deposit Maps (Sheet 009).

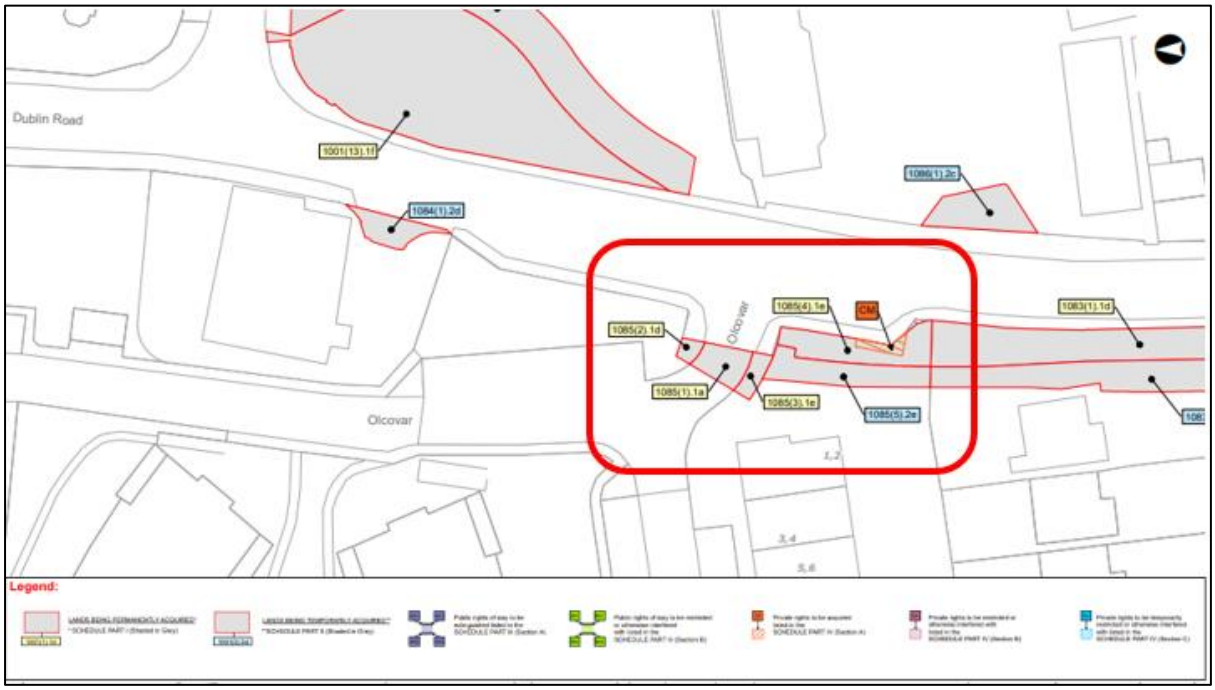


Figure 3.182: Extract from Deposit Map at Olcovar, Dublin Road (Sheet 009)

Figure 3.183 below shows the 02-General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed scheme plans at Olcovar (Sheet 45). This shows the section of road widening to the south of the estate entrance, for the proposed signal-controlled priority at the new proposed bus gate.

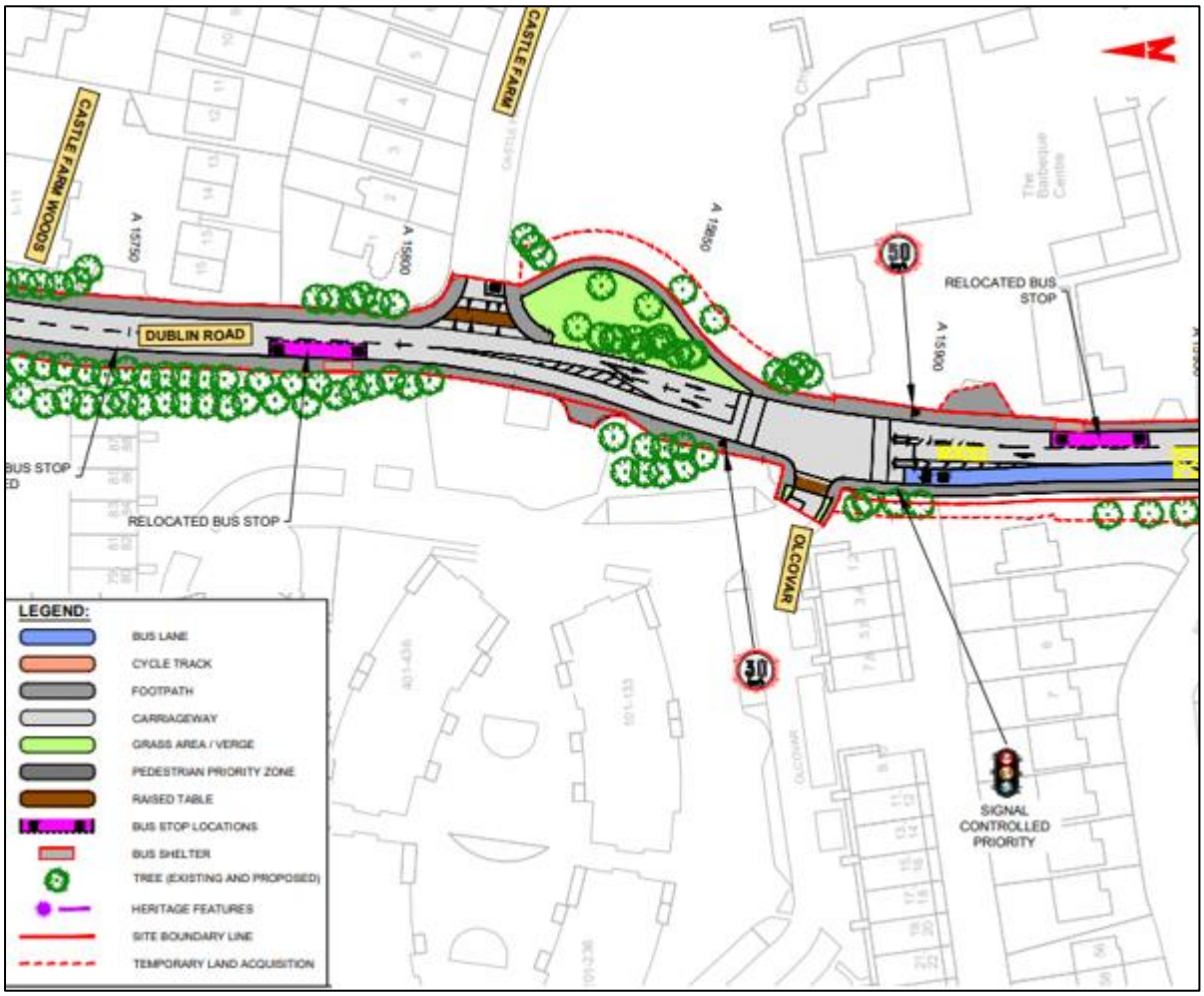


Figure 3.183: Extract from General Arrangement Drawing at Olcovar, Dublin Road (Sheet 45)

3.9.4.3 Flooding

Summary of issue raised

One submission summarised concern relating to water infrastructure, commenting that there is no evidence of planning for the stream running under the R119, which has previously caused flooding issues within the area.

Response to issue raised

Figure 3.184 below shows an extract from the Appendix A13.2-Site Specific Flood Risk Assessment (FRA), in Volume 4 of the EIAR. The figure shows the Proposed Scheme is crossing two watercourses along the R119; Rathmichael Stream and River Dargle, and these have both been assessed as part of the Flood Risk Assessment for the Proposed Scheme.

No change in ground levels is proposed as part of the scheme and there will be no change to the risk of flooding. As noted, the proposed works comprise extension to an existing highway, maintaining the existing level of flood risk is considered to be acceptable.

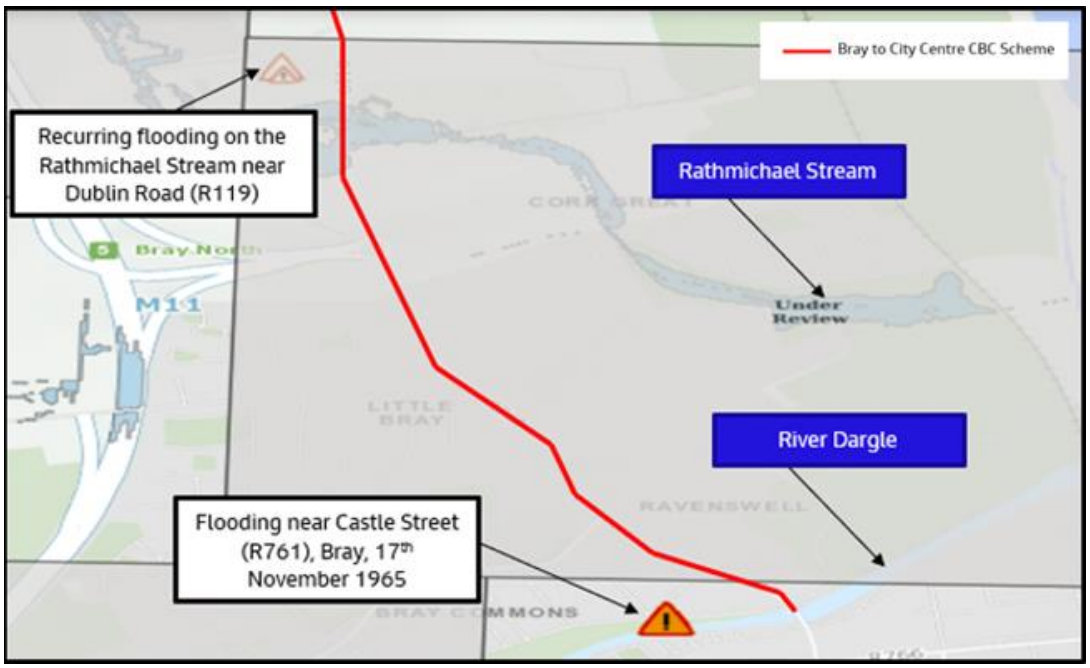


Figure 3.184: Extract from Appendix A13.2-Site Specific Flood Risk Assessment (Figure 4.5 Location of historic flooding near Dublin Road R119) and Castle Street (R761))

3.9.4.4 Impact to Boundary Walls & Privacy

Summary of issue raised

A number of submissions raised concerns regarding the impacts to their property boundaries and concern about loss of privacy.

There were also a number of location-specific submissions, which are summarised and responded to in their own sub-sections following the below response (Section 3.9.4.4.1 to Section 3.9.4.4.5 of this report).

Response to issue raised

In respect of boundary treatment and loss of privacy, as noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis and maintains the privacy of the residents.

As stated in Section 4.5.3.8.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, in relation the Loughlinstown Roundabout to St Anne's Shankill, Including Stonebridge Road:

'Where stone wall boundaries are proposed to be reinstated and set back, the materials are to match existing utilising any existing stone where possible.'

Refer to location-specific responses below for further detail.

3.9.4.4.1 Woodbank

Summary of issue raised

One submission raised concern that the Proposed Scheme will lead to overlooking of properties in the Woodbank Estate, adjacent to the scheme.

Response to issue raised

The 05-Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Figure 3.185 below, shows Sheet 42 of the Landscaping General Arrangement Drawings, which shows the section of the Proposed Scheme at Woodbank, including areas of tree removal and locations and details of proposed new tree and vegetation planting along the boundary wall of the estate.

Figure 3.186 shows an extract from 07-Fencing and Boundary Treatment Drawings, Volume 3, Part 1 of 3 of the EIAR. This shows the relocation and reinstatement of the existing boundary wall.

There are no proposed bus stops located adjacent to Woodbank estate, and the proposed planting along with the reinstatement of the set-back boundary wall will help screen the properties from passing traffic.

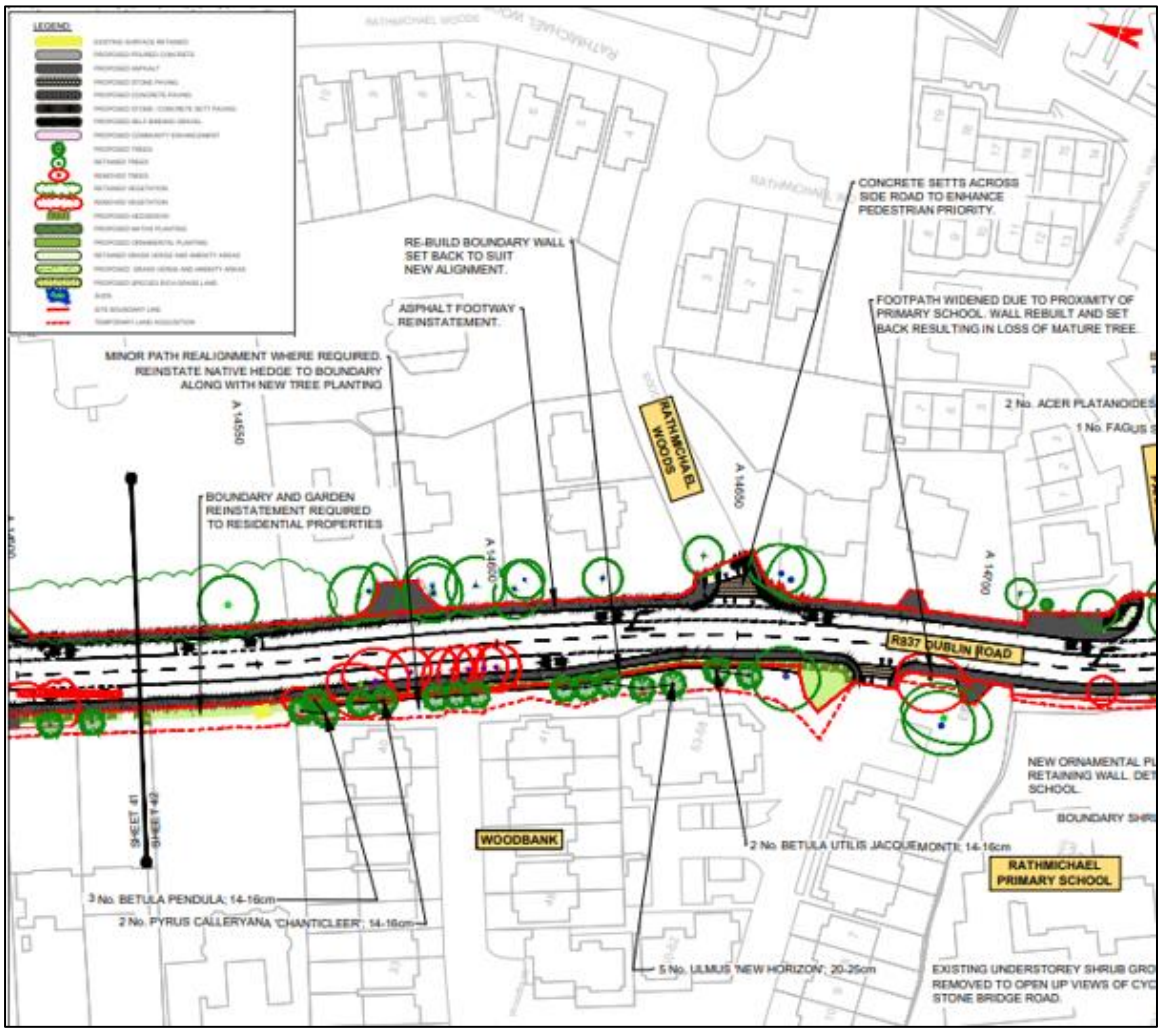


Figure 3.185: Extract from Landscaping General Arrangement Drawings at Woodbank (Sheet 42)

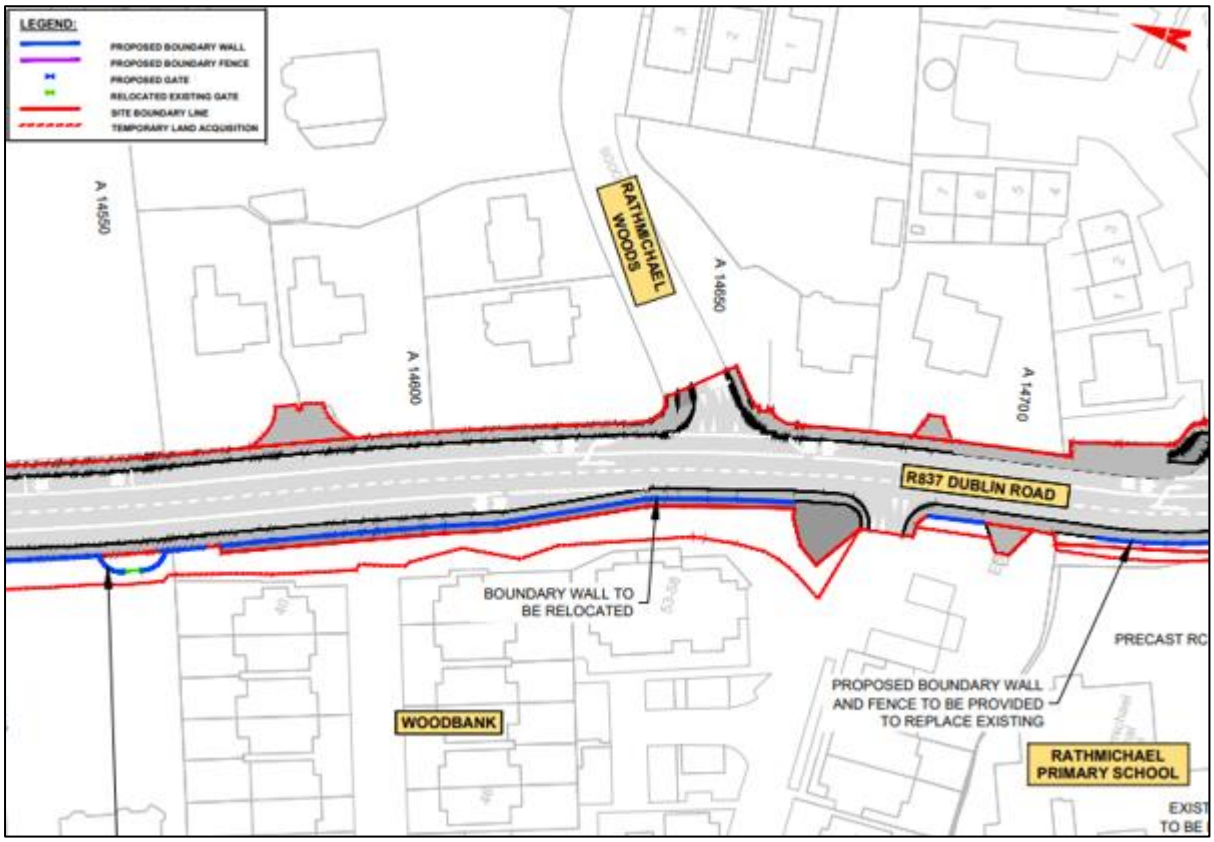


Figure 3.186: Extract from Fencing and Boundary Treatment Drawings at Woodbank (Sheet 42)

3.9.4.4.2 Beech Road

Summary of issue raised

A submission raised concern on the removal of the wall and trees between residents and the main road will increase noise pollution, dust/dirt, lower air quality, and is an invasion of privacy where residents will have buses looking directly into the front of their homes.

Response to issue raised

The 05-Landscaping General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Figure 3.187 below, shows Sheet 45 of the Landscaping General Arrangement Drawings, which shows the section of the Proposed Scheme at Beech Road, showing the proposed extent of tree removals and the proposed new trees and ornamental planting along the boundary. This is further described in Section 3.9.3.11.2.

Figure 3.188 shows an extract from 07-Fencing and Boundary Treatment Drawings, Volume 3, Part 1 of 3 of the EIAR. This shows the relocation and reinstatement of the existing boundary wall and fence along Beech Road.

The proposed planting along with the reinstatement of the set-back boundary wall will help screen the properties from passing traffic, and noise and dust.

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in relation to impact on ‘Noise and Air Quality’ in Shankill and Beech Road.

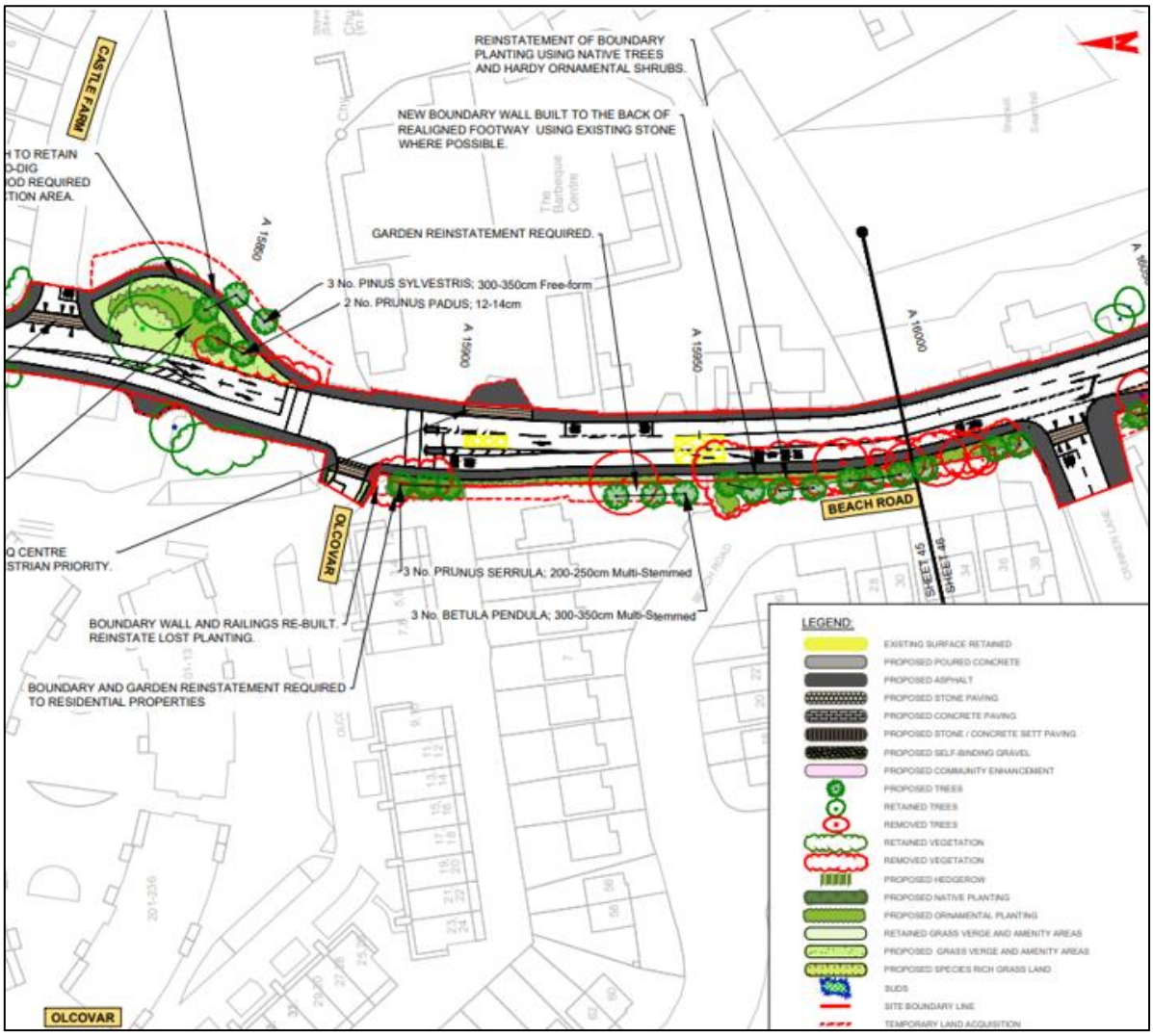


Figure 3.187: Extract from Landscaping General Arrangement Drawings at Beech Road (Sheet 45)

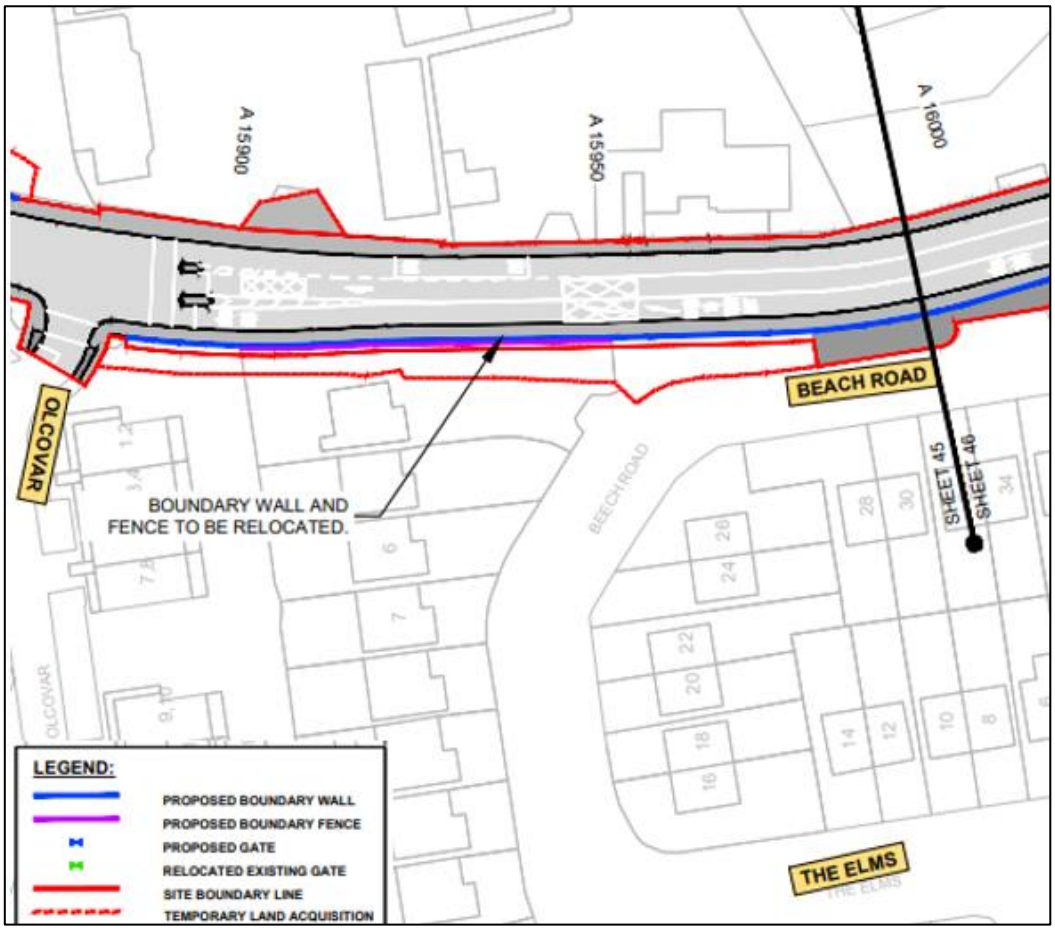


Figure 3.188: Extract from Fencing and Boundary Treatment Drawings at Beech Road (Sheet 45)

3.9.4.4.3 No.3 Windrush

Summary of issue raised

One submission raised concern that the Proposed Scheme will cause noise pollution and reduce privacy to house. The submission requested that the wall close to house should be built higher to alleviate this issue.

Response to issue raised

Figure 3.189 shows an extract from 02-General Arrangement Drawings, Volume 3, Part 1 of 3 of the EIAR, showing the Proposed Scheme at No.3 Windrush. The Proposed Scheme will have no impact on the existing boundary wall, so there will be no impact to the privacy at this location.

The proposed footpath and road edge will move slightly closer to the property boundary wall, however, there will be no additional lanes of traffic other than the short section of turning lane onto Beechfield Manor.

Also refer to the response in Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in relation to impact on Noise and Air Quality in this area of Shankill.

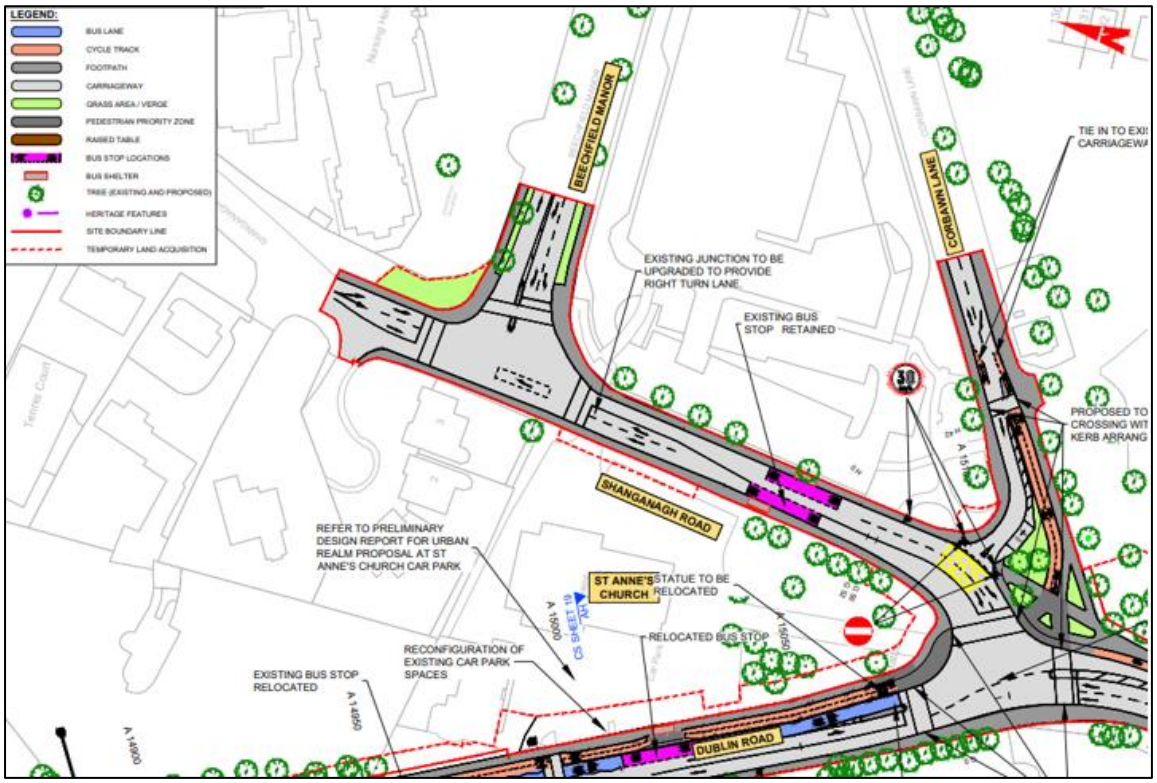


Figure 3.189: Extract from General Arrangement Drawings at No.3 Windrush (Sheet 43)

3.9.4.4.4 Rathmichael Woods

Summary of issue raised

The submission raised concern regarding the demolition work adjoining their very old west wall and the impact it may have on the wall foundation. They note that they understand the wall dates back to the first decade of the 20th century.

Response to issue raised

Figure 3.190 shows an extract from the 07-Fencing and Boundary Treatment Drawings, from Chapter 4 (Proposed Scheme Description) in Volume 3 of the EIAR. This shows that there is no works proposed to the boundary wall at Rathmichael Woods. As part of the works, the

Assessments of existing structures and proposed structures are included in Chapter 4.6.8 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, along with Chapter 8 (Structures) in the Preliminary Design Report, and Appendix F – Structures Reports in the Preliminary Design Report also. The assessments did not identify any impact to the existing boundary wall at Rathmichael Woods.

As there are no proposed changes to the kerb line or width of pavement, the construction works required to reinstate the footpath pavement will have minimal impact on any surrounding boundary structures. Additionally, Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

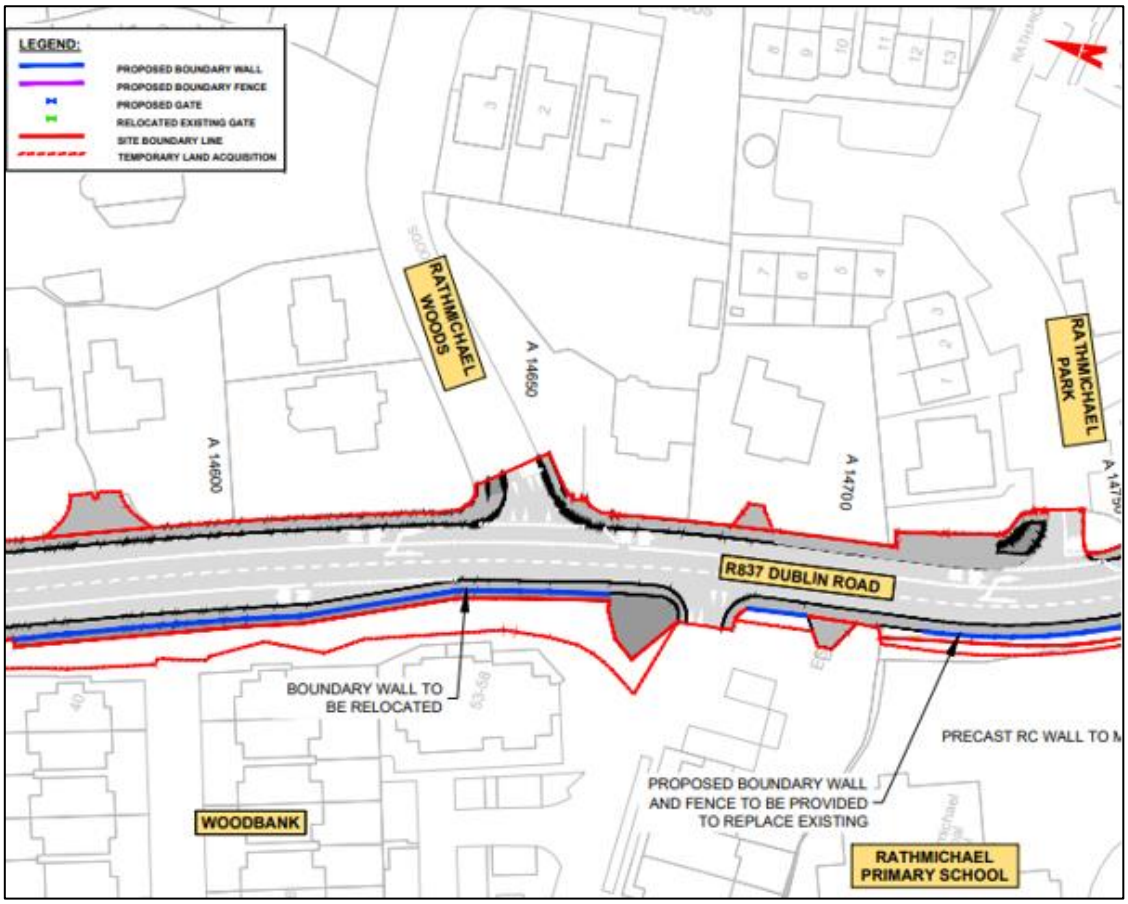


Figure 3.190: Extract from Fencing and Boundary Treatment Drawings at Rathmichael Woods (Sheet 42)

3.9.4.4.5 Olcovar

Summary of issue raised

The submission raised the concern that the acquisition of lands adjacent to their property will be an invasion of privacy.

Response to issue raised

Refer to Section 3.9.4.2 on Insufficient Land Take Details in the CPO and Consultation in this report for further details on Proposed Scheme at Olcovar and detail of the permanent and temporary land acquisition plots.

Refer to Section 3.9.3.12.4 (Olcovar) in this report for further details on the impact to green amenity areas and proposed landscaping at Olcovar.

Figure 3.191 shows an extract from 07-Fencing and Boundary Treatment Drawings, Volume 3, Part 1 of 3 of the EIAR. This shows the like-for-like relocation and reinstatement of the existing boundary wall and fence, to the south of the estate entrance.

The proposed planting along with the reinstatement of the set-back boundary wall will help screen the properties from passing traffic.

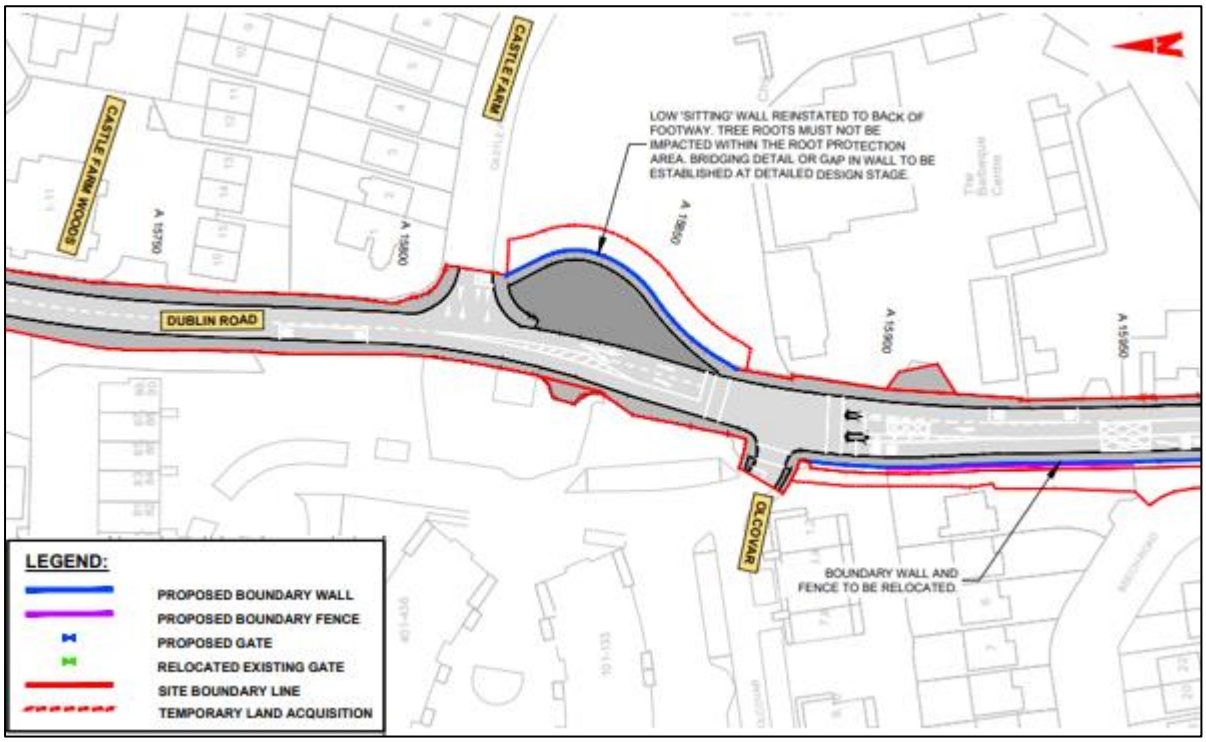


Figure 3.191: Extract from Fencing and Boundary Treatment Drawings at Olcovar (Sheet 45)

3.9.4.4.6 Kiltuc

Summary of issue raised

The submission raised concerns regarding the loss of land, the removal / impact on a 200+ year old boundary wall. A further concern was around a historic outline of a pedestrian entrance that was used for access to a 'well' which provided water to the locals before the implementation of a public water supply.

Response to issue raised

The Proposed Scheme works would require set-back of the existing boundary wall and the gates will be set-back at the same location.

Additionally, where the walls are of heritage significance, as outlined in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR, the taking down and rebuilding of such walls will be managed in accordance with the mitigation measures described in Section 16.5.1 of Chapter 16, including '*recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR*'.

The Proposed Scheme Boundary Treatment design at the location of Kiltuc is shown in the 07- Fencing and Boundary Treatment Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.192 which shows a continuous boundary wall set-back with the gate.

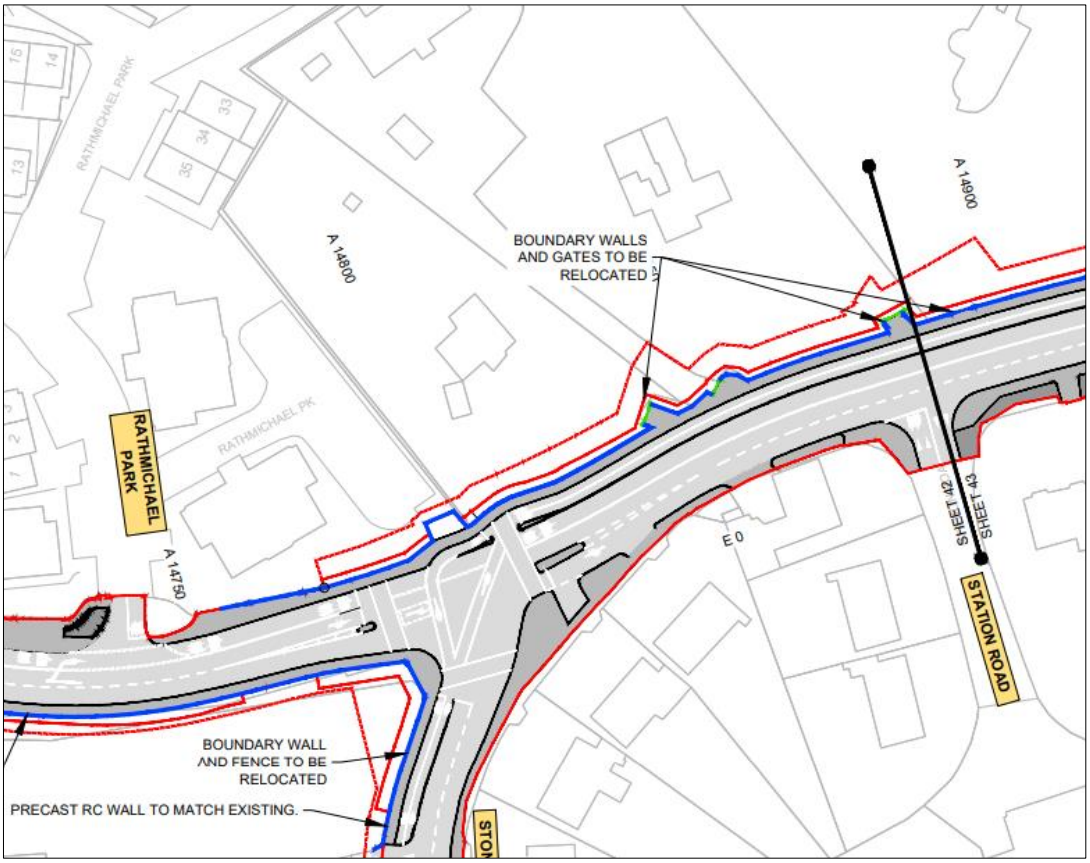


Figure 3.192: Extract from Boundary Treatment Drawing at Kiltuc on Dublin Road (Sheet 42)

3.9.4.4.7 Narrow Meadow

Summary of issue raised

The submission raised concerns regarding the negative impact that the CPO would have on the property, specifically mentioning the concern related to the impact and associated relocation of the property frontage *(stone walls, piers and capping stones, wooden gates with automated mechanism for opening and closing)* and services / utilities as part of the Proposed Scheme.

The submission also raised concerns regarding the two-way cycle track running alongside the footpath on Stonebridge Road, outside of Narrow Meadow and comments that the lack of segregated facilities would cause a danger to pedestrians, especially mentioning the footfall of pedestrians to and from the local schools, church, and the shops, further mentioning that this part of the design will also prove challenging / problematic for entering and exiting the properties at this location.

Response to issue raised

The Proposed Scheme would require set-back of the existing boundary wall. The Proposed Scheme Boundary Treatment design at the location of Narrow Meadow is shown in the 07- Fencing and Boundary Treatment Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.193 which shows a continuous boundary wall set-back with the gate.

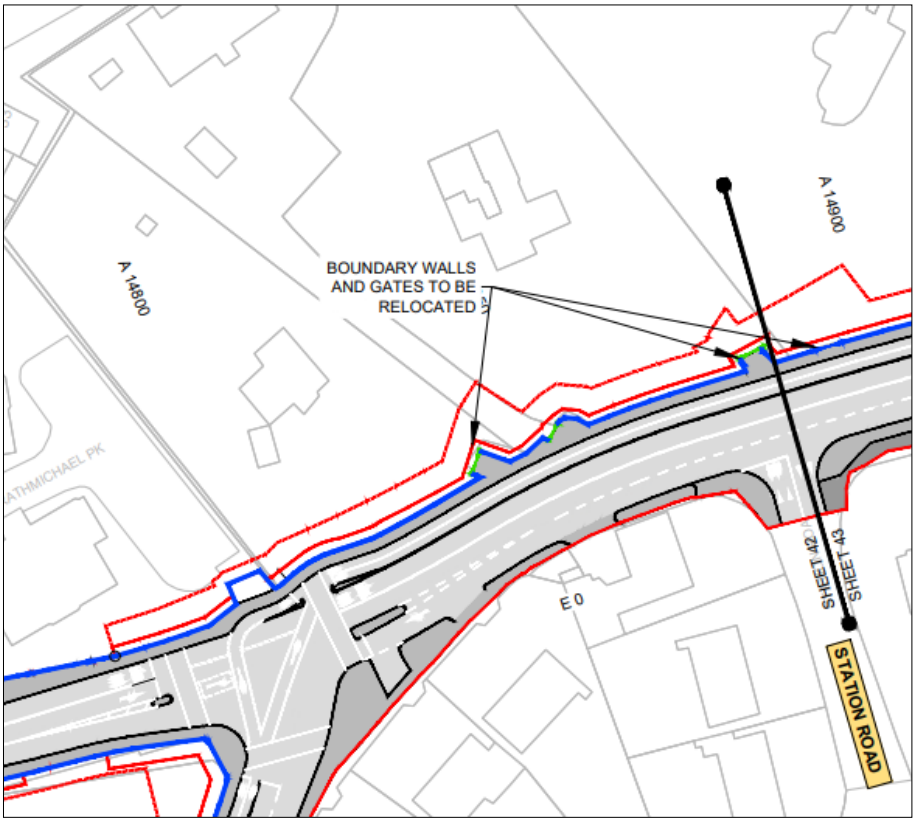


Figure 3.193: Extract from Boundary Treatment Drawing at Narrow Meadow on Dublin Road (Sheet 42)

The existing access / egress gates, see below Figure 3.194, at the property of Narrow Meadow will be set-back along with the boundary wall at the same location. The access / egress and the gates will be designed like for like to allow for safe access and egress. There are no turning restrictions from the property, post-construction.

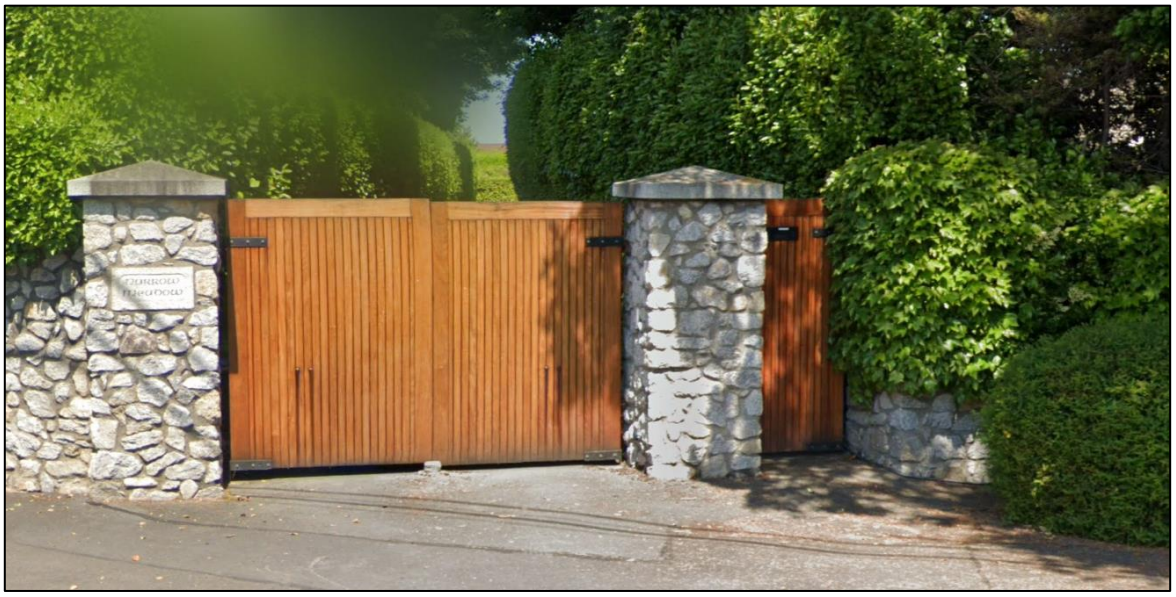


Figure 3.194: Existing street view directy at Narrow Meadow Access / Egress on Dublin Road (Image Source: Google)

Regarding the concern for vehicular access and egress to the property, although continuous segregated cycle track has been shown in the Proposed Scheme design, the cycle track will ramp down to carriageway level and kerbs improved over the length of the property mouth to allow for access for vehicles to safely enter / exit the properties. This is similar to what can be seen in the existing access arrangement, shown in Figure 3.194 above.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with access / egress at these properties during the operational phase.

Regarding unavoidable disruptions to utilities and service infrastructure, Section 19.5.1.1 in Chapter 19 (Material Assets) in Volume 2 of the EIAR outlines that works will be carefully planned in consultation with each utility provider, interruptions will be time-bound so far as is reasonably practicable in order to minimise service disruption and prior notification issued to impact properties.

'Where diversions, or modifications, are required to utility infrastructure (as listed in Section 19.4.3), service interruptions and disturbance to the surrounding residential, commercial and / or community property may be unavoidable. Where this is the case, it will be planned in advance by the appointed contractor. Required service interruptions will generally only occur for a set period of time per day (a set number of hours not exceeding eight hours where reasonably practicable) and will generally not be continuous for full days at a time. Prior notification will be given to all impacted properties. This notification will include information on when interruptions and works are scheduled to occur and the duration of such interruption. Any required works will be carefully planned by the appointed contractor to ensure that the duration of interruptions is minimised in so far as is practicable.'

The following drawing series provide information in relation to utility services at the property and are provided as Appendices in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR:

- 13. ESB Asset Alterations – Low voltage overhead diversion
- 16. Telecommunications Asset Alterations – EIR network diversion

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.9.4.5 Impact to Property Access

There were a number of location-specific submissions, which are summarised and responded to in their own sub-sections below (Section 3.9.4.5.1 to 3.9.4.5.4 of this report).

3.9.4.5.1 Seaview Park

Summary of issue raised

One submission raised concern regarding the access to Seaview Park due to the additional traffic lanes on Dublin Road, commenting that the existing layout makes it difficult to exit to the right, into the city and the proposed changes would result in crossing additional lanes.

One commented that a number of accidents have already happened when exiting Seaview and more would occur with the new proposed change, concerns were raised in particular for the impact on the less able and elderly.

Response to issue raised

The existing access and egress at Dublin Road to Seaview Park will be retained post construction. Figure 3.195 below shows an extract from the 02-General Arrangement Drawing, in Volume 2 of the EIAR, at Seaview Park. There is no restriction turning right from the estate, post-construction, and the addition of the proposed toucan crossing to the south of the access may provide more opportunity to turn right as traffic slows/stops for the signals.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with the access/ egress to Seaview Park during operational phase.

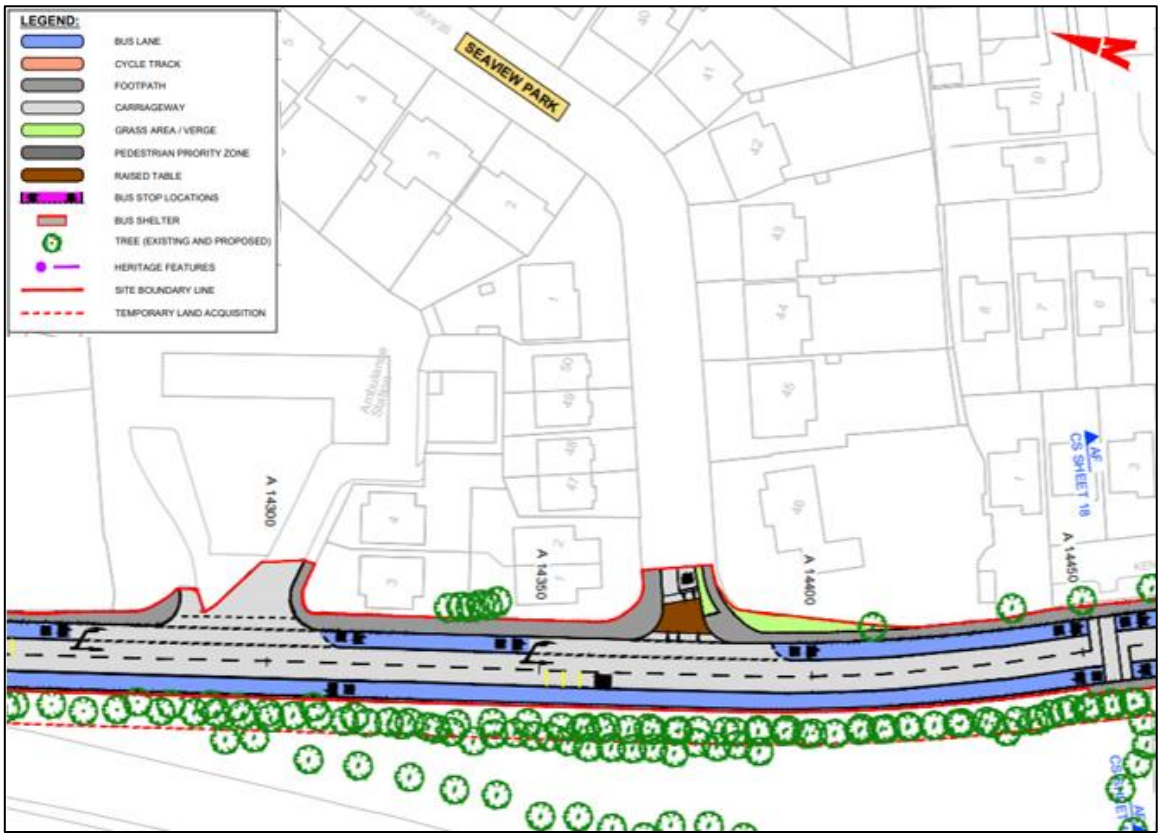


Figure 3.195: Extract from General Arrangement Drawings at Seaview Park (Sheet 41)

3.9.4.5.2 Carezza

Summary of issue raised

The submission also raises concerns over the impacts to the property front gate needing to be relocated further into the property, due to the removal and reinstatement of the boundary wall and will subsequently cause issues for accessing and exiting vehicles, stating that vehicles will be stopped *'partially'* in the proposed cycle tracks.

Response to issue raised

The Proposed Scheme works would require set-back of the existing boundary wall. The Proposed Scheme Boundary Treatment design at the location of Carezza is shown in the 07- Fencing and Boundary Treatment Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 42 and shown in Figure 3.196 which shows a continuous boundary wall set-back with the gate.

The existing access/ egress gate at the property of Carezza will be set-back along with the boundary wall at the same location. The access/ egress and the gate will be designed like for like to allow for safe access and egress. There are no turning restrictions from the property, post-construction.

Regarding the concern for vehicular access and egress to the property, although continuous segregated cycle track has been shown in the Proposed Scheme design, the cycle track will ramp down to carriageway level and kerbs improved over the length of the property mouth to allow for access for vehicles to safely enter / exit the properties. This is similar to what can be seen in the existing access arrangement

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with the access and egress to the property post construction.

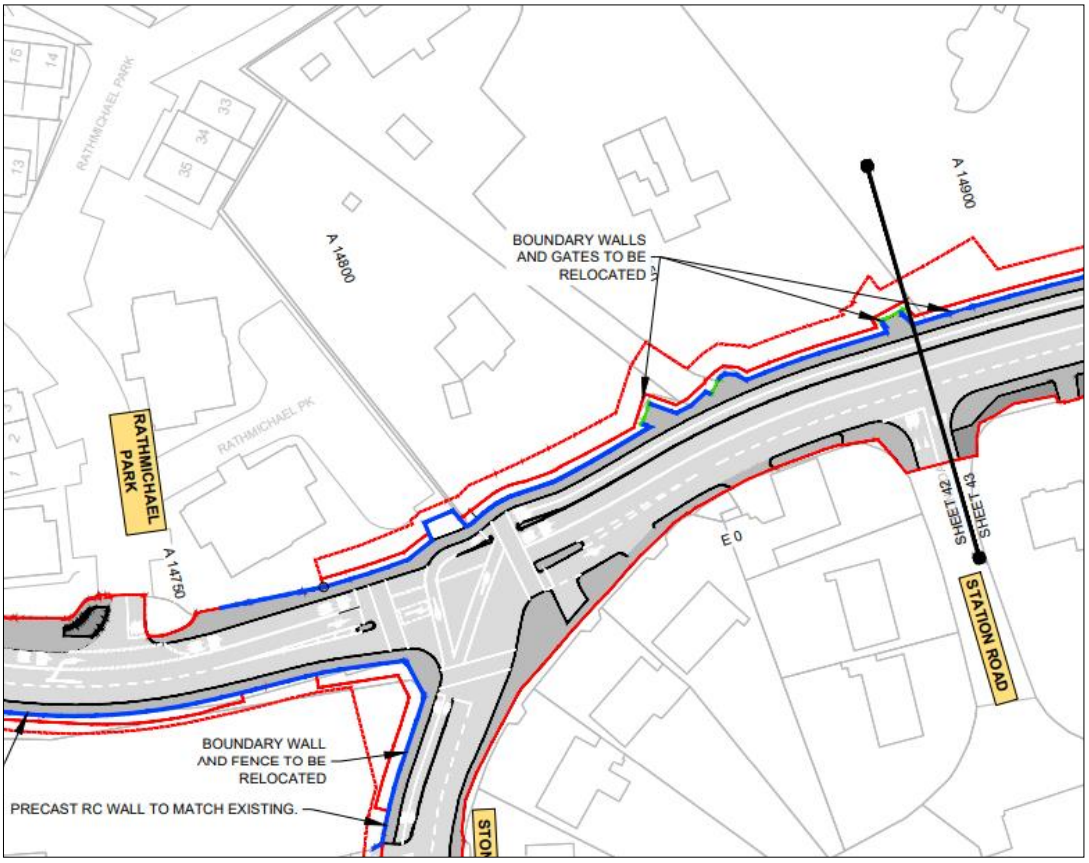


Figure 3.196: Extract from Boundary Treatment Drawing at Carezza on Dublin Road(Sheet 42)

3.9.4.5.3 Rathmichael Woods

Summary of issue raised

The submission raised concern that the new ramp and changed Rathmichael Woods entrance arrangement will impact the safe access and egress from their driveway. They proposed to move the large rock with estate name to the opposite side of the road or move it further into the estate to avoid blocking the sightlines at their driveway.

Response to issue raised

Figure 3.197 below shows an extract from the 02-General Arrangement Drawing, in Volume 2 of the EIAR, at Rathmichael Woods. There is no proposed change to the driveway access to the property to the property in question, Carrigfern, near the entrance to Rathmichael Woods. The extent of the Proposed Scheme, the proposed footpath, ends prior to the driveway access. There will be no restrictions to visibility at the access, during or post construction. The existing access and egress to the property will be maintained during construction and retained as per existing arrangement.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with the access/ egress to the property and visibility post construction.

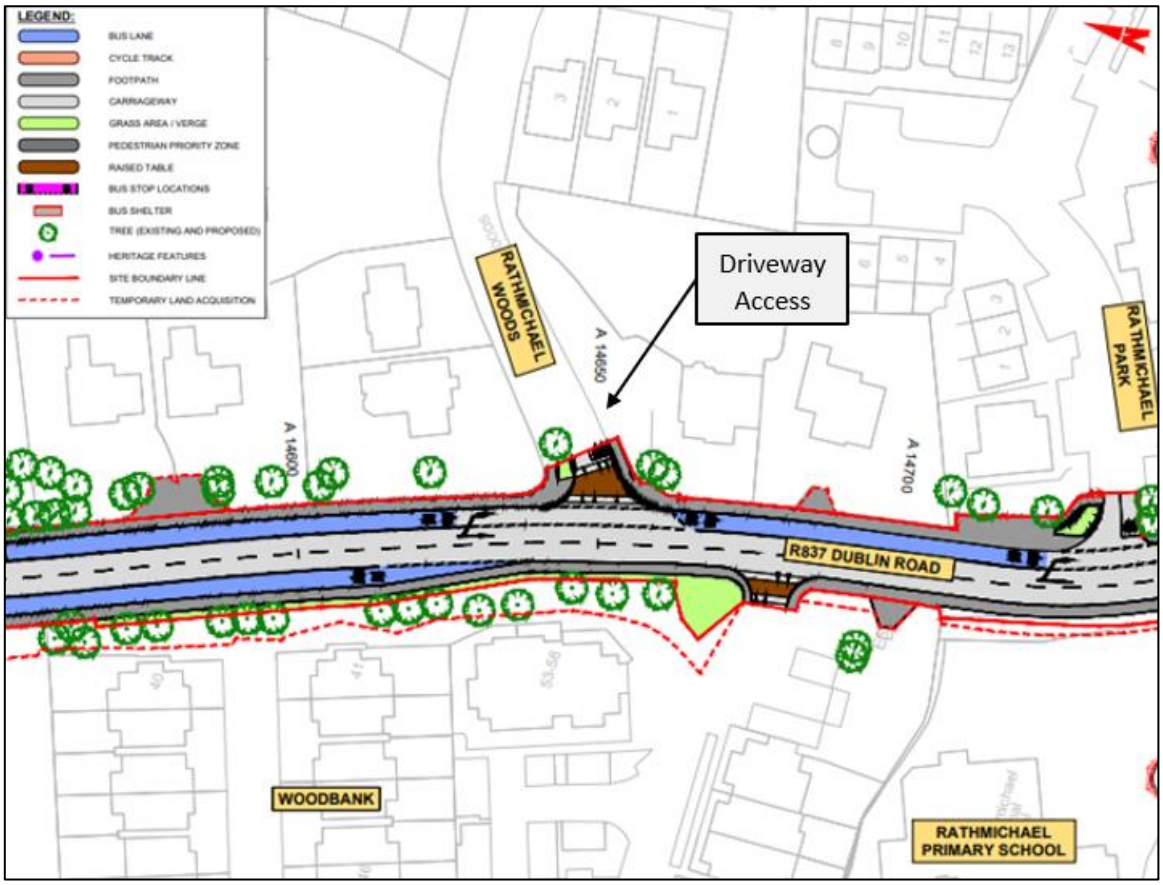


Figure 3.197: Extract from General Arrangement Drawings at Rathmichael Woods (Sheet 42)

3.9.4.5.4 Barbeque Centre

Summary of issue raised

The submission raised the concern the construction of the Proposed Scheme would negatively impact their business at the Barbeque Centre. They raised the issue that previous works for the installation of pedestrian lights outside the Barbecue Centre resulted in a 67% reduction in business.

Response to issue raised

The primary concern of the objection related to the impact to businesses due to the impact to access to the businesses at the Barbeque Centre.

Refer to response in Section 3.9.3.20 in this report for further information on the Impact During Construction.

Refer to response in Section 3.9.3.17 in this report for further information on Impact to Business.

As part of Proposed Scheme, the lands at plot number Plot 1086(1).2c is proposed to be temporarily compulsorily acquired for the resurfacing works of the entrance to the property. Temporary land take will be returned after construction. The temporary land take is depicted in the Deposit Map sheet 09 as shown in Figure 3.198.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works.'

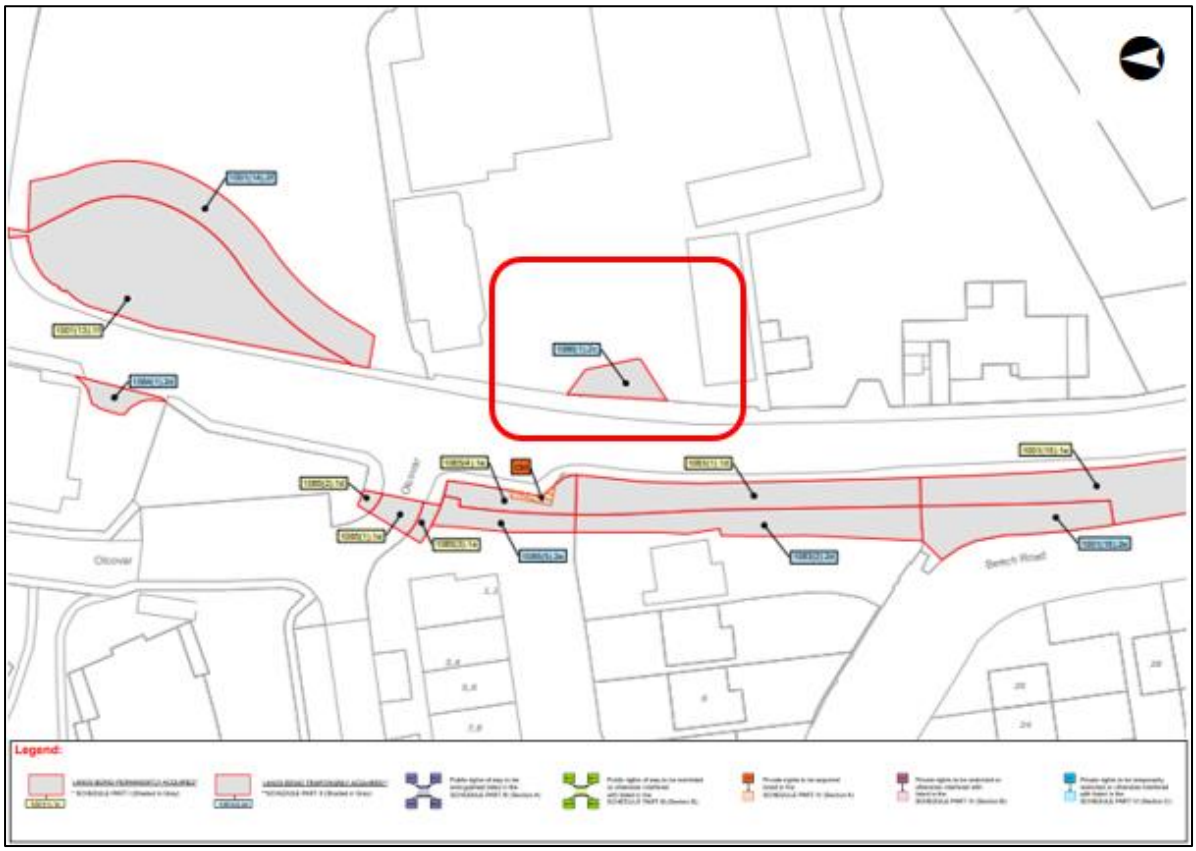


Figure 3.198: Extract from Deposit Map at Dublin Road (Sheet 009)

With regards to the access/ egress during construction, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable.

As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Section 5.10.1.1, Construction Traffic Management Plan (CTMP), goes on to state: *'The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CTMP the manner in which it is intended to effectively implement all the applicable mitigation measures identified in this EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála, should they grant approval.'*

The existing access and egress at Dublin Road to the Barbeque Centre will remain as existing post construction. Figure 3.199 below shows an extract from the 02-General Arrangement Drawing, in Volume 2 of the EIAR, at the Barbeque Centre.

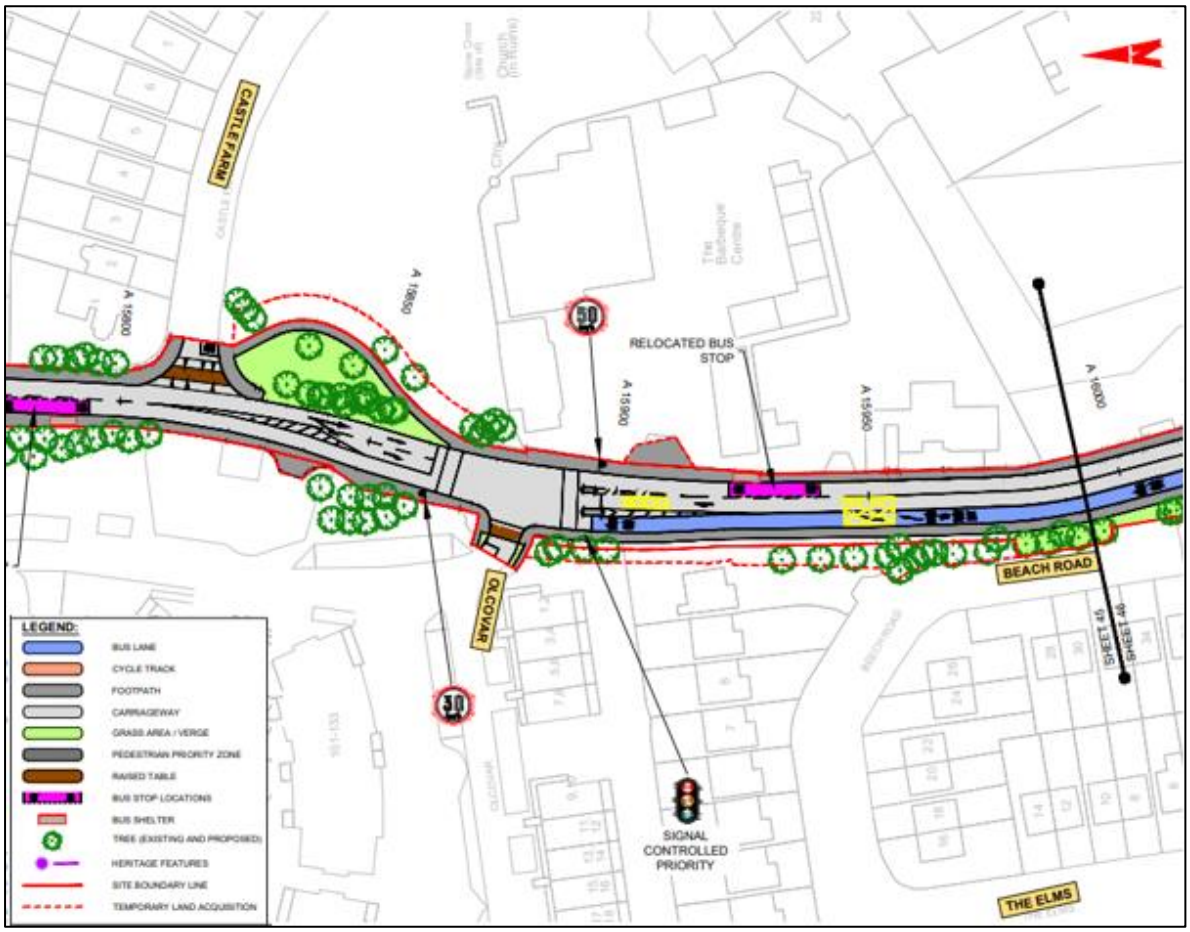


Figure 3.199: Extract from General Arrangement Drawings at Barbeque Centre (Sheet 45)

NTA are satisfied that suitable traffic management measures will be ensured during construction works to maintain safe access and egress to the property all times. The operational ability of the business remains unchanged and the arrangement of how vehicles access the business is not affected by the Proposed Scheme. Therefore, it is not envisaged that the Proposed Scheme will impact on business operations.

3.9.4.6 Impact to Beechfield Manor Nursing Home

Summary of issue raised

One submission raised concern regarding the CPO of lands at Beechfield Manor, near Shanganagh Road will impact green space of the address. There are further concerns that the retained grass verge and amenity area has the potential to expose the owners to liability for acts of Misfeasance arising out of defects associated with the condition of the green area after the works have been completed. The impact to the boundary wall also raised concerns, and impact on the Scheme on the structural integrity of it.

The submissions raised concerns regarding the air quality impact of the construction of the Proposed Scheme. Some submissions comment on areas of sensitivity that will be impacted including, Beechfield Manor Nursing Home.

Response to issue raised

Refer to Section 3.12.3.3 for further information on 19 – Beechfield Manor Nursing Home Ltd. under Dispersed Locations.

3.10 Proposed Scheme at Dublin Road, Bray

3.10.1 Description of Proposed Scheme at this Location

From the Dublin Road / M11 junction (Wilford Roundabout) to the Lower Dargle Road, it is proposed to continue with a bus lane, general traffic lane and a segregated cycle track in each direction. Footpaths are proposed on both sides. All junctions have been developed further to provide improved cycle movements. It is proposed to upgrade the Wilford Roundabout with a new signalised junction.

The Corke Abbey Avenue / Old Connaught Avenue junction with the Dublin Road has been designed to cater for the proposed bus and cycle lanes, and to remove the left turn slips in and out of Corke Abbey Avenue. The design for the Upper Dargle Road junction with the Dublin Road has removed the northbound left turn slip from the Dublin Road. The junction with the new road at Chapel Lane has also been upgraded to a signalised junction, including improved cycle and pedestrian movements.

The Proposed Scheme design at Dublin Road, Bray is presented in the 02-General Arrangement Drawings Sheet 50 and 51 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.200 and Figure 3.201 below.

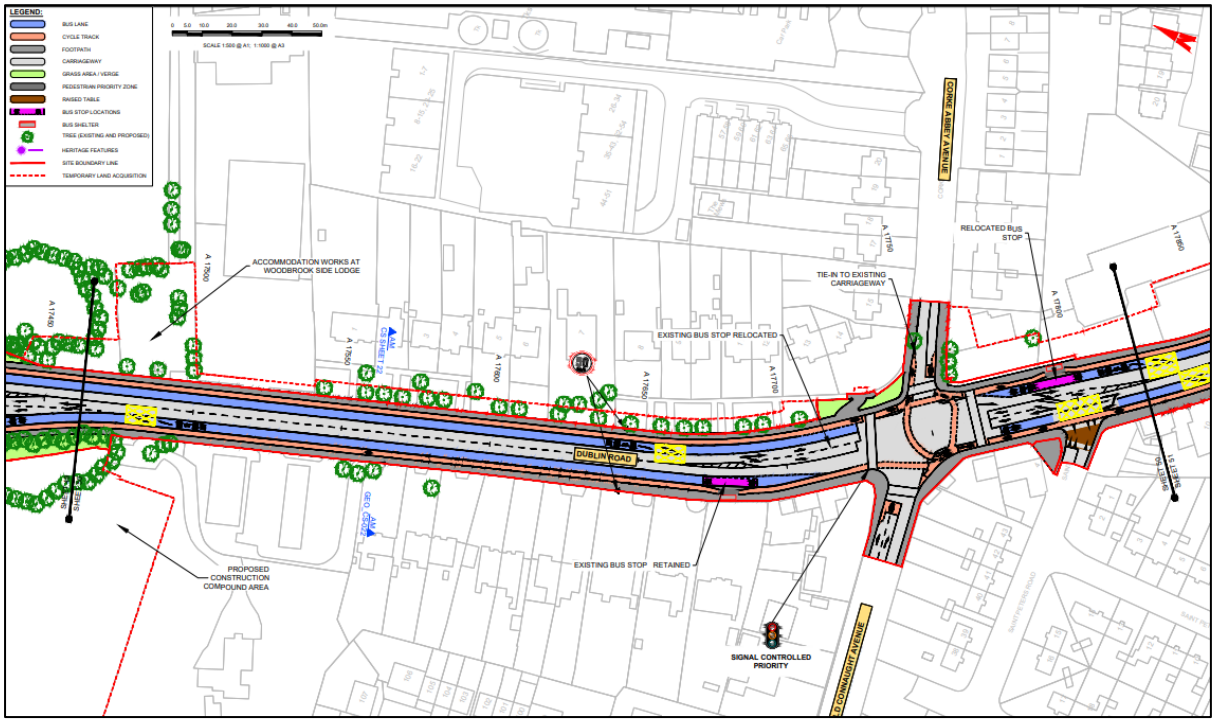


Figure 3.200: Extract from General Arrangement Drawings at Dublin Road, Bray (Sheet 50)

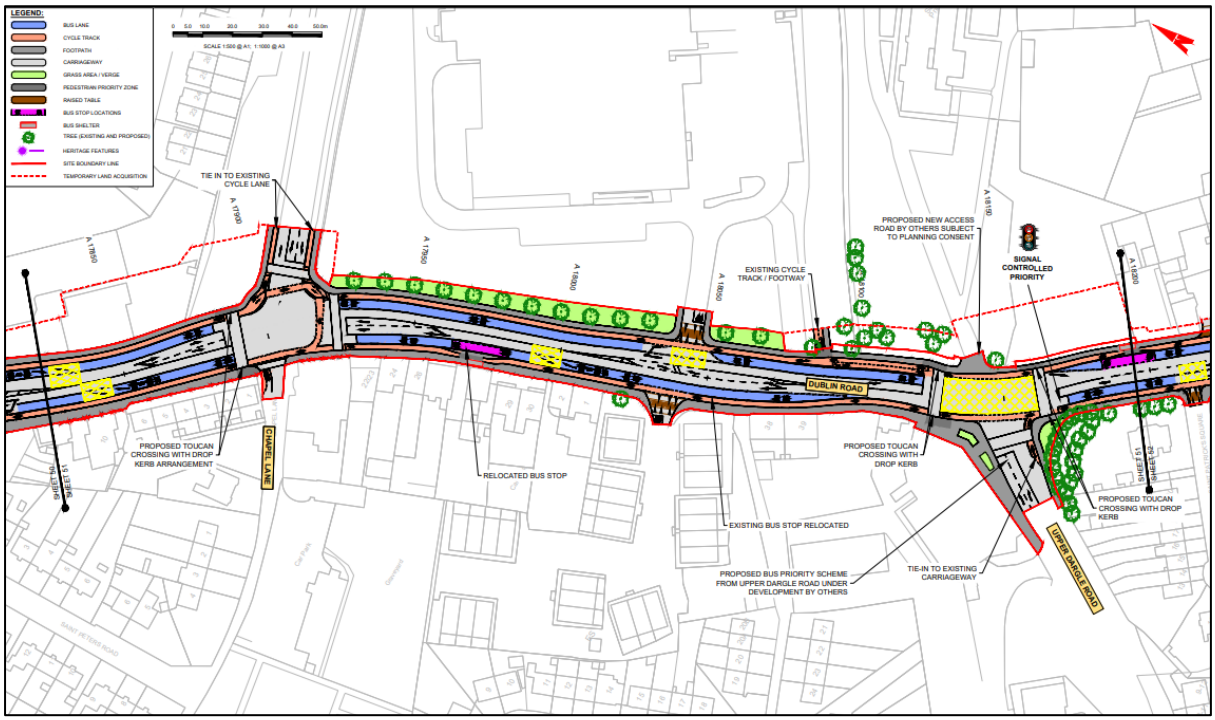


Figure 3.201: Extract from General Arrangement Drawings at Dublin Road, Bray (Sheet 51)

3.10.2 Overview of Submissions Received

Table 3.58 below lists the 2 individual submissions made in respect of the Proposed Scheme at Dublin Road, Bray.

Table 3.58: Submissions Made in Respect of at Dublin Road, Bray

No	Name	No	Name	No	Name
93	Gwen & John Downing	214	Windsor Motors		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

3.10.3 93 – Gwen & John Downing

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Increase in noise, dust, vibration and pollution
2) Loss of informal parking.
3) Impact on access and egress
4) Design is contrary to consultation
5) Removal of slip lane at Corke Abbey Avenue junction / increase in Dublin Road Traffic
6) Impact on boundary wall, landscaping and loss of privacy

3.10.3.1 Increase in noise, dust, vibration and pollution

Summary of issue raised

One submission raises the concern that the traffic passing the house will now be closer to the residence which will result in more noise, dust, vibration, and pollution.

Response to issue raised

Figure 3.202 shows an extract from the 02-General Arrangement Drawings Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, which shows the widening to provide for the additional bus lane and cycle track and the proposed arrangement will bring the traffic lane close to the residence.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the impact on air quality of both the Construction and Operational Phases within the study area. For the traffic assessment, the focus is on air quality sensitive receptors which will bound the Proposed Scheme and those along redistributed traffic routes within the study area.

Figure 7.1 in Volume 3, Figures of the EIAR shows the locations of air quality monitoring undertaken as part of the baseline assessment for air quality, showing on Sheet 4 that there was a diffusion tube located outside 5 Dublin Road (Reference Number CBC0013DT001), which is very close to the property for which the submission was made. Figures 7.3 to 7.8 map the nearest receptors and provides a colour coding corresponding to the modelled change in annual mean concentration of NO_2 and particulate matter (PM_{10} and $PM_{2.5}$) during the Construction Phase (Figures 7.6 to 7.8) and Operational Phase (Figures 7.3 to 7.5). For the Dublin Road, Bray area (Sheet 4 in each Figure), the significance of the change is Negligible for each pollutant during both Construction Phase and Operational Phase. With respect to the Operational Phase residual impacts of the Proposed Scheme, Section 7.6.2 states the following:

'*The air dispersion modelling assessment has found that the majority of all modelled receptors are predicted to experience negligible impacts due to the Proposed Scheme, and beneficial impacts are also estimated along the length of the Proposed Scheme. The number of receptors where an exceedance of the NO2 limit value is predicted decreases as a result of the Proposed Scheme*.'

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location at Dublin Road / Corke Abbey Avenue (Reference Number CBC0013ANML022), in close proximity to the property at the Dublin Road, Bray, as shown in Figure 9.2 (Sheet 13) in Volume 3, Part 3 of 3 of the EIAR. Figure 9.3 maps the potential noise impacts associated with the predicted Construction Phase traffic, with the Dublin Road, Bray, (Sheet 8) mapped with an impact significance rating of Imperceptible / Positive. Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible / Positive at Dublin Road, Bray. The modelled impact shows no change in the Design Year also giving an Imperceptible / Positive significance.

With respect to vibration impacts on buildings specifically, the assessment is described within Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR. The assessment considered both Construction and Operational Phase vibration impacts. Section 9.4.3.3 assessed the potential Construction Phase vibration impacts associated with surface breaking activities given that these activities give the highest potential for vibration during construction. The assessment states that:

'*Vibration impacts during ground breaking activities using heavy breakers have the potential to generate Negative, Slight to Moderate, Temporary effects at distances of 10m from the activity. Beyond 50m from this type of activity, impacts are reduced to Negative, Not Significant to Slight and Temporary. For all other works, vibration impacts will be below those associated with perceptible vibration and will be Negative, Imperceptible to Not Significant and Temporary. All construction works are orders of magnitude below limits values associated with any form or cosmetic or structural damage for structurally sound or protected or historical buildings or structures.'*

As outlined in Section 9.5.1.2 with respect to mitigation measures for vibration impacts during the Construction Phase, as shown in Table 3.59 below:

'*Vibration from construction activities will be limited to the values set out in Table 9.12 to avoid any form of potential cosmetic damage to buildings and structures.'*

Table 3.59: Extract from Chapter 9 (Noise & Vibration), Page 12 showing Construction Vibration Thresholds

Table 9.12: Recommended Construction Vibration Thresholds for Buildings

Vibration Limits for Buildings (PPV) at the Closest Part of the Building to the Source of Vibration, at a Frequency of 4Hz		
Building Type	**Transient Vibration**	**Continuous Vibration**
Reinforced or framed structures. Industrial and heavy commercial buildings	50 mm/s	25 mm/s
Unreinforced or light framed structures. Residential or light commercial-type buildings	15 mm/s	7.5 mm/s
Protected and Historic Buildings *Note 1	6 mm/s – 15 mm/s	3 mm/s – 7 mm/s
Identified Potentially Vulnerable Structures and Buildings with Low Vibration Threshold	3 mm/s	

Note 1: The relevant threshold value to be determined on a case by case basis. Where sufficient structural information is unavailable at the time of assessment, the lower values within the range will be used, depending on the specific vibration frequency.

With respect to the potential for Operational Phase vibration impacts, Section 9.4.4.2 of Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR describes the potential impact as Neutral, Negligible and Long-Term as follows:

'*Once operational, buses will use the dedicated bus lanes for the Proposed Scheme. Analysis of traffic data for the Proposed Scheme, however, indicates a reduction in overall AADT traffic flows along the Proposed Scheme.*

Reference to the monitoring results in Table 9.24 and Table 9.25, confirms that vibration levels associated with passing buses and other vehicular traffic at distances of 2.5m to 10m from the road edge are negligible in terms of human perception and building response. Vibration levels associated with a passing bus were recorded at 0.1mm/s PPV or less under the monitored scenarios. These values are below the normal range of perceptible human response to vibration and would not pose any significant impact.

A review of the traffic data for the Proposed Scheme indicates that the maximum number of buses travelling inbound or outbound will be up to 650 over the 16-hour daytime period along the N11 Stillorgan Road which is nominally the same for the Do Minimum scenario along this road. Using this number and the highest VDV event measured during a bus pass at a reference distance of 5m from the road edge (0.0033 m/s$^{1.75}$), the daytime VDV$_{,b,day}$ value is calculated as 0.017 m/s$^{1.75}$. Reference to Table 9.18 confirms this value is orders of magnitude below those associated with a low probability of adverse comment. The overall impact is Neutral, Negligible and Long-Term.'

3.10.3.2 Loss of informal parking

Summary of issue raised

The submission raises the concern that the green area in front of the house is used daily for parking cars and will now be lost.

Response to issue raised

The parking space within the existing unpaved/ green area noted in this submission has not been identified as an informal parking space in the Parking and Loading assessment described in Section 6.4.6.1.2.4 of Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR due to the presence of grass and absence of relevant signage and demarcation.

Figure 3.202 shows an extract from the 02-General Arrangement Drawings Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, indicating a reconfigured unpaved/ green area to the front of the property, beyond the existing entrance gate and driveway on Dublin Road that will be retained.

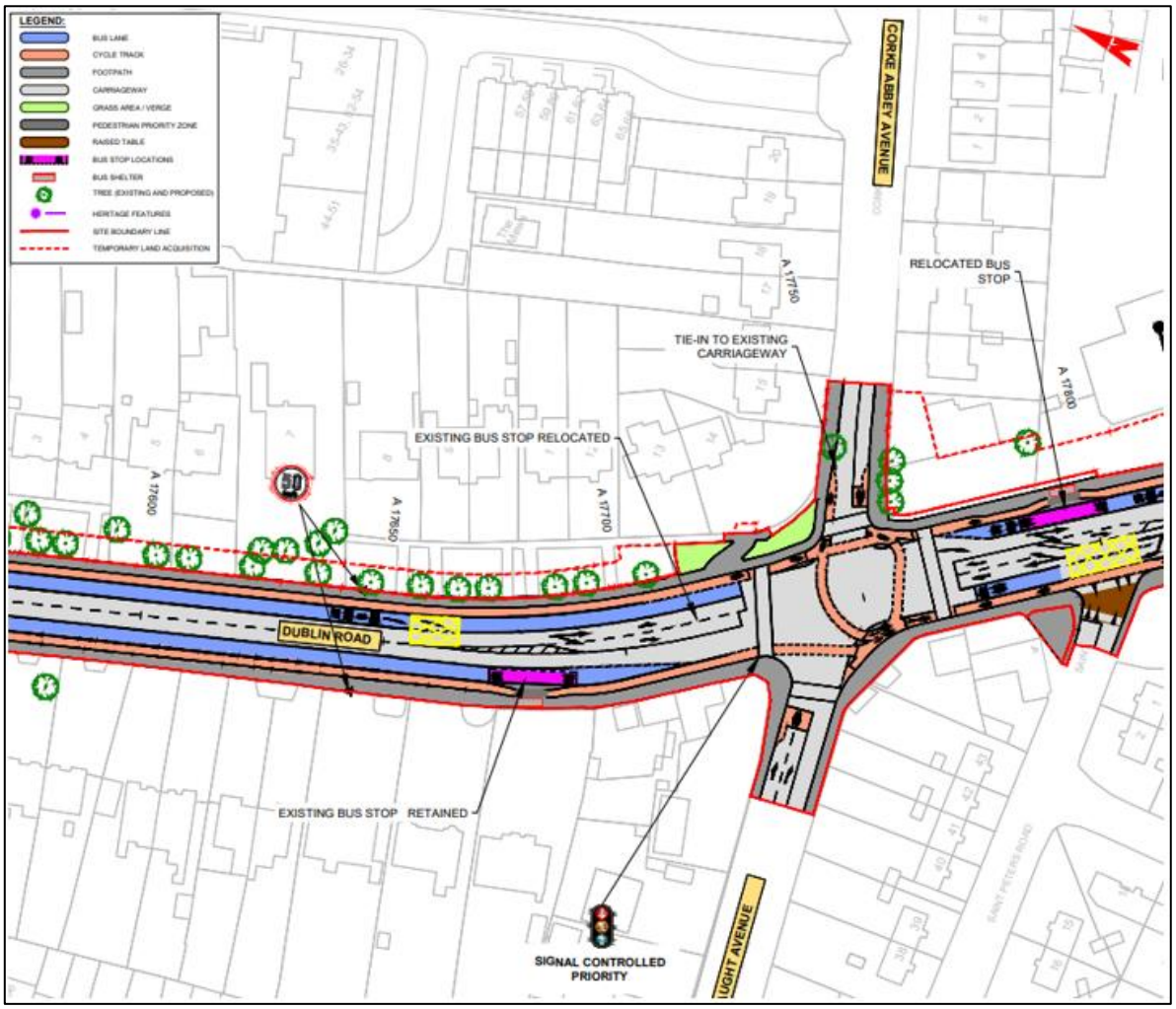


Figure 3.202: Extract from General Arrangement Drawings at Dublin Road, Bray (Sheet 50)

3.10.3.3 Impact on access and egress

Summary of issue raised

The submission raises the concern that the existing green area in front of the property allowed for safe access and egress of a boat that winters in the garden, which will now be removed.

They also raised the concern that the access is now onto a major junction, to turn right they would need to cross four lanes of traffic.

Response to issue raised

In relation to the green area to the front of 14 Dublin Road, Figure 3.204 shows an extract from the General Arrangement Drawing Sheet 50, which are included as drawing set 02 (accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR, indicating the reconfigured green area being retained, which will still allow for separation between the road and the property boundary to increase visibility on exiting the property.

In relation to the access location adjacent to the Dublin Road / Corke Abbey Avenue junction, the existing property access location, seen in the aerial image in Figure 3.203 is located adjacent to the existing junction. In the Proposed Scheme, the location of the proposed property access has not been altered, as seen in Figure 3.203 below. Currently, to turn right from their property access, the owner is required to cross the slip lane and and two traffic lanes. In the Proposed Scheme, to turn right from the property, the owner will be required to cross a bus lane and two traffic lanes. This is a minor change from the existing conditions.

Figure 3.203: Existing Aerial image of access at 14 Dublin Road (Image Source: Google)

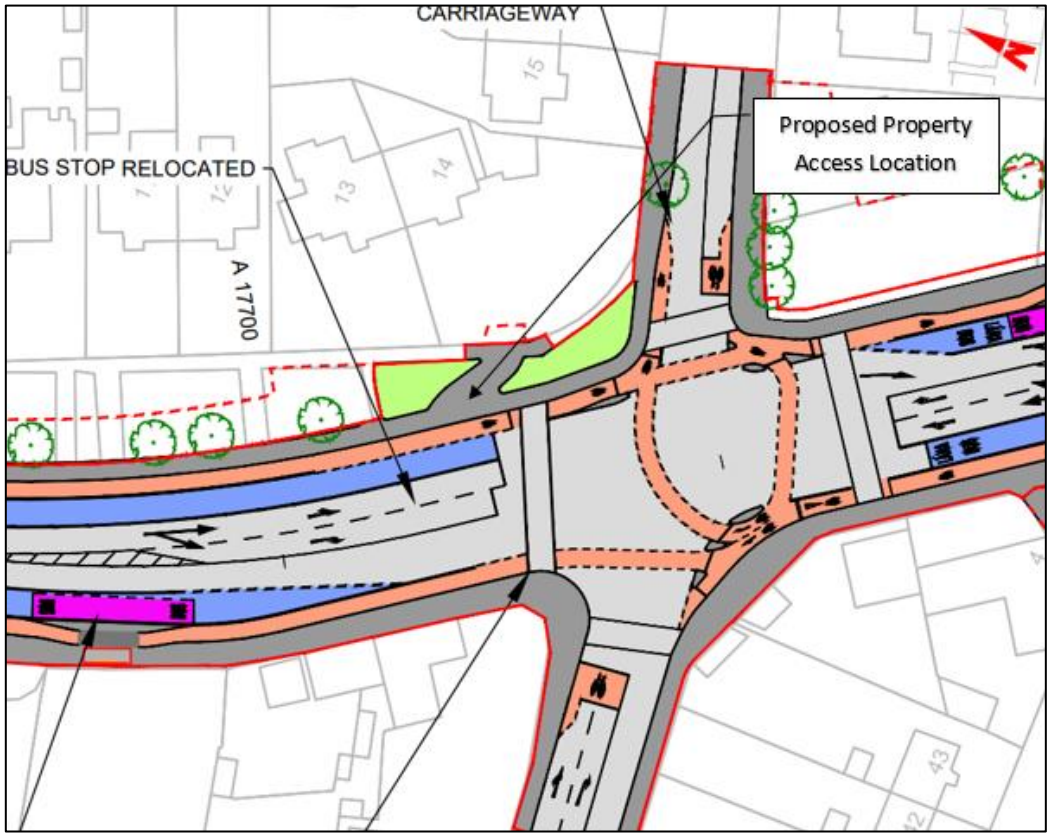


Figure 3.204: Extract from General Arrangement Drawings showing Access to 14 Dublin Road (Sheet 50)

3.10.3.4 Design is contrary to consultation

Summary of issue raised

The submission noted that there was consultation with engineers for the NTA, however, they were informed that the impact would be limited, and the full green area would not be lost. The submission notes that this is contrary to the design, and they feel their concerns have not been addressed.

Response to issue raised

The green area to the front of the property has been included in the CPO to accommodate both the Proposed Scheme cross section, and also the space is required for underground surface water attenuation tanks. This is presented in Sheet 50 of the 11-Proposed Surface Water Drainage Works Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR and shown in Figure 3.205.

The unpaved/ green area required for the attenuation works is proposed to be landscaped to retain residual green area. This is presented in Sheet 50 of the 05-Landscaping General Arrengment Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.206.

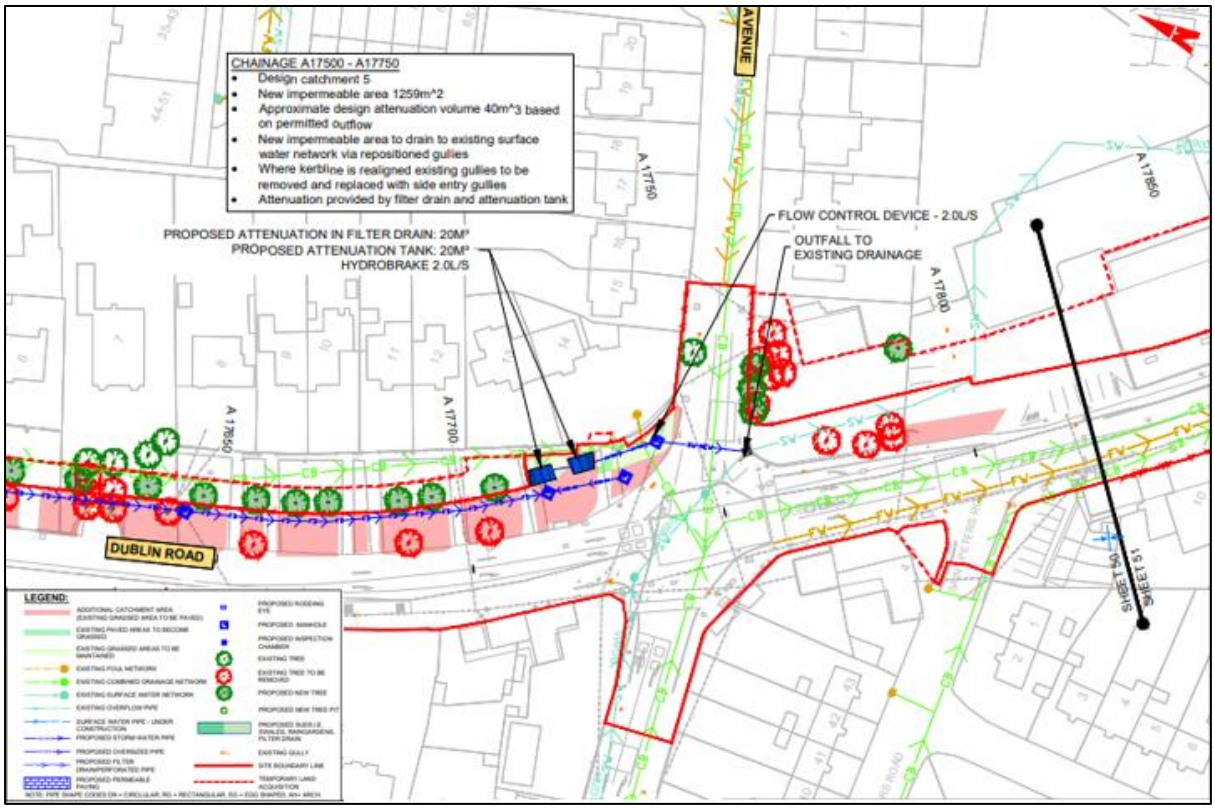


Figure 3.205: Extract from Proposed Surface Water Drainage Works Drawings (Sheet 50)

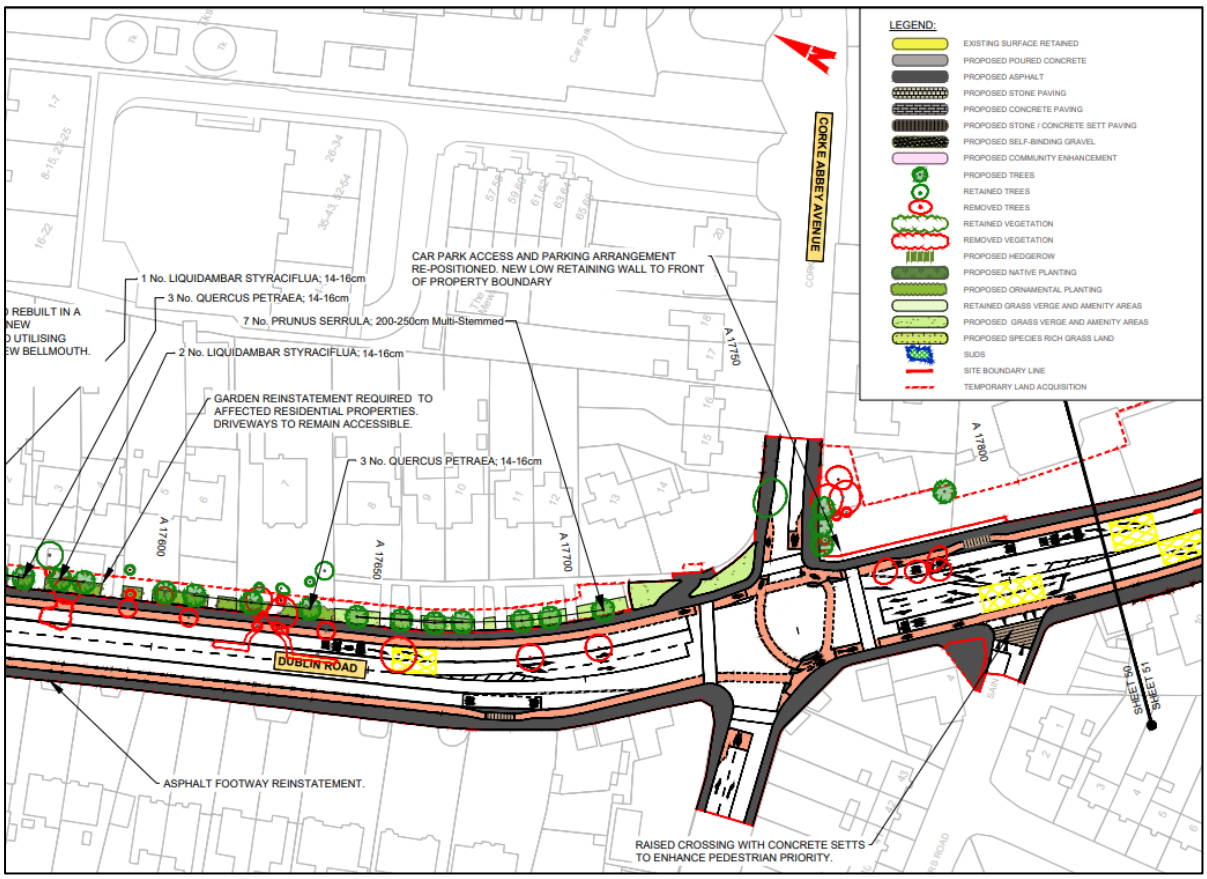


Figure 3.206: Extract from Landscaping Design Drawings at Dublin Road (Sheet 50)

There has been communication with the property owners (emails/ phone calls/ visit on site) during the design development phase of the Proposed Scheme.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.10.3.5 Removal of slip lane at Corke Abbey Avenue junction/ increase in Dublin Road traffic.

Summary of issue raised

The submission states that much of the traffic on the Dublin Road turn into the Woodbrook/Corke Abbey estate. They note that the proposal to remove the slip road will cause additional delays on to Dublin Road traffic.

Response to issue raised

The Proposed Scheme has been designed to achieve the stated objectives, and this allows for all junctions in practice to operate on an adaptive basis, permitting priority to be applied to different modes. The EIAR as submitted has robustly addressed this matter.

Section 6.3.5.4.1 in Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR outlines the existing arrangement at the R761 Dublin Road / Old Connaught Avenue junction.

'R761 Dublin Road / Old Connaught Avenue Four-Arm Signalised Junction: The R761 Dublin Road / Old Connaught Junction has a signalised pedestrian crossings (pelicans) across the south-eastern and south-western arms.

The north-western arm approach consists of one left-turn slip, one straight-ahead traffic lane, and one right-turn flare approximately 60m in length. The north-western arm exit consists of one traffic lane.

The north-eastern arm approach consists of a left-turn slip which begins approximately 20m in advance of the junction, and one traffic lane for all other movements. The north-eastern arm exit consists of one traffic lane.

The south-eastern arm approach consists of one straight-ahead and left-turn lane and one right-turn lane, the arm widens to the width of two lanes approximately 30m in advance of the junction, following the with R761 Dublin Road / St. Peter's Road Junction. The south-eastern arm exit consists of one nearside merging lane, approximately 20m in length, and one traffic lane.

The south-western arm approach consists of one straight-ahead and left-turn lane and one right-turn lane. The south-western arm exit consists of one traffic lane.'

Figure 3.207 below shows the existing junction arrangement.

Image 6.43: R761 Dublin Road / Old Connaught Avenue / Corke Abbey Avenue Four-Arm Signalised Junction

Figure 3.207: Extract from Chapter 6 (Traffic and Transport) of the EIAR (Image 6.43)

This proposed junction layout is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.208 below.

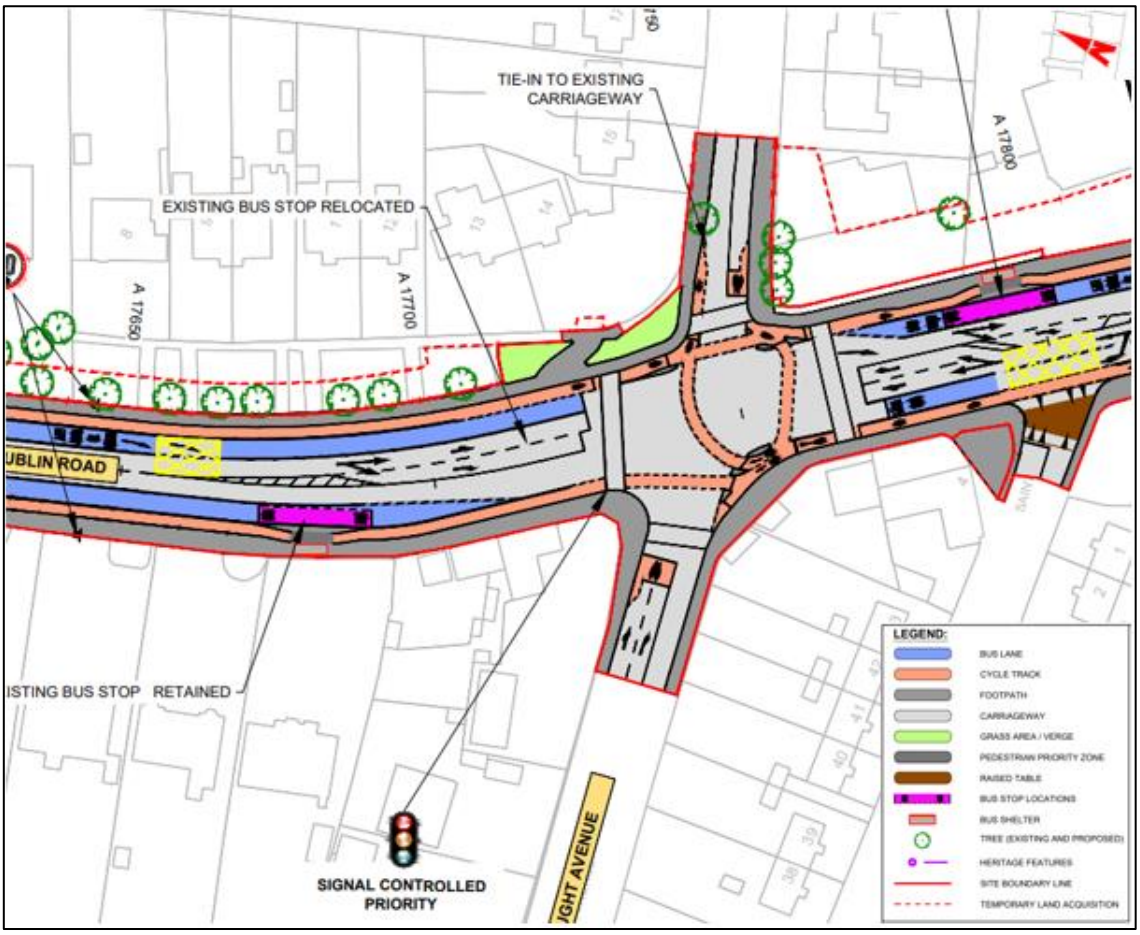


Figure 3.208: Extract from General Arrangement Drawings at Dublin Road / Corke Abbey Avenue junction (Sheet 50)

The TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR refers to the Dublin Rd / Corke Abbey Avenue junction as Junction Reference 43 in Section 3 of the report, and notes the following on the proposed layout:

'Summary:

Junction Type 1 can be physically accommodated in both directions. Slip lanes removed onto Corke Abbey Avenue to improve pedestrian crossings. Cycle lanes improved with protected movement onto side roads.

Pedestrian Infrastructure:

Pedestrian crossings improved with the removal of slip road onto Corke Abbey Avenue to reduce the number of crossings and wait times. Pedestrian crossing implemented across Corke Abbey Avenue side road. Crossing lengths are long over the mainline but within the bounds of 19m set out in the BusConnects Design Guide. A dedicated wrap around pedestrian crossing phase is demanded as required.

Cycle Infrastructure:

Cycle lanes have been improved with protected approaches around junction. Updated arrangement provided to improve Corke Abbey Avenue tie-in by removing slip road. Single signal controlled crossing of road carriageway and cycle track provided. cycle lane lead ins and Advance Stop Lines for cyclists provided on side roads to improve junction tie in.

Bus Priority Infrastructure:

Full bus priority provided. Northbound and Southbound buses and cycle movements run together.'

The proposed junction design and signalling has been modelled with existing traffic counts and forecast traffic to ensure existing and predicted future movements at the junction (including movements in and

out of the Woodbrook/Corke Abbey estate) can be accommodated. Dublin Road / Corke Abbey Avenue junction is a Junction Type 1 that can be physically accommodated in both directions. Staging and signal times have been proposed on the basis considering multiple factors including safety and demand.

At Dublin Road / Corke Abbey Avenue Junction, pedestrian crossings have been improved with the removal of slip road onto Corke Abbey Avenue to reduce the number of crossings and wait times. Cycle lanes have also been improved with protected approaches around junction from the updated arrangement shown in Figure 3.208 to improve Corke Abbey Avenue tie-in by removing the slip road. Full bus priority is provided at Dublin Road / Corke Abbey Avenue junction to enable northbound and southbound bus and cycle movements to run together.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at Dublin Road / Corke Abbey Avenue junction. The PRC is 36.4% during the AM Peak Hours is and 24.5% during the PM Peak Hours. This suggests the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Section 6.4.6 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR outlines the potential impacts at the Operational phase. Table 6.38 in Section 6.4.6.1.6.1 notes that the pedestrian impact at the Dublin Road / Corke Abby Avenue junction, as Positive and Profound. Table 6.39 in Section 6.4.6.1.6.2 notes the cycling impact on Dublin Road, from Wilford Roundabout to Chapel Lane (which includes the Dublin Road / Corke Abby Avenue junction) as Positive and Significant. Table 6.41 in Section 6.4.6.1.6.3 notes that the bus qualitative impact in the Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge) section of the Proposed Scheme (which includes the Dublin Road / Corke Abby Avenue junction) as Positive and Profound.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that there is a *'slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year'*. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential '*Positive, Slight to Profound Long-Term*' impact which on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

3.10.3.6 Impact on boundary wall, landscaping and loss of privacy

Summary of issue raised

The submission raises the concern that the Proposed Scheme will have an adverse impact on the property in terms of interference with the entrance, boundary wall and landscaping.

The submission notes that the proposed development will bring double decker buses closer to the residence, which will lead to overlooking into the residence by anyone seated on the top deck of the bus, leading to loss of privacy.

Response to issue raised

Refer to response in Section 3.10.3.3 and also note below.

Figure 3.209 shows an extract from the Fencing and Boundary Treatment Drawings which are provided as an Appendix in the 07-Fencing and Boundary Treatment Drawings Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, indicating Dublin Road.

This shows there will be no impact on the existing boundary wall or hedge. Given that there will be no impact on the existing boundary wall, there will be no impact on the existing landscaping within that boundary wall of the property and also no loss to privacy.

Figure 3.210 shows an extract from the Landscaping General Arrangement Drawings which are provided as an Appendix in the 05-Landscape Design Drawings Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR, indicating Dublin Road.

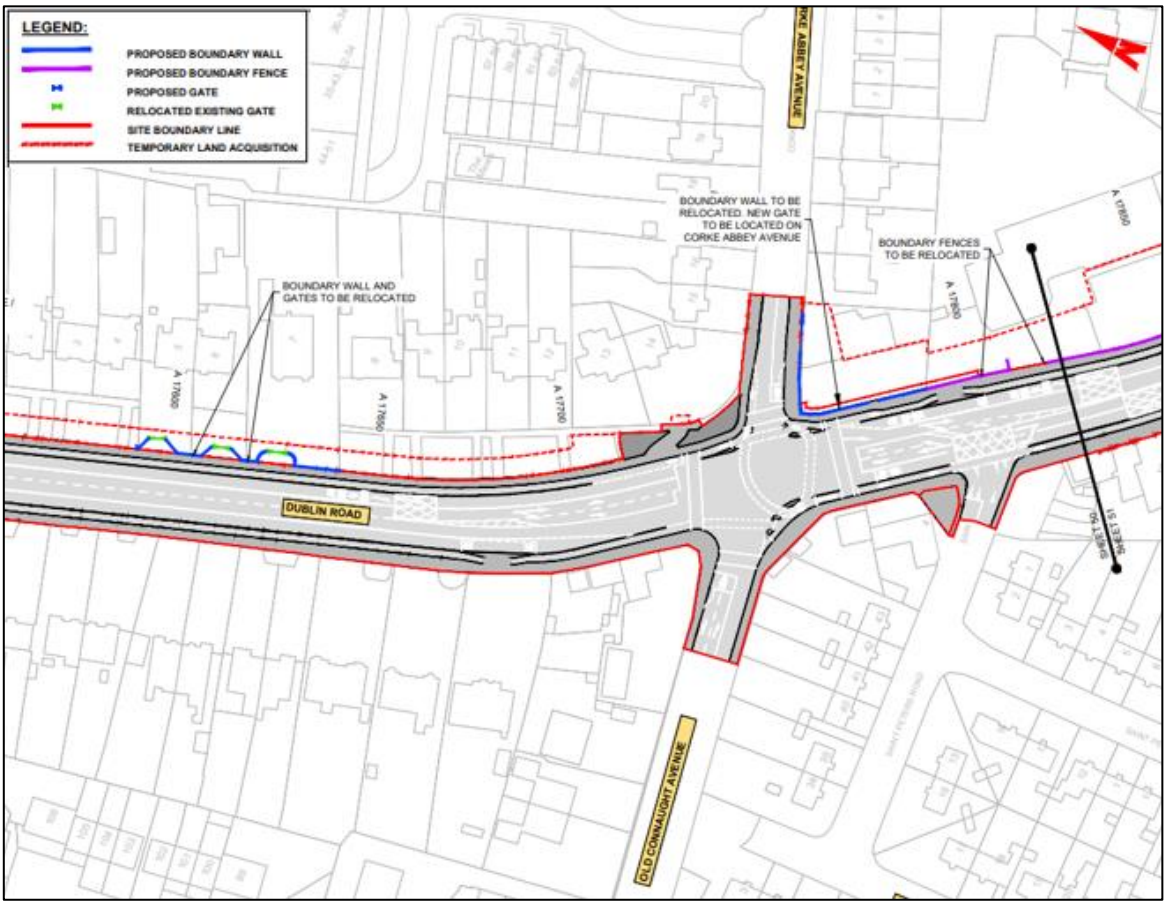


Figure 3.209: Extract from Fencing and Boundary Treatment Drawings at Dublin Road (Sheet 50)

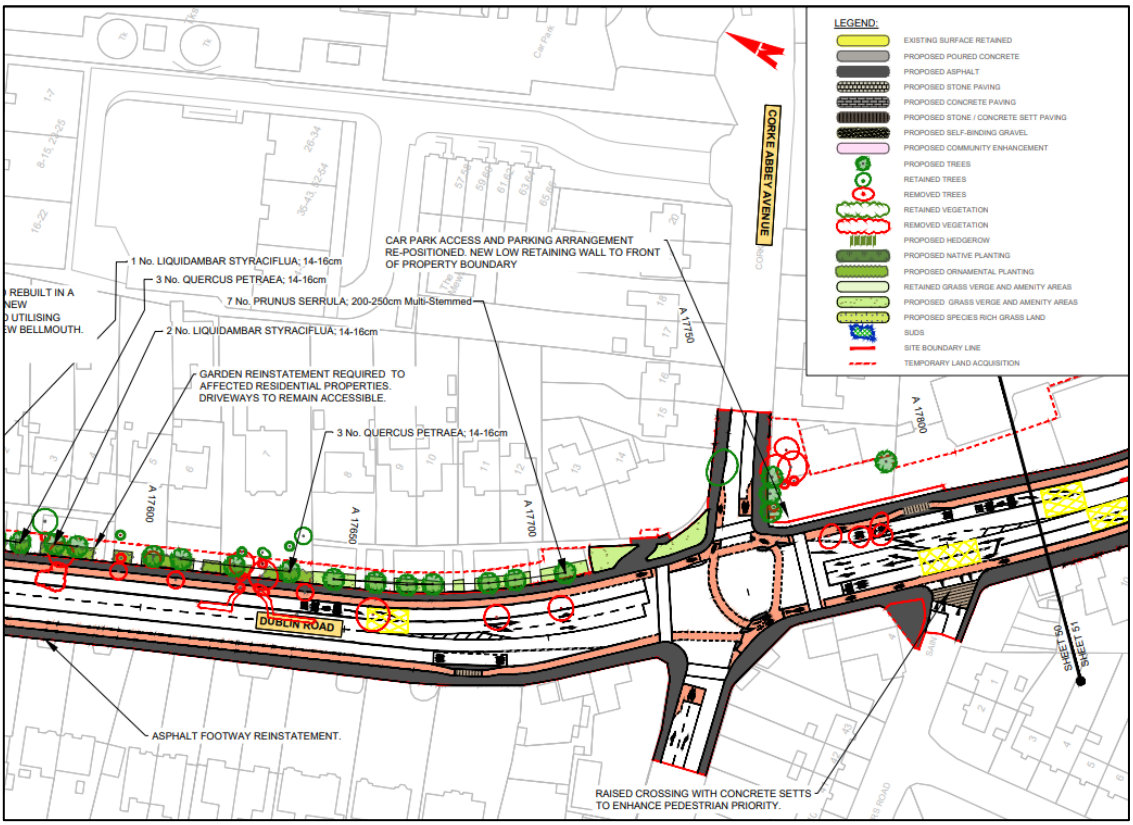


Figure 3.210: Extract from Landscaping Design Drawings at Dublin Road (Sheet 50)

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the potential landscape and visual impacts of the Proposed Scheme during both the Construction and Operational Phases. The assessment considers the impact on the overall character of the study area, the impacts on streetscape elements and visual impacts. The assessment concludes that there will be a Negative, Significant, Temporary / Short-Term impact on the townscape and streetscape character through the Bray section of the Proposed Scheme during the Construction Phase. Once operational, the townscape and streetscape character of this section of the Proposed Scheme will improve from Neutral, Moderate / Significant, Short-Term immediately following the Construction Phase, to Positive, Moderate and Long-Term once the proposed changes and landscaping changes mature within the townscape.

Section 17.4.4.2.8 of Chapter 17 (Landscape (Townscape) and Visual) of Volume 2 of the EIAR outlines the residential properties that will require permanent acquisition, including the '*Green area & driveway to the front of 14 Dublin Road'*. It states:

'There will be adequate replacement planting provided to the properties to consolidate the screening effect and restore the landscape and visual amenity, thus reducing the effects over the medium to long-term as the planting matures. The sensitivity is high and the magnitude of change at these properties will be very high.' It goes on to note *'The potential townscape / streetscape and visual impact of the Operational Phase on these properties is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Moderate and Long-Term.'*

3.10.4 214 – Windsor Motors Bray

The submission raises a number of concerns, outlined here and described in the sections below.

Summary of issues raised:

1) Impact on Access and Egress
2) Loss of Visibility, Marketing and Brand Effectiveness
3) Upgrade of Wilford Roundabout to Signalised Junction
4) Impacts on Business Operations

3.10.4.1 Impact on Access and Egress

Summary of issue raised

Existing access and egress points are utilised for smooth traffic flow through the property. Access is required by cars, SUVs, LGVs and HGVs transporting damaged vehicles and alterations to the access/egress arrangement could have severe implications for the facilities ability to maintain its thriving business operations.

The new arrangement will potentially reduce sightlines given revised width of access and egress and create traffic hazards for those entering and exiting the business premises.

Response to issue raised

For the Operational Phase, the Windsor Motors Bray proposed access and egress locations have been setback back in line with the permanent land acquisition line. Existing access and egress widths will be maintained in the new arrangement to allow for vehicular movement through the property.

Section 4.6.18.1 of the EIAR Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a summary of the accommodation works and boundary treatment for the entirety of the Proposed Scheme and notes that:

'There are a number of areas along the extents of the route where the Proposed Scheme will result in the requirement for accommodation works and boundary treatments. Specific accommodation work are considered on a case-by-case basis'.

Section 4.6.18.1 goes on to state that:

'To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics, unless a section of street can benefit from urban improvement appropriate to the area'.

The reinstatement of the property frontage will be on a like for like basis at this location and the proposed boundary treatment at this location is presented in the Fencing and Boundary Treatment Drawings which are provided as an Appendix in to 07-Fencing and Boundary Treatment Drawings Sheet 50 in Chapter 17 (Landscape (Townscape) & Visual) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.211. Detailed accommodation works plans will be prepared in consultation with the landowner in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

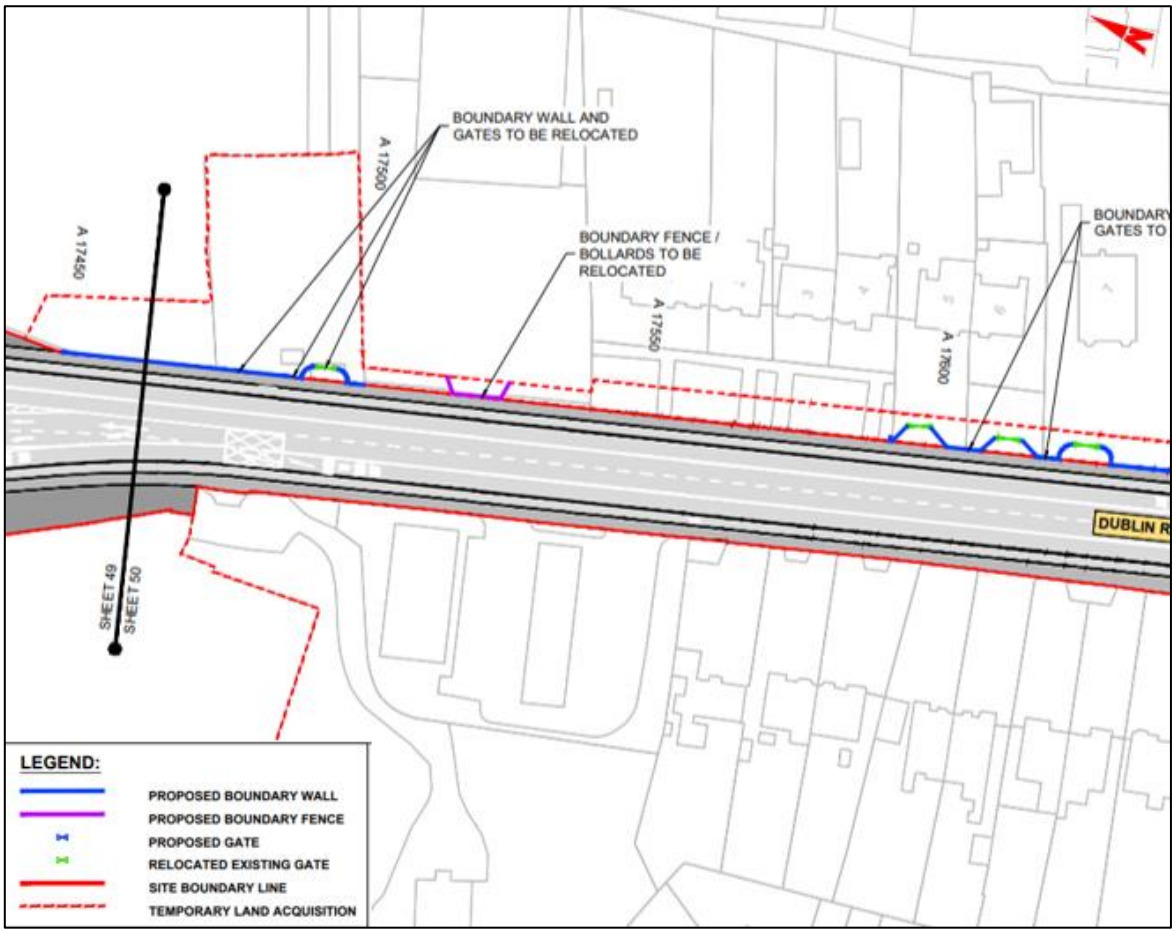


Figure 3.211: Extract from Fencing and Boundary Treatment Drawings at Windsor Motors Bray (Sheet 50)

In relation to the issue of possible reduced sightlines, as the new access/egress location is set back inline will other adjacent boundary setbacks, there will be no reduction in sightline visibility.

The Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with visibility at the access/ egress to Windsor Motors.

3.10.4.2 Loss of Visibility, Marketing and Brand Effectiveness.

Summary of issue raised

The submission raises the issue that the Proposed Scheme will have significant impacts on brand effectiveness due to permanent loss of visibility and impairment of marketing impact. They are also concerned that the works proposed intends to reduce the frontage of the site. This area of land is currently in use and provides for spaces used to market vehicles and a variety of signage.

They also note the proposal may result in the forfeiture of one, possibly two, franchises due to non-compliance with franchise criteria standards regarding signage display requirements.

Response to issue raised

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in Chapter 4 (Proposed Scheme Description), Volume 3, Part 1 of 3 – 02-General Arrangement Drawings.

As part of the Proposed Scheme, the permanent land take is required to allow for the construction of the Proposed Scheme and achieve the BusConnects standard cross-section at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The existing carriageway will be widened on the east side along Dublin Road to allow for bus lane, cycle track and footpath. The standard cross-section provided at this location is the optimum CBC cross-section which meets the CBC Design Guidelines Objectives in accordance with Section 2 (Figure 1) of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR. The Proposed Scheme typical cross-section at this location is shown in the Typical Cross Sections which are provided as an Appendix in the 04-Typical Cross-section Drawings Sheet 22 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.212.

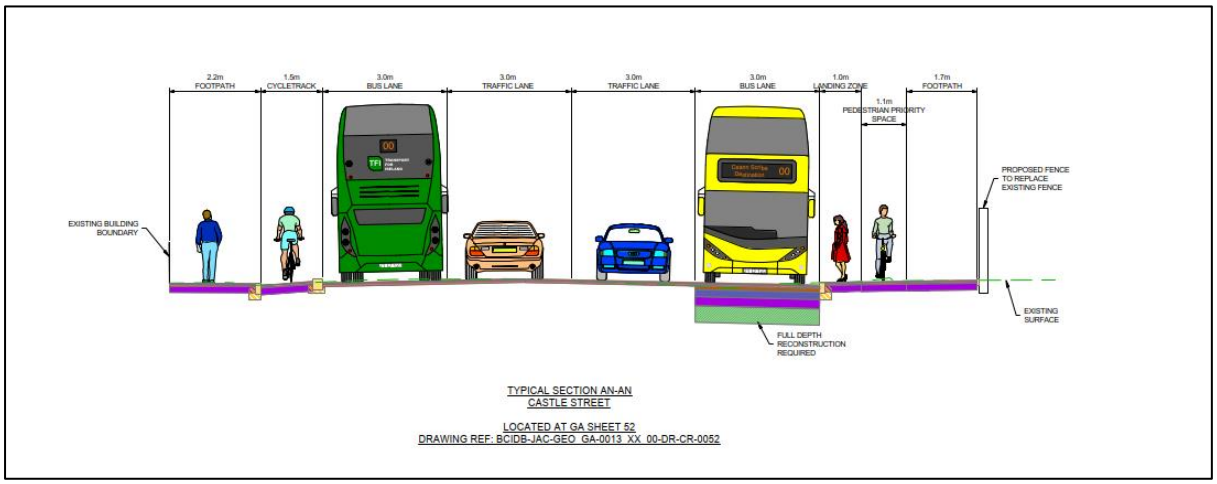


Figure 3.212: Extract from Typical Cross-section Drawings (Sheet 22)

The Proposed Scheme design at the location of the Windsor Motors is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Sheet 51 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR as shown in Figure 3.214. The permanent and temporary land take required at this location is shown in the Deposit Maps included in the Compulsory Purchase Order information and as shown in Figure 3.213 and details listed in the CPO Schedule, Sheet 3.

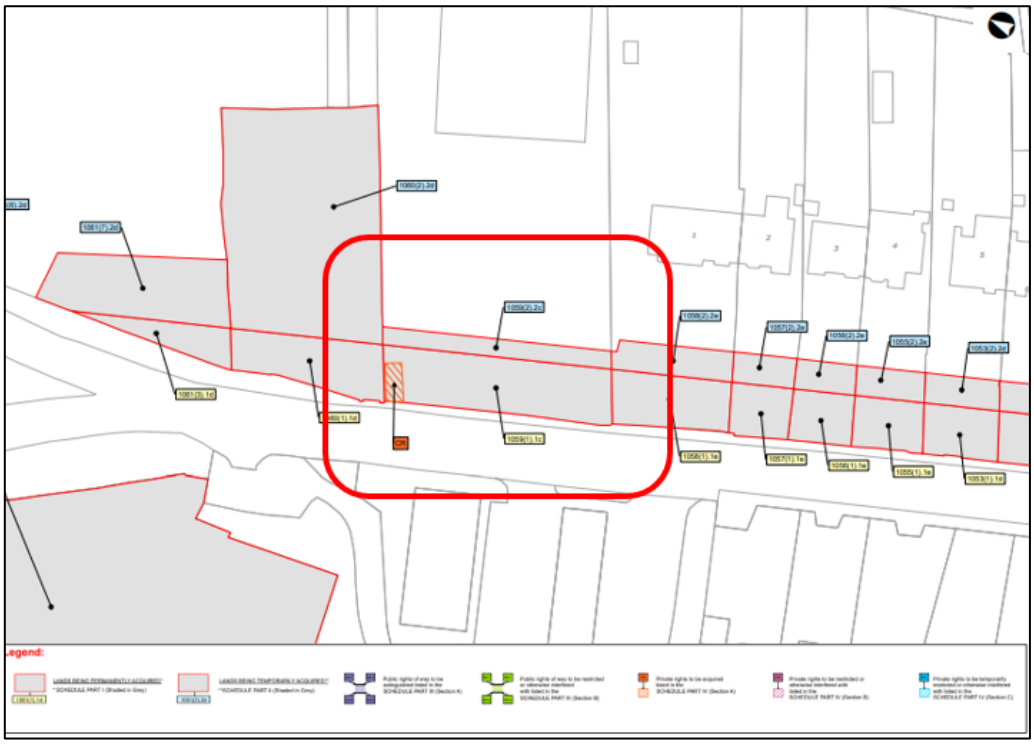


Figure 3.213: Extract from CPO Deposit Maps at Windsor Motors Bray (Sheet 3)

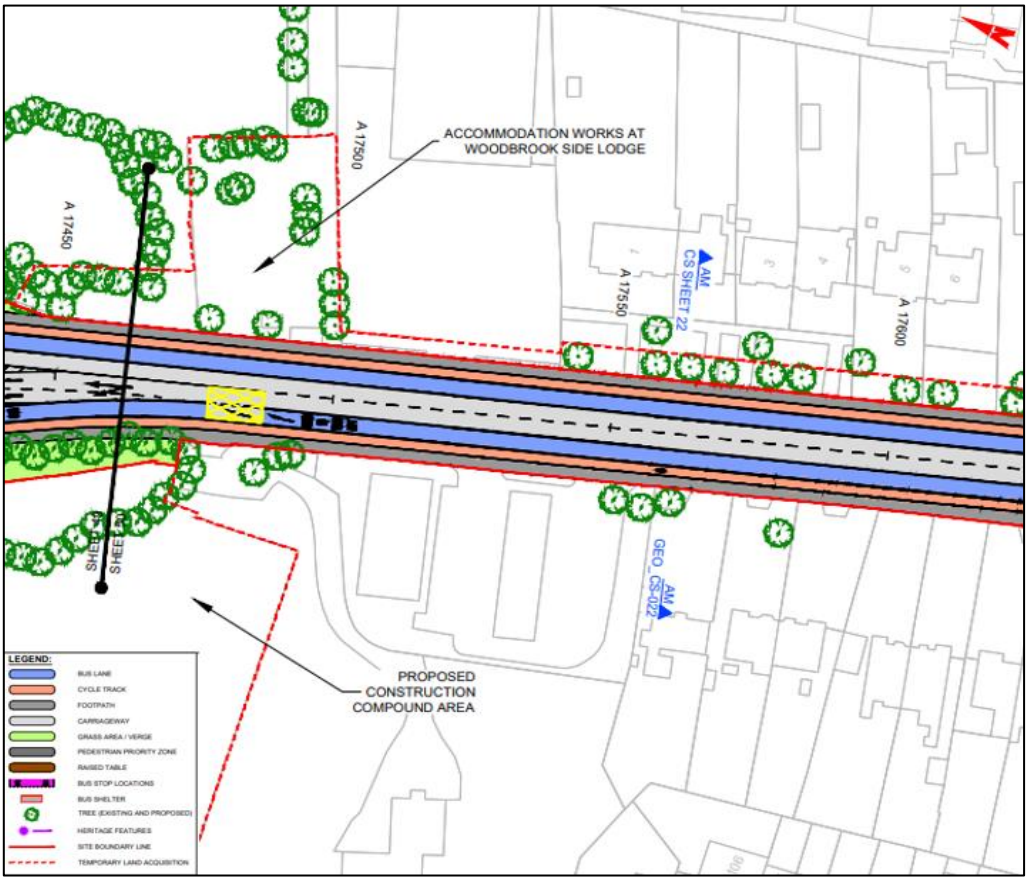


Figure 3.214: Extract from General Arrangement Drawings at Windsor Motors Bray (Sheets 50)

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

In relation to the possible reduction in brand effectiveness due to loss of visibility of the business from the street, the NTA note that the property frontage will be set back from the road edge in comparison to

adjacent properties. The proposed frontage will be in line with adjacent properties and therefore there will be no reduction in visibility.

Existing advertising signs will be relocated within the property boundary as part of accommodation works.

Refer to response to Section 3.10.4.1 on Impact on Access and Egress.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.10.4.3 Upgrade of Wilford Roundabout to Signalised Junction

Summary of issue raised

The submission raises the concern that the removal of the Dublin Road – M11 Wilford Roundabout and replacing with a T-junction will impact accessibility to the site and impact business as potential customers will no longer have an easy way to return to the site if they miss the site entrance going north through the roundabout and returning south along Dublin Road.

They also note that the benefits of the removal of the roundabout are unclear. It is noted that the proposed T-junction would increase traffic in the area. Moreover, it is considered that the Emerging Preferred Route for the roundabout design would be substantially safer with less impact on the traffic flow for the area.

Response to issue raised

Refer to response in Section 3.9.3.4.1 on Upgrade of Existing Roundabouts to Signalised Junctions and Section 3.9.3.4.5 on SCP and Signalisation at Wilford Roundabout, and also note below.

In relation to proposed junction arrangement in the Emerging Preferred Route, Section 2.2.4 of Appendix N (Emerging Preferred Route Public Consultation February 2019) in the Supplementary Information of the EIAR, states in relation to the Dublin Road/M11 (Wilford roundabout) that *'It is proposed to replace the M11 access roundabout with a signalised priority junction.*' Sheet 82 in Section 6 of Appendix N also shows the proposed junction change, seen in Figure 3.215 below.

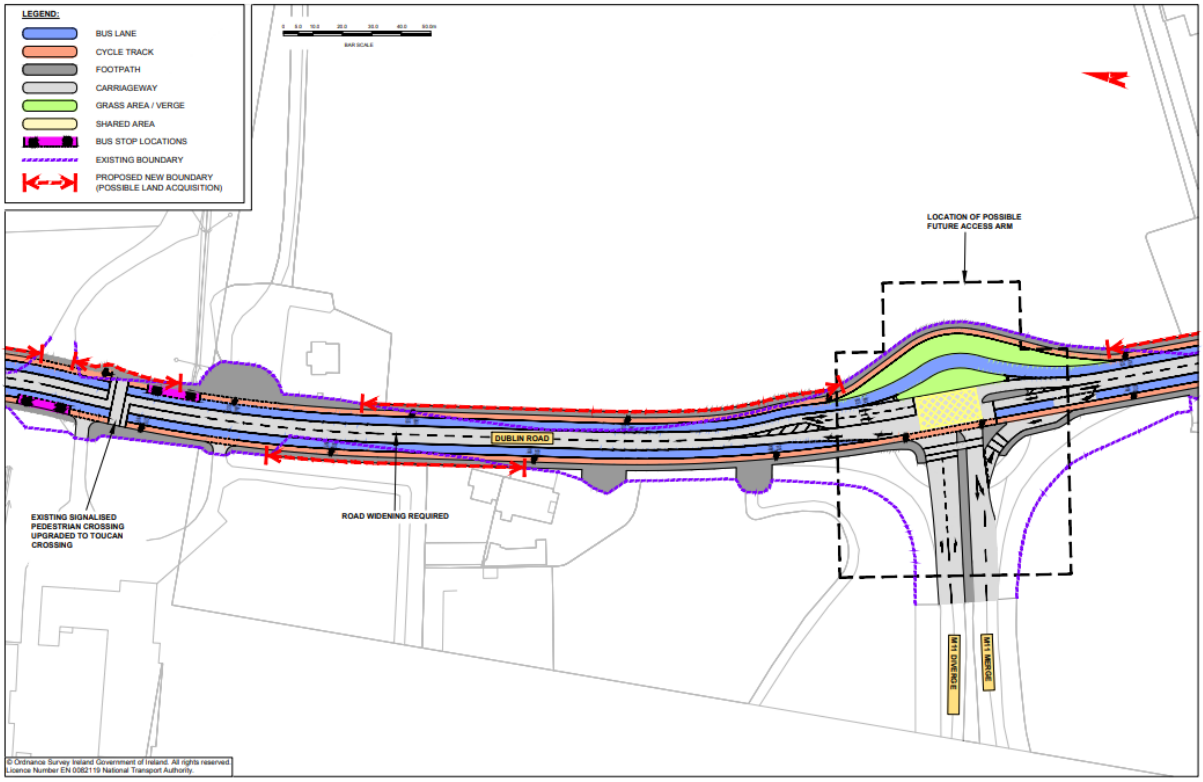


Figure 3.215: Extract from Appendix N (Emerging Preferred Route Public Consultation February 2019) at M11 / Dublin Road junction (Sheet 82)

NTA are satisfied regarding the benefits of a signalised junction against roundabout and the proposed signalisation of the Wilford Roundabout will not create any congestion on Dublin Road. Business access to Windsor Motors will remain as existing in the operational stage.

3.10.4.4 Impacts on Business Operations

Summary of issue raised

One submission raises the concern that the business will be impacted due to a reduction in capacity on site. They note that the Proposed Scheme is estimated to result in 6 parking spaces, as well as the bollards to the front to be forfeited. They raise the concern that the Proposed Scheme proposes to relocate these bollards but does not outline where these will be located.

Response to issue raised

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives of the Proposed Scheme to provide high quality public transport, cycling and walking facilities through the Proposed Scheme.

The impact on parking and loading is detailed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. Section 6.4.6.1.6.4 states:

'The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.'

Specifically in relation to commercial/display parking spaces at Windsor Motors Bray, Section 6.4.6.1.6.4 states:

- *'There are currently 59 commercial vehicle spaces for display (car sales) located at Windsor Motors Bray to the south of Wilford Roundabout. It is proposed to remove six spaces whilst 53 spaces will be retained. This loss of six spaces is considered to have a Negative, Slight and Long-term impact.'*

Figure 3.216 below shows the extent of the Proposed Scheme in relation the existing parking arrangements.

Figure 3.216: Existing aerial view at Windsor Motors Bray, Dublin Road (Google Image)

As noted previously, Section 4.6.18.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a summary of the accommodation works and boundary treatment for the entirety of the Proposed Scheme. Detailed accommodation works plans will be prepared in consultation with the landowner in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

During the Construction Phase, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Section 5.2.1.2 Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Section 5.3.4.2 in Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities in Section 4a Bray North (Wilford Roundabout) to Old Connaught Avenue. The expected construction duration for the section will be approximately 12 months, as shown in Table 3.60. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3.

Table 3.60: Extract from Chapter 5 (Construction) EIAR showing Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4, Part 3 of 4 of the EIAR. Windsor Bray Nissan is ID 201 in Appendix A10.1.

With respect to the assessment of land take impacts on the above listed commercial businesses in Chapter 10 (Population), *'Table 10.10 shows 7 commercial receptors, a Circle K filling station and Ford Motors, AXA insurance, Dargle Centre and Castle Street Shopping Centre in Bray, and the Circle K filling station, FirstStop and FastFit in Donnybrook, are expected to experience a Negative, Significant, Short-Term land take effect during the Construction Phase.*' Those potential impacts will reduce following the completion of construction at those locations.

Section 10.4.4.2.2.1, *'Table 10.13 shows that one commercial receptor are expected to experience a Negative, Significant and Long-Term impact by permanent land take.'* This is the Circle K filling station on the east side of the Dublin Road in Little Bray.

The remainder of businesses noted in Appendix 10.1 were not assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in Chapter 10 (Population) in Volume 2 of the EIAR. The impact of land take on commercial receptors across the *Little Bray* community area as a whole is considered Negative, Not Significant to Slight and Short-Term during the Construction Phase and Negative, Not Significant and Long-Term during the Operational Phase.

Section 10.4.4.2.2.1 states:

'Overall, the impact of land take on community areas Donnybrook, Cabinteely, Shankill and Little Bray is expected to be Negative, Not Significant and Long-Term.'

As per Chapter 10 (Population), Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of 4 of the EIAR, numerous case studies have been done to understand the impact of similar schemes on that of local businesses. It was found in Ireland, that businesses have a tendency to overestimate the impact of cars on their business. For example, a survey undertaken of businesses on Henry Street showed that they perceived 40% of customers arrived by bus whereas the actual percentage was 49%. Another example was businesses perceiving that 6% of customers would walk to Henry Street whereas the actual percentage was 19%.

The conclusion from these studies in Section 2 of this report states:

'*Evidence from studies in Ireland and internationally suggest that reductions in the numbers of car journeys to the shops should not lead to a reduction in footfall as traders typically overestimate the importance of cars. Many shoppers are already arriving using sustainable transport options and therefore should be quick to take advantage of new transport options. There may be some disruption to business during the construction phase, however once the new routes are open footfall should return to normal and may in fact rise.'*

Additionally, research was undertaken for shoppers of Henry Street and Grafton Street to understand how much was spent in shops by people arriving different modes of transport. On average, it was found that car spending was more per trip. However, due to the frequency of visits by bus, bike and walking, the average spend was higher.

The conclusion for this in Section 2 – The Impact on Local Businesses states '*There is strong international evidence to suggest that the proposed improvements will lead to further increases in the use of sustainable transport. This should, in turn, more than compensates for reductions in visits by car users. Whilst spend per visitor may fall slightly, the overall spend rises due to the increased overall footfall. This effect should occur as soon as the new proposed routes open with shoppers choosing to make even more use of sustainable transport decisions.*

Whilst there is limited evidence of the impact during the construction work, none of the evidence suggested an increase in business insolvency or a departure of businesses from the area during construction works.'

NTA acknowledge the nature of the Windsor Motors business, which is car sales, the above may not be considered fully applicable. However, the NTA does believe the overall benefit to the public transport and active travel through the Proposed Scheme will outweigh this negative impact.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation. These are matters that can be addressed between the Windsor Motors and NTA.

3.11 Proposed Scheme at Castle Street, Bray

3.11.1 Description of Proposed Scheme at this Location

The design for the Upper Dargle Road junction with the Dublin Road has removed the northbound left turn slip from the Dublin Road. The junction with the new road at Chapel Lane has also been upgraded to a signalised junction, including improved cycle and pedestrian movements.

At the end of the Proposed Scheme at the tie-in to the Fran O'Toole Bridge, the northbound bus lane starts just after the Lower Dargle Road junction so the tie-in at the Proposed Scheme termination consists of a southbound bus lane and two general traffic lanes and cycle track in both directions, on the immediate Castle Street approach to the Fran O'Toole Bridge, where the Proposed Scheme will end. This layout has been developed to coordinate with the proposed Bray Bridge Improvement Scheme.

The Proposed Scheme design at Castle Street, Bray is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.217.

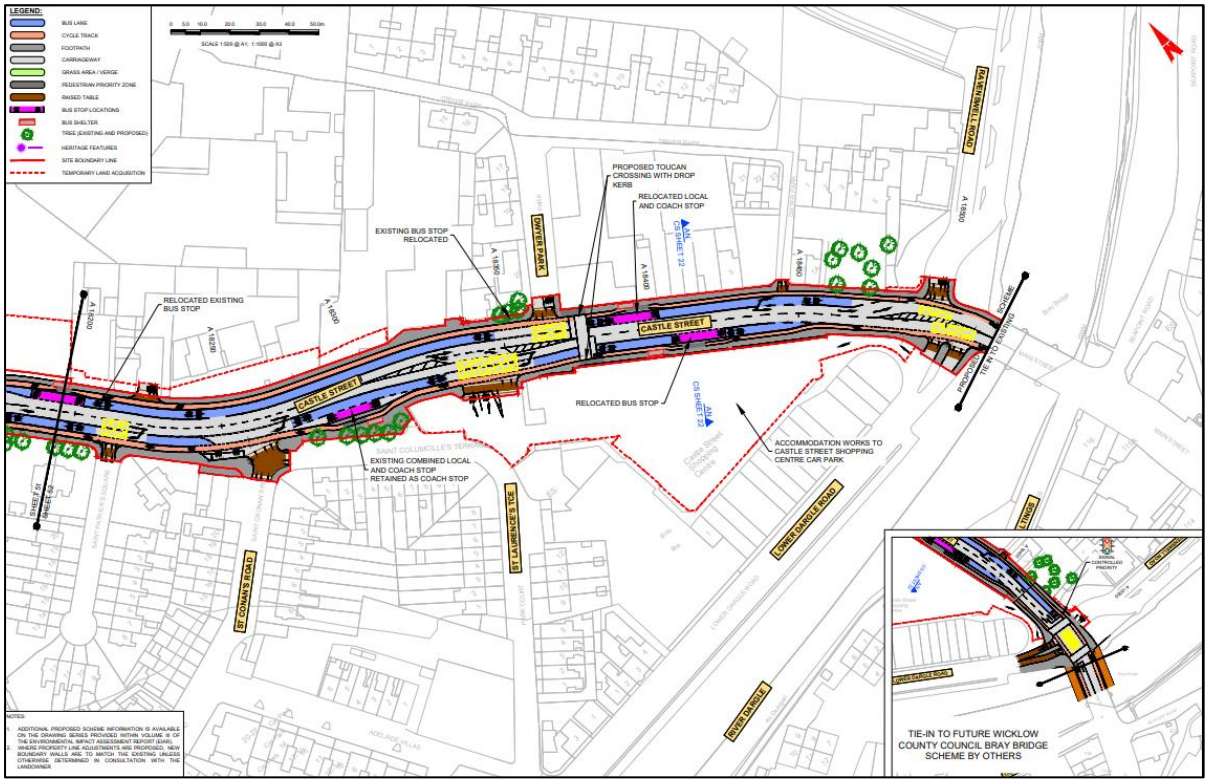


Figure 3.217: Extract from General Arrangement Drawings at Castle Street, Bray (Sheet 52)

3.11.2 Overview of Submissions Received

Table 3.61 below lists the 11 individual submissions made in respect of the Proposed Scheme at Castle Street, Bray.

Table 3.61: Submissions Made in Respect of at Castle Street, Bray

No	Name	No	Name	No	Name
43	Councillor Joe Behan	121	Mandabard Holdings Ltd	131	Melcorpo Commercial Properties Unlimited
61	Dorothee Corrigan	126	Mary Foran	139	Musgrave Limited
80	Four Star Pizza	128	MCL Estates Ltd - Fast Fit Tyres	140	Natasha Hogan

No	Name	No	Name	No	Name
116	Kingsley Hogan	130	Melcorpo Commercial Properties Limited		

A number of issues were raised within these submissions. Issues and responses for each submission are detailed in the individual submission sections below.

Common Issues Raised

1) Removal of parking spaces and impact on business
2) Project timeline
3) Access during construction
4) Operational access/egress and carpark reconfiguration
5) Environmental Impacts
6) Land acquisition, value of property and construction compound
7) No clear link with planned future development in the area

Other Issues Raised

1) Alternative design options
2) Design detail and constitutional rights
3) Benefits are unclear
4) Loading bays
5) Lack of consistency in traffic planning
6) Drainage
7) Noise
8) Boundary Treatment
9) Consultation after CPO Notice for land take details
10) Footpaths/cycle paths improvements

3.11.3 Common Issues Raised and Responses

3.11.3.1 Removal of parking spaces and impact on business

Summary of issue raised

A number of submission state their objection to the removal of a large number of parking spaces in front of commercial and retail properties in the Castle Street area of Bray. It is considered that this will cause disruption to trade and economic activity to local businesses, and it will result in the short-term closure of their businesses. Some submissions also raised that there is no clarity on alternative parking for staff and customers.

Response to issue raised

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives of the Proposed Scheme to provide high quality public transport, cycling and walking facilities through the Proposed Scheme.

The impact on parking and loading is detailed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Section 6.4.6.1.6.4 states:

'The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.'

Specifically in relation to loading bays and commercial parking spaces, Section 6.4.6.1.6.4 states:

- *'There are currently two designated loading / unloading bay located adjacent to the Castle Street northbound carriageway It is proposed to provide four additional loading / unloading spaces which is considered to have a Positive, Slight and Long-term impact;*
- *There are currently 132 informal parking spaces located in the Castle Street Shopping Centre. It is proposed to reconfigure the existing car park which will result in an overall loss of 13 car parking spaces. This impact is considered have to a Negative, Slight and Long-term impact;*
- *There are currently 16 commercial vehicle spaces for display (car sales) located at Castle Garage Bray, south of Dwyer Park. It is proposed to reduce the number of spaces at this location by three. The impact of the loss of three spaces at this location is considered to be Negative, Slight and Long-term; and*
- *There are currently 15 commercial parking spaces located to the east of Castle Street opposite St Cronan's Road. It is proposed to reduce the number of commercial parking spaces at this location to four. The loss of 11 spaces at this location is considered have to a Negative, Moderate and Long-term impact.'*

Section 6.4.6.1.1.4 states: *'This qualitative assessment has also taken into account nearby parking, which is defined as alternative parking locations along side roads within 200 – 250m of the Proposed Scheme.'*

Section 6.3.5.5 states: *'There are a number of side streets which can be used by local residents and visitors / businesses throughout this section. In total there are approximately 137 parking spaces on streets surrounding Dublin Road and approximately 215 parking spaces on streets surrounding Castle Street.'*

Section 10.4.3.2.2.1 in Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase and Section 10.4.4.2.2.1 of the Operational Phase. The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4, Part 3 of 4 of the EIAR.

With respect to the assessment of land take impacts on the above listed commercial businesses in Chapter 10 (Population), *'Table 10.10 shows 7 commercial receptors, a Circle K filling station and Ford Motors, AXA insurance, Dargle Centre and Castle Street Shopping Centre in Bray, and the Circle K filling station, FirstStop and FastFit in Donnybrook, are expected to experience a Negative, Significant, Short-Term land take effect during the Construction Phase.'* Those potential impacts will reduce following the completion of construction at those locations.

Section 10.4.4.2.2.1, '*Table 10.13 shows that one commercial receptor are expected to experience a Negative, Significant and Long-Term impact by permanent land take.*' This is the Circle K filling station on the east side of the Dublin Road in Little Bray.

The remainder of businesses noted in Appendix 10.1 were not assessed as being significantly impacted by either the construction or operation of the Proposed Scheme as summarised in Chapter 10 (Population), Volume 2 of the EIAR. The impact of land takes on commercial receptors across the Little Bray community area as a whole is considered Negative, Not Significant to Slight and Short-Term during the Construction Phase and Negative, Not Significant and Long-Term during the Operational Phase.

As per Chapter 10 (Population) Appendix A10.2 (Economic Impact of Core Bus Corridors) in Volume 4 Part 3 of 4 of the EIAR, numerous case studies have been done to understand the impact of similar

schemes on that of local businesses. It was found in Ireland, that businesses have a tendency to overestimate the impact of cars on their business. For example, a survey undertaken of businesses on Henry Street showed that they perceived 40% of customers arrived by bus whereas the actual percentage was 49%. Another example was businesses perceiving that 6% of customers would walk to Henry Street whereas the actual percentage was 19%.

The conclusion from these studies in Section 2 of this report states:

'Evidence from studies in Ireland and internationally suggest that reductions in the numbers of car journeys to the shops should not lead to a reduction in footfall as traders typically overestimate the importance of cars. Many shoppers are already arriving using sustainable transport options and therefore should be quick to take advantage of new transport options. There may be some disruption to business during the construction phase, however once the new routes are open footfall should return to normal and may in fact rise.'

Additionally, research was undertaken for shoppers of Henry Street and Grafton Street to understand how much was spent in shops by people arriving different modes of transport. On average, it was found that car spending was more per trip. However, due to the frequency of visits by bus, bike and walking, the average spend was higher.

The conclusion for this in Section 2 – The Impact on Local Businesses states:

'There is strong international evidence to suggest that the proposed improvements will lead to further increases in the use of sustainable transport. This should, in turn, more than compensates for reductions in visits by car users. Whilst spend per visitor may fall slightly, the overall spend rises due to the increased overall footfall. This effect should occur as soon as the new proposed routes open with shoppers choosing to make even more use of sustainable transport decisions.

Whilst there is limited evidence of the impact during the construction work, none of the evidence suggested an increase in business insolvency or a departure of businesses from the area during construction works.'

3.11.3.2 Project timelines

Summary of issue raised

A number of submissions raised the issue of the uncertainty of timing for the Proposed Scheme, querying how long the works will take to complete in this area. One submission highlight that there is no certainty as to when construction will take place which means the property is blighted for an indefinite period. One submission specifically queried the timelines for the re-configuration works on the Castle Street Shopping Centre car park.

Response to issue raised

Section 5.3.4.3 of Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities in Section 4c (Upper Dargle Road to Bray South (Fran O'Toole Bridge)), as shown in Table 3.62 below as Section 4c. The expected construction duration for the section will be approximately 9 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3. The duration of the works will vary from property to property, but access and egress will be maintained at all times. An indicative Proposed Scheme construction programme is shown in Table 5.2 of Section 5.4.

Dargle Centre and Castle Street Shopping Centre are within the Section 4c of the construction programme.

Table 3.62: Extract from Chapter 5 (Construction) EIAR showing Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

Section 5.5.3.2 in Chapter 5 (Construction) of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times. Further refer to response below in section 3.11.3.3.

3.11.3.3 Access during construction

Summary of issue raised

One submission considers that the temporary land acquisition in front of the main building at the Dargle Centre is unnecessary and as a result the building will be unable to facilitate the existing use.

Two submissions raise concerns regarding the 9-month construction duration and the impacts this will have on access for customers and servicing of the shopping centre which will likely result in a loss of trade including over the winter/ Christmas Period. The submission suggests that the project should be amended to exclude Castle Street Shopping Centre lands.

Response to issue raised

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable.

As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

Section 5.3.4.3 provides details of the construction activities between Upper Dargle Road to Bray South (Fran O'Toole Bridge). The expected construction duration for the section will be approximately 9

months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3.

The temporary land acquisition area at the Castle Street Shopping Centre and Dargle Centre covers the entirety of the car parking to the front of the centre. This area is required to carry out the works, including car park reconfiguration works. This area will be returned to the owners on completion of the works. As noted above, details regarding temporary access will be discussed with the business owners prior to construction starting. Where possible, the car park reconfiguration works will be done in a phased manner.

During the works, the use of alternative parking spaces, such as other parking at the centres, or side street parking can also be utilised. Refer to response 3.11.3.1 on parking.

Section 5.3.4.3 states:

'Accommodation works will be carried out at Castle Street Shopping Centre Car Park. All works associated with the Proposed Scheme in this location are confined to the existing carriageway, apart from minor widening into the existing shopping centre car park on the northbound side of the carriageway and reconfiguration of the Castle Street Shopping Centre Car Park which includes re-surfacing and lining works. The construction works will be carried out in a phased manner to keep the car park operational.'

Additionally, Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

3.11.3.4 Operational access/egress and car park reconfiguration

Summary of issue raised

One submission considers that the details provided regarding access is limited and should be provided now so that the property owner and the Board can make an informed decision.Clarity is sought to the existing access/egress arrangements at the Shopping Centre.

A third submission is concerned that the existing two-way access and egress traffic lanes will be reduced to one traffic lane facilitating inbound access to the Shopping Centre only, there is concern that there will likely be increased queues and delays at this junction. The submission requests that the BusConnects proposals cease at the northern end of the Castle Street Shopping Centre site and maintain the existing access arrangements to the shopping centre.

One submission also raised the concern of reduced circulation within the castle street shopping centre and how this will impact servicing of the units.

Response to issue raised

At the Dargle Centre, during the operational stage, there will be no change to the existing access arrangements, as indicated in Appendices 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.218 and 07-Fencing and Boundary Treatment Drawings Sheet 52 in Chapter 17 (Landscape (Townscape) & Visual) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.219.

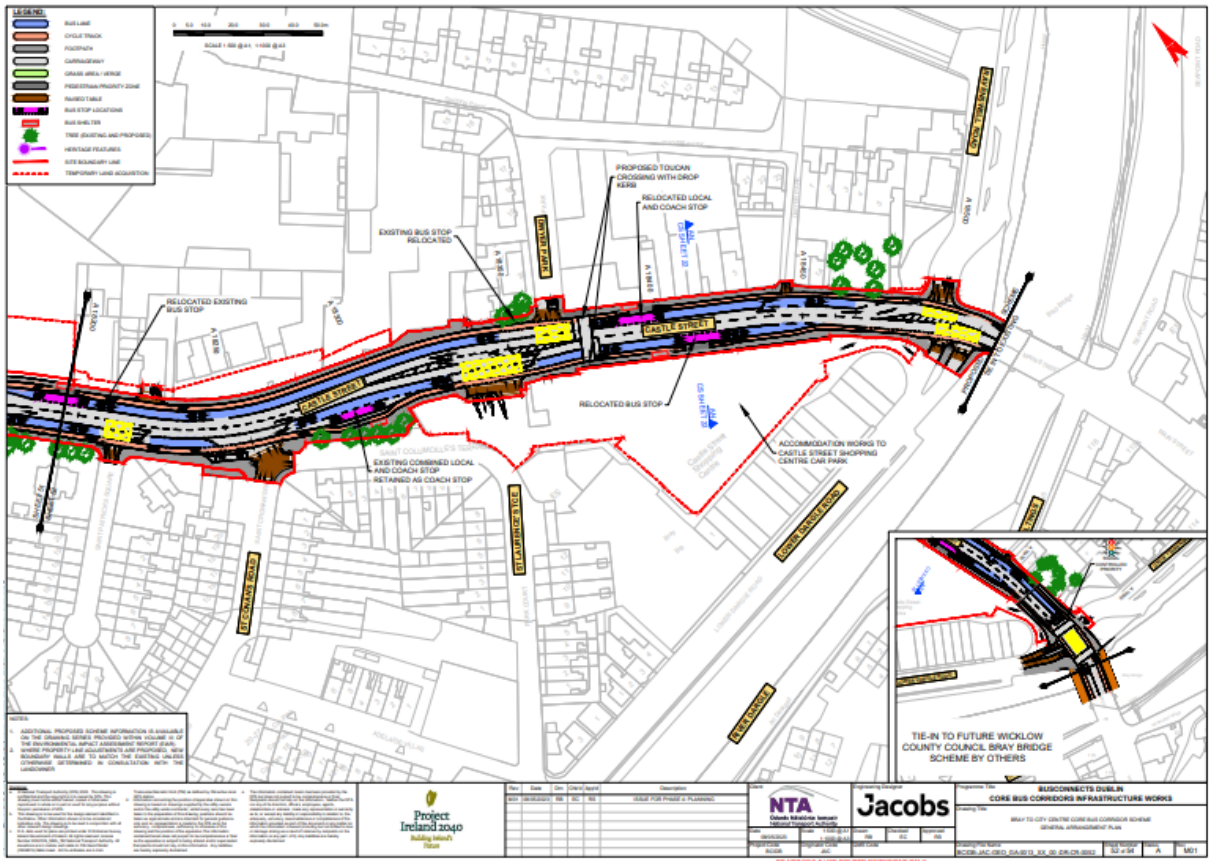


Figure 3.218: Extract from General Arrangement Drawings at Castle Street, Bray (Sheet 52)

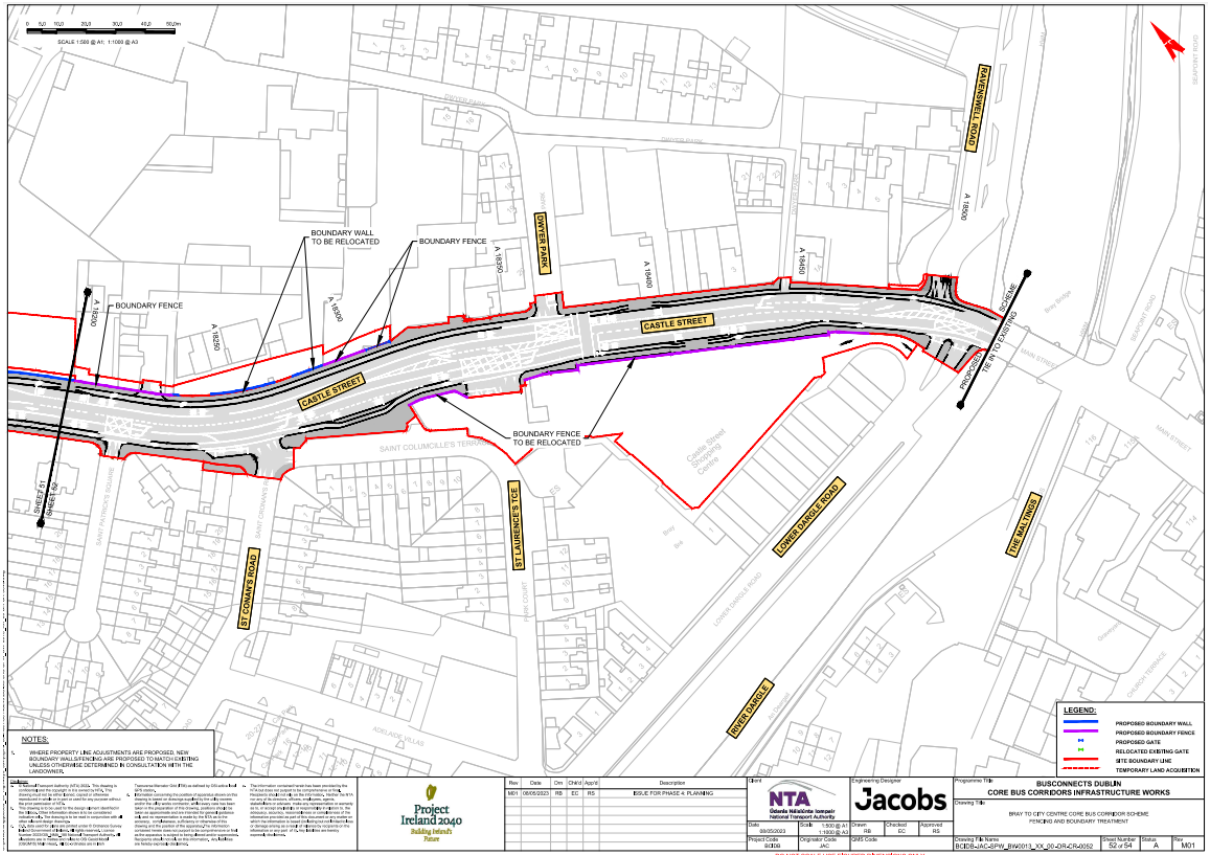


Figure 3.219: Extract from Fencing and Boundary Treatment Drawing at Castle Street (Sheet 52)

At the Castle Street Shopping Centre, during the operational Stage, there will be no change at the existing access arrangements at the northern Castle Street entrance, as indicated on the General

Arrangement Drawings (Figure 3.218 above) and Fencing and Boundary Treatment Drawings (Figure 3.219 above) in Volume 3, Part 1 of 3 of the EIAR. However, at the Lower Dargle Road entrance to the Castle Street Shopping Centre, a one-way entry only arrangement is proposed. This arrangement will allow for the proposed cycle track in both directions and safety at the Lower Dargle Road junction. It is noted that the northbound bus lane has been omitted for a short section at this location to allow the Lower Dargle Road entrance to remain in use.

Alternative options were evaluated to minimise impact to the Castle Street Shopping Centre car park. The entrance to the shopping centre from the Lower Dargle Road is proposed as one-way entry only to improve safety with the Lower Dargle Road junction. The existing access/egress to the Castle Street Shopping Centre from Castle Street will be retained as per existing arrangement.

Section 3.4.3 Chapter 3 (Consideration of Alternatives) Volume 2 of the EIAR, goes on to state:

'3.4.3 Further Consideration Following Updated Draft Preferred Route Option Consultation (November 2020)

The design has been further developed between Ravensdale Park and Dwyer Park to provide for continuous cycle lane and bus lane while minimising the impact to properties and the heritage wall on the east side at Belton Terrace. Design options were evaluated to minimise impact to the Castle Street Shopping Centre car park which includes an alternative to remove the bus lane for a short section and replace with Signal Control Priority. The Proposed Scheme provides for continuous bus lane, cycle track and footpath with the northbound bus lane commencing further north of the Bray Bridge to reduce impact to the Shopping Centre car park entrance from the Lower Dargle Road and cycle track reduced to minimum at this constraint point. The entrance to the shopping centre from the Lower Dargle Road is proposed as one-way entry only. The pedestrian crossing has been moved closer to the shopping centre entrance and the bus stop to facilitate the pedestrian desire line;'

The reconfiguration of the Castle Street Shopping Centre car park, due to the impact of the Proposed Scheme, will be done as part of accommodation works. The reconfiguration of the car park will be designed to Standards and will take into account existing parking, loading, manoeuvrability and delivery arrangements that currently exists on ground.

Section 5.3.4.3 of Chapter 5 (Construction) in Volume 2 of the EIAR states:

'Accommodation works will be carried out at Castle Street Shopping Centre Car Park. All works associated with the Proposed Scheme in this location are confined to the existing carriageway, apart from minor widening into the existing shopping centre car park on the northbound side of the carriageway and reconfiguration of the Castle Street Shopping Centre Car Park which includes re-surfacing and lining works. The construction works will be carried out in a phased manner to keep the car park operational.'

As shown in Section 6.4.6.2.8.3 and Section 6.4.6.2.8.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a General Traffic Flow Difference for the AM and PM peak hour was undertaken. The Proposed Scheme show that '*there is a moderate reduction of -392 on Castle Street during the AM Peak Hour and there are also significant reductions of -609 on Castle Street during the PM Peak Hour*'. In summary, there is a moderate to significant reduction of general traffic flows along the direct study area during the AM and PM Peak Hour, which is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact. Therefore, there is no impact to traffic delays at the Shopping Centre / Castle Street junction.

As shown in Section 6.4.6.2.8.7 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a General Traffic Impact Assessment Summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. The overall results of this assessment can be summarised as follows:

- The majority of assessed junctions have V / C ratios of below 85%, i.e. they are operating well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios. This indicates that these junctions will be able to accommodate any additional general traffic volumes redistributed as a result of the Proposed Scheme. The effect of the Proposed Scheme on the majority of junctions is deemed imperceptible to not significant and long-term; and
- No junctions are predicted to experience a significance of effect that is significant or higher.

Overall, it is determined that there will be a Negative, Low and Long-Term effect impact from the redistributed general traffic as a result of the Proposed Scheme. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.11.3.5 Environmental impacts

Summary of issue raised

One submission claimed that there is a lack of clarity around what the total environmental impact will be of the Proposed Scheme including the environmental impact and upfront carbon footprint for the Construction Phase. Other submissions also questioned the adequacy of the EIAR.

Response to issue raised

With regard to environmental impacts for the Proposed Scheme, the Environmental Impact Assessment Report (EIAR) has assessed these impacts in each of the assessment chapters and summarised the predicted significant residual impacts in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR. As described in Chapter 1 (Introduction) in Volume 2 of the EIAR, the EIAR for the Proposed Scheme has been prepared in accordance with the requirements of the EIA Directive and all applicable Irish legislation, as well as 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency in 2022.

Refer to Section 3.9.3.10 in this report for further information on the adequacy of the environmental assessment undertaken for the Proposed Scheme.

Specifically in relation to the carbon footprint of the Construction Phase, Section 8.8.1 of Chapter 8 (Climate) in Volume 2 of the EIAR states:

'*The Proposed Scheme is estimated to result in total Construction Phase GHG emissions of 15,652 tonnes embodied CO_2eq for materials over a 36-month period, equivalent to an annualised total of 0.014% of Ireland's non-ETS 2020 target and 0.087% of the 2030 Transport Emission Ceiling. The embodied carbon emissions associated with the Construction Phase of the Proposed Scheme will be short-term and temporary in nature. Nevertheless, the impact on CO_2eq emissions, after mitigation, …due to the embodied carbon associated with the Construction Phase of the Proposed Scheme will be Negative, Minor and Short-Term.*'

The NTA are satisfied that the environmental impact assessments undertaken and the conclusions as presented in the EIAR are robust and clearly present the potential Construction and Operational Phase impacts of the Proposed Scheme.

3.11.3.6 Land acquisition, value of property and construction compound

Summary of issue raised

One submission considers that the acquisition of temporary and permanent areas will destroy the value of the owner's premises. It is considered that the temporary acquisition is poorly thought out and if all of this is needed then the premises will be closed. It is considered that the property is blighted by the CPO and the occupier no longer has certainty regarding the future of their business.

Another submission claims that the route has been designed with an excessive acquisition area that is unnecessary and on this basis they believe that the design is flawed.

One submission has queried if the Acquiring Authority are proposing to utilise any of the temporary acquisition area as a works compound.

Response to issue raised

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The Proposed Scheme design at the location of the Dargle Centre is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.222 below. The permanent and temporary land take required at the Dargle Centre is shown in the Deposit Maps, as shown in Figure 3.221, and details listed in the CPO Schedule.

As part of the Proposed Scheme, the permanent land take is required to allow for the construction of the Proposed Scheme and achieve the BusConnects standard cross-section at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The existing carriageway will be widened on the west side (within the Castle Street Shopping Centre) and west side (within the Dargle Centre) to allow for bus lane, cycle track and footpath. The standard cross-section provided at this location is the optimum CBC cross-section which meets the CBC Design Guidelines Objectives in accordance with Section 2 (Figure 1) in Appendix A4.1 (Preliminary Design Guidance Booklet) in the Typical Detail Drawings which are provided as an Appendix in the 04-Typical Cross Sections Sheet 04 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.220 below.

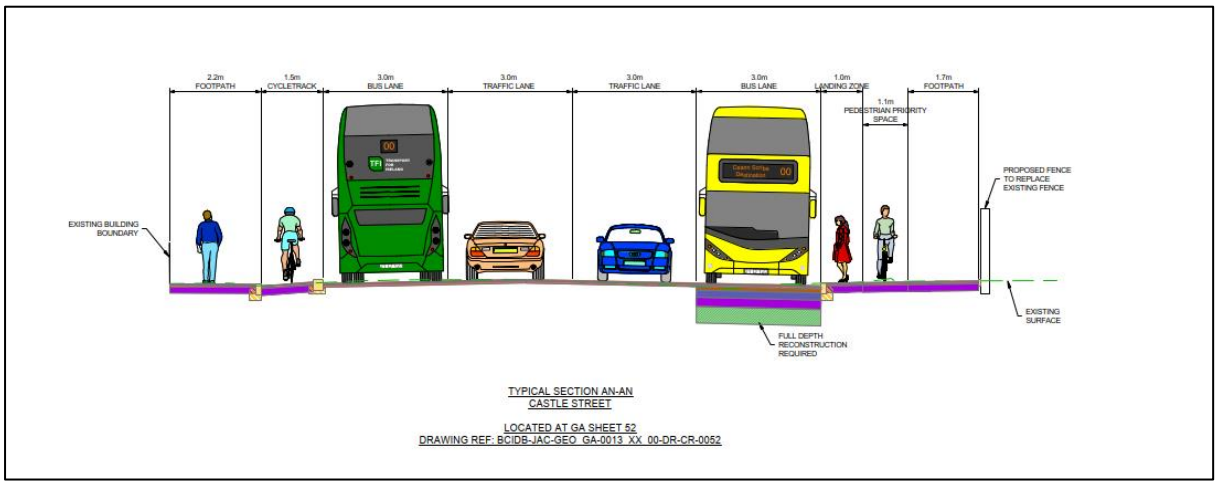


Figure 3.220: Extract from Typical Cross-section Drawings (Sheet 04)

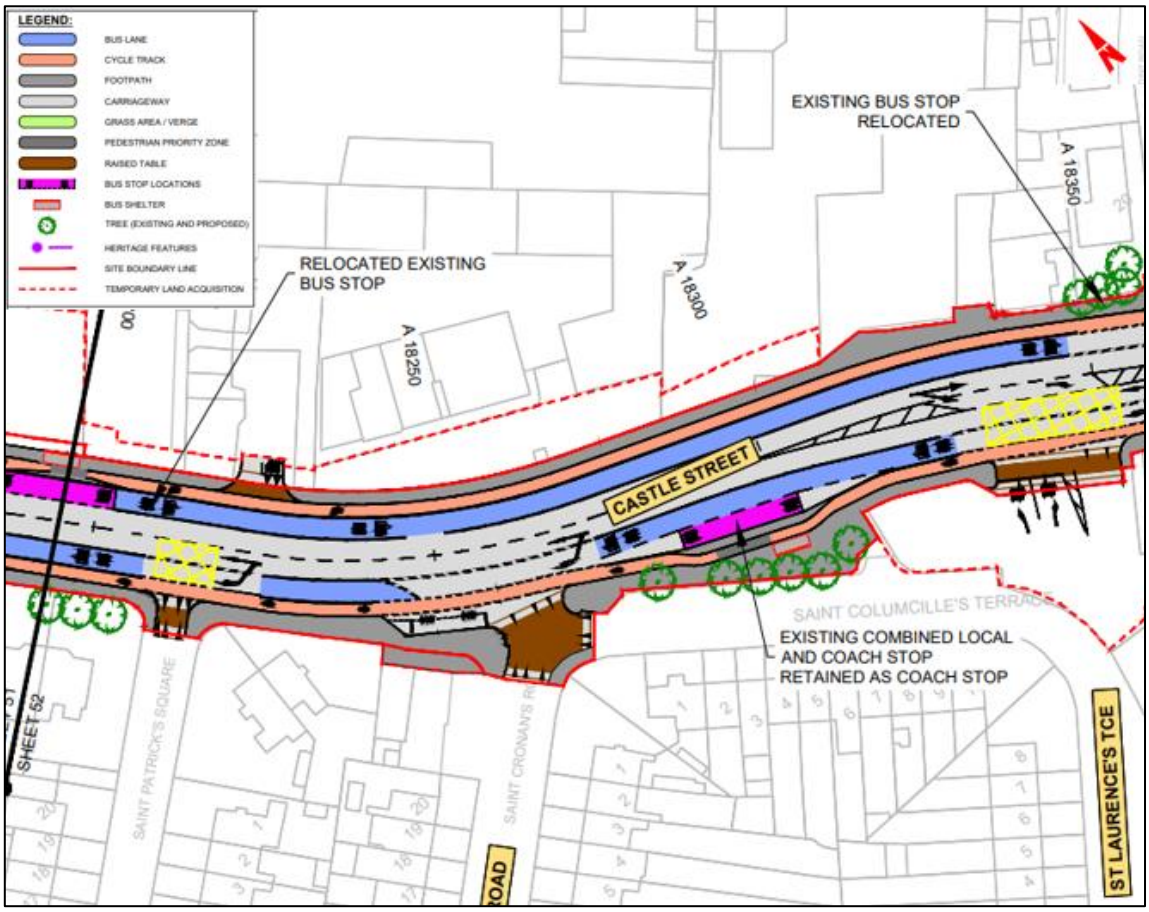


Figure 3.221: Extract from General Arrangement Drawings at the Dargle Centre (Sheet 52)

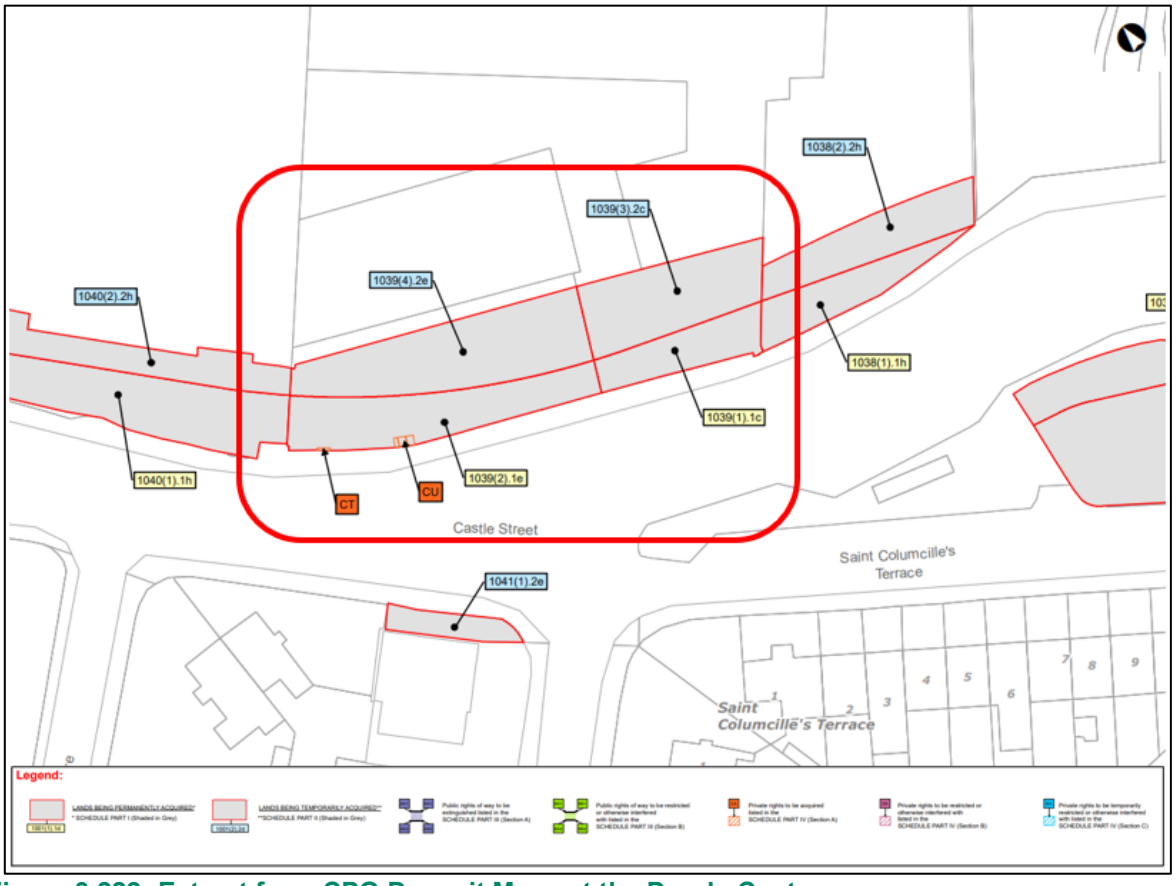


Figure 3.222: Extract from CPO Deposit Maps at the Dargle Centre

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/and or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

As regards the view expressed that the combined impact of all the issues raised would have an adverse and negative impact on the value of properties in the Castle Street area, Chapter 10 (Population) in Volume 2 of the EIAR includes Appendix A10.2 (Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4. Section 3 on Page 14 the Appendix discusses the impact of the Proposed Scheme on property prices. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors, with evidence showing that investing in public realm creates improved spaces that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

In order to construct the Proposed Scheme, the appointed contractor will require Construction Compounds from which they can manage the delivery of the Proposed Scheme. Section 5.7 of Chapter 5 (Construction) Volume 2 of the EIAR describes the locations of the construction compound as noted below:

> *'Figure 5.1 of Volume 3 of the EIAR shows the locations for the Construction Compounds in relation to the Proposed Scheme. The Construction Compound locations have been selected due to the amount of available space, their relative locations near to the majority of the Proposed Scheme major works, and access to the National and Regional Road network. Refer to Chapter 6 (Traffic & Transport) of the EIAR for an assessment of the construction traffic.*
>
> - *The Construction Compound BR1 will be located south-west of the Wilford Junction, with access/egress from Dublin Road, as shown in Image 5.1*
> - *Construction Compound BR2 will be located east of Stillorgan Road, with access/egress from Fosterbrook, as shown in Image 5.2.'*

There is no construction compound proposed at Castle Street, Bray.

3.11.3.7 No clear link with planned future development in the area

Summary of issue raised

One submission comments the bus corridor will come to an abrupt end at the Frank O'Toole bridge and will create a bottle neck on Castle Street. This defeats the purpose until such a time as the bridge is widened.

Response to issue raised

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 Chapter 3 (Consideration of Reasonable Alternatives) Volume 2 of the EIAR provides a detailed summary of this, with further details provided in the Preferred Route Option Report, provided in the Supplementary Information submitted with the application for the Proposed Scheme.

The study area for Section 4 covers Bray North to Bray South. The study area end point extends as far as the urban area of Bray bounded by the N11 to the west and the Southern Cross to the south. The Proposed Scheme infrastructure terminates at the River Dargle to the north of Bray Town, at the Castle Street / Lower Dargle Road Junction adjacent to the Fran O'Toole Bridge, where the Proposed Scheme will tie into the Wicklow County Council's proposed Bray Bridge Improvement Scheme. Beyond the proposed tie-in, that is outside the scope of the Proposed Scheme.

The Proposed Scheme design tie-in to existing road at the North of the Fran O'Toole Bridge in an independent scenario. The Proposed Scheme design at the tie-in has been co-ordinated with the WCC

Bray Bridge Improvement Scheme proposals, which takes into account bus priority and cyclists and pedestrian infrastructure. The signalised junction is proposed with signal control priority for busses and safe pedestrian crossings.

Section 3.3 (last bullet point) of the Preferred Route Options Report, part of Supplementary Information states the following:

'The end point for the Emerging Preferred Route was at the south side of Fran O'Toole Bridge on Bray Main Street. In developing the Preferred Route Option, this end point was changed to the northern side of the bridge where it has been designed to tie into the proposed Bray Bridge Improvement Scheme.'

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the proposals and the proposed design takes them into consideration. Section 4.6.6.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and states the list of infrastructure projects within the vicinity of the Proposed Scheme which will interface with the project.

In relation to the WCC Bray Bridge Improvement Scheme, Section 4.6.6.3.1 states that the '*Proposed Scheme design terminates at the northern end of the Fran O'Toole Bridge and the design has been coordinated to tie in with Wicklow County Council's Bray Bridge Improvement Scheme proposals, which takes into account bus priority and cyclists and pedestrian infrastructure. The junction design at the tie-in with the proposed Bray Bridge Improvement Scheme designed by WCC has been included as an alternative layout.'*

The junction layout as part of the Proposed Scheme where the Proposed Scheme ties into the existing road cross-section North of the Bray Bridge is presented in the 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.223 where it shows *'a coordinated design solution of the overall arrangement in a scenario in which both schemes have been implemented'.* This is presented in the 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR as shown in Figure 3.224.

Figure 3.223: Extract from General Arrangement Drawings showing the Proposed Scheme design tie-in to the Existing Design (Sheet 52)

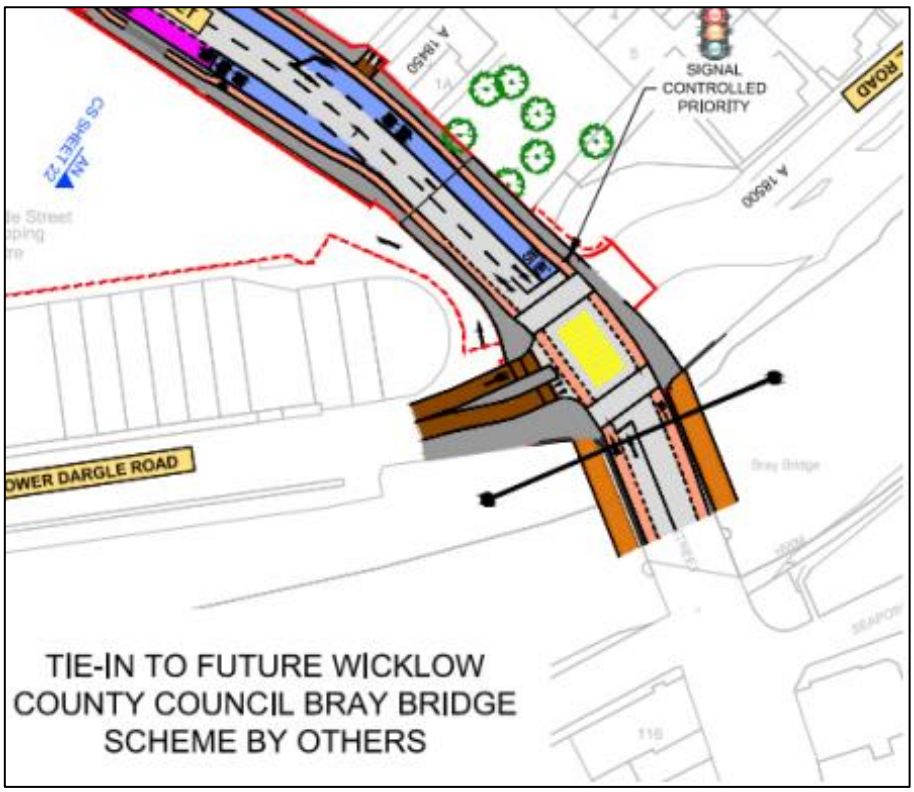


Figure 3.224: Extract from General Arrangement Drawings showing the Proposed Scheme design is co-ordinated with the Proposed WCC Bray Bridge Improvement Scheme (Sheet 52)

As shown in Figure 3.223 and Figure 3.224 above the boundary of the Proposed Scheme is at Fran O Toole bridge and therefore the way buses are managed beyond the bridge is part of a different scheme.

3.11.4 Other Issues Raised and Responses

3.11.4.1 Alternative design options

Summary of issue raised

One submission suggested alternative solutions to the Proposed Scheme such as:

- The existing bus lane on Castle Street is sufficient
- Making better use of the existing and underused DART service
- An alternative route to Bray via the Old Bray Golf Course site and vacant adjacent properties
- Extending the Luas from Cherrywood to terminate somewhere in the vicinity of the Carlisle grounds.
- An alternative route closer to the coast with the addition of another bridge over the Dargle

Response to issue raised

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking

into account the effects on the environment. It considers the alternatives at three levels:

- Strategic Alternatives
- Route Alternatives
- Design Alternatives

The reasonable alternatives studied which are relevant to the Proposed Scheme and its specific characteristics are described in the subsequent sections of this Chapter. The strategic alternatives involved study of the following:

- GDA Transport Strategy 2016 – 2035
- GDA Cycle Network Plan (NTA 2013)
- Bus Rapid Transit – Core Network Report (NTA 2012);
- Review of the DART Expansion Programme (2015);
- BRT Alternative
- Metro Alternative
- Light Rail Alternative
- Demand Management Alternative
- Technological Alternative
- Route Alternatives

GDA Cycle Network Plan was key in assessing the cycling infrastructure along the Proposed Scheme. Section 2.2 of the Preferred Route Options Report, part of Supplementary Information notes the following on the GDA CNP:

'The Greater Dublin Area Cycle Network Plan (the 'GDA Cycle Network Plan') was adopted by the NTA in early 2014 following a period of consultation with the public and various stakeholders. This plan forms the strategy for the implementation of a high-quality, integrated cycle network for the GDA.

There are a number of primary (Routes 12, 12A, S01, S03, S04, S05), secondary (Routes C7, S01a, S02, 13E/N5, S04, S06, 13C, 13G), Inter Urban (Route D4) and Greenway (Dodder Greenway) cycle routes identified either running along or crossing the Proposed Scheme.

During the earlier assessment process which identified the EPR Option, the provision of these cycle routes was considered at all stages. Therefore, as part of the options assessment process, any upgrading of infrastructure to provide bus priority also needs to consider and provide for the required cycling infrastructure, where practicable, to the appropriate level and quality of service (as defined by the NTA National Cycle Manual) required for primary and secondary cycle routes.

It is noted that in preparing the GDA Transport Strategy (2022 - 2042) the NTA also carried out a review of the GDA Cycle Network Plan. This review culminated in the preparation of the 2022 Greater Dublin Area Cycle Network which was published alongside the GDA Transport Strategy (2022 - 2042). With respect to the Proposed Scheme, the 2022 Greater Dublin Area Cycle Network is broadly aligned with the 2013 GDA Cycle Network Plan.

Notable differences between the 2022 Greater Dublin Area Cycle Network and the 2013 GDA Cycle Network Plan include:

- *Dublin Road in Shankhill from Loughlinstown Roundabout to Corbawn Roundabout is identified as Secondary Route in the 2022 Greater Dublin Area Cycle Network. These routes were identified as Primary Secondary Routes in the 2013 GDA Cycle Network Plan;*
- *Shanganagh Road continuing into Dublin Road R119 through Shankill village is now identified as the Primary Cycle Route. in the 2013 GDA Cycle Network Plan;*
- *Dublin Road in Bray from Wilford Roundabout to junction with Lower Dargle Road is identified*

as Primary Route in the 2022 Greater Dublin Area Cycle Network. These routes were identified as Primary/ Secondary Routes in the 2013 GDA Cycle Network Plan;

- *Upper Dargle Road in Bray is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This route was identified as a Primary/ Secondary Route in the 2013 GDA Cycle Network Plan;*
- *Old Cannaught Avenue Road in Bray is identified as a Secondary Route in the 2022 Greater Dublin Area Cycle Network. This route was identified as a Primary/ Secondary Route in the 2013 GDA Cycle Network Plan;*
- *Additional link from the Loughlinstown to Deansgrange Greenway have been added to the Primary Route along Dublin Road in Shankill, with connections at Shaganagh Park and Cemetery. These connections were not identified in the 2013 GDA Cycle Network Plan.*
- *Additional link from the River Dargle Greenway have been added to the Primary Route along Dublin Road in Bray, with connections at Lower Dargle Road. These connections were not identified in the 2013 GDA Cycle Network Plan.'*

It is noted that each of the changes listed above support and reinforce the need for the delivery of cycling infrastructure along the route of the Proposed Scheme.

The GDA Transport Strategy 2022-2042 states that key elements of the Cycling Network Plan for the GDA will be delivered as part of the Core Bus Corridor schemes.

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR, Section 3.3, goes on to note the following on the Route Alternatives:

'Following on from the strategic alternatives considered earlier, this Section sets out the route alternatives which were considered as part of the process to establish the Proposed Scheme. Development of the Proposed Scheme has evolved in the following stages:

1) *Feasibility and Options Reports were concluded in December 2017 and March 2018 (two reports associated with the Proposed Scheme (Bray to UCD CBC in December 2017 and UCD to City Centre (St. Stephen's Green) CBC in March 2018)), setting out the initial route options and concluding with the identification of the combined Emerging Preferred Route;*

2) *A first round of non-statutory Public Consultation was undertaken on the Emerging Preferred Route from 26 February 2019 to 31 May 2019;*

3) *Development of Draft Preferred Route Option (May 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder and community engagement and the availability of additional design information, the design of the Emerging Preferred Route evolved with further alternatives considered;*

4) *A second round of non-statutory Public Consultation was undertaken on the draft Preferred Route Option from 4 March 2020 to 17 April 2020. Due to the introduction of COVID-19 restrictions, some planned in-person information events were cancelled, leading to a decision to hold a third consultation later in the year;*

5) *A third round of non-statutory Public Consultation was undertaken on the updated draft Preferred Route Option from 4 November 2020 to 16 December 2020; and*

6) *Finalisation of Preferred Route Option. Informed by feedback from the overall public consultation process, continuing stakeholder engagement and the availability of additional design information, the Preferred Route Option, being the Proposed Scheme, was finalised.*

Alternative route options have been considered in a number of areas during the iterative design of the Proposed Scheme, such as the location of offline cycle routes and the road layout in constrained locations. The iterative development of the Proposed Scheme has also been informed by a review of feedback and new information received during each stage of public consultation and as data, such as topographical surveys, transport and environmental information was collected and assessed. In addition, the potential for climate impact was considered in all phases of the design process for the Proposed Scheme. As the design progressed climate was indirectly affected in a positive way by refining the design at each stage through reducing the physical footprint of the scheme coupled with the inclusion of technological bus priority measures.

Key environmental aspects have been considered during the examination of reasonable alternatives in the development of the Preferred Route Option for the Proposed Scheme. Environmental specialists have been involved in the iteration of key aspects of the Proposed Scheme with the engineering design team. The following key environmental aspects were considered:

- ***Archaeological, Architectural and Cultural Heritage** – There is the potential for impacts on archaeological, architectural and cultural heritage when providing CBC infrastructure. The assessment had regard to Recorded Monuments and Protected Structures, Sites of Archaeological or Cultural Heritage and on buildings listed on the National Inventory of Architectural Heritage adjacent to the corridor;*
- ***Flora and Fauna** – The provision of the CBC could have negative impacts on flora and fauna, for example, through construction of new infrastructure through green field sites;*
- ***Soils and Geology** – Construction of infrastructure necessary for the provision of the CBC has the potential to negatively impact on soils and geology. For example, through land acquisition and ground excavation. There is also the potential to encounter ground contamination from historical industries;*
- ***Hydrology** – The provision of CBC infrastructure may include aspects (for example structures) with the potential to impact on hydrology;*
- ***Landscape and Visual** – Provision of CBC infrastructure has the potential to negatively impact on the landscape and visual aspects of the area, for example, by the removal of front gardens or green spaces or the altering of streetscapes, character and features;*
- ***Noise, Vibration and Air** – Provision of CBC infrastructure (e.g. the construction activities), has the potential to negatively impact on noise, vibration and air quality along a scheme. For example, through construction works;*
- ***Land Use and the Built Environment** – This criterion assesses the impact of each option on land use character, and measured impacts which would prevent land from achieving its intended use, for example through land acquisition, removal of parking spaces or severance of land; and*
- ***Climate** – Construction works involve negative GHG emissions impacts, while operational efficiencies of public transport, walking and cycling through modal shift from car usage has the potential to reduce GHG impacts.'*

In Section 4 Bray North to Bray South, the Emerging Preferred Route Option has been taken forward as the Preferred Route Option. The EPR at this location includes for dedicated bus lane in each direction, segregated cycle track and footpath in each direction, and this allows sustainable transport modes to achieve priority and safety. The EPR option requires the full widening to occur on the eastern side of the existing carriageway.

Alternative option with no segregated cycle tracks was considered in this section where the cyclists will share with the bus lane. This option would provide for journey time reliability for the buses; however this alternative does not provide segregated cycling infrastructure in this section of the Proposed Scheme, which is identified as a Primary Cycle Route in the GDA Cycle Network Plan 2013. Dublin Road in Bray from Wilford Roundabout to junction with Lower Dargle Road is identified as Primary Route in the 2022 Greater Dublin Area Cycle Network. These routes were identified as Primary/ Secondary Routes in the 2013 GDA Cycle Network Plan.

In the alternate option cyclists would have to share the bus lane on a proposed Primary Cycle Route and therefore it will not meet the BusConnects objectives and would impact the safety of the cyclists in particular on the immediate approaches to a significant junction accessing the M11. The EPR Option performs better in terms of integration with the transport network and safety.

Section 6.5.2 of the Preferred Route Option Report, part of the Supplementary information, refers to the development of design at Castle Street, as noted below:

'The design has been further developed between Ravensdale Park and Dwyer Park to provide for continuous cycle lane and bus lane in both direction while minimising the impact to properties and the heritage wall on the east side at Belton Terrace. Alternative options were evaluated which included no widening either side, which would mean compromise to the bus lane and cycle track.

Alternative options were evaluated to minimise impact to the Castlestreet Shopping Centre Car Park. The Proposed Scheme provides for continuous bus lane, cycle track and footpath in front of the

Castelstreet Shopping Centre with the bus lane commencing further north of the Bray Bridge to avoid impact to the Shopping Centre car park entrance from the Lower Dargle Road, the cycle track is reduced to minimum at this constraint point. The entrance to the shopping centre from the Lower Dargle Road is proposed as one-way entry only. The pedestrian crossing has been moved closer to the shopping centre entrance and the bus stop to facilitate the pedestrian desire line.'

Section 3.4.2.4 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR, lists the design development post 3rd public consultation for Section 4 (Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge)):

'Key changes for the Proposed Scheme implemented in the design of the draft Preferred Route Option for Section 4 include:

- *The design was also further developed between Ravenswell Road and Dwyer Park to provide for continuous cycle lanes and bus lanes while minimising the impact on properties and the heritage wall at Belton Terrace. Alternative options were evaluated which included no widening either side of the Dublin Road, which would mean compromise to the bus lane and cycle track. It is proposed to apply widening on the west side into the Castle Street Shopping Centre car park;*

- *The road alignment at the Upper Dargle Road Junction in Bray was further reviewed and updated to avoid impact to the pine tree under preservation (Tree Preservation Order). The road geometry has been revised to provide minimum road width at the junction. A two-way cycle track connection was provided from the junction to tie-in to the existing two-way cycle track through the grounds; and*

- *The design at the end of the Proposed Scheme tie-in with the Fran O'Toole Bridge Improvement Scheme proposals designed by others was co-ordinated. It is proposed to provide a southbound bus lane only and two general traffic lanes on the immediate Castle Street approach to the Fran O'Toole Bridge and southbound cycle track tie-in to the Bray Bridge Improvement Scheme proposals of cantilever cycle bridge and northbound cycle track will run through the bridge cross-section.'*

Section 3.4.3 goes on to state:

'3.4.3 Further Consideration Following Updated Draft Preferred Route Option Consultation (November 2020)

The design has been further developed between Ravensdale Park and Dwyer Park to provide for continuous cycle lane and bus lane while minimising the impact to properties and the heritage wall on the east side at Belton Terrace. Design options were evaluated to minimise impact to the Castle Street Shopping Centre car park which includes an alternative to remove the bus lane for a short section and replace with Signal Control Priority. The Proposed Scheme provides for continuous bus lane, cycle track and footpath with the northbound bus lane commencing further north of the Bray Bridge to reduce impact to the Shopping Centre car park entrance from the Lower Dargle Road and cycle track reduced to minimum at this constraint point. The entrance to the shopping centre from the Lower Dargle Road is proposed as one-way entry only. The pedestrian crossing has been moved closer to the shopping centre entrance and the bus stop to facilitate the pedestrian desire line;'

Section 3.3.2.4 summarises the route options considered at the Feasibility stage and the assessment to inform the Emerging Preferred Route option (EPR) in Section 3 – Loughlinstown Roundabout to Bray North as follows:

'Following the Stage 1 sifting process, two viable route options for Section 4 were taken forward for assessment and further refinement as shown in Image 3.14. These two route options were as follows:

- *Route 1A would run via Castle Street and Dublin Road to Wilford Roundabout; and*

- *Route 1B would run via Quinsborough Road (northbound direction) / Florence Road (southbound direction), parallel to the DART line across the River Dargle via a new bridge, through the old Bray Golf Club lands onto Dublin Road to Wilford Roundabout.*

Both routes overlap at their start and end points. The Florence Road junction with Main Street is the terminus for both routes, with the inbound route of Option 1B overlapping with the start of Option 1A between the Florence Road and Quinsborough Road junctions on Main Street. Both options also overlap on the Dublin Road from approximately Chapel Lane to Wilford Roundabout.

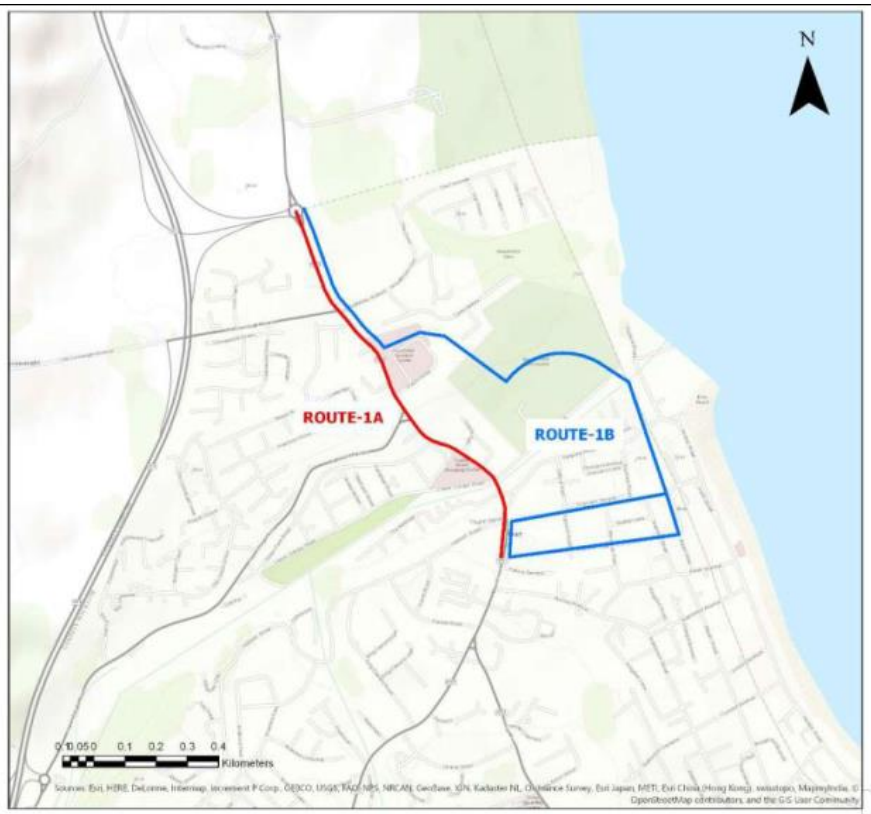


Image 3.14: Section 4 Route Options Remaining After Stage 1 Sifting (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

Overall 1A was deemed to be the most advantageous route. This is due to its significantly lower cost; the likelihood of less impact on the environment; and it was the preferred option under the Safety criterion. Therefore, 1A was brought forward into the Emerging Preferred Route.'

While Route Option 1B would have avoided the impact at the Castle Street, Route Option 1A was brought forward into the Emerging Preferred Route.

Appendix M (Bray to UCD Core Bus Corridor - Feasibility and Options Report) in the Preferred Route Options Report, as part of the Supplementary Information, summarises the assessment of route options in Bray. The Emerging Preferred Route Option is shown in Appendix N of the Preferred Route Options Report, as part of the Supplementary Information.

NTA are satisfied that reasonable alternatives have been considered to inform the Proposed Scheme which meets the objectives.

3.11.4.2 Design detail and constitutional rights

Summary of issue raised

One submission claimed that there is a lack of design being put forward and it is their view that it would be premature of for the Board to decide in favour of the Proposed Scheme as currently being presented. It is claimed that the order as presently presented would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property.

Response to issue raised

The submission makes an assertion that the proposed scheme would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property due to lack of design put forward as part of the Planning application.

The lands are being acquired for the purposes of the Bray to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 (Introduction) in Volume 2 of the EIAR. They are also explained below in response to this objection.

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

Powers of NTA and Statutory basis for the CPO Application

Refer to response in Section 3.1.4.1 on Constitutional requirements of CPO on 'Powers of NTA'.

Purpose of the CPO of the land

Please refer to response in Section 3.11.3.6 on Land acquisition, value of property and construction compound, which notes details of the proposed works and cross-section required for the CPO of the Proposed Scheme at the location of the Dargle Centre, Castle Street.

Proposed Scheme Details

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 4 notes details for the Section 4 Bray North (Wilford Junction) to Bray South. scheme at Castle Street, Bray.

The design details are also shown in Chapter 4 (Proposed Scheme Description) Part 1 and Part 2 of 3 Figures in Volume 3 of the EIAR.

Chapter 5 (Construction) Volume 2 of the EIAR describes the construction activities along the Proposed Scheme.

Additionally, Preliminary Design Report and the associated Appendices of the PDR, part of Supplementary information, also gives description of the design details of the Proposed Scheme.

The design of the Proposed Scheme has been developed to a stage where all potential environmental impacts can be identified, and a fully informed environmental impact assessment has been carried out.

EIAR Assessment

The Environmental Impact Assessment Report (EIAR) has assessed the impacts of the Proposed Scheme in each of the assessment chapters and summarised the predicted significant residual impacts in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR. As described in Chapter 1 (Introduction) in Volume 2 of the EIAR, the EIAR for the Proposed Scheme has been prepared in accordance with the requirements of the EIA Directive and all applicable Irish legislation, as well as 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency in 2022.

Please refer to response in Section 3.11.3.5 on Environmental and Section 3.9.3.10 on Adequacy of Environmental Assessment.

Constitutional Rights

Refer to response in Section 3.1.4.1 on Constitutional requirements of CPO and also note below.

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of the EIAR Chapter 3 Reasonable Alternatives provides a detailed summary of this, with further details provided in the Preferred Route Option Report provided in the Supplementary Information submitted with the application for the Proposed Scheme. In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. Section 3.3 of Chapter 3 of the EIAR set out that design development and assessment work was carried on this section of the Proposed Scheme. The design development at Castle Street, Bray to inform the Proposed Scheme is documented in Section 6.5 of the Preferred Route Option Report, part of Supplementary Information.

Please refer to response in Section 3.11.4.1 on Alternative design options, covering the alternatives considered and design development to inform the Proposed Scheme.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.11.4.3 Benefits of the Proposed Scheme are unclear

Summary of issue raised

One submission requested for the difference between a bus corridor and a bus lane to be explained and queried the need for the expense, disruption, and potential loss of jobs.

Another submission considers that there will be no meaningful improvement in journey times as a result of the Proposed Scheme.

Response to issue raised

Section 2.2 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, outlines the benefits of the Proposed Scheme. It notes:

'The need for the Proposed Scheme to respond to current deficiencies in our transport system in the context of the wider GDA transport need is presented in this section of the EIAR. The reasonable alternatives considered as part of this process are addressed in Chapter 3 (Consideration of Reasonable Alternatives).'

Section 2.4 outlines the benefits of the Proposed Scheme. It notes:

'The Proposed Scheme has been designed to facilitate improved efficiency of the transport network through the improvement of the infrastructure for active (walking and cycling) and public transport modes making them attractive alternatives to car-based journeys. Central to the design is the optimisation of roadway space with a focus on the movement of people rather than vehicles along the route and through the junctions.'

It goes on to state:

'The benefits resulting from the 2028 AM Peak Hour people movement assessment shows that there is an increase of 40% in the number of people travelling by bus, an increase of 108% in people walking

or cycling, and a reduction of 49% in the number of people travelling by car along the route of the Proposed Scheme.'

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport.

It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that *'there is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year'*. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact which on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

Section 2.4 of Chapter 2 (Need of the Proposed Scheme) in Volume 2 of the EIAR goes on to note that a key objective of the Proposed Scheme is to enhance the potential for cycling along the route. It states:

'Currently within the existing extents of the Proposed Scheme there are segregated cycle tracks on approximately 47% of the route outbound and inbound respectively. This will increase to 91% in both directions. In addition to this, the significant segregation and safety improvements to walking and cycling infrastructure that is a key feature of the Proposed Scheme will further maximise the movement of people travelling sustainably along the corridor.'

Table 4.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides key infrastructure improvements along the Proposed Scheme. As noted in the table, the Proposed Scheme will improve the existing bus priority from 69% to 99.6% through combination of bus lanes and signal control priority. The number of pedestrian crossings is increased from 119 to 176 number.

Cumulative journey time savings can be seen in the Proposed Scheme along the Proposed Scheme due to the introduction of signal-controlled priority at junctions which offer active control at intersections and therefore help to reduce congestion.

Section 6.4.6.2.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR demonstrates the average bus journey time savings, in both the AM and PM peak hour. The Proposed Scheme is expected to deliver bus journey time savings in both the AM and PM peaks where positive long-term impacts from enhanced capacity, reliability, and punctuality through the provision of bus priority measures. The Proposed Scheme will deliver *'average inbound journey time savings for E1 service bus passengers of 5.9 minutes (11%) in 2028 and 5.8 minutes (10%) in 2043 from the implementation of bus priority measures. The Proposed Scheme will deliver average outbound journey time savings for E1 service bus passengers of up to 7.3 minutes (12%) in 2028 (PM) and 7.5 minutes (13%) in 2043 (AM)'.*

The Proposed Scheme will make significant improvements to pedestrian infrastructure through the provision of increased signal crossings, introduction of traffic calming measures, improved accessibility, increased pedestrian directness and increased footpath and crossing widths. Section 2.4 of Chapter 2 (Need of the Proposed Scheme) in Volume 2 of the EIAR states:

'The number of pedestrian signal crossings will increase by approximately 60% as a result of the Proposed Scheme. The scheme design has been developed with cognisance to the relevant accessibility guidance. It is anticipated that the overall quality of pedestrian infrastructure will improve as a result of the Proposed Scheme. This aligns with the overarching aim to provide enhanced walking infrastructure on the corridor.'

It also notes that:

'The Proposed Scheme will address sustainable mode transport infrastructure constraints while contributing to an overall integrated sustainable transport system as proposed in the GDA Transport Strategy 2022-2042. It will increase the effectiveness and attractiveness of bus services operating along the corridor and will result in more people benefiting from faster journey times and improved journey time reliability.'

It goes on to state that:

'In addition to the public transport benefits, the Proposed Scheme will also improve the existing streetscape/urban realm setting along the corridor. This will include the introduction of new and improved landscaping provisions along the corridor, and a complimentary planting regime and streetscape improvements at key locations will also enhance the character of the surrounding built environment along the corridor.'

In the absence of the Proposed Scheme, bus services will be operating in a more congested environment, leading to higher journey times and lower reliability for bus journeys. This limits their attractiveness to users, and this will lead to reduced levels of public transport use, making the bus system less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will also significantly limit the potential to grow those modes into the future.

In addition to the benefits to traffic and transport, there will also be environmental benefits from the Proposed Scheme, specifically with respect to air quality, climate, noise, population, and human health, as outlined below.

Chapter 7 (Air Quality) in Volume 2 of the EIAR assesses the air quality impact of the Construction and Operational Phases of the Proposed Scheme. Once operational the Proposed Scheme will have an overall Neutral and Long-Term impact on air quality. However, there are some beneficial impacts as described in Section 7.6.2 of Chapter 7 (Air Quality) in Volume 2 of the EIAR:

'*The air dispersion modelling assessment has found that the majority of all modelled receptors are predicted to experience negligible impacts due to the Proposed Scheme, and beneficial impacts are also estimated along the length of the Proposed Scheme. The number of receptors where an exceedance of the NO_2 limit value is predicted decreases as a result of the Proposed Scheme*.'

Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that '*the Proposed Scheme has the potential to reduce CO2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively*'.

Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR assesses the impact as a result of Construction and Operational Phase noise and vibration changes as a result of the Proposed Scheme. As stated in Section 9.6.2, '*Once operational, there will be a Positive to Neutral direct impact along the Proposed Scheme due to a reduction in traffic volumes during both the Opening Year (2028) and the Design Year (2043)*'. Figures 9.4 and 9.5 in Volume 3, Part 3 of 3 of the EIAR show the results of the noise modelling during the Operational Phase of the Proposed Scheme, showing both the change in noise during the Opening Year (2028) and during the Design Year (2043) respectively. As shown in Figure 9.4 the majority of the impact along the Proposed Scheme route will be Imperceptible / Positive during the Opening Year, while Figure 9.5 shows a similar result for the Design Year.

Chapter 10 (Population) in Volume 2 of the EIAR describes the impact assessment with respect to the population along the Proposed Scheme, namely assessing the impacts to the communities along the Proposed Scheme and assessing the impacts on commercial activity along the Proposed Scheme. While there will be localised negative impacts with respect to residential, community and commercial land take, the general accessibility impacts (both community and commercial accessibility) will be positive for the majority of communities along the Proposed Scheme with respect to pedestrian, cyclist, bus user and private vehicle accessibility.

Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4 Part 3 of 4 of the EIAR describes the economic impact assessment carried out for all 12 of the Core Bus Corridors which form part of the wider Dublin BusConnects Core Bus Corridors Project. The leading sentence in the Executive Summary of that report states:

'*The evidence suggests the infrastructure work will improve the public realm along the routes with positive impacts on businesses and individuals along the corridors*'. The Executive Summary goes on to state that '*Whilst there are a number of potential negative impacts, the majority of the evidence suggests the net impact will be positive*', summarising all of the areas assessed in the report, listing the below items as experiencing positive effects:

- Under the 'Local Businesses' heading:
    - Commerce; and
    - Car parking.
- Under the 'Public Realm' heading:
    - Improved public realm; and
    - Improved outputs.
- Under the 'Health and wellbeing' heading:
    - Walking and cycling;
    - Health; and
    - Productivity.
- Under the 'Social cohesion' heading:
    - Improved transport;
    - Better jobs;
    - Better access; and
    - Reduced crime.
- Under the 'Adapting to the future' heading:
    - Sustainability;
    - Shopping close to home; and
    - Working from home.

Chapter 11 (Human Health) in Volume 2 of the EIAR describes the assessment undertaken into the potential human health impacts as a result of the Construction and Operational Phases of the Proposed Scheme. The assessment found that in general there will be a beneficial impact on human health across the Proposed Scheme once it is operational. Section 11.6.2 of the Chapter states the following with respect to the residual Operational Phase impacts:

'*Three issues were assessed as likely to be associated with significant residual impacts on human health, all of which were considered positive.*

Lack of regular physical activity is a leading cause of chronic disease and premature deaths. The Proposed Scheme will improve opportunities and convenience for walking and cycling, which will support many people in the study area in achieving recommended levels of weekly physical activity, for example as part of an active travel commute to work or education. It will also increase safety and the perception of safety for pedestrians and cyclists, who are more vulnerable to injury and mortality from traffic collisions. Furthermore, by redressing the balance between private car-use and other forms of transport, the Proposed Scheme will improve public transport journey times and reliability, as well as introduce greatly improved active travel infrastructure. This will provide for a more equitable transport experience, including for those without access to a car.

The Proposed Scheme is expected to have a significantly positive contribution to health outcomes related to increased physical activity, equitable access to services and improved safety for vulnerable road users.'

In summary, Section 2.4 of Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR notes:

'The Proposed Scheme and its objectives fit within the current planning frameworks that are described in Section 2.3. The Proposed Scheme will help deliver many of the objectives on an international, national, regional and local level.

Overall, the Proposed Scheme will make a significant contribution to the overall aims and objectives of BusConnects, the GDA Transport Strategy 2022-2042 and allow the city to grow sustainably into the future, which would not be possible in the absence of the Proposed Scheme.'

3.11.4.4 Loading Bays

Summary of issue raised

One submission raised that there is no provision for any loading bays for the businesses on the northern side of Castle Street. They noted that there are 18 businesses impacted by this issue and that the only way of getting deliveries to these premises will be by trucks parking on the bus corridor.

Response to issue raised

Figure 3.225 shows an aerial view of the existing arrangement along the northern side of Castle Street in Bray. The aerial view shows that there is currently a bus lane to the front of these businesses and no existing loading bays on the Castle Street southbound carriageway. However, there is an existing loading bay in the northbound carriageway opposite to Dargle Centre.

Figure 3.225: Extract from General Arrangement Drawings at Castle Street, Bray (Sheet 52)

Figure 3.226 shows the Proposed Scheme along the northern side of Castle Street. The proposed arrangement will provide for bus lane, cycle track and footpath in both directions. There will be no change to the existing arrangement for loading at these businesses. This figure presents the 02-General Arrangement Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

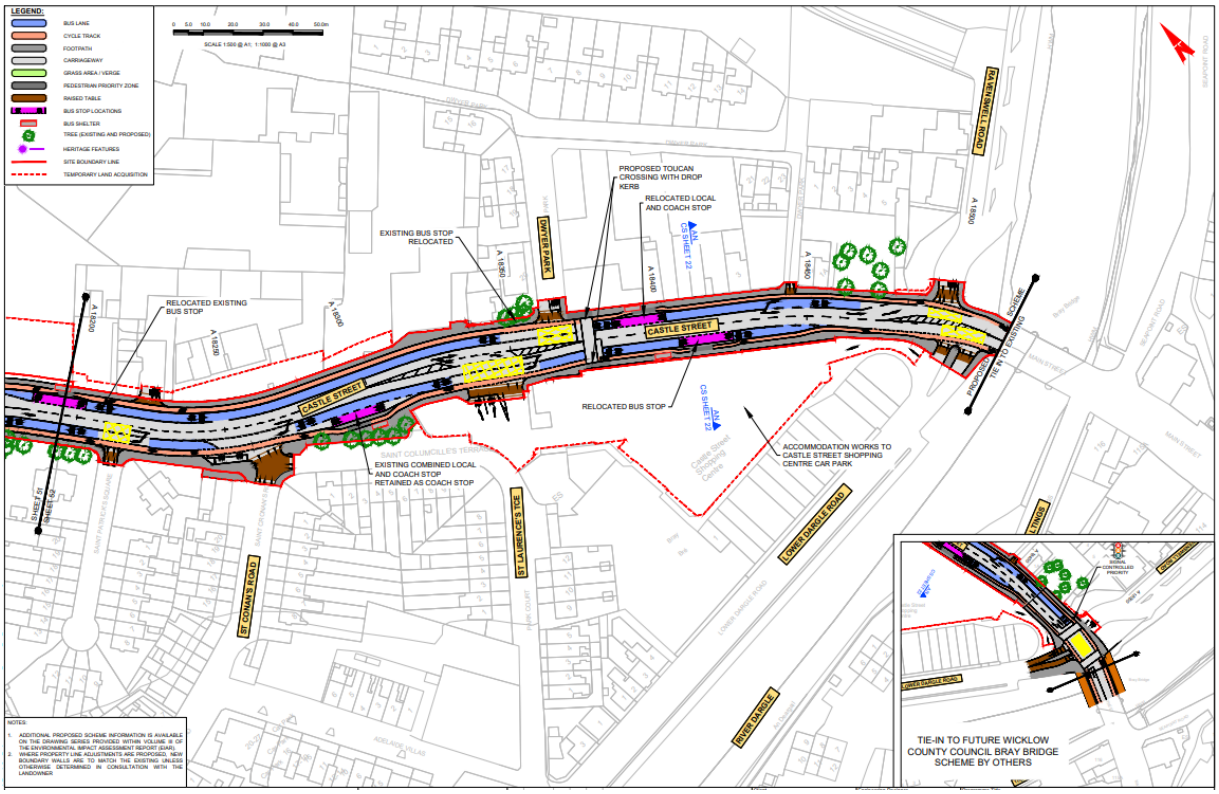


Figure 3.226: Extract from General Arrangement Drawing on Castle Street, Bray (Sheet 52)

Also refer to response in Section 3.11.3.1 of this report for further details on the impact to loading bays and commercial parking in the area.

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives of the Proposed Scheme to provide high quality public transport, cycling and walking facilities through the Proposed Scheme.

3.11.4.5 Lack of consistency in traffic planning

Summary of issue raised

One submission highlights that the bus corridor on the Main Street has been closed and made a bicycle lane and questions where is the free flow of traffic?

Response to issue raised

The submission suggests that there was an existing bus corridor on Main Street that has been replaced with a bicycle lane, however, the NTA note that the existing cross section on Main Street has a single traffic lane in each direction and single cycle track in the southbound direction, with a short section of northbound cycle track at the northern end of Main Street and a short section of northbound bus lane at the southern end of Main Street. This arrangement has been unchanged for a number of years. Main Street in Bray is outside the scope of the Proposed Scheme.

The Proposed Scheme aims to improve on the existing situation within the boundaries of the Proposed Scheme, and tie into the existing cross section at tie-in points, at the Fran O'Toole bridge in Bray.

Refer to response in Section 3.11.3.7 on No clear link with planned future development in the area of this report for further details on tie-in works at Fran O'Toole bridge.

3.11.4.6 Drainage

Summary of issue raised

One submission raises that the property owners are concerned in relation to the drainage implications associated with the works on the public road, in that they may negatively impact their retained property and parking areas.

Response to issue raised

Section 4.6.15 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the approach taken to drainage design for newly paved areas. In particular, the principal objectives of the drainage design are described in Section 4.6.15.4 as follows:

- *All drainage structures for newly paved areas are designed with a minimum return period of no flooding in 1:30 years with a 20% climate change allowance. Unless informed otherwise via hydraulic models, drainage structures for existing paved areas are assumed to have been designed with a return period of no flooding in 1:5 years;*
- *A SuDS drainage design has been developed for all newly paved areas in accordance with the SuDS hierarchy set out in the Drainage Design Basis. SuDS are provided to ensure no increase on existing runoff rates from new or existing paved areas;*
- *Due to the largely impermeable nature of soils across Dublin, infiltration rates were assumed to be zero for calculating the required attenuation volumes of any SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will need to be completed so that infiltration rates can be considered in a future design stage;*
- *All runoff from road pavement or any other paved areas is collected in a positive drainage system. Over-the-edge discharges are not permitted; and*
- *Narrow filter drains or fin drains are not expected for inner city roads.*

Section 13.4.1.1 of Chapter 13 (Water) in Volume 2 of the EIAR states:

'The drainage design includes principles relating to Sustainable Drainage Systems (SuDS). A SuDS drainage design has been developed as a first preference and in accordance with the SuDS hierarchy as described in the SuDS Manual C753 (CIRIA 2015) (hereafter referred to as the SuDS Manual). The SuDS Manual recommends that when considering SuDS solutions, the preferred approach is a hierarchy whereby runoff using source control solutions (e.g. pervious surfacing) are considered first. Where source control is not possible or cannot fully address an increase in runoff from a development, residual flows are then managed using site controls (e.g. bioretention / infiltration basins). If this is not practical or residual flows remain above existing runoff rates, regional controls (e.g. oversized pipes) are used. SuDS provide the dual benefits of controlling flows and treating water quality. In areas where the catchment is proposed to remain unchanged as no additional impermeable areas are proposed, the design consists of relocating existing gullies (where possible) to new locations.'

The Proposed Scheme primarily involves the reallocation of existing road space. Where additional impermeable areas are proposed, a SuDS strategy has been developed to ensure that there will be no increase in existing runoff rates. This is the appropriate surface water management strategy for the Proposed Scheme. Hence, the proposed works on the public road will not impact the property.

A Flood Risk Assessment was undertaken for the Proposed Scheme and is included as Appendix A13.2 (Flood Risk Assessment) in Volume 4, Part 3 of 4 in the EIAR. The Proposed Surface Water Drainage Works Drawings are provided as an Appendix in the 11-Proposeed Surface Water Drainage Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR and provides information in relation to drainage and the proposed drainage design.

Supplementary information is also provided in Appendix K (Drainage Design Basis Document) of the Preliminary Design Report.

3.11.4.7 Noise

Summary of issue raised

One submission claimed that inadequate information has been provided regarding the mitigation measures that are being proposed to control increased noise pollution from the intensive bus corridor.

Response to issue raised

Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location on Castle Street near the end of the Proposed Scheme (Reference Number CBC0013ANML023), on the footpath to the northeast of Fran O'Toole Bridge as shown in Figure 9.2 (Sheet 2) in Volume 3, Part 3 of 3 of the EIAR. Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible / Positive along Castle Street (Figure 9.4, Sheet 8). The modelled impact remains unchanged in the Design Year modelling at Imperceptible / Positive along Castle Street (Figure 9.5, Sheet 8).

Regarding the Operational Phase noise impact of the Proposed Scheme, Section 9.4.4.1 of Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR provides details of the assessment undertaken for the Operational Phase of the Proposed Scheme in respect of the potential noise and vibration impacts associated with altered traffic flows, realigned traffic lanes and displaced traffic flows.

In respect of electric buses, as discussed in Section 9.4.4.1.1. the proposed Opening Year (2028), the NTA forecast is for 94% of the city bus fleet to be EVs or HEVs. For the Design Year (2043), the city bus fleet is forecast to be 100% electric. The operation of electric and hybrid buses will eliminate ICE noise from buses accelerating, decelerating, and idling at bus stops which is the dominant noise source.

In addition, the characteristic of noise from EVs is subjectively less intrusive compared to those with ICE's and is masked to a much greater extent by surrounding road traffic. It is noted the bus stops along the Proposed Scheme will be used by other bus operators which may not transition to EV and HEVs over the same period as the city bus fleet. The volume of these buses along the Proposed Scheme will, however, be significantly less than the city bus fleet and hence, noise levels associated with these areas will not generate significant noise levels over the prevailing noise environment.

Section 9.5.2 of Chapter 9 (Noise and Vibration) describes the mitigation measures required during the Operational Phase of the Proposed Scheme to mitigate potential noise impacts. With respect to the change in traffic noise it states the following:

'The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'

With respect to construction traffic noise impacts, as noted in Figure 9.3 in Volume 3, Part 3 of 3 of the EIAR, a noise impact of Not Significant is forecast along Castle Street. For construction noise from the works along the Proposed Scheme, there is the potential for some temporary significant impacts at the nearest receptors from construction plant noise and activities such as ground-breaking.

The EIAR contains a comprehensive set of mitigation measures to minimise Construction Phase impacts, including noise impacts. Construction noise mitigation measures are set out in Section 9.5 of Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR and are also summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR.

During the Construction Phase, Section 9.5.1.1 states that: '*The appointed contractor will be required to take specific noise abatement measures to the extent required and comply with the recommendations of BS 5228–1 (BSI 2014a) and S.I. No. 241/2006 - European Communities (Noise Emissions by Equipment for Use Outdoors) (Amendment) Regulations 2006.'* It also states that *'During the Construction Phase, the appointed contractor will be required to manage the works to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 (BSI 2014a)'*.

Section 9.5.1.1 also states that '*BS 5228–1 includes guidance on several aspects of construction site practices, which include, but are not limited to:*

- *Selection of quiet plant;*
- *Control of noise sources;*
- *Screening;*
- *Hours of work;*
- *Liaison with the public; and*
- *Monitoring.'*

Specifically, Section 9.5.1.1 states that:

'*The appointed contractor will put in place the most appropriate noise control measures depending on the level of noise reduction required at individual working areas (i.e. based on the construction threshold values for noise and vibration set out in Table 9.9: and Table 9.12).'* [Note - Table 9.9 of Section 9.2.4.1 of the EIAR Chapter 9 (Noise and Vibration) sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 in Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR sets out the proposed working hours and states:

'*It is envisaged that generally construction working hours will be between 07:00hrs and 23:00hrs on weekdays, and between 08:00hrs and 16.30hrs on Saturdays. Night-time and Sunday working will be required during certain periods to facilitate street works that cannot be undertaken under daytime / evening time conditions.'*

However, the contractor will also have to take account of sensitive receptors (in particular any nearby residential areas). Section 9.5.1.1.4 goes on to state:

'*The planning of such works will take consideration of sensitive receptors, in particular any nearby residential areas. Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties. Construction activities / plant items will be considered with respect to their potential to exceed construction noise thresholds at NSLs and will be scheduled according to their noise level, proximity to sensitive locations and possible options for noise control. In situations where an activity with potential for exceedance of construction noise thresholds is scheduled (e.g. road widening and utility diversions or activities with similar noise levels identified in Table 9.46), other construction activities will be scheduled to not result in significant cumulative noise level.'*

In summary the noise abatement measures set out in the EIAR that the appointed contractor will be required to put in place to comply with the limits detailed in Section 9.2.4.1 using methods outlined in BS 5228–1 will result in appropriate and adequate mitigation measures in respect of construction noise impact at this location during construction.

3.11.4.8 Boundary Treatment

Summary of issue raised

One submission claimed that there is no detail in relation to boundary treatment either temporary or permanent.

Response to issue raised

As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

Figure 3.227 shows an extract from the Fencing and Boundary Treatment Drawings which are provided as an Appendix in the 07-Fencing and Boundary Treatment Drawings Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR indicating Castle Street.

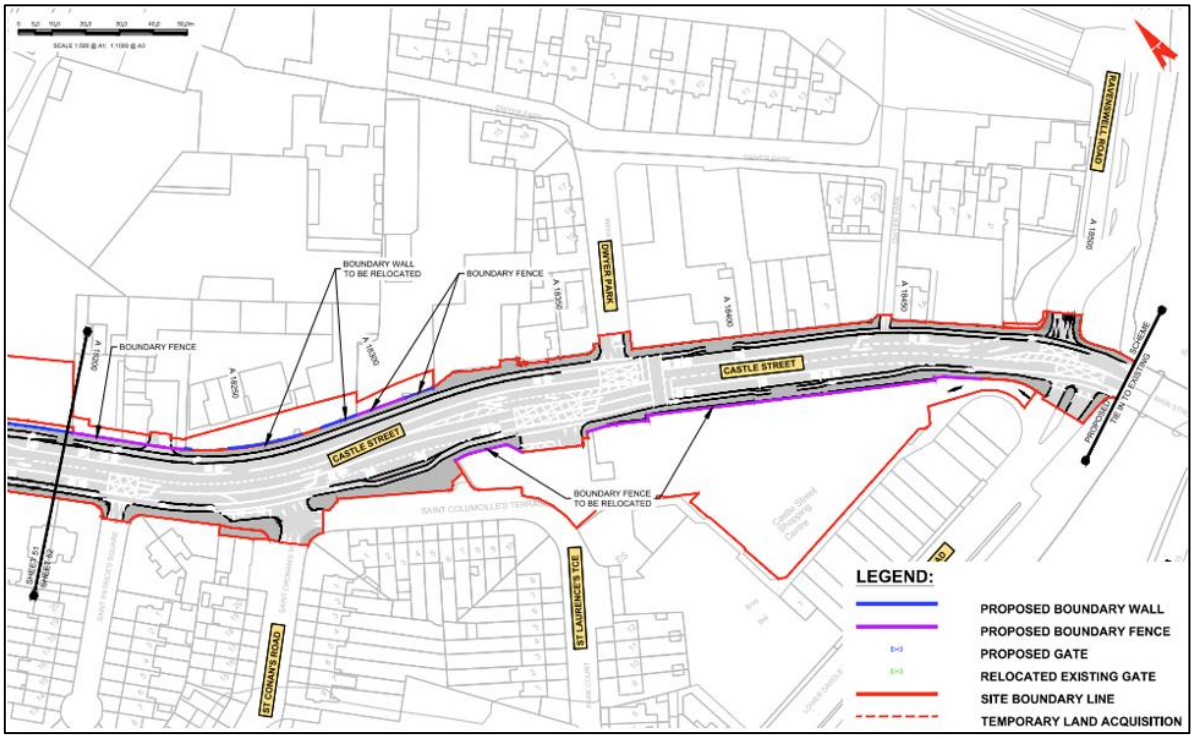


Figure 3.227: Extract from Fencing and Boundary Treatment Drawings at Castle Street (Sheet 52)

3.11.4.9 Consultation after CPO Notice for land take details

Summary of issue raised

One submission raised the concern that on receipt of the CPO Notice, they had requested that a member of design team mark out the extent of the temporary and permanent land takes on site at their property, and that this was not done. The submission raised concerns relating to the CPO of the lands, commenting that these have not been detailed within the application in significant detail, making it difficult to understand.

Response to issue raised

The CPO and Schedule has been prepared in accordance with the requirements under the Section 76 of the Third Schedule of the Housing Act 1966 (as extended and amended). Deposit Maps are prepared for the Proposed Scheme and individual landowner maps have been issued to the impacted landowner with the CPO pack. The CPO Schedules states the following:

- *"The land described in Part I of the CPO Schedule hereto and coloured grey on the said deposited maps is land being permanently acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.*
- *The land described in Part II of the CPO Schedule hereto and coloured grey on the said deposited maps is land being temporarily acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense."*

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their agent / valuer in preparing, negotiating, and advising on compensation.

3.11.4.10 Footpaths/cycle lane improvement

Summary of issue raised

One submission claimed that there is a lack of clarity in relation to the impact of the Proposed Scheme on footpaths and cycle paths.

Response to issue raised

Section 4.6.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines the preferred widths of the mainline cross-section. 2.0m is a desirable minimum width for footpaths, with 1.2m being a minimum width at pinch points over a 2m length of the path. The minimum nominal width is 1.8m. It notes that *'The cross-sectional design of the mainline has been developed to achieve the desirable width criteria contained within the PDGB wherever reasonably practicable.'*

Section 4.5.4.5 notes the proposed cycling provision in the Bray North to Bray South section as *'Segregated cycle facilities will be provided in both directions from the M11 Wilford junction to the end of the Proposed Scheme at Fran O'Toole Bridge.*

These cycle tracks follow a 2022 GDACNP Primary Route. Cycle facilities are currently only intermittently provided, and are composed of a mix of advisory cycle lanes and shared bus lanes along this section of the Proposed Scheme, however these will be reconfigured and upgraded to the arrangement set out in the PDGB (including 120mm upstand kerb between cycle track and traffic lane).

A tie-in is provided to a Secondary Route within the 2022 GDACNP at the Old Connaught Avenue / Dublin Road junction, and at the Upper Dargle Road / Dublin Road Junction.'

At the Dargle Centre, shown below in Figure 3.228, the cross-section proposed will include footpaths, segregated cycle tracks, bus lanes and traffic lanes in both directions.

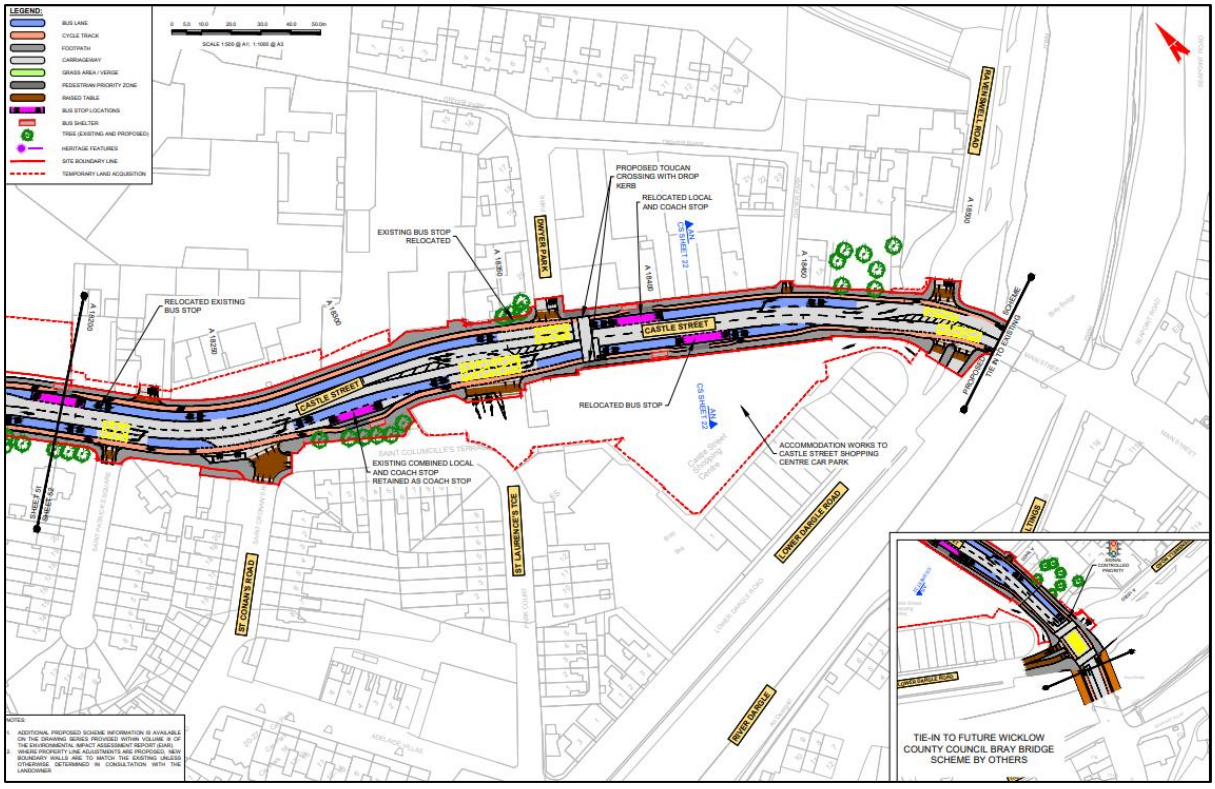


Figure 3.228: Extract of General Arrangement Drawing at the Dargle Centre (Sheet 52)

Section 6.4.6.1.6.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR notes:

'The key infrastructure changes to pedestrian links along Section 4 of the Proposed Scheme are summarised as follows:

- *Increased footpath width, crossing width, and pedestrian directness*

- *Increased provision of priority crossings across side streets with raised tables;*
- *Provision of pedestrian crossings on all arms at R761 Dublin Road / Old Connaught Avenue junction, R761 Dublin Road / Chapel Lane junction and R761 Dublin Road / R918 Upper Dargle Road junction; and*
- *Provision of new mid-link pedestrian crossing along R761 Castle Street to the north of the R761 Castle Street / Lower Dargle Road junction. '*

The assessment of the qualitative impacts on the Pedestrian Infrastructure for Section 4 of the Proposed Scheme are summarised in Table 3.63 along with the accompanying sensitivity for each junction and the resultant significance of effect. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4 (Pedestrian Infrastructure Assessment) in Volume 4, Part 2 of 4 of the EIAR.

Table 3.63: Extract from Chapter 6 (Traffic & Transport) Page 113 - Significance of Effects for Pedestrian Impact During Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Magnitude of Impact	Sensitivity	Significance of impact
R761 Dublin Road / Old Connaught Avenue 4-arm Signalised Junction	A17710 - A17780	E	A	High	High	Positive Profound
R761 Dublin Road / St Peter's Road 3-arm Priority Junction	A17790 - A17810	D	B	Medium	High	Positive Very Significant
R761 Dublin Road / Chapel Lane 4-arm Priority Junction	A17880 - A17930	D	A	Medium	High	Positive Very Significant
R761 Dublin Road / Lidl Entrance Staggered 4-arm Priority Junction	A18030 - A18050	D	B	Medium	Medium	Positive Significant
R761 Dublin Road / R918 Upper Dargle Road Junction 3-arm Signalised Junction	A18120 - A18170	E	A	High	High	Positive Profound
R761 Castle Street / St Patrick's Square 3-arm Priority Junction	A18200 - A18210	D	B	Medium	High	Positive Very Significant
R761 Castle Street / Saint Cronan's Road 3-arm Priority Junction	A18250 - A18260	F	B	High	High	Positive Profound
R761 Dublin Road / Dwyer Park (north) Staggered 4-arm Junction	A18320 - A18360	E	B	Medium	High	Positive Very Significant
R761 Castle Street mid-link crossing *North of the of the R761 Castle Street / Dwyer Park (south) Junction*	A18370	B	A	Low	High	Positive Moderate
R761 Dublin Road / Dwyer Park (south) 3-arm Priority Junction	A18440 - A18450	D	B	Medium	High	Positive Very Significant
R761 Castle Street / Lower Dargle Road 4-arm Junction	A18480 - A18500	C	B	Low	Medium	Positive Moderate
Section Summary		**D**	**B**	**Medium**	**High**	**Positive Very Significant**

Section 6.4.6.1.6.1 goes on to state:

'The contents of Table 6.38 demonstrates that the Proposed Scheme will have a long-term positive impact on the quality of the pedestrian infrastructure along Section 4.

The LoS during the Do Minimum scenario ranges between B and F with nine of the 11 impacted locations being rated as D or lower. During the Do Something scenario, all of the impacted junctions along this section achieve the highest A / B ratings. This is because of the proposed improvements to the existing pedestrian facilities in the form of additional crossing locations, increased pedestrian directness, provision of traffic calming measures to reduce vehicle speeds, improved accessibility and increased footpath and crossing widths. All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities.

Overall, it is anticipated that there will be a Positive, Very Significant and Long-term effect to the quality of the pedestrian infrastructure along Section 4 of the Proposed Scheme, during the operational phase, which aligns with the overarching aim to provide enhanced walking infrastructure on the corridor. A detailed breakdown of the assessment at each impacted junction, including a list of the junctions which experience no change, can be found in Appendix A6.4.1 (Pedestrian Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.'

Section 6.4.6.1.6.2 notes:

'The key cycling improvements along Section 4 of the Proposed Scheme can be summarised as follows:

- *Proposed 1.25m to 2m wide one-way cycle tracks adjacent to the southbound and northbound carriageway throughout Section 4 with the exception of a 50m section between north of the R761 Castle Street / Dwyer Park (south) Junction and south of the R761 Castle Street / Dwyer Park (south) Junction where a combined bus and cycle lane is provided for southbound cyclists; and*
- *Positioning the proposed cycle tracks to bypass behind the bus stops along Section 4.'*

Table 3.64 outlines the cycling qualitative assessment along Section 4, which sets out the overall Do Minimum LoS and the Do Something LoS and the description of impact.

Table 3.64: Extract from Chapter 6 (Traffic & Transport) Page 114 - Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Magnitude and type of Impact	Sensitivity	Significance of impact
R761 Dublin Road: Wilford Roundabout to Chapel Lane	A17400 - A17900	D	A	Medium	Medium	Positive Significant
R761 Dublin Road: Chapel Lane to Upper Dargle Road	A17900 - A18150	C	B	Low	Medium	Positive Moderate
R761 Castle Street: Upper Dargle Road to Fran O'Toole Bridge	A18150 - A18500	C	C	Negligible	High	Not Significant
Section Summary		**C**	**B**	**Low**	**Medium**	**Positive Moderate**

Table 3.64, as noted in Section 6.4.6.1.6.2:

'Demonstrates that the scheme will have a permanent positive impact on the cycling environment. The significance of these impacts range from not significant to significant positive impact, demonstrating that the scheme will create enhancements for cyclists.

During the DoMinimum scenario the LoS ranges between C and D. During the DoSomething scenario, the LoS ratings increase to between A and C. This is due to the proposed improvements to the existing cycling facilities, in the form of increased segregation, improvements to the cycle way widths and improvements to the cycling priority at junctions.

Overall, it is anticipated that there will be Positive, Moderate and Long-term effect to the quality of the cycling infrastructure along Section 4 of the Proposed Scheme, during the Operational Phase. A detailed breakdown of the assessment along each section can be found in Appendix A6.4.2 (Cycling Infrastructure Assessment) in Appendix A6.4 in Volume 4 of this EIAR.

The findings of the cycling assessment aligns with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to 'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable'.

3.12 Dispersed Locations

3.12.1 Overview of Submissions Received

Table 3.65 below lists the 18 individual submissions made in respect of dispersed locations along the Proposed Scheme.

Table 3.65: Submissions Made in Respect of Dispersed Locations

No	Name	No	Name	No	Name
1	Woodbrook SHD	81	Fr. Michael O'Sullivan SAC, PP	171	Religious Sisters of Charity
19	Beechfield Manor Nursing Home Ltd.	71	Eoin Conway & Helen Clarke	175	Ross Lawless & Lisa Kenny
21	Bray Retail Group	157	Paula Whelan & Roy Parker	185	Shanganagh Marble & Stone Centre
31	Chris Horn	165	Rathmichael National School	192	Sir Marc Cochrane
33	Circle K, Bray	166	Rathmichael Parish School	200	The Congregation of Christian Brothers
53	Deirdre Spillane & Jason O'Sullivan	170	Red Rock Donnybrook	206	Trustees of St James Church, c/o Robert Thompson

Issues and responses for submissions related to dispersed location, along with location descriptions, are detailed in the individual submission sections below.

3.12.2 1 – Aeval Unlimited Company (Woodbrook SHD)

3.12.2.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes in each direction.

The existing road cross section in this location provides a footpath in both direction of Dublin Road, with an advisory cycle lane running northbound, with a single traffic lane in each direction, and turning lanes on either side of the junction with Woodbrook Downs.

At the location on Dublin Road, near Woodbrook Downs, it is proposed that additional bus lanes will be added in both directions, as well as the addition of cycle tracks in each direction, and the cycle infrastructure at the four-way signalised junction will be upgraded. The minor arms on the four-way junction will tie into existing infrastructure with that on the east side to tie in with the Woodbrook Strategic Housing Development.

The new residential development Woodbrook SHD is under construction. The proposed signalised junctions for this development and bus stops have been coordinated with the development proposals and incorporated within the design.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 48 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.229.

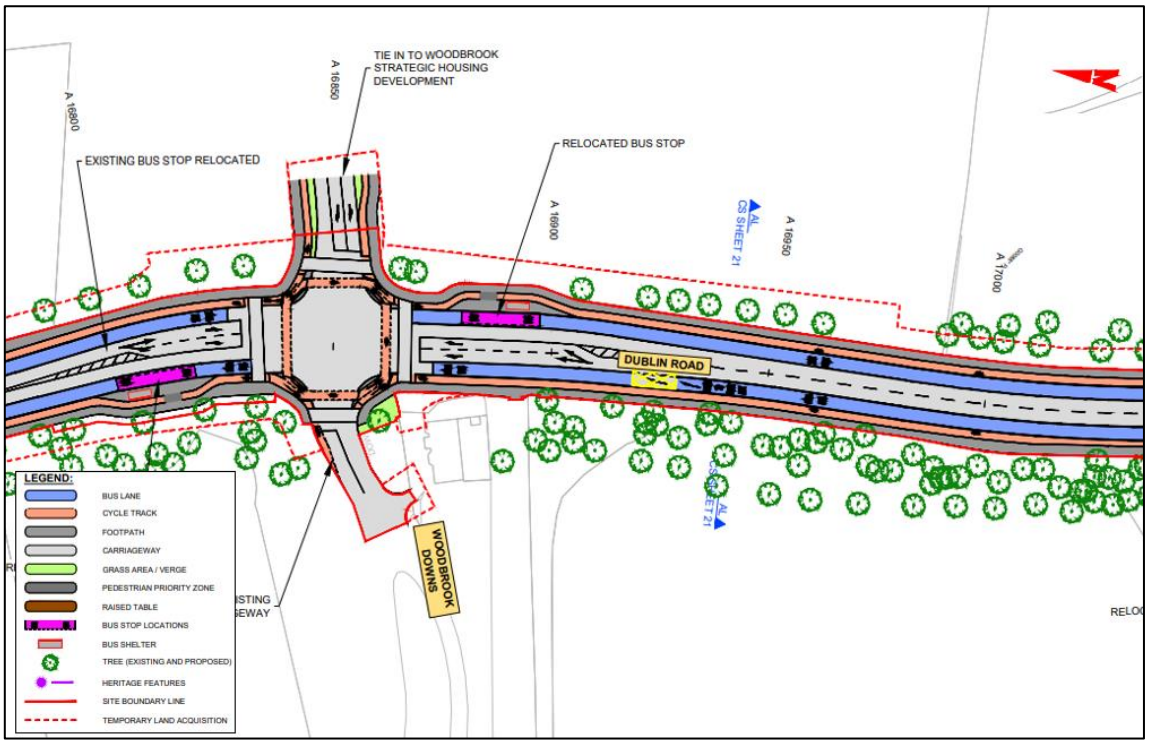


Figure 3.229: Extract from General Arrangement Drawings at Dublin Road (Sheet 48)

3.12.2.2 Summary of Issues Raised

The submission raises five potential issues:

1) Support for the Proposed Scheme
2) Impact to Trees, Walls, and Heritage
3) Alternative Design
4) Temporary Land Take
5) Consultation & Engagement

3.12.2.3 Responses to Issues Raised

3.12.2.3.1 Support for the Proposed Scheme

Summary of issue raised

The respondent supports the Proposed Scheme in principle but has some concerns relating to the CPO of lands through BusConnects on their Woodbrook Strategic Housing Development landholding.

The respondent notes that SHD planning permission has been secured for the site at Woodbrook at Dublin Road for 682 residential dwellings, with the first occupations expected in October 2023.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the objection to support improvement of bus services.

NTA notes the ABP Planning approval of the Woodbrook Strategic Housing Development and that the ongoing construction works.

3.12.2.3.2 Impact to Trees, Walls, and Heritage

Summary of issue raised

The submission notes Condition No. 8 of SHD Permission ABP-305844-19, which required Option 1 to be put in place for the entrance to Woodbrook SHD and interface arrangement with Old Dublin Road, as quoted below. Option 1 enabled retention of most of the mature trees along the front of the site and retention of much of the stone boundary wall.

> *'8. The proposed new road junction layout on the Old Dublin Road to serve the proposed development shall comprise of Option 1, as submitted with this application. Any future changes to the access road junction and boundary arrangements shall be the subject of a further planning application to the local authority.'*

The submission raised concerns regarding the impact of the proposed changes at Dublin Road to the built and natural heritage features such as trees and walls. The submission notes that loss of mature trees and walls is not in line with the Woodbrook-Shanganagh Local Area Plan, and this would negatively impact the established sylvan character of the area.

The submission raised concerns regarding the impact of the permanent land acquisition on the mature trees from their property. Further planting of semi-mature trees in higher numbers within a wider green corridor would be warranted as an appropriate mitigation measure for the changes is noted within the submission. The submission queried the indicative hedge and tree planting suggested.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Woodbrook SHD landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.230. The permanent land take is shown in Plot 1066(1).1h and the temporary land take is shown in Plot 1066(2).2h.

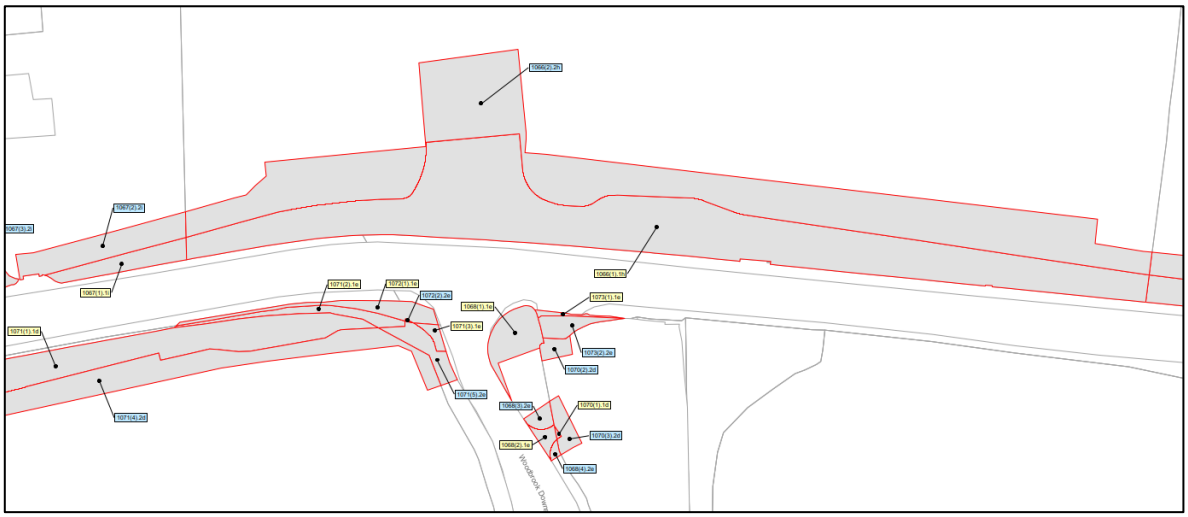


Figure 3.230: Extract from CPO Deposit Map at Woodbrook SHD (Sheet 006)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath and cycle track on the Dublin Road, hence meeting the objectives of BusConnects, as shown in Figure 3.231 extract from 04-Typical Cross Section Drawing Chapter 4 (Proposed Scheme Description) Vol 3 Part 1 of 3 of EIAR.

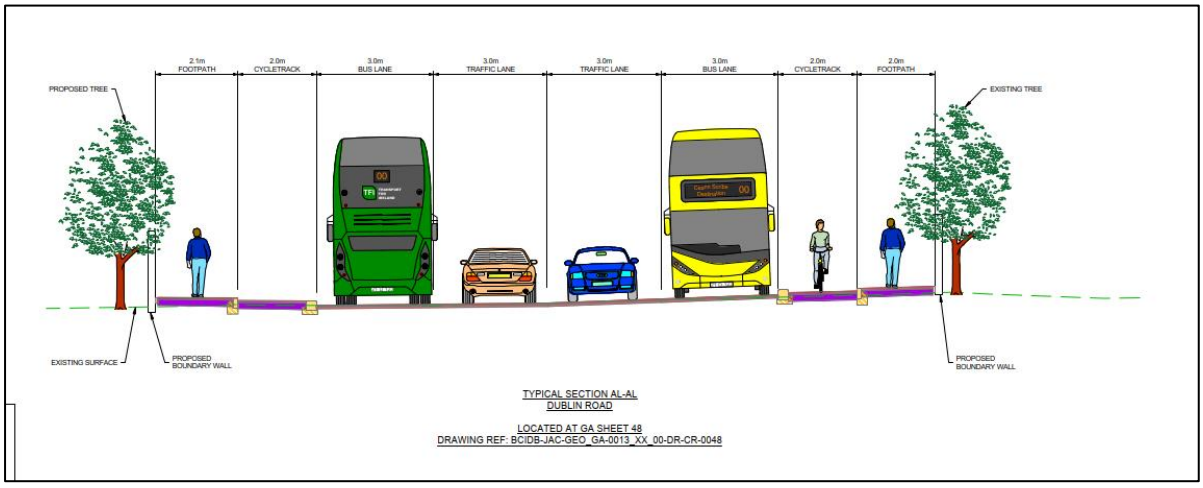


Figure 3.231: Extract from Typical Cross-Section at Woodbrook SHD (Sheet 21)

As part of the Proposed Scheme, it is proposed to widen the road on the east side and will tie into the Woodbrook SHD site and the associated new junction opposite Woodbrook Downs. Liaison has taken place with the development organisation and the local authority regarding boundary treatments and tie-in proposals.

The Proposed Scheme General Arrangement design at the location of the Woodbrook SHD is shown in the 02-General Arrangement drawings Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 48 and shown in Figure 3.232.

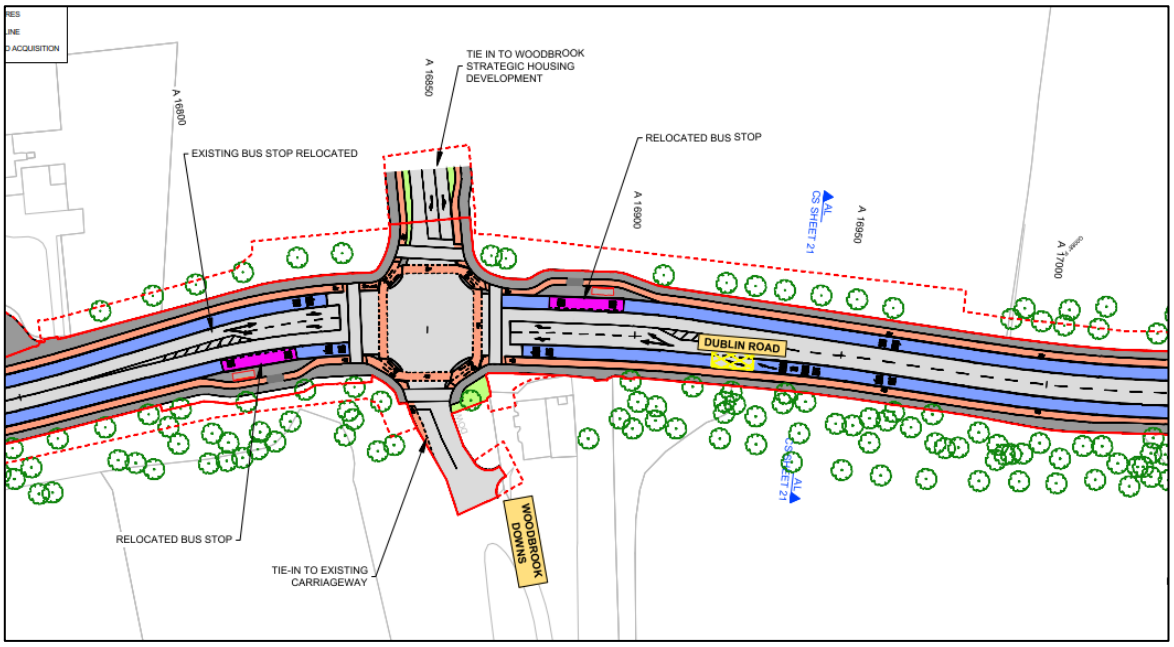


Figure 3.232: Extract from General Arragement Drawings at Woodbrook SHD (Sheet 48)

Boundary wall

The proposed works would require set-back of the existing boundary wall, which will be relocated along the Woodbrook SHD frontage and rebuilt stone walls, like for like.

As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, the reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

The Proposed Scheme Boundary Treatment design at the location of the Woodbrook SHD is shown in the 07- Fencing and Boundary Treatment Drawing Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 48 and shown in Figure 3.233.

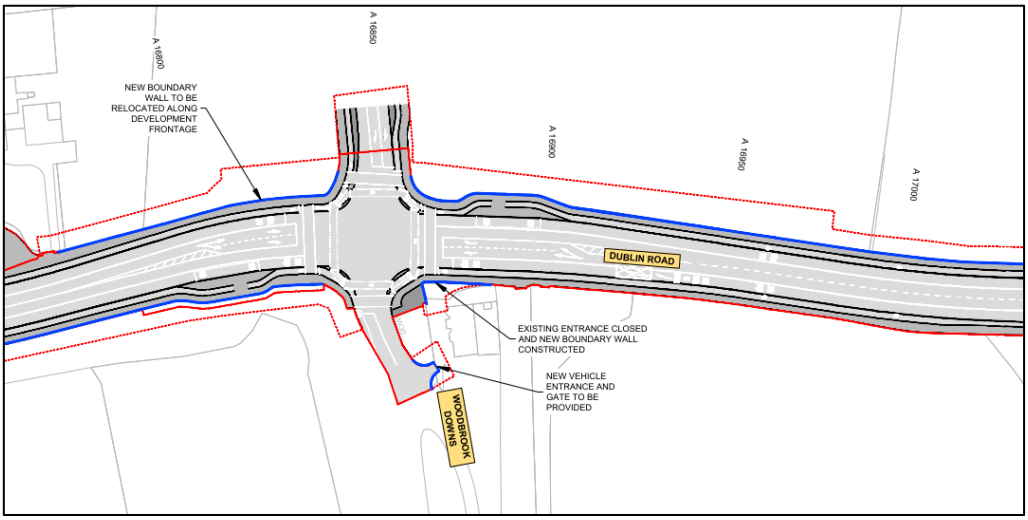


Figure 3.233: Extract from Boundary Treatment Drawing at Woodbrook SHD (Sheet 48)

Trees

The proposed works would require loss of mature trees along the frontage of the housing development. New trees are proposed in the residual green area between the Proposed Scheme permanent land take and Woodbrook SHD proposed / constructed footpath / cycle path to restore the sylvan character of the road at this location.

The Proposed Scheme Landscape design at the location of the Woodbrook SHD is shown in the 05-Landscape Drawings in Volume 3 Part 1 of 3 of EIAR on Sheet 48 and shown in Figure 3.234.

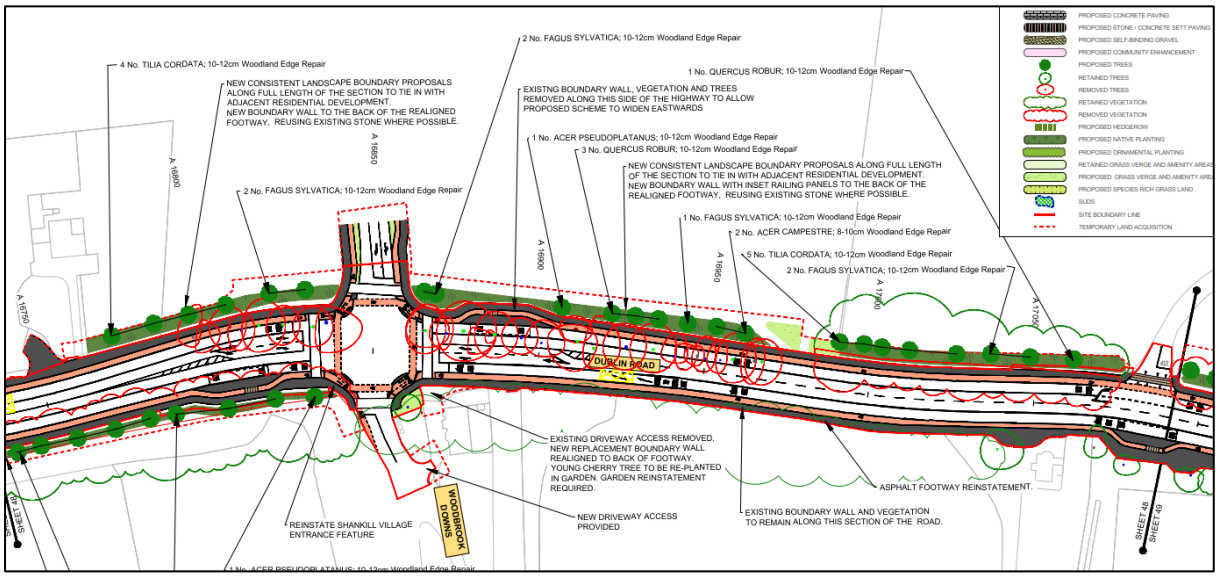


Figure 3.234: Extract from Landscape Drawings at Woodbrook SHD (Sheet 48)

An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes a schedule of all trees on the Proposed Scheme, with all trees to be removed at this locations assessed for age, quality and usable life expectancy. The trees located in front of Woodbrook SHD comprise a mix of species of a mix of ages. The quality of the trees ranges from high to low quality, with some categorised as being unsuitable for retention due to structural issues. The proposed replacement planting and reinstatement of the boundary is described in Figure 3.234 above as follows:

'*New consistent landscape boundary proposals along full length of the section to tie in with adjacent residential development. New boundary wall to the back of the realigned footway, reusing existing stone where possible*'.

A belt of native tree planting consisting of whips and standard trees (trees with a girth of 8-10cm, and a height of 2.5-3m) is proposed behind the re-built stone wall. A mix of species have been selected as species diversity increases the likelihood of planting success in the long term.

Heritage

With respect to the heritage impact from the repositioning of the boundary walls to the front of Woodbrook SHD, Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment of such potential impacts for the Proposed Scheme. It is marked as an architectural heritage feature (Reference Number CBC0013BTH025) in Figure 16.1 (Sheet 24) in Volume 3 of the EIAR, and has an entry in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4 of the EIAR. The direct impact on this wall during the Construction Phase is assessed in Chapter 16, Section 16.4.3.5 (Designed Landscapes) and is described as follows:

'*The proposed land take on the east side of the Dublin Road will directly impact on a 19th century demesne wall (CBC0013BTH025) which is of Medium Sensitivity, necessitating its removal and reinstatement. The wall is associated with Corke Lodge (DLR RPS 1869). New openings in this wall have been granted under a separate application for the Woodbrook SHD (Ref ABP30584419). The trees to the boundary will be replaced. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary*.'

The Operational Phase impact on this feature is also assessed in Section 16.4.4.2 (Designed Landscapes) with respect to the impact of proposed new bus stop in front of Woodbrook SHD as follows:

'*A bus shelter is proposed on the east side of the of the Dublin Road at the demesne wall (CBC0013BTH025) to the north of Corke Lodge (DLR RPS 1869). Cork Lodge retains its designed landscape which is of Regional Importance and Medium Sensitivity. There is no bus shelter in this location currently. The magnitude of impact is Negligible. The potential Operational Phase impact is Indirect, Negative, Not Significant and Long-Term*.'

Mitigation is proposed in Section 16.5.1.5 with respect to the repositioning of the wall during the Construction Phase as follows:

'*Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Slight and Long-Term*.'

The new tree planting and rebuilding of stone walls is focussed on the east side providing a consistent landscape approach through this section and retaining the sylvan character of the street. Liaison has taken place with the development organisation and the local authority regarding boundary treatments and tie-in proposals.

Compliance with Woodbrook-Shanganagh LAP

Appendix A2.1 (Planning Report) in Volume 4 Part 1 of 4 of the EIAR sets out the planning context for the development of the Proposed Scheme, in which it identifies the existing policy framework for the Proposed Scheme in the context of relevant international, European, national, regional and local planning strategy, plan and policy documents. Section 3.7.3 of the Planning Report addresses the Proposed Scheme in the context of the DLRCC Development Plan 2022-2028. As outlined in Section 3.7.3, '*The vision of the DLRCDP (DLRCC 2022) is to 'embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations' The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county*'.

Section 3.7.3.4 of the Planning Report specifically discusses the relevant LAPs within the DLRCC area, including the Woodbrook-Shanganagh LAP 2017-2023. Table 3.14 in the Planning Report lists the key objectives within that LAP which are relevant to the Proposed Scheme and includes a scheme response for each, including Objective T8 '*To seek to retain the sylvan character of the Dublin Road in any road improvement schemes and to ensure that any loss of mature trees will be mitigated by replacement tree planting with consideration also to the re-instatement of any historic walls or features along any new road alignment*'. The mitigation for both tree loss and wall reinstatement as described in the previous sections aligns with the requirements of that objective in the Woodbrook-Shanganagh LAP.

The section on the relevant LAPs concludes stating that '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor adjoining the LAP area. It will facilitate a modal shift towards public transport and active travel modes which is are key objectives of the Stillorgan LAP (2018) and Woodbrook Shanganagh LAP (2017)*'.

3.12.2.3.3 Alternative Design

Summary of issue raised

The submission requests that the footpath and southbound cycle path along the eastern side of the upgraded Dublin Road should be retained in any event at that existing, recently constructed new alignment along the front of the Woodbrook site thereby reducing the continuous corridor width of the widened Dublin Road and avoiding the duplication of pedestrian and cycle facilities so close to these permitted facilities as constructed on-site. The eastern extent of the BusConnects widened corridor

would thus be the southbound bus lane and bus stop with a pathway connection east from the bus stop to the adjacent footpath and cycle path as existing at Woodbrook SHD.

Response to issue raised

Refer to Section 3.9.3.1.2 on Consideration of Alternatives and Options Assessment in Shankill for Proposed Scheme at Dublin Road (Crinken Lane to Wilford Roundabout) of this report, and also note below, for further information on the review of alternative proposals.

Section 4.6.6.3 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and states the list of infrastructure projects within the vicinity of the Proposed Scheme which will interface with the project.

In relation to the Woodbrook SHD Scheme, Section 4.6.6.3.1 states that the:

'Townland of Corke Little, Woodbrook: The Woodbrook Strategic Housing Development is located at around chainage A16850 of the Proposed Scheme. It consists of a residential-led development comprising 685 no. residential units and one childcare facility. Included in the planning application is the provision of Woodbrook Distributor Road / Woodbrook Avenue from the Old Dublin Road (R119) to the future Woodbrook DART Station. Also included in the application is a new vehicular access provided from the Old Dublin Road (R119) opposite Woodbrook Downs entrance including new junction arrangements. Planning permission has been granted and the junction works are under construction at the time of writing this report;'

NTA notes the comment on the alternate design to allow bus lane only in the southbound direction and utilise the footpath and cycle track part of the Woodbrook SHD in southbound direction as shown in the Figure 3.235 extract from the Submission Report. This will minimise land take and impact to trees behind the existing boundary wall.

Figure 3.235: Existing View at Woodbrook SHD Junction (Source: Google)

NTA notes the above suggestion, and the intention of the Proposed Scheme is to keep the cyclists and pedestrian at the main Dublin Road on the roadside of the set-back and reinstated boundary wall. The residual green area between the back of the Proposed Scheme footpath and the back of the footpath/ cycle path part of the Woodbrook SHD will be reinstated with landscaping and tree planting.

NTA notes the plan provided with the application and the Development proposes a cycle path and footpath running close to the proposed or under construction duplex houses. This footpath will provide access to the front doors of these dwellings and will be in continuous use. Diverting the pedestrians and

cyclists through Woodbrook SHD footpath close to the duplex houses could lead to safety and privacy issues.

The Proposed Scheme will construct the bus lane, footpath and cycle track along the road edge and upgrade the junction to a Protected junction layout for cyclists and the footpath and cycle track which will connect to the Woodbrook SHD access road. There will be separation between the Proposed Scheme back of footpath and the frontline duplexes and the developer's footpath can be accommodated for these frontline houses with necessary connection to the main road footpath.

Pedestrian links from the Proposed Scheme footpath to the Woodbrook SHD can be provided to improve permeability by opening up the wall.

Figure 3.236 shows the Proposed Scheme over the Development Plan.

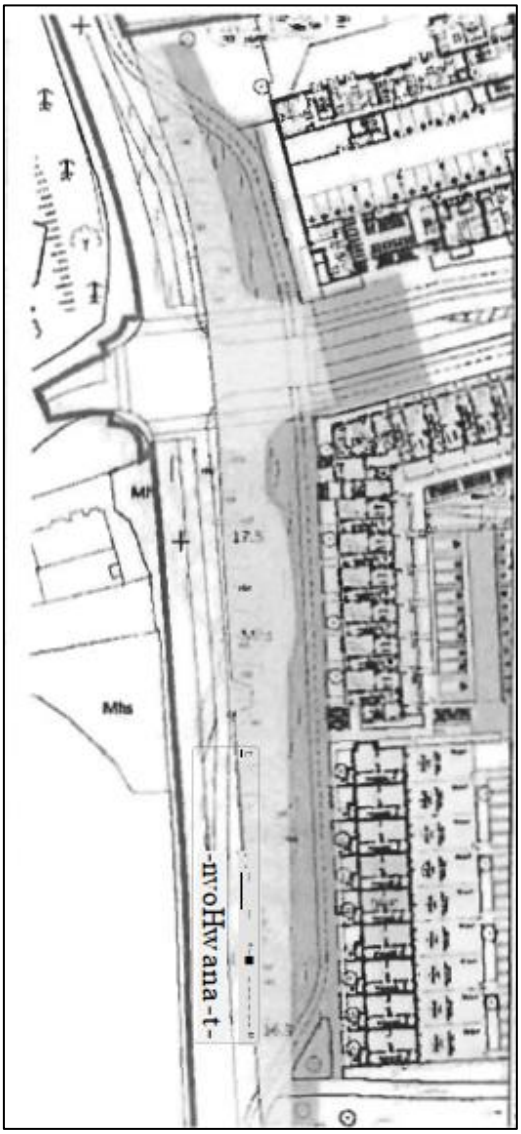


Figure 3.236: Extract from the Objection showing the Proposed Scheme over the Development Plan

Continuous communications have taken place with the developer during the design development process and in particular this issue was discussed via emails and phone calls between 27/04/2023 and 09/05/2024.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

The NTA acknowledge the positive and constructive liaison that has occurred with the Woodbrook Strategic Housing Development throughout the design and planning process to date. These are matters that can be successfully addressed between the Woodbrook SHD and the NTA, in the absence of any approval condition.

3.12.2.3.4 Temporary Land Take

Summary of issue raised

The objection notes that they have been assured in previous correspondence that the temporary land acquisition would not encroach on the private front curtilage of any apartments, duplexes or houses along the edge of Dublin Road but that the temporary land acquisition would extend to the back of footpath, adjoining those private curtilages, this is required to maintain access to property.

Response to issue raised

NTA note the developers concern and confirm that the temporary land take has been co-ordinated with the latest designs provided by the developer and that the Proposed Scheme temporary land take is at the back of the footpath of the Woodbrook SHD. NTA can confirm that the temporary land take does not impact the private curtilage of the houses and duplexes and the footpath itself.

The cycle path part of the Woodbrook SHD development is within the temporary land take and will be re-instated on completion of the construction works.

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned back after construction, to be compatible with the development.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

Continuous communications have taken place with the developer during the design development process and in particular this issue was discussed via emails and phone calls between 27/04/2023 and 09/05/2024.

The NTA acknowledge the positive and constructive liaison that has occurred with the Woodbrook Strategic Housing Development throughout the design and planning process to date. These are matters that can be successfully addressed between the Woodbrook SHD and the NTA, in the absence of any approval condition.

3.12.2.3.5 Consultation & Engagement

Summary of issue raised

The objection queried the level of public consultation linked to the Proposed Scheme due to previously raising concerns at consultation have not been addressed adequately.

Response to issue raised

Refer to Section 3.9.3.15 on Public Consultation and Engagement of this report for further information on public consultation.

3.12.3 19 – Beechfield Manor Nursing Home Ltd.

3.12.3.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives, St Anne's Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane) is being upgraded as part of the Proposed Scheme.

The roundabout is proposed to be converted to a signal-controlled junction to manage traffic flow, improve bus progression and safe crossing for pedestrian and cyclists. A dedicated right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Beechfield Manor to Shanganagh Road is also to be provided.

The existing road cross section at this location provides one general traffic lane and footpath in each direction on Shanganagh Road, with signalised pedestrian crossings on Beechfield Manor and the south of the junction on Shanganagh Road.

The Proposed Scheme design along Shanganagh Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 43 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.237.

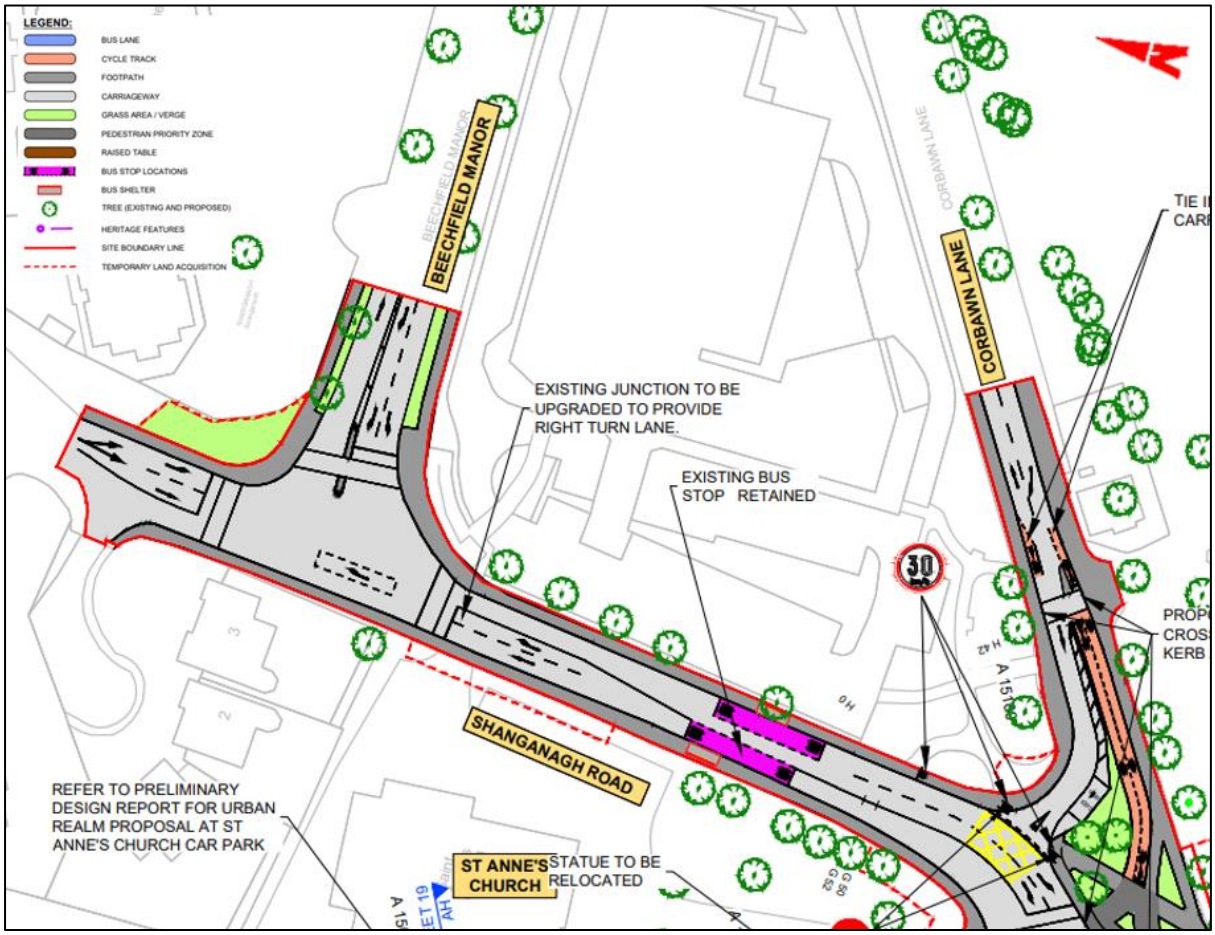


Figure 3.237: Extract from General Arrangement Drawing at Shanganagh Road (Sheet 43)

3.12.3.2 Summary of Issues Raised

The submission raises three potential issues:

1) Land Acquisition and Impact to Boundary Wall
2) Insufficient EIAR on Noise and Dust Mitigations
3) Indemnity

3.12.3.3 Responses to Issues Raised

3.12.3.3.1 Land Acquisition and Impact to Boundary Wall

Summary of issue raised

The submission raised concerns regarding the proposed footpath construction undermining the structural integrity of boundary wall on the property. It notes concerns on the impact on the green area.

Response to issue raised

As set out in Paragraph 2 of the statutory notice which was served, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme cross-section as presented in an Appendix in 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, in Part 1 of 3 of the EIAR on Sheet 43 and shown in Figure 3.238. As part of the proposed works the permanent land take is required to widen the footpath in the green area adjacent to the Beechfield Manor Nursing home.

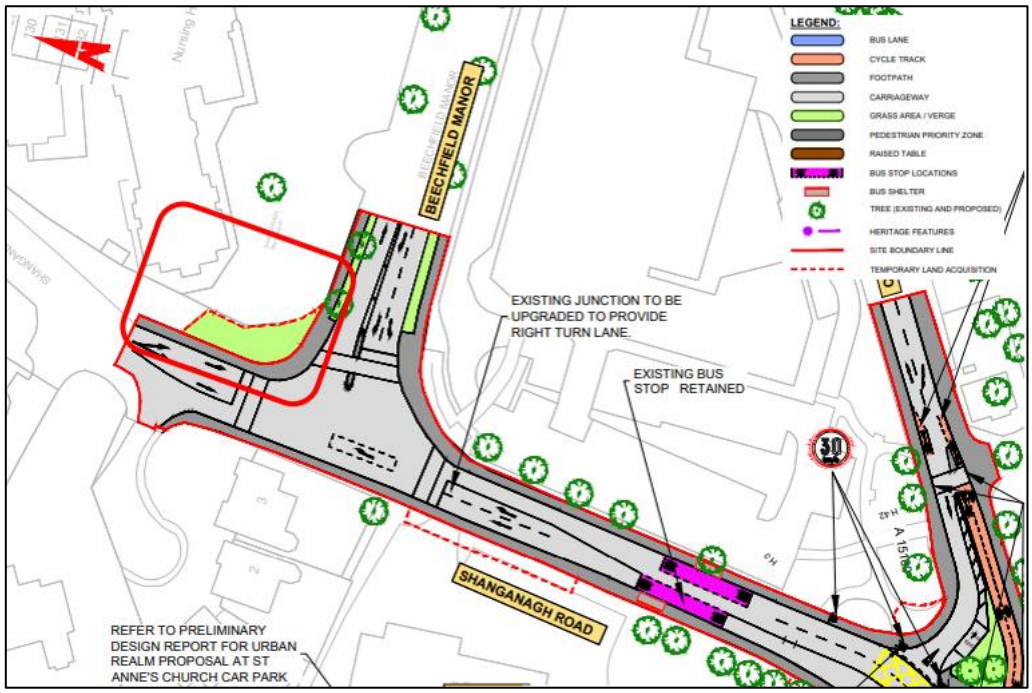


Figure 3.238: Extract from General Arrangement Drawings at Beechfield Manor (Sheet 43)

The permanent and temporary land take required at this location is shown in the Deposit Maps, as shown in Figure 3.239. The permanent land take is shown in Plot 1098(1).1e and temporary land take in 1098(2).2e.

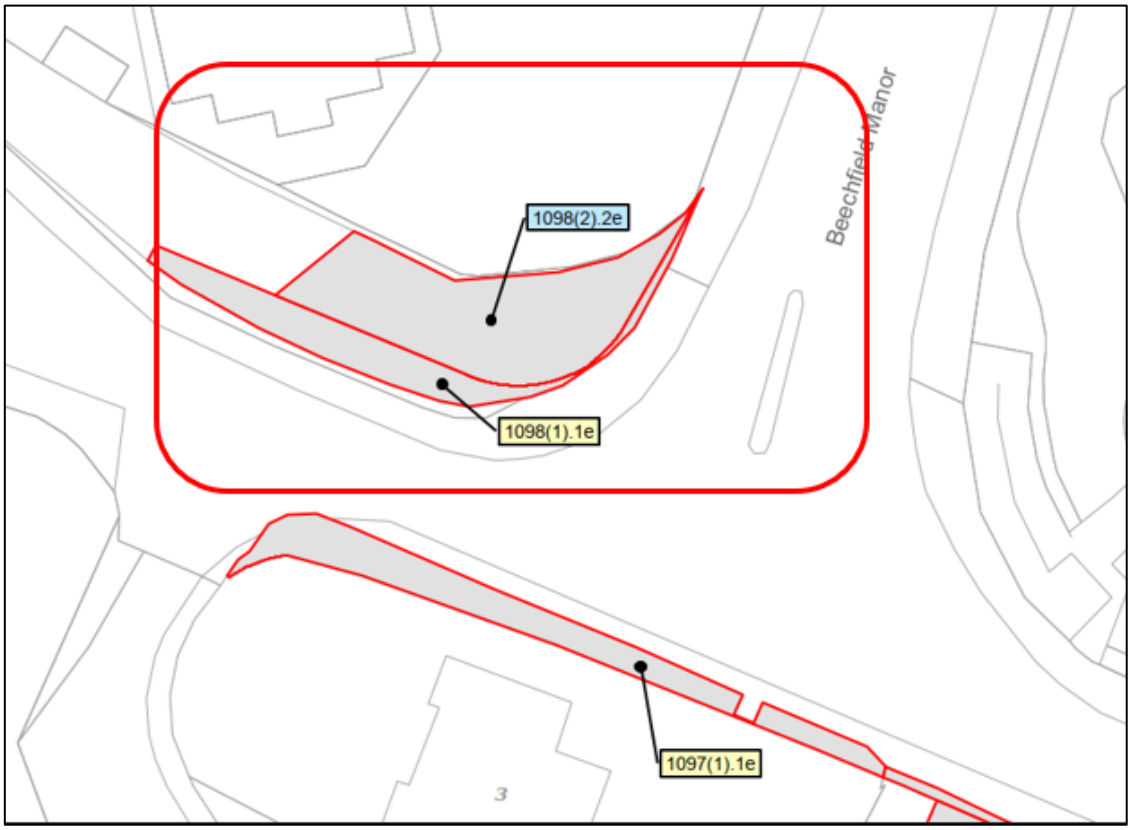


Figure 3.239: Extract from CPO Deposit Maps at Beechfield Manor (Sheets 10)

The temporary land take is required for the duration of the construction period to allow working space for the construction works. Temporary land take will be returned back after construction, reinstated in the same condition as existing.

Impact to Boundary Wall

Figure 3.240 shows an extract from the Fencing and Boundary Treatment Drawings (drawing set 07 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR, indicating Beechfield Manor. This shows there there will be no impact on the existing boundary wall of Beechfield Manor Nursing Home.

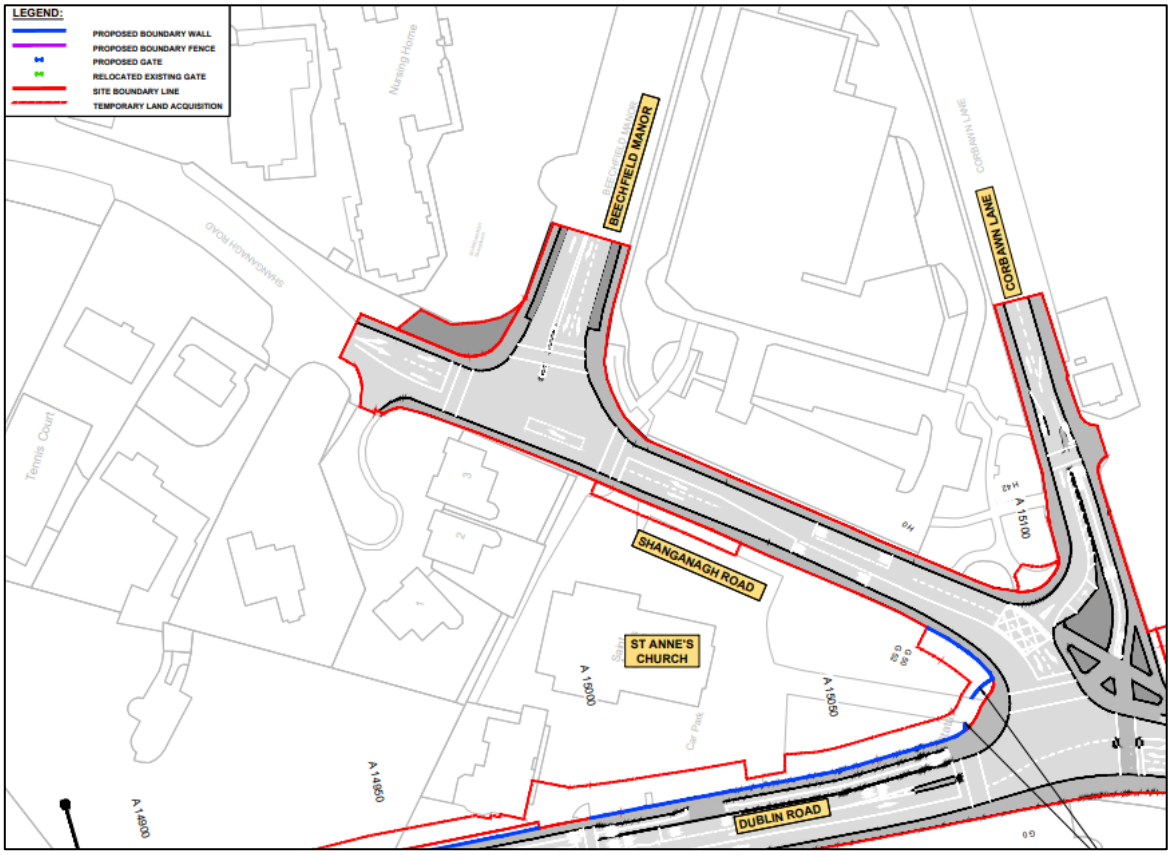


Figure 3.240: Extract from Fencing and Boundary Treatment Drawings at Beechfield Manor (Sheets 43)

Section 4.6.8 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR summarises the proposed structures in Table 4.29 including the retaining wall, which shows there is no impact to the existing wall at Beechfield Manor Nursing Home. The structures for the Proposed Scheme are presented in 018-Structure General Arrangement Drawing Sheet 43 Chapter 4 (Proposed Scheme Description) Vol 3 Part 2 of 3 of EIAR, as shown in Figure 3.241.

Assessments of existing structures and proposed structures are included in Section 4.6.8 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, along with Chapter 8 (Structures) in the Preliminary Design Report (included in the Supplementary Information), and Appendix F – Structures Reports in the Preliminary Design Report also. The assessments did not identify any impact to the existing boundary wall at Beechfield Manor Nursing Home.

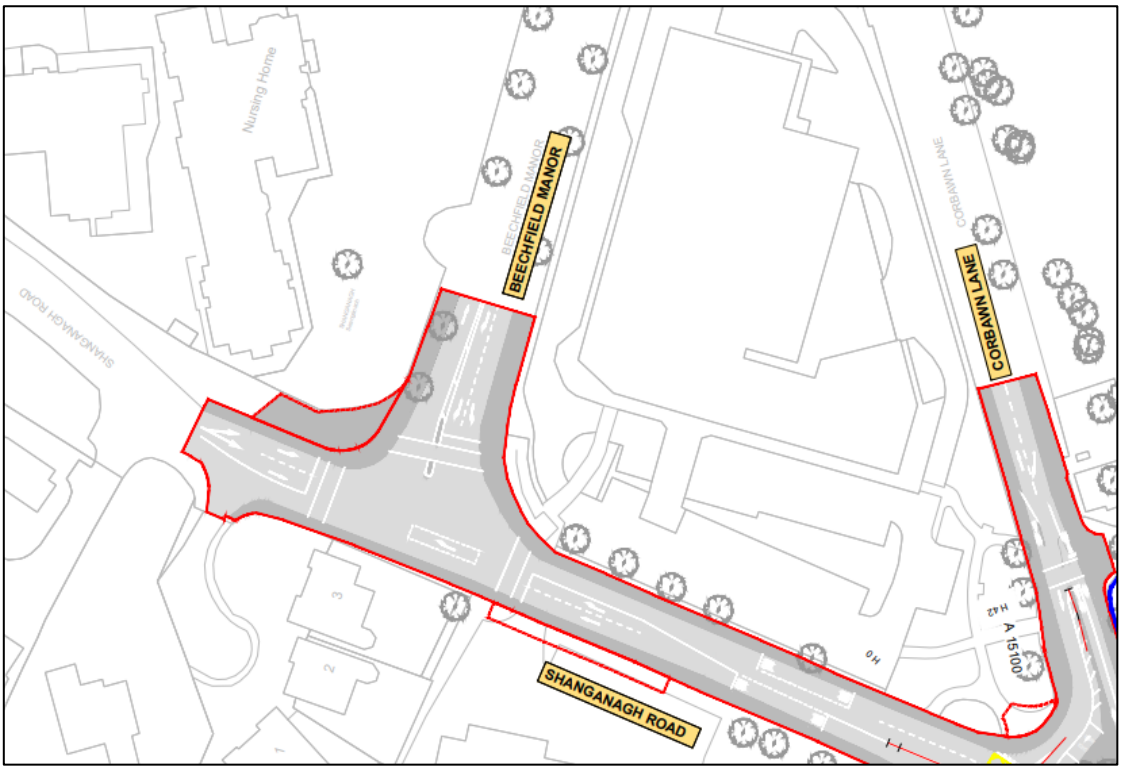


Figure 3.241: Extract from Structures General Arrangement – (Sheets 43)

3.12.3.3.2 Insufficient EIAR on Noise and Dust Mitigations

Summary of issue raised

The submission commented that there were insufficient provisions in EIAR for noise and dust mitigations over the course of the project.

Response to issue raised

Refer to Section 3.9.3.10 on Adequacy of Environmental Assessment with respect to the EIAR being insufficient, and Section 3.9.3.11 on Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) specifically on noise, dust and air pollution impacts and mitigation.

With respect to noise impacts specifically at Beechfield Manor, Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed Scheme. As part of the baseline noise surveys undertaken for the Proposed Scheme, there was an attended noise monitoring location in the car park of St Anne's Church (Reference Number CBC0013ANML013), in close proximity to Beechfield Manor Nursing Home as shown in Figure 9.2 (Sheet 11) in Volume 3 of the EIAR. Figure 9.3 in Volume 3 of the EIAR maps the potential noise impacts associated with the predicted Construction Phase traffic, with the roads around Beechfield Manor Nursing Home (Sheet 6) mapped with an impact significance rating of Imperceptible / Positive. Figures 9.4 and 9.5 in Volume 3 of the EIAR map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible / Positive for Shanganagh Road and Slight for Beechfield Manor. The Design Year modelling shows a slight improvement with a traffic noise impact significance of Imperceptible / Positive on both Shanganagh Road and Beechfield Manor.

Aside from construction traffic, Construction Phase noise from the works has also been assessed in Section 9.4.3.2 of Chapter 9. The type of works likely to impact on Beechfield Manor Nursing Home would be as a result of general road works and road upgrades in the vicinity of the property. The assessment describes the potential Construction Phase impacts in Table 9.46, with the potential daytime impacts assessed as Negative, Moderate to Significant and Temporary at noise sensitive locations closest to the works (within 15m), with the potential impact reducing the further from the works. Evening and Saturday potential noise impacts are assessed as Negative, Significant to Very Significant and Temporary at the nearest receptors (within 25m). In both cases these are the potential impacts in

the absence of mitigation. See an extract from the Table 9.46 below describing the potential Construction Phase impacts in the absence of mitigation (see Table 3.66 below)

Table 3.66: Extract from Chapter 9 of EIAR (Table 9.46)

Assessment Topic	Period over which Criterion Applies	Potential Impacts
General Road Works, Urban Realm Landscaping, Bored Piling and Boundary Treatment Works	Monday to Friday: Daytime (07:00hrs – 19:00hrs)	• Negative, Moderate to Significant and Temporary in the absence of noise mitigation at NSLs within 15m distance from the proposed works; and • Negative, Slight to Moderate and Temporary at NSLs at distances between 20m to 40m from the proposed works; and • Negative, Not Significant and Temporary at NSLs at distances greater than 40m from the proposed works. All impacts noted above are in the absence of noise mitigation. Refer to Section 9.5.1.1 for the range of noise mitigation measures which will be adopted at specific working areas to reduce noise impacts at NSLs.
	Monday to Friday: Evening: (19:00hrs – 23:00hrs) or Saturdays (08:00hrs – 16:30hrs)	• Negative, Significant to Very Significant and Temporary at NSLs within 25m distance from the proposed works; • Negative, Moderate to Significant and Temporary at NSLs at distances between 25m and 50m from the proposed works; and • Negative, Not Significant and Temporary at NSLs at distances greater than 50m from the proposed works. All impacts noted above are in the absence of noise mitigation. Refer to Section 9.5.1.1 for the range of noise mitigation measures which will be adopted at specific working areas to reduce noise impacts at NSLs.

Following implementation of mitigation measures (as outlined in the 'Noise' section of Section 3.9.3.11 of this report), the predicted Construction Phase impacts associated with road works are summarised in Table 9.50. They reduce to Negative, Slight to Moderate and Temporary at sensitive receptors within 10m of the works, reducing to Negative, Not Significant and Temporary at distances greater than 10m during the daytime. During evenings and Saturdays the post-mitigation predicted impacts at sensitive receptors within 15m is assessed as Negative, Moderate to Significant and Temporary, reducing to Not Significant beyond 15m. See an extract from the Table 9.46 below describing the potential Construction Phase impacts in the absence of mitigation (see Table 3.67 below).

Table 3.67: Extract from Chapter 9 of EIAR (Table 9.50)

Assessment Topic	Period over which Criterion Applies	Potential Impacts (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
General Road Works, Urban Realm Landscaping, Bored Piling and Boundary Treatment Works	Monday to Friday: Daytime (07:00hrs – 19:00hrs)	• Negative, Moderate to Significant and Temporary in the absence of noise mitigation at NSLs within 15m distance from the proposed works; and • Negative, Slight to Moderate and Temporary at NSLs at distances between 20m to 40m from the proposed works; and • Negative, Not Significant and Temporary at NSLs at distances greater than 40m from the proposed works.	• Negative, Slight to Moderate and Temporary at NSLs within 10m distance from the proposed works. • Negative, Not Significant and Temporary at NSLs at distances greater than 10m from the proposed works.
	Monday to Friday: Evening: (19:00hrs – 23:00hrs) or Saturdays (08:00hrs – 16:30hrs)	• Negative, Significant to Very Significant and Temporary at NSLs within 25m distance from the proposed works; • Negative, Moderate to Significant and Temporary at NSLs at distances between 25m and 50m from the proposed works; and • Negative, Not Significant and Temporary at NSLs at distances greater than 50m from the proposed works.	• Negative, Moderate to Significant and Temporary at NSLs within 15m from the proposed works. • Negative, Not Significant and Temporary at NSLs at distances greater than 15m from the proposed works.

3.12.3.3.3 Indemnity

Summary of issue raised

The submission highlighted that the liability for condition of green area at Shanganagh Road boundary. Beechfield Nursing Home Ltd. and Beechfield Owners Management Company CLG should be indemnified against all future liability arising out of any acts of misfeasance in relation to the reinstatement/condition of the surface of the lands which are subject to temporary acquisition as a result of this project.

Response to issue raised

Figure 3.242 shows an extract from Sheet 43 of the Landscaping General Arrangement Drawings (drawing set 05 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR. The temporary land take is required for the construction works, widening of footpath and junction re-configuration works. On completion of works the grassed area will be returned to the owner re-instated to existing condition.

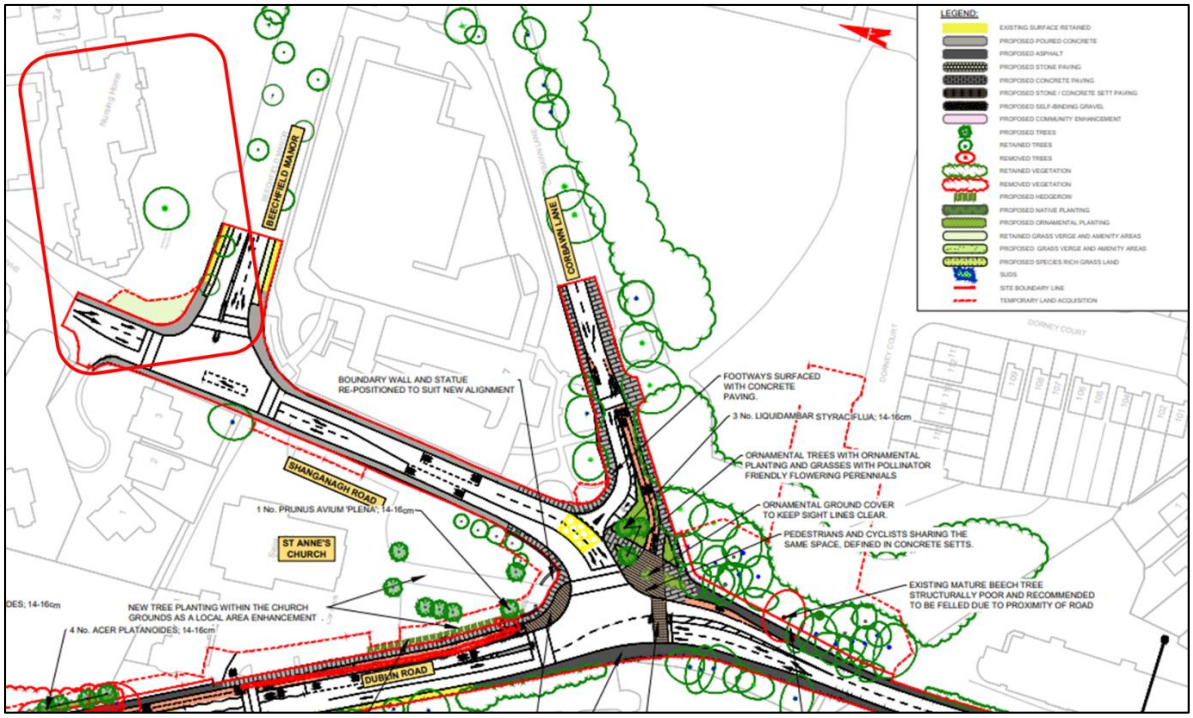


Figure 3.242: Extract from Landscaping General Arrangement Drawings at Beechfield Manor (Sheet 43)

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Section 5.5.2.1 states, in part, the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2, in part, that:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit

a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation. These are matters that can be successfully addressed between Beechfield Manor Nursing Home Ltd, Beechfield Owners Management Company CLG and the NTA.

3.12.4 21 – Bray Retailers Group

3.12.4.1 Description of Proposed Scheme at this Location

The design for Bray along R761 Dublin Road / R761 Castle Street has upgraded R119 Dublin Road / M11 roundabout to a signalised junction, including improved cycle and pedestrian movements.

From the M11 junction (Wilford Roundabout) to the Lower Dargle Road, it is proposed to continue with a bus lane, general traffic lane and a segregated cycle track in each direction. All junctions have been developed further to provide improved cycle movements. It is proposed to replace the Wilford Roundabout with a new signalised junction. The Corke Abbey Avenue / Old Connaught Avenue junction with the Dublin Road has been designed to cater for the proposed bus and cycle lanes, and to remove the left turn slips in and out of Corke Abbey Avenue. The design for the Upper Dargle Road junction with the Dublin Road has removed the northbound left turn slip from the Dublin Road. The junction with the new road at Chapel Lane has also been upgraded to a signalised junction, including improved cycle and pedestrian movements.

At the end of the Proposed Scheme at the tie-in to the Fran O'Toole Bridge, the northbound bus lane starts just after the Lower Dargle Road junction so the tie-in at the Proposed Scheme termination consists of a southbound bus lane and two general traffic lanes and cycle track in both directions, on the immediate Castle Street approach to the Fran O'Toole Bridge, where the Proposed Scheme will end. This layout has been developed to coordinate with the proposed Bray Bridge Improvement Scheme.

The Proposed Scheme design along Dublin Road and Castle Street is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 50, 51 and 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and are shown in Figure 3.243, Figure 3.244, Figure 3.245, and Figure 3.246.

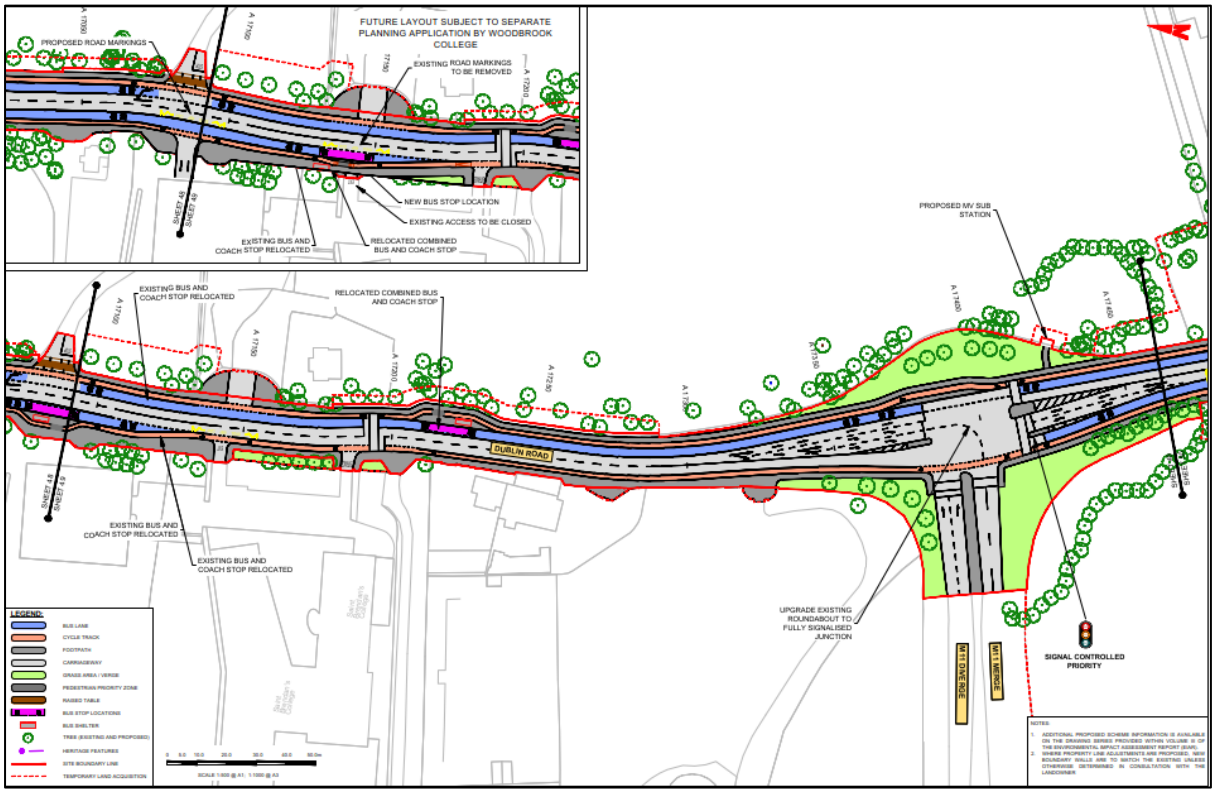


Figure 3.243: Extract from General Arrangement Drawing at Dublin Road / Old Connaught Avenue junction (Sheet 49)

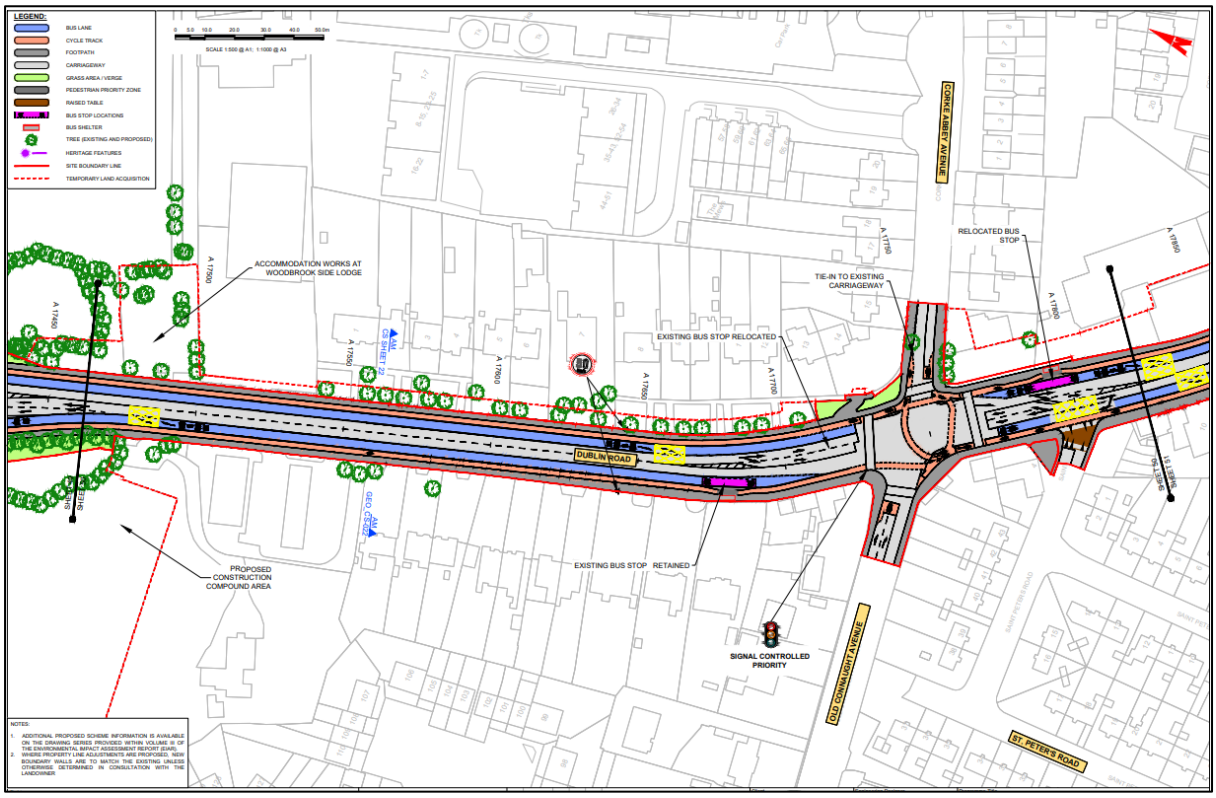


Figure 3.244: Extract from General Arrangement Drawing at Dublin Road / Old Connaught Avenue junction (Sheet 50)

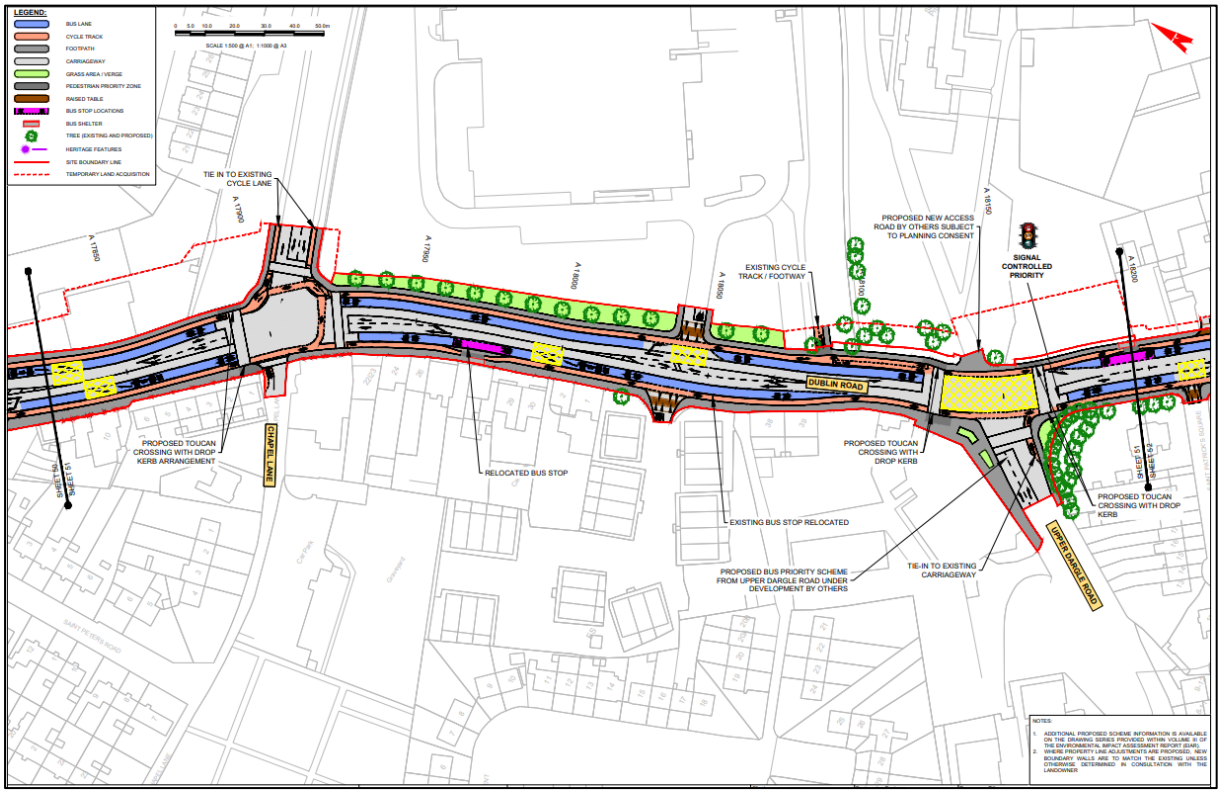


Figure 3.245: Extract from General Arrangement Drawing at Dublin Road / Upper Dargle Road junction (Sheet 51)

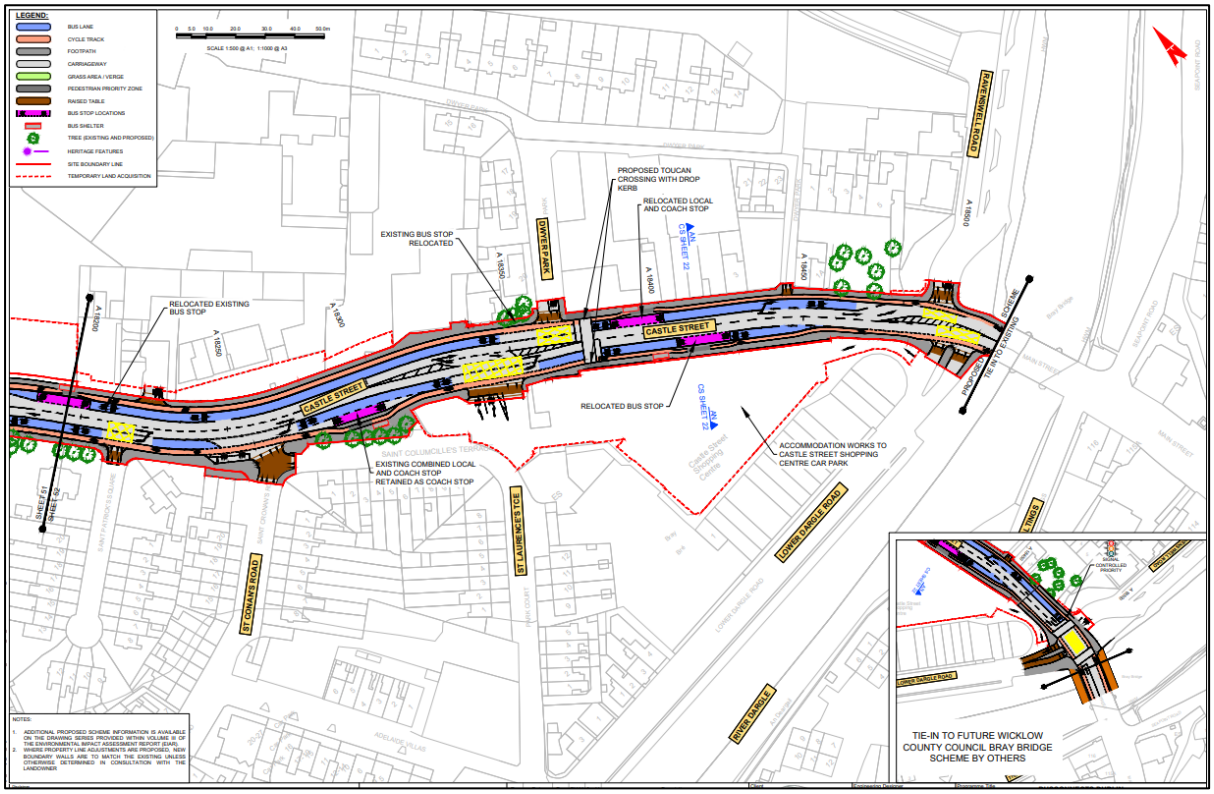


Figure 3.246: Extract from General Arrangement Drawing along Castle Street (Sheet 52)

3.12.4.2 Summary of Issues Raised

The submission raised concern regarding the Wilford roundabout capacity and the retention of roundabouts along the corridor. The submission also suggested new roundabouts at a number of locations, namely:

- At the Old Connaught intersection;
- At the Industrial Yarns / Lidl intersection including changes to the Chapel Lane junction; and
- At SuperValu / Dwyer Park or near the base of Bray Bridge.

3.12.4.3 Responses to Issues Raised

The General Arrangements Drawing as shown in Figure 3.243, Figure 3.244, Figure 3.245, and Figure 3.246 shows the upgrade of Wilford three-arm roundabout to a signalised junction. The upgrade of Wilford three-arm roundabout to a signalised junction results in reduced corner radii and reduced lane widths which will encourage slow vehicular speeds and help maximise control at intersections. Traffic signals provide more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions.

The retention of R761 Dublin Road / Old Connaught Avenue / Corke Abbey Avenue four-arm signalised junction would provide more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions.

The retention of R761 Dublin Road / Lidl entrance three-arm junction would provide more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions.

The retention of R761 Castle Street / Dwyer Park four-arm junction would provide more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions.

The General Arrangements Drawing as shown in Figure 3.243, Figure 3.244, Figure 3.245, and Figure 3.246 shows that the Proposed Scheme includes toucan crossings and signalised junctions along the length of the corridor. Toucan crossings and signalised junctions will help reduce the likelihood of accidents because signalised junctions ensure that drivers must give way to oncoming traffic and toucan crossings help reduce the number of accidents involving cyclists on the road. By alternately assigning right of way to various traffic movements, signals and crossings help provide for orderly movement of conflicting flows.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus.

The Proposed Scheme retains signalised junctions along the length of Dublin Road in Bray (between Wilford Roundabout to Bray End/ Fran O'Toole Bridge. Signalised junctions offer more control at intersections and help assign rights-of-way to conflicting movements of traffic at an intersection. This will help reduce the likelihood of collisions and improve safety.

Refer to Section 3.9.3.4.1 in this report for further information on the Upgrade of Existing Roundabouts to Signalised Junctions, in regard to the replacement of the roundabouts with the signalised junctions.

In the context of the above, if the roundabouts were retained it would not allow for bus priority and safer crossing for pedestrians and cyclists at these locations. Therefore, the continuous linear operational functioning of the corridor and key project objectives related to safety, sustainable transportation and efficiency of service would be disrupted at these locations which is why the roundabouts must be removed.

3.12.5 31 – Chris Horn

3.12.5.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor, it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks behind the tree line and general traffic lanes in each direction.

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two toucan crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line.

A new pedestrian crossing is proposed south of Allies River Road with a relocated bus stop to the south of Shanganagh Cemetery.

The existing road cross section in this location provides a footpath on each side of the road with general traffic lanes in each direction. Currently a bus lane starts at Askefield House and runs northbound with an advisory cycle lane running in the southbound direction.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.247.

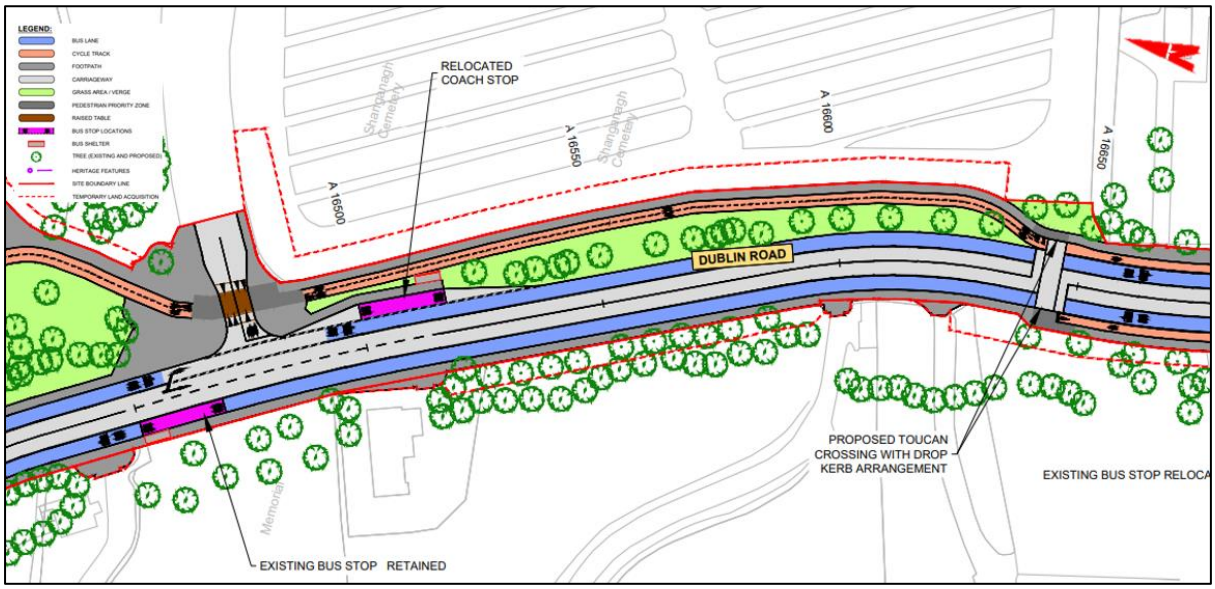


Figure 3.247: Extract from General Arrangement Drawing at Askefield House on Dublin Road (Sheet 47)

3.12.5.2 Summary of Issues Raised

The submission raises four potential issues:

1) Impact to Property, Boundary Wall, Gate and Trees
2) Impact to Safety and Need for Pedestrian Crossing and Traffic Calming
3) Impact to Shankill Village Environment
4) N11 / M11 Interim Bus Priority Suggestions

3.12.5.3 Responses to Issues Raised

3.12.5.3.1 Impact to Property, Boundary Wall, Gate and Trees

Summary of issue raised

The submission raised concerns regarding the loss of land and the impact of the ambiance of the entrance to the property noting impacts to the stone granite wall, woodland pathway, gate and loss of trees. The submission notes the property as being a 'listed property'.

The respondent further raised concerns regarding the safety to existing domestic animals on the property, noting that the boundary wall must be secure at all times in the proposals to prevent the animals escaping / getting injured.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Askefield House landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.248. The permanent land take is shown in Plot 1074(1).1d and 1078(1).2d and the temporary land take is shown in Plot 1074(2).2d.

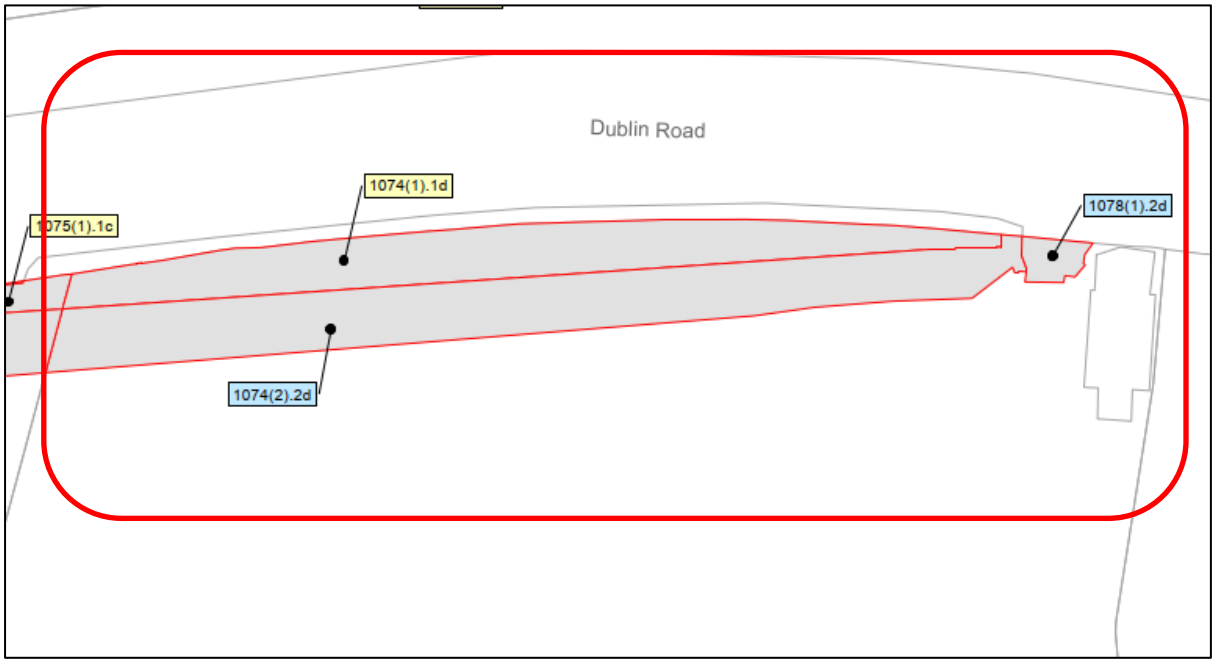


Figure 3.248: Extract from Deposit Map at Askefield House on Dublin Road (Sheet 07)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane and footpath hence meeting the objectives of BusConnects, as shown in Figure 3.247 extract from 02-General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR on Sheet 47. The proposal at the location of the Askefield House is to widen the road on the west side to provide for continuous bus lane, and footpath. The permanent land take will impact the property boundary wall, gate, garden and trees fronting the property boundary wall.

The proposed works would require set-back of the existing boundary wall. The boundary wall will be reinstated using existing stone, where possible.

As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, the reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

The Proposed Scheme Boundary Treatment design at the location of the Askefield House is shown in the 07- Fencing and Boundary Treatment Drawing in Volume 3, Part 1 of 3 of EIAR on Sheet 47 and shown in Figure 3.249, which shows a continuous boundary wall set-back with the gate.

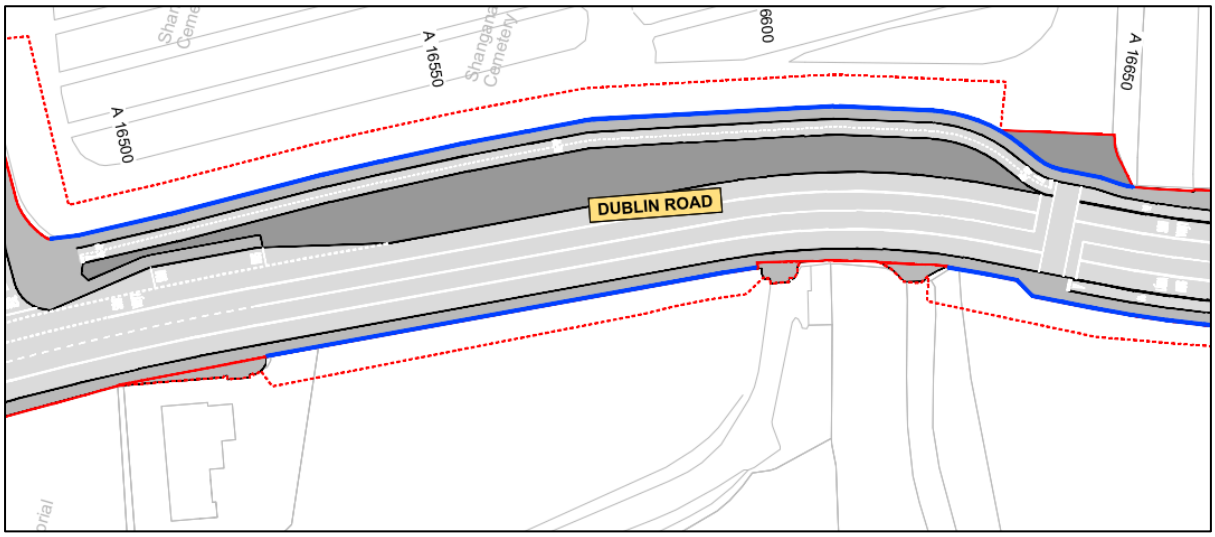


Figure 3.249: Extract from Boundary Treatment Drawing at Askefield House on Dublin Road (Sheet 47)

The proposed works would require loss of mature trees along the boundary parallel to Dublin Road on the west side of the road. The loss of this linear group of trees will be limited to those closest to the road. Existing trees located far enough back from the proposed wall line will be retained, A new belt of mixed native woodland trees are proposed in the residual green area in front of the property frontage and reinstatement of the garden where it is affected. A mix of whips and standard trees (trees with a girth of 8-10cm, and a height of 2.5-3m) is proposed to reinstate the vegetated boundary. The new planting will be positioned behind the new stone boundary wall which replicates the current arrangement of landscape elements.

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes an inventory of all trees on the Proposed Scheme, with all trees at this location assessed for age, quality and usable life expectancy. It should be noted that trees with a stem diameter less than 75mm (when measured at 1.5m above ground) and ornamental garden plants are not surveyed. The trees are located along the property boundary parallel to Dublin Road. They have been surveyed as a mixed species group deemed to be category B with the exception of two individual category A grade beech trees. A proportion of the group closest to the road, including the two beech trees, are proposed to be removed to allow for the road widening. Existing trees set further back from the scheme extents will be retained and protected. In order to re-establish the woodland edge, it is proposed to re-plant a belt of native tree whips as well as individual standard trees (trees with a girth of 8-10cm, and a height of 2.5-3m).

The following new trees along with a belt of native planting are proposed to be planted inside of the new set back boundary wall of Askfield House:

- 5 no Prunus Avium
- 1 no Fagus Sylvatica
- 3 no Acer Pseudoplatanus

The Proposed Scheme Landscape design at the location of the Askefield House is shown in the 05-Landscape Drawings in Volume 3, Part 1 of 3 of the EIAR on Sheet 47 and shown in Figure 3.250.

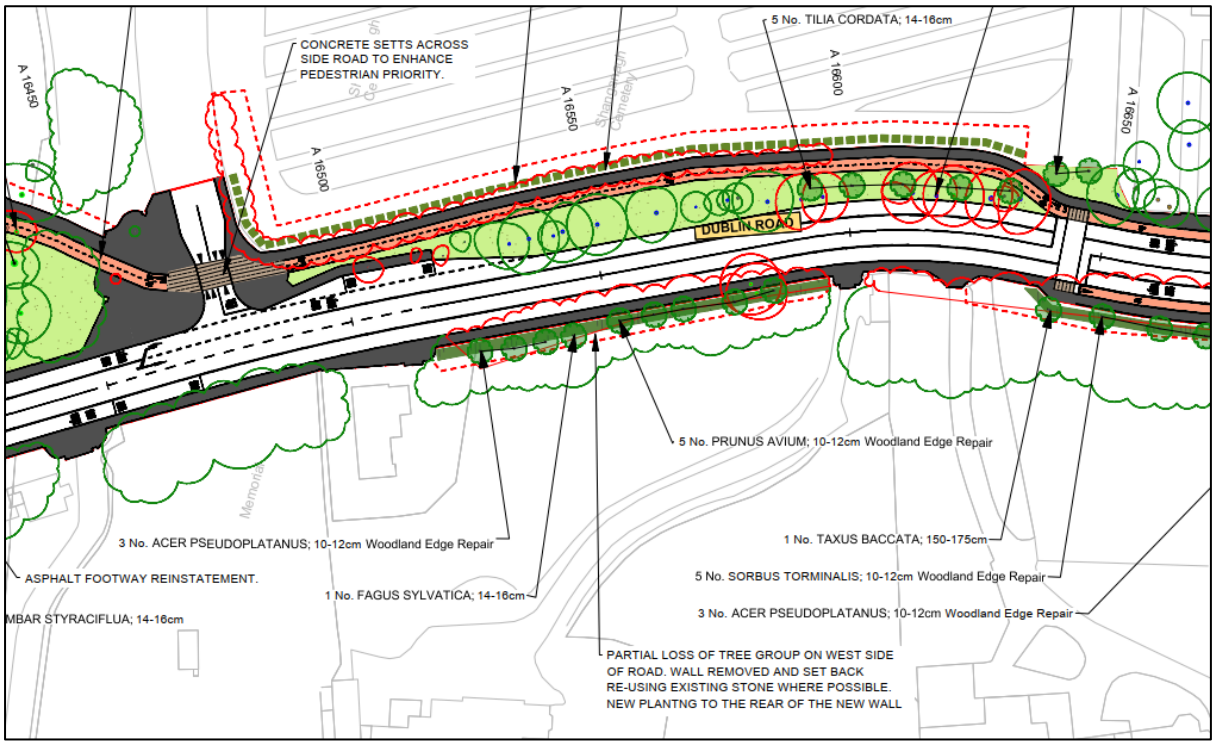


Figure 3.250: Extract from Landscape Drawings at Askefield House on Dublin Road (Sheet 47)

The CPO of lands at this location at Askefield House will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states '*where properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

With respect to the heritage significance of the property including the boundary walls and gate lodge, these are assessed in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR, mapped as being of heritage significance in Figure 16.1 in Volume 3 of the EIAR, and listed in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR. Chapter 16 has assessed the impacts on the following heritage features associated with Askefield House:

- Askefield House (Reference DLR RPS 1860 and NIAH 60260170);
- Askefield House Gate Lodge (Reference DLR RPS 2001 and NIAH 60260171); and
- Boundary wall to Askefield (Reference CBC0013BTH032).

Section 16.4.3.5 of Chapter 16 describes the potential Construction Phase impacts on designed landscapes. The assessment identifies a direct impact on the boundary wall, describing it as follows:

'*The proposed land take on the west side of the Dublin Road will directly impact on the demesne wall (CBC0013BTH032) to Askefield House (DLR RPS 1860), necessitating its removal and reinstatement. It is of Medium Sensitivity. Trees along the boundary will be retained for the most part though some will be removed and replaced. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary*.'

The assessment also identifies indirect impacts on Askefield House and Gate Lodge in Section 16.4.3.5 as follows:

'*Indirect Construction Phase impacts are anticipated where there is potential for damage to the designed landscapes, and where an adverse visual impact is anticipated during construction. Twelve designed landscapes of Medium Sensitivity were identified in the study area where there is potential for*

damage during the Construction Phase, these include Morehampton Grove (CBC0013BTH147), Ardmore House (DLR RPS 19), Woodview House (DLR RPS 9), Belfield House (DLR RPS 41), St Helen's (NIAH 2460), the entrance gates and gate lodge formerly associated with Dorney Court (also known as Claremont), Corbawn Lane (DLR RPS 2010, 2077), Shanganagh Park Gates and Railings (NIAH 60260149), the boundary wall and gate piers of the Orchard (DLR RPS 1987), the boundary wall and gate piers of Askefield House (DLR RPS 1860, 2001), the boundary wall of the Aske (DLR RPS 1866), the entrance gates and boundary wall to Woodbrook House (DLR RPS 1870, 2090) and the entrance gates to Wilford House (DLR RPS 1873). They are listed Table 16.10 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The magnitude of impact would be Medium. The potential Construction Phase impact will be Indirect, Negative, Moderate and Temporary.'

Section 16.5.1.5 describes the proposed mitigation measures to reduce the heritage impacts outlined above on the designed landscapes. With respect to the direct impact on the boundary wall, it describes the following mitigation:

'*Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Slight and Long-Term*.'

Regarding the identified indirect impact described above, Section 16.5.1.5 describes the required mitigation measures as follows:

'*Mitigation includes recording, protection and monitoring of the sensitive fabric prior to and for the duration of the Construction Phase. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR, reducing the magnitude of the impact from Medium to Negligible. The predicted residual Construction Phase Impact is Indirect, Negative, Not Significant and Temporary*.'

Following the implementation of the mitigation measures described above, Chapter 16 does not identify any significant residual impacts on the heritage importance of Askefield House, Lodge and boundary wall.

3.12.5.3.2 Impact to Safety and Need for Pedestrian Crossing and Traffic Calming

Summary of issue raised

The submission welcomes the two proposed toucan crossings near the two-housing development (Shanganagh Castle and Woodbrook SHD), however, requests an additional toucan crossing at the junction with Shanganagh Park/ Shanganagh Cemetery due to pedestrian footfall.

The submission raised concerns that the current proposals would make Dublin Road less safe for pedestrians and cyclists at the location of his property. The submission raised concerns regarding the impact to public safety due to the existing traffic speeds (50km/her) through the area, therefore the respondent suggests both traffic calming measures (such as 'speed bumps') and / or a proposed reduction to 30km/hr speed limits.

Response to issue raised

Refer to Section 3.9.3.8 on Impact on Safety (Pedestrian & Cyclist), specifically under the heading 'Pedestrian Infrastructure in Shankill (footpath width and crossings)' and in particular refer to response in Section 3.9.3.8.2 (Shanganagh Cemetery) on the pedestrian crossing at Shanganagh Park and Shanganagh Cemetery.

Speed Limit

Refer to Section 3.9.3.5 in this report on the Impact on Traffic Flows, Speed Limit, and Traffic Calming under the heading 'Speed Limit' and also note below.

The Proposed Scheme design along this section provides northbound and southbound bus lanes, segregated cycle tracks behind the tree line and general traffic lanes in each direction and footpath in both directions. Two new toucan crossings are proposed on Dublin Road as mentioned in the response above.

The existing speed limit on this section of Dublin Road is 50km/h. The Proposed Scheme does not include any changes to this existing speed limit and no safety concerns relating to traffic speed have been identified during the design development. It is further noted that the Stage 1 Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided as part of the Supplementary Information, did not highlight any safety issues with the speed limit at this location.

Traffic Calming Measures

Refer to Section 3.9.3.5 in this report on the Impact on Traffic Flows, Speed Limit, and Traffic Calming under the heading 'Traffic Calming Measures' .

3.12.5.3.3 Impact to Shankill Village Environment

Summary of issue raised

The submission raised concern regarding impact to the ambience of Shankill village. The Proposed Scheme has raised concerns that it will result in impact to public realm and will not encourage key community focal points.

Response to issue raised

Refer to Section 3.9.3.13 on the Impact to Shankill Village & Community.

3.12.5.3.4 N11 / M11 Interim Bus Priority Scheme Suggestions

Summary of issue raised

The submission suggests the incorporation of the N11 / M11 BPIS to remove bus traffic from Dublin Road, bypassing Shankill.

Response to issue raised

Refer to Section 3.9.3.1.3 on Alternate N11/M11 Bus Priority Interim Scheme.

3.12.6 33 – Circle K Bray

3.12.6.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor a dedicated bus lane, segregated cycle track, and general traffic lane will be provided in each direction.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 51 and 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.251 and Figure 3.252.

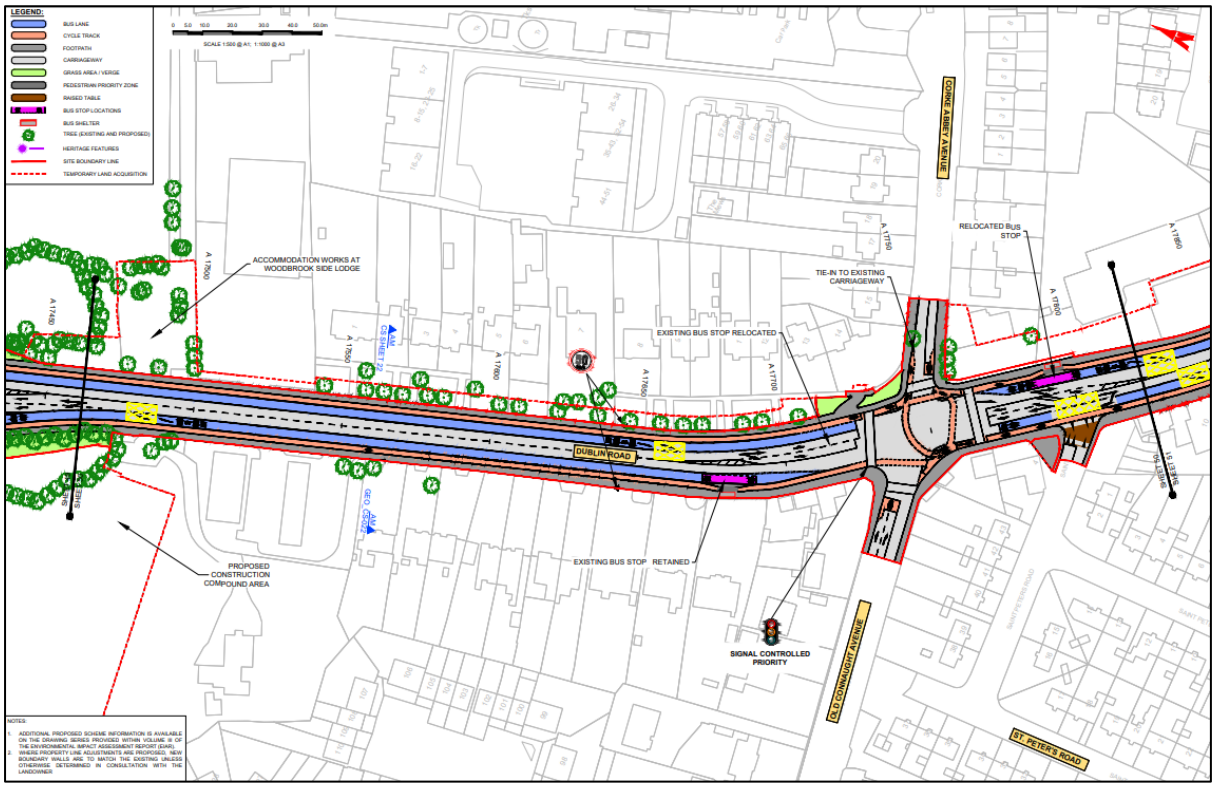


Figure 3.251: Extract from General Arrangement Drawing on Dublin Road at Circle K (Sheet 51)

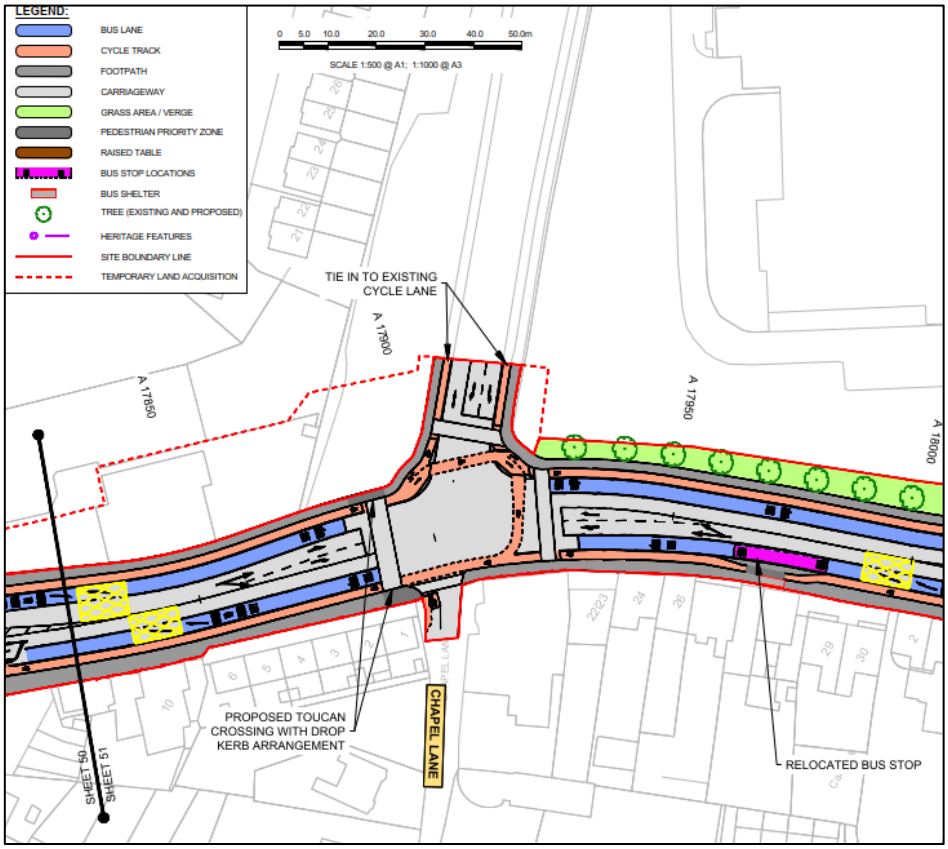


Figure 3.252: Extract from General Arrangement Drawing on Dublin Road at Circle K (Sheet 52)

3.12.6.2 Summary of Issues Raised

The submission noted the following four issues:

1) Impact to business due to temporary land take/ closure of business during construction
2) Future viability of the operation of the Circle K business
3) Alternate design proposal
4) Relocation of bus stop and access/ egress to the site

3.12.6.3 Issues Raised and Responses

3.12.6.3.1 Impact to the business due to temporary land take/ closure of business during construction

Summary of issue raised

The submission notes that the temporary acquisition of the entire site during the construction phase which is set to last for 9 months will force a business closure and difficulty to recover this business post construction and will have significant impact on its future viability.

Response to the issue raised

The Proposed Scheme design at the location of Circle K Service Station is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 51 and 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.251 and Figure 3.252. As part of the Proposed Scheme, the CPO of the temporary land take is required to facilitate the construction of the Proposed Scheme and to reconfigure and reinstate the site as an operational petrol station. The remainder operational site will be returned to Circle K on completion of construction works at this location.

Section 5.3.4.2 in Chapter 5 (Construction) in Volume 2 of the EIAR notes the construction works involved at the Circle K Service Station site on Dublin Road:

'The construction activities at Section 4b will comprise reconstruction and resurfacing of the roads, footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. Considerable clearance works are required at Circle K Bray, including the demolition of the forecourt awning, demolition of four pumps, removal of the car wash area and removal of a number of underground tanks. The car park access and parking arrangement at Circle K Bray will be rearranged and a new kerb separation with railing will be constructed in front of the proposed property boundary. The forecourt canopy will be rebuilt over the operational pumps. Urban realm enhancement works will be carried out at the Dublin Road.'

The Circle K Service Station operation will be impacted during the construction works and will be closed for business during this period. Circle K will re-gain possession of the remaining site, which is reconfigured, re-instated with pumps re-commissioned and operational as a petrol station, on completion of the BusConnects construction works.

Section 5.5.4.2.2 notes:

'The service station operation will be impacted during the construction works.'

An indicative programme for the Construction Phase of the Proposed Scheme is provided in Table 5.2 (see Table 3.68 below) in Chapter 5 (Construction) in Volume 2 of the EIAR. The programme identifies the approximate duration of works at each section. The total Construction Phase duration for the overall Proposed Scheme is estimated at approximately 36 months. However, construction activities in individual sections will have shorter durations as outlined in Section 5.3. The location of each section/sub-section along the Proposed Scheme is shown in Figure 5.1.

The Circle K Service Station on the Dublin Road, Bray is located in Section 4b: Old Connaught Avenue to Upper Dargle Road). The duration for construction works in Section 4b is 9 months, however, individual sections will have shorter durations.

Table 3.68: Extract from Chapter 5 (Construction) (Page 7)

Table 5.2: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works at the petrol station. Temporary land take will be returned after construction.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

Chapter 10 (Population) in Volume 2 of the EIAR includes an assessment of the impact on commercial properties as a result of land take during both the Construction Phase (Section 10.4.3.2.2.1) and the Operational Phase (Section 10.4.4.2.2.1). The commercial properties which were assessed are listed in the Chapter's Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4, Part 3 of 4 of the EIAR in which this Circle K is business ID Number 208.

With respect to the assessment of land take impacts on the above listed commercial businesses in Chapter 10 (Population) in Volume 2 of the EIAR, Section 10.4.3.2.2.1 states that '*7 commercial receptors, a Circle K filling station and Ford Motors, AXA insurance, Dargle Centre and Castle Street Shopping Centre in Bray, and the Circle K filling station, FirstStop and FastFit in Donnybrook, are expected to experience a Negative, Significant, Short-Term land take effect during the Construction Phase*.' Those potential impacts will reduce following the completion of construction at those locations.

Section 10.4.4.2.2.1 states that '*one commercial receptor are expected to experience a Negative, Significant and Long-Term impact by permanent land take. The Circle K filling station on the east side of the Dublin Road in Little Bray will require permanent removal of four of its pumping stations, which is expected to have an adverse impact on the business*.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.12.6.3.2 Long term future viability of the operation of Circle K business

Summary of issue raised

The submission notes that the loss of land both permanently and temporarily to accommodate the Proposed Scheme will have serious implications for the overall business and its future viability, to the

extent that the use may no longer be viable. The submission goes on to note that proposed permanent land take will result in the loss of significant infrastructure, which is integral to the operation to the business, which could lead to business being not viable.

The submission notes that the acquisition of the service station is premised on the risk associated with works involving the removal of the fuel dispensers and underground petrol tanks and pipes. The submission notes that it is their opinion that the building will require demolition as part of the Proposed Scheme, including the forecourt canopy. The submission notes removal of parking will have an impact to the business.

Due to the combination of issues and the nature of the interrelationship between all elements of infrastructure on the Circle K petrol station site, the submission notes that the Proposed Scheme in relation to the permanent land take will lead to the total demolition and reconstruction of the entire Service Station facility.

The submission notes that the permanent land take will greatly reduce the amount of open space available in the forecourt which presents a serious safety hazard in an area which is shared by both pedestrians and vehicles.

On positive note, the submission acknowledges that the EIAR states that the entire station is to be temporarily acquired and decommissioned during the works and that these works are to be carried out by a competent contractor. The submission further acknowledges that Health and Safety considerations relating to site construction activity within the temporary land take area will necessitate permanent fuel tank decommission and ultimately tank replacement at the end of the temporary CPO period.

Response to the issue raised

Proposed Works

NTA notes the acknowledgement of the CPO. As set out in Paragraph 2 of the statutory notice which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.* Further, the face of the CPO itself also indicates that it is *'for the purposes of facilitating public transport*'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that the EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent land take is required to allow for the construction of the Proposed Scheme and achieve the standard cross-section at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The existing carriageway will be widened on the east side (within the Circle K's landholding) to allow for bus lane, cycle track and footpath. The standard cross-section provided at this location is the optimum cross-section which meets the Proposed Scheme Design Guideline Objectives in accordance with Section 2 (Figure 1) of the Preliminary Design Guidance Booklet for the Proposed Scheme as provided in Appendix A4.1 (Preliminary Design Guide Booklet) in Volume 4, Part 1 of 4 of the EIAR. The Proposed Scheme's typical cross-section at this location is shown in the Typical Cross Section Drawings which are provided as an Appendix in the 04-Typical Cross Sections Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.253.

Figure 3.253: Extract from Typical Cross-section Drawing (Sheet 50)

The permanent and temporary land take required from Circle K's landholding is shown in the Deposit Maps, as shown in Figure 3.254 below, Plot 1042(1).1c is the permanent land take and Plot 1042(2).2c is the temporary land take.

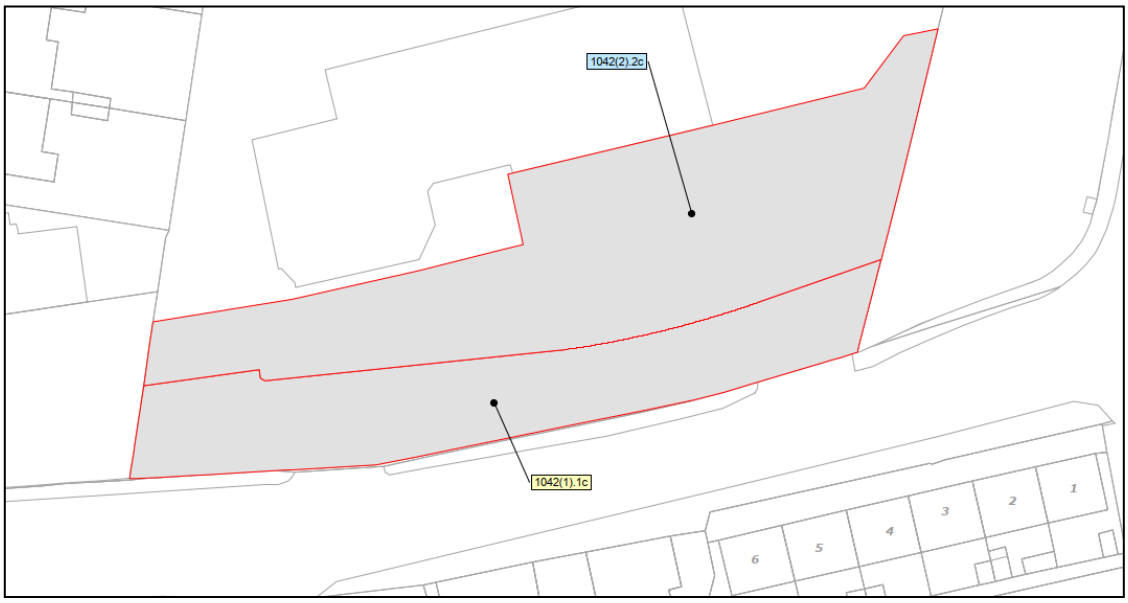


Figure 3.254: Extract from the CPO Deposit Map

The Circle K Service Station operation will be impacted during the construction works. Circle K will re-gain possession of the remainder site, which is reconfigured, re-commissioned and operational as a petrol station site, on completion of the Proposed Scheme construction works. The reconfiguration of the Circle K Service station site will be done in consultation with Circle K and best practices and standards for design of petrol station.

The General Arrangement Drawings for the residual Circle K Service Station site post construction of the Proposed Scheme are provided as an Appendix in the 21-Circle K General Arrangement Drawings Sheet 01 Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR and shown in Figure 3.255 and Figure 3.256.

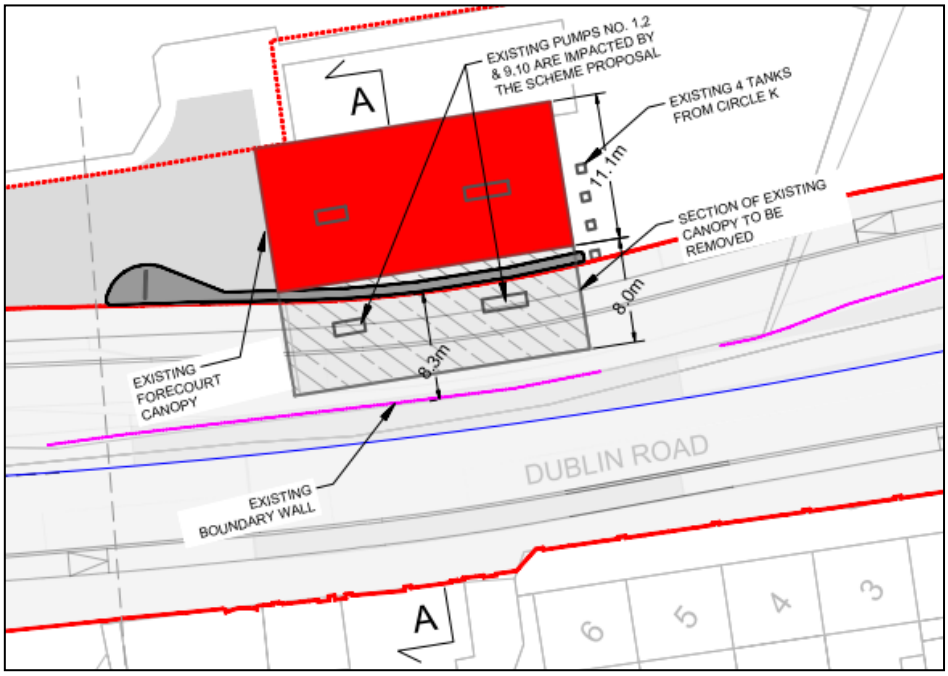


Figure 3.255: Extract from the Circle K General Arrangement Drawings (Sheet 01)

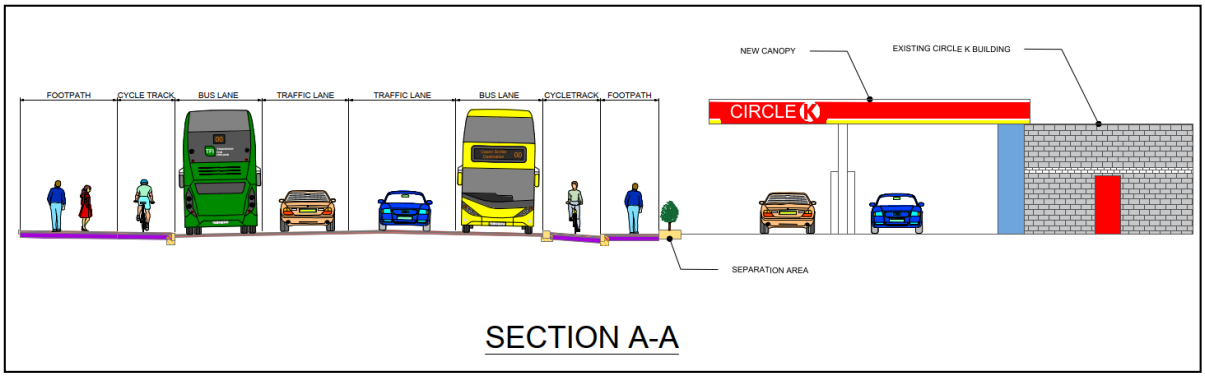


Figure 3.256: Extract from the Circle K General Arrangement Drawings (Sheet 01)

Section 5.3.4.2 in Chapter 5 (Construction) in Volume 2 of the EIAR notes the construction works involved at the Circle K Service Station site on Dublin Road:

'The construction activities at Section 4b will comprise reconstruction and resurfacing of the roads, footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. Considerable clearance works are required at Circle K Bray, including the demolition of the forecourt awning, demolition of four pumps, removal of the car wash area and removal of a number of underground tanks. The car park access and parking arrangement at Circle K Bray will be rearranged and a new kerb separation with railing will be constructed in front of the proposed property boundary. The forecourt canopy will be rebuilt over the operational pumps. Urban realm enhancement works will be carried out at the Dublin Road.'

Section 5.5.2.10.2 notes the demolition works involved at the Circle K Service Station site on Dublin Road:

'The existing Circle K service station on the east side of the Dublin Road in Bray will be modified, to facilitate carriageway widening works. Considerable clearance works are required at Circle K Bray, including the demolition of the forecourt awning, demolition of four pumps, removal of the car wash area, removal of underground tanks and reconfiguration of the parking spaces. The low height kerb separation and railing will also be demolished and removed.

Demolition of elements of the service station will commence from the roof structure working downwards. The overhead awning will be removed first. The appointed contractor will require the use of excavators

and/or other suitable equipment for the demolition works. The remaining concrete and masonry structures will then be demolished and temporarily stockpiled in an appropriate location within the Proposed Scheme boundary. All material will be removed off site to an appropriately licensed facility. The pumps will be decommissioned and demolished.

Due to the removal of the underground tanks there is risk of contamination. Decommissioning of the pumps and the underground tanks will be undertaken in accordance with the appropriate legislation.'

Section 5.5.4.2.2 in Chapter 5 (Construction) further notes the structural works involved at the Circle K Service Station site on Dublin Road:

'*The existing Circle K service station on the east side of the Dublin Road in Bray will be modified, to facilitate carriageway widening works. Considerable clearance works and demolition works are required at Circle K Bray, as described in Section 5.5.2.10.2.*

Following the clearance works and demolition works, the forecourt canopy will be rebuilt over the remaining four operational pumps. The car wash, service station and existing access will be reconfigured. The car park access and parking arrangement at Circle K Bray will be repositioned and a new kerb separation with railing will be constructed in front of the boundary.

The Circle K Bray service station works will be undertaken in the following sequence:

- *Site clearance and excavation;*
- *Decommissioning of four pumps. Removal of the underground tanks and connections relevant to these pumps;*
- *Utility diversions;*
- *Drainage and service ducting, in particular the underground tank connections to the operational pumps;*
- *Structural works – preparation and pouring of the structure foundations and concrete columns. Once completed, the forecourt canopy will be modified;*
- *Kerbs and paved area works;*
- *Street furniture and landscaping; and*
- *Finishing works – pulling of cabling, and installation and commissioning of the mechanical and electrical infrastructure.*

The service station operation will be impacted during the construction works.'

Section 5.10.1 of the EIAR, Volume 2, Chapter 5 (Construction) states the following on the Construction Environment Management Plan:

'As stated in Section 5.1, a CEMP has been prepared for the Proposed Scheme and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to finalising the Construction Contract documents for tender, so as to include any additional measures required pursuant to conditions attached to An Bord Pleanála's decision. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CEMP the manner in which it is intended to effectively implement all of the applicable mitigation measures identified in this EIAR. The CEMP has regard to the guidance contained in the Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA 2007), and the handbook published by CIRIA in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

Details of mitigation measures proposed to address potential impacts arising from construction activities are described in Chapter 6 to Chapter 21, as appropriate, and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

A number of sub-plans have also been prepared as part of the CEMP and these are summarised in the following sections. For the avoidance of doubt, all of the measures set out in the CEMP and the sub-

plans appended to this EIAR will be implemented in full by the appointed contractor to the satisfaction of the NTA.'

Section 5.10.2 in Chapter 5 (Construction) then describes the Construction Phase mitigation measures as follows:

'Mitigation and monitoring measures have been identified as environmental commitments and overarching requirements which shall avoid, reduce or offset potential impacts which could arise throughout the Construction Phase of the Proposed Scheme. These mitigation and monitoring measures which are relevant to the Construction Phase of the Proposed Scheme are detailed in Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) and in Appendix A5.1 CEMP in Volume 4 of this EIAR.'

Section 22.12, specifically Table 22.10 (see Table 3.69 below) on Page 18 in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR includes the following monitoring and mitigation during the construction stage at the Circle K site, Dublin Road, Bray:

Table 3.69: Extract from Chapter 22 (Summary of Mitigation & Monitoring Measures) Page 18

LSGH6	14.5.1.2	Circle K in Bray (Section 4 (Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge))	Excavation of Potentially Contaminated Ground The decommissioning works at Circle K in Bray will require mitigation if ground contamination is encountered during the construction works. A ground investigation shall be undertaken prior to the construction works to inform a remedial strategy for the decommissioning and removal of any below ground infrastructure associated with the storage of fuel under the forecourt. This remedial strategy will include any measures required to remediate soil contamination and/or determine the appropriate ultimate disposal options for contaminated material.

Section 5.10.5 in Chapter 5 (Construction) in Volume 2 of the EIAR describes the construction health and safety requirements as follows:

'The requirements of Number 10 of 2005 – Safety, Health and Welfare at Work Act 2005, and S.I. No. 291/2013 – Safety, Health, and Welfare at Work (Construction) Regulations, 2013 (hereafter referred to as the Regulations), and other relevant Irish and European Union safety legislation will be complied with at all times. As required by the Regulations, a Safety and Health Plan will be formulated which will address health and safety issues from the design stages through to the completion of the Construction Phase. This plan will be reviewed as the Proposed Scheme progresses. The contents of the Safety and Health Plan will follow the requirements of the Regulations. In accordance with the Regulations, a 'Project Supervisor Design Process' has been appointed and 'Project Supervisor Construction Stage' will be appointed, as appropriate.'

Loss of Parking

In developing the design of the Proposed Scheme, the NTA has balanced the need to provide parking / loading at local shops / services with the need to achieve the objectives of the Proposed Scheme to provide high quality public transport, cycling and walking facilities through the Proposed Scheme.

The impact on parking and loading is detailed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR.

Section 6.4.6.1.6.4 states:

'*The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses*.'

Specifically in relation to loading bays and commercial parking spaces, Section 6.4.6.1.6.4 states:

'*There are currently seven commercial parking spaces located to the east of Dublin Road. It is proposed to remove five spaces at this location and to provide two commercial parking spaces The impact of the loss of these spaces balanced with the loss of five additional commercial spaces (detailed above) is considered to have a Negative, Moderate and Long-term*;'

Section 6.4.6.1.1.4 states:

'*This qualitative assessment has also taken into account nearby parking, which is defined as alternative parking locations along side roads within 200 – 250m of the Proposed Scheme*.'

Section 6.3.5.5 states:

'*There are a number of side streets which can be used by local residents and visitors / businesses throughout this section. In total there are approximately 137 parking spaces on streets surrounding Dublin Road and approximately 215 parking spaces on streets surrounding Castle Street*.'

As shown in Table 6.42, the proposed amendments to parking / loading will result in a loss of 46 spaces along Section 4. Where parking is removed, the impact varies between negligible and moderate. The overall significance of effect is assessed as Negative, Moderate and Long-term. This moderate effect is considered acceptable in the context of the planned outcome of the Proposed Scheme, which is to improve accessibility to this local area (on foot, by bicycle and bus) for residents and visitors to local shops and businesses.

Viability of the business

Refer to response in Section 3.12.6.3.1 in this report for further information on the Impact to the business due to temporary land take/ closure of business during construction and also note below:

As noted in Chapter 10 Population in Volume 2 of EIAR, during the operational stage one commercial receptor are expected to experience a Negative, Significant and Long-Term impact by permanent land take. The Circle K filling station on the east side of the Dublin Road in Little Bray will require permanent removal of four of its pumping stations, which is expected to have an adverse impact on the business.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

The NTA acknowledge the positive and constructive liaison that has occurred with the Circle K management throughout the design and planning process to date. These are matters that can be successfully addressed between the Circle K and the NTA.

3.12.6.4 Alternate design proposal

Summary of issue raised

The submission suggests removal of both cycle lanes on either side of R761 will reduce the impact of the potential permanent CPO at the Circle K site. As is common in other urban areas, cyclists can travel along the designated bus lane.

Response to the issue raised

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the alternatives considered when designing the Proposed Scheme. In Section 4 (Bray North to Bray South) of the Proposed Scheme, the Emerging Preferred Route (EPR) Option has been taken forward as the Preferred Route Option. The EPR at this location includes for a dedicated bus lane in each direction, a segregated cycle track and footpath in each direction, and this allows sustainable transport modes to achieve priority and safety. The EPR option requires the full widening to occur on the eastern side of the existing carriageway.

An alternative option with no segregated cycle tracks was considered in this section where the cyclists would share the bus lane. This option would provide for journey time reliability for the buses; however this alternative does not provide segregated cycling infrastructure in this section of the Proposed Scheme, which is identified as a Primary Cycle Route in the 2022 Greater Dublin Area Cycle Network.

In the alternate option, cyclists would have to share the bus lane on a proposed Primary Cycle Route and therefore it will not meet the Proposed Scheme objectives and would impact the safety of the cyclists in particular on the immediate approaches to a significant junction accessing the M11. The Proposed Scheme performs better in terms of integration with the transport network and safety.

Section 3.3.2.4 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR summarises the route options considered at the Feasibility stage and the assessment to inform the Emerging Preferred Route option (EPR) in Section 4 of the Proposed Scheme.

'Following the Stage 1 sifting process, two viable route options for Section 4 were taken forward for assessment and further refinement as shown in Image 3.14. These two route options were as follows:

- *Route 1A would run via Castle Street and Dublin Road to Wilford Roundabout; and*
- *Route 1B would run via Quinsborough Road (northbound direction) / Florence Road (southbound direction), parallel to the DART line across the River Dargle via a new bridge, through the old Bray Golf Club lands onto Dublin Road to Wilford Roundabout.*

Both routes overlap at their start and end points.. Both options also overlap on the Dublin Road from approximately Chapel Lane to Wilford Roundabout.

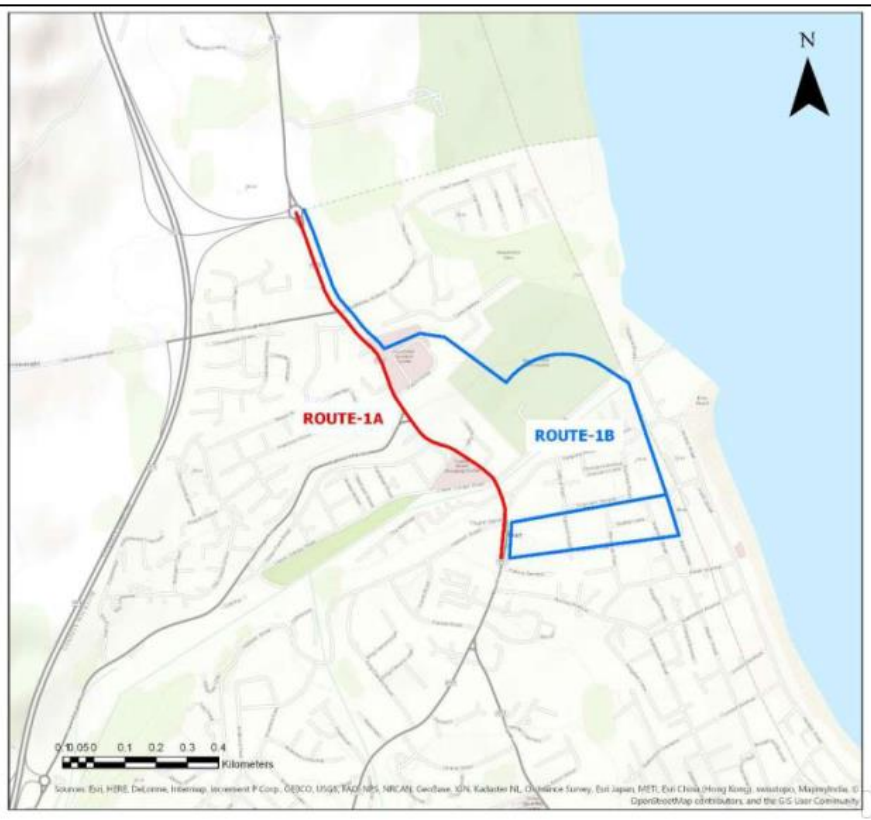


Image 3.14: Section 4 Route Options Remaining After Stage 1 Sifting (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

Overall 1A was deemed to be the most advantageous route. This is due to its significantly lower cost; the likelihood of less impact on the environment; and it was the preferred option under the Safety criterion. Therefore, 1A was brought forward into the Emerging Preferred Route.'

Appendix M (Bray to UCD Core Bus Corridor - Feasibility and Options Report) in the Preferred Route Options Report, as part of the Supplementary Information, summarises the assessment of route options in Bray. The Emerging Preferred Route Option is shown in Appendix N of the Preferred Route Options Report, as part of the Supplementary Information.

Both options considered at the Feasibility stage (Route 1A and Route 1B) would have the same impact on the Circle K service station. EPR Option 1A is the Proposed Scheme.

NTA are satisfied that reasonable alternatives have been considered for the Proposed Scheme on Dublin Road, Bray.

3.12.6.5 Relocation of bus stop and access/ egress to the site

Summary of issue raised

The submission notes concerns that the proposed location of the bus stop will create a conflict between pedestrians and motorist and leads to an inherent road safety hazard. The submission raised concern that proposed bus stop in its current location will block sightlines for vehicles exiting the service station and will be a significant safety concern and could lead to collisions between vehicles exiting the service station and traffic on the road.

The submission notes a lack of tactile paving across the entrance.

The submission notes that it is not clear if vehicles will be allowed to turn right into the service station as they currently do, following the completion of the Proposed Scheme and noted safety concerns.

Response to the issue raised

As noted in Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR:

'*To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.*

The criteria for consideration when locating a bus stop are as follows:

- *Driver and waiting passengers are clearly visible to each other;*
- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*
- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as part of the Preliminary Design Report and set out in Bus Stop Review Report, Appendix H, and specifically in Appendix H2 (Bus Stop Review Analysis), using the methodology as set out in Appendix H1 (Bus Stop Review Methodology) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis, Appendix H2 notes the following in relation to the relocated Bus Stop at this section of the Proposed Scheme:

Bus Stop 4129

'Move to downstream of junction to improve journey times.

A shared landing layout is proposed to reduce land take.'

The Proposed Scheme relocated outbound bus stop is located at chainage A17800 and does not interfere with the existing access/ egress of the Circle K service station, as shown in Figure 3.257.

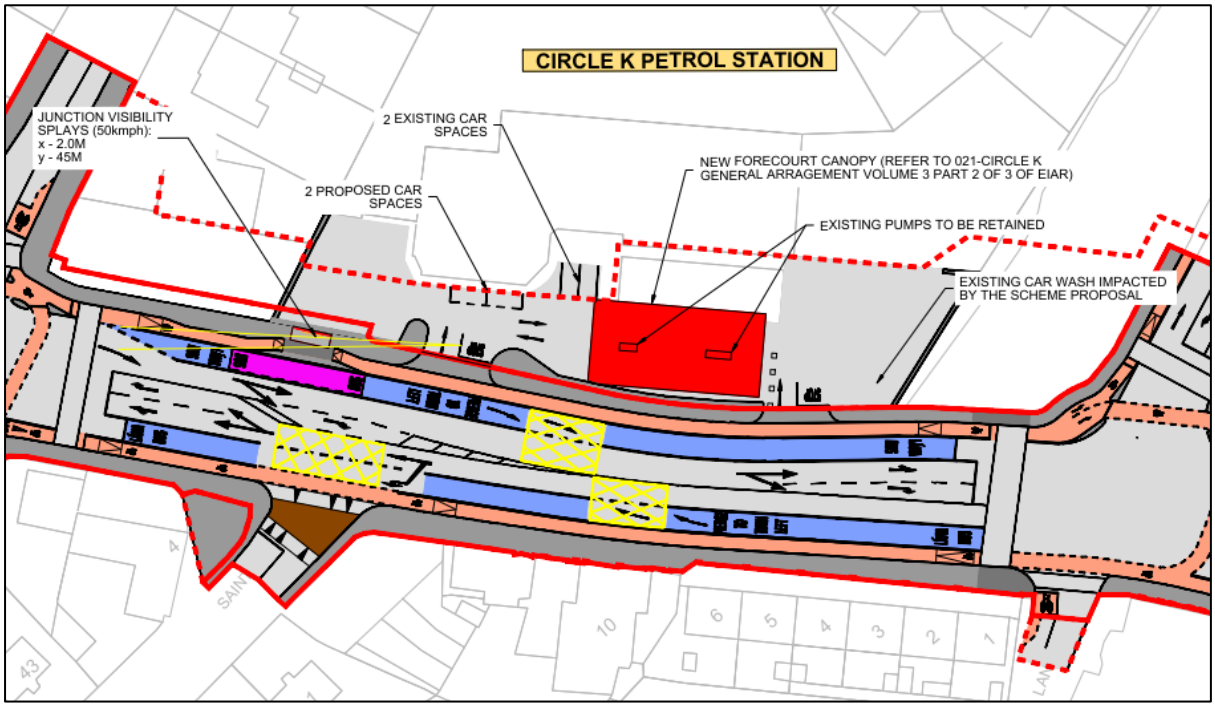


Figure 3.257: Proposed General Arrangement at Circle K and Visibility at Bus Stop

The two existing access and egress (north and south) into the service station will be retained post construction. There is no restriction turning right from the property, post-construction.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with the access and egress to the property in operational stage.

The proposed segregated footpath and cycle track will ramp down at the access / egress of the petrol station, as per Section 8.3, Page 21 in Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR which shows 'On Road Cycle Lane Priority Junction Treatment'.

Forward visibility checks have been undertaken as part of the Proposed Scheme. Chapter 4.7 of the Preliminary Design Report included as part of the Supplementary Information notes that desirable minimum forward visibility requirements for the Proposed Scheme and the sections with reduced forward visibility are provided in Table 4.6. At the access / egress to the Circle K service station site no forward visibility issues have been identified. In particular at the northern access/ egress, junction visibility checks have also been undertaken and there are no visibility issues at the northern access/ egress interfering with the bus stop as shown in Figure 3.257. The visibility splays to the edge of the bus lane cuts through the bus stop, however, the bus stop will have a cantilever shelter without half end panels and so visibility splays will not be interfered. Refer to Figure 3.379: Example of a 3-Bay Reliance Cantilever Shelter with a Narrow Roof Configuration With and Without Half End Panels (Source: PDG). The visibility splays to the edge of the traffic lane does not interfere with the bus shelter.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with visibility at this junction.

With regards to the concern on manoeuvring of the oil tankers, a swept path analysis has been carried out considering FTA Design Articulated Vehicle and presented below in Figure 3.258. This demonstrates that the oil tankers delivery will not be impacted in the residual reconfigured petrol station site.

Figure 3.258: HGV Swept Path Analysis at Circle K, Dublin Road, Bray

3.12.7 53 & 157 – Deirdre Spillane and Jason O'Sullivan & Paula Whelan and Roy Parker

3.12.7.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, between Loughlinstown Roundabout and Stonebridge Road, it is intended to provide a bus lane and general traffic lane in both directions. Where bus lanes are not continuous, Signal Controlled Bus Priority has been provided.

Segregated cycle tracks have not been provided between Loughlinstown Roundabout and Stonebridge Road along the Proposed Scheme as impacts including land take to residential properties were not considered appropriate. The proposed bus lanes along this section will be shared with cyclists.

The existing road cross section at this location provides a footpath with a general traffic lane in each direction along with advisory cycle lane in both directions.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 42 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.259.

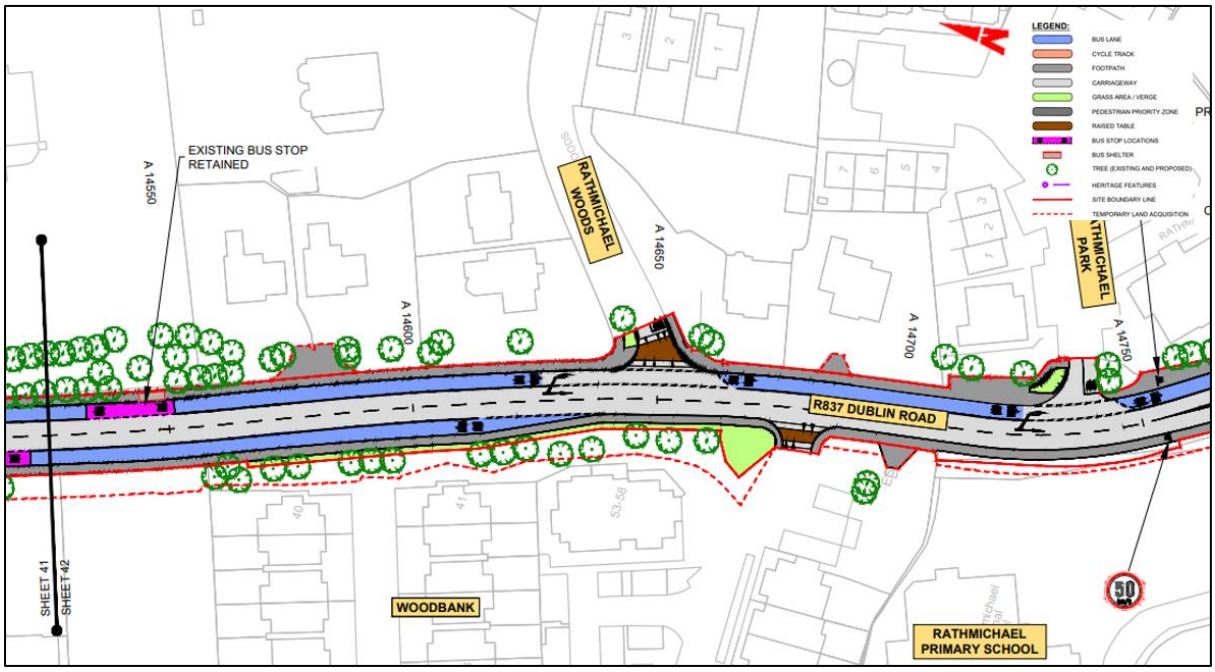


Figure 3.259 Extract from General Arrangement Drawing at Dublin Road (Sheet 42)

3.12.7.2 053 - Deirdre Spillane and Jason O'Sullivan

The submission raises five potential issues:

1) Request for Details on CPO
2) Inaccurate CPO Mapping
3) Design Detail and Constitutional Rights
4) Project Timelines
5) Oral Hearing Request

3.12.7.2.1 Request for Details on CPO

Summary of issue raised

The submission raised the concern that they had requested more details of the land take, on behalf of their client after receiving the CPO Notice, however they never received any response from the NTA that was specific to the property.

Response to issue raised

The CPO and Schedule has been prepared in accordance with the requirements under the Section 76 of the Third Schedule of the Housing Act 1966 (as extended and amended). Deposit Maps are prepared for the Proposed Scheme and individual landowner maps have been issued to the impacted landowner with the CPO pack. The CPO Schedules states the following:

- *'The land described in Part I of the CPO Schedule hereto and coloured grey on the said deposited maps is land being permanently acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.*
- *The land described in Part II of the CPO Schedule hereto and coloured grey on the said deposited maps is land being temporarily acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense'.*

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

NTA note that there have been communications (letter, emails and telephone calls) with representatives of Deirdre Spillane with regards to the above issues.

3.12.7.2.2 Inaccurate CPO Mapping

Summary of issue raised

The submission notes that the CPO notice provided to the respondent's client displays an inaccurate map, with a straight boundary rather than curved. They also raised concerns regarding the true extent of the property to be acquired, commenting that the NTA could deliberately or otherwise take unauthorised, permanent acquisition of part of the property.

Response to issue raised

The General Arrangement drawings are displayed on Ordnance Survey mapping which is regularly updated by Ordnance Survey Ireland. Whilst the designs are displayed on this mapping, up-to-date and detailed topographical survey of all areas within the proposed site boundary has been undertaken to inform the design development.

It is noted that the potential issue regarding the straight boundary rather than curved line is outside the extent of the temporary land take identified in the CPO and Deposit Maps.

3.12.7.2.3 Design Detail and Constitutional Rights

Summary of issue raised

The submission raised the concern that the design had insufficient detail and that it would be premature for the Board to make decision with this amount of detail as it would be an infringement on Constitutional Rights to quiet enjoyment of property.

The submission requested any further information in relation to the property that is supplied to ABP be sent to their client in a timely manner. The respondent also requests the NTA reimburse the land and client's costs in dealing with the submission.

Response to issue raised

The submission makes an assertion that the proposed scheme would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property due to lack of design put forward as part of the Planning application.

It is clear from the face of the CPO itself and on the statutory notice served therein that the lands are being acquired for the purposes of the Bray to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 (Introduction) in Volume 2 of the EIAR. They are also explained below in response to this submission.

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

Powers of NTA and Statutory basis for the CPO Application

Refer to response in Section 3.1.4.1 on the Constitutional requirements of CPO on 'Powers of NTA'.

Purpose of the CPO of the land

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

As part of Proposed Scheme, the lands at plot numbers Plot 1109(1).2d are proposed to be temporary compulsorily acquired for the resurfacing works at the entrance to the property 4 Rathmichael Lawns. Temporary land take will be returned to the owner after construction works are complete.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works.'

The Proposed Scheme design at the location of the property at 4 Rathmichael Lawns is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 42 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.259 above in Proposed Scheme Description. The Proposed Scheme at this location includes a bus lane in both direction along with general traffic lanes. Footpath is improved on either side.

The temporary land take required at the property 4 Rathmichael Lawns is shown in the Deposit Maps, as shown in Figure 3.260. The temporary land take is shown in Plot 1109(1).2d.

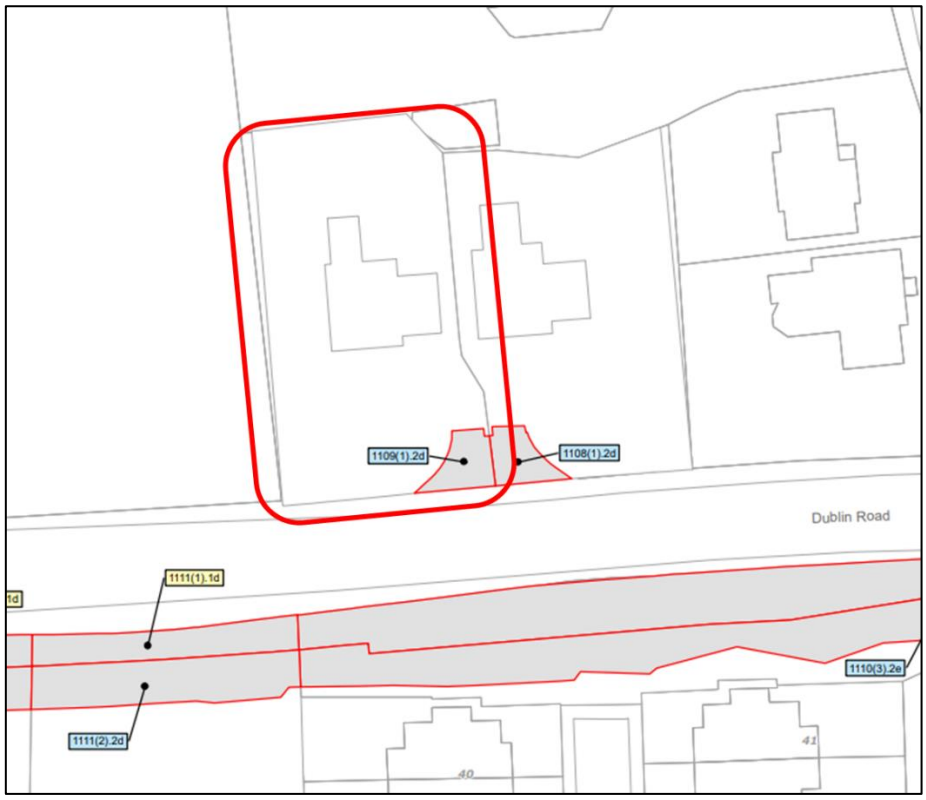


Figure 3.260: Extract from CPO Deposit Maps at 4 Rathmichael Lawns, Dublin Road (Sheet 42)

Proposed Scheme Details

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 4.5.3 notes details for the Section 3 Loughlinstown Roundabout to Bray North (Wilford Roundabout).

The design details are also shown in Chapter 4 (Proposed Scheme Description) Part 1 and Part 2 of 3 Figures in Volume 3 of EIAR.

Chapter 5 (Construction) Volume 2 of the EIAR describes the construction activities along the Proposed Scheme.

Additionally, the Preliminary Design Report and the associated Appendices of the PDR, part of Supplementary information, also gives description of the design details of the Proposed Scheme.

The design of the Proposed Scheme has been developed to a stage where all potential environmental impacts can be identified, and a fully informed environmental impact assessment has been carried out.

EIAR Assessment

The Environmental Impact Assessment Report (EIAR) has assessed the impacts of the Proposed Scheme in each of the assessment chapters and summarised the predicted significant residual impacts in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of EIAR. As described in Chapter 1 (Introduction) in Volume 2 of the EIAR, the EIAR for the Proposed Scheme has been prepared in accordance with the requirements of the EIA Directive and all applicable Irish legislation, as well as 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' published by the Environmental Protection Agency in 2022.

Refer to Section 3.9.3.10 on the Adequacy of Environmental Assessment of this report.

Constitutional Rights

Refer to response in Section 3.1.4.1 on Constitutional requirements of CPO and also note below.

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of EIAR Chapter 3 Reasonable Alternatives provides a detailed summary of this, with further

details provided in the Preferred Route Option Report provided in the Supplementary Information submitted with the application for the Proposed Scheme. In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. Section 3.3 of Chapter 3 of the EIAR set out that design development and assessment work was carried on this section of the Proposed Scheme. The design development in Section 3 to inform the Proposed Scheme is documented in Section 6.5 of the Preferred Route Option Report, part of Supplementary Information.

Please refer to response in Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill covering the alternatives considered and design development to inform the Proposed Scheme, in particular section between Loughlinstown Roundabout to Stonebridge Road.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.12.7.2.4 Project Timelines

Summary of issue raised

The submission raised the issue that they could see no indication of how long the works will take.

Response to issue raised

An indicative Proposed Scheme construction programme is shown in Table 5.2 of Section 5.4 of Chapter 5 (Construction) of Volume 2 of the EIAR, as shown in Table 3.70 below.

Section 5.3.3.1 of Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities in Section 3a Loughlinstown Roundabout to Shanganagh Road. The expected construction duration for the section will be approximately 12 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3.

Table 3.70: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300	■	■	■	■	■							
Section 1b	15 months	1,300		■	■	■	■	■						
Section 2a	15 months	5,800		■	■	■	■	■						
Section 2b	12 months	5,700	■	■	■	■								
Section 3a	12 months	1,270					■	■	■	■				
Section 3b	9 months	500							■	■	■			
Section 3c	18 months	1,800					■	■	■	■	■	■		
Section 4a	12 months	300								■	■	■	■	
Section 4b	9 months	400										■	■	■
Section 4c	9 months	350								■	■	■		

Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

3.12.7.2.5 Oral Hearing Request

Summary of issue raised

The submission requests that the Board hold an Oral Hearing.

Response to issue raised

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.12.7.3 157 - Paula Whelan and Roy Parker

The submission raises four potential issues:

1) Request for Further Information and Lack of Details on CPO
2) Inaccurate CPO Maps
3) Design Detail and Constitutional Rights
4) Project Timelines

3.12.7.3.1 Request for Further Information and Lack of Details on CPO

Summary of issue raised

The submission raised concern regarding the request for further information regarding the CPO, which is not available on the website. The reply from the NTA resulted in the respondent being directed to the website where there is no definitive reference to the client's property.

The submission raised the concern that they had requested more details of the land take proposal, on behalf of their client after receiving the CPO Notice as the maps don't provide dimensions.

Response to issue raised

Refer to response in Section 3.12.7.2.1 on Request for Details on CPO in this report and also note below.

NTA note that there have been communications (letter, emails and telephone calls) with representatives of Paula Whelan and Roy Parker with regards to the above issues.

3.12.7.3.2 Inaccurate CPO Maps

Summary of issue raised

The submission notes that the CPO notice provided to the respondent's client displays an inaccurate map, with a straight boundary rather than curved. They also raised concerns regarding the true extent of the property to be acquired, commenting that the NTA could deliberately or otherwise take unauthorised, permanent acquisition of part of the property.

Response to issue raised

Refer to response in Section 3.12.7.2.2 on Inaccurate CPO Mapping in this report.

3.12.7.3.3 Design Detail and Constitutional Rights

Summary of issue raised

The submission raised the concern that the design had insufficient detail and that it would be premature for the Bord to make decision with this amount of detail as it would be an infringement on Constitutional Rights to quiet enjoyment of property.

The submission requested any further information in relation to the property that is supplied to ABP be sent to their client in a timely manner. The respondent also requests the NTA reimburse the land and client's costs in dealing with the submission.

Response to issue raised

Refer to Section 3.12.7.2.3 on Design Detail and Constitutional Rights in this report, and additional information below, for further details on design detail and constitutional rights of the landowner.

Purpose of the CPO of the land

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

As part of Proposed Scheme, the lands at plot numbers Plot 1108(1).2d are proposed to be temporary compulsorily acquired for the resurfacing works of the entrance at the property 3 Rathmichael Lawns. Temporary land take will be returned after construction and resurfacing works are complete.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works.'

The Proposed Scheme design at the location of 3 Rathmichael Lawns property is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 42 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.259 above in Proposed Scheme Description. The Proposed Scheme at this location includes a bus lane in both direction along with general traffic lanes. Footpath is improved on either side.

The temporary land take required at the property of 3 Rathmichael Lawns is shown in the Deposit Maps, as shown in Figure 3.261. The temporary land take is shown in Plot 1108(1).2d.

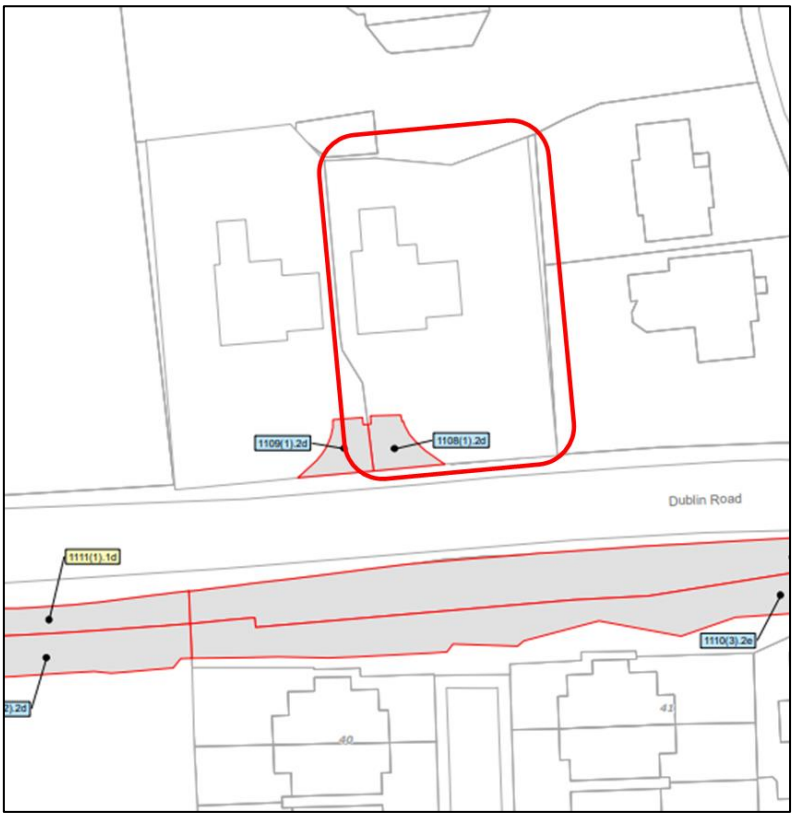


Figure 3.261: Extract from CPO Deposit Maps at the Dublin Road (Sheet 011)

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.12.7.3.4 Project Timelines

Summary of issue raised

The submission raised the issue that they could see no indication of how long the works will take.

Response to issue raised

Refer to response in Section 3.12.7.2.4 on Project Timelines.

3.12.8 71 – Eoin Conway & Helen Clarke

3.12.8.1 Description of Proposed Scheme at this Location

In order to achieve the objectives of this scheme, from Crinken Lane to the Wilford Roundabout, it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes.

New pedestrian crossings are proposed at south of Allies River Road near Shanganagh Cemetery.

The existing road cross section at this location provides a footpath with a general traffic lane in each direction. There is an existing bus lane in the northbound direction and an advisory cycle lane in the southbound direction.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.262.

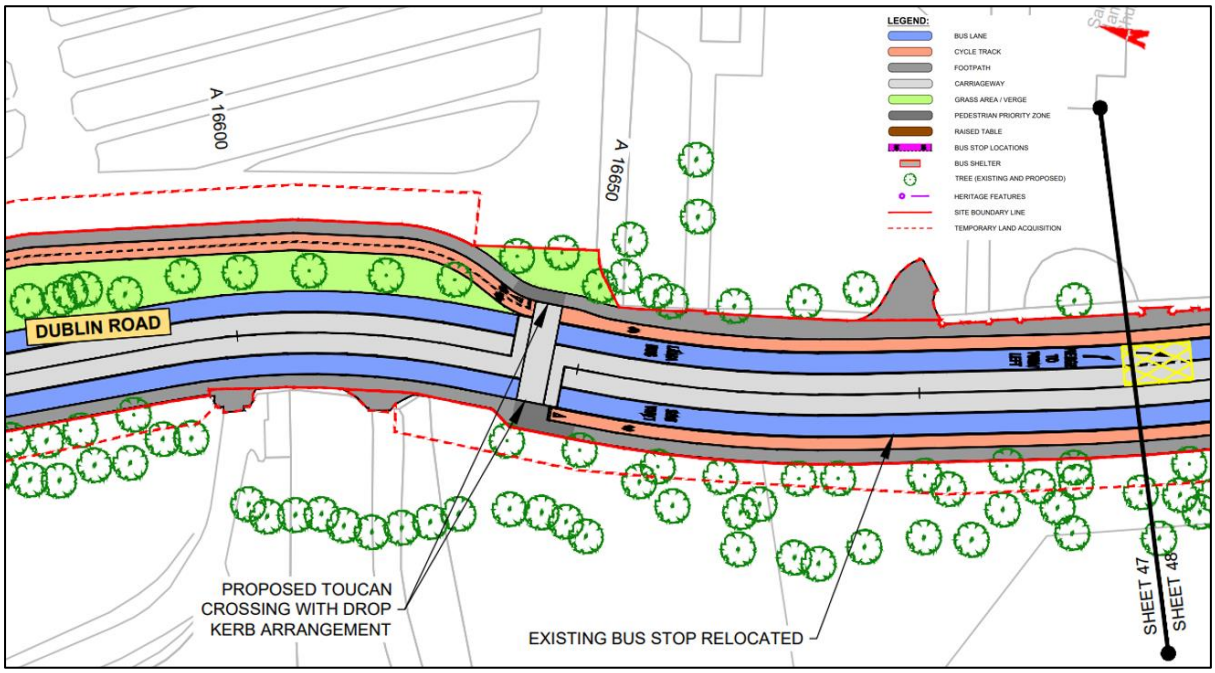


Figure 3.262: Extract from General Arrangement Drawing at Beauchamp House (Sheet 47)

3.12.8.2 Summary of Issues Raised

The submission raises three potential issues:

1) Impact to Property Due to CPO on a Protected Structure
2) Impact to Trees and Biodiversity
3) Non-compliance with Policy, Zoning and LAP

3.12.8.3 Responses to Issues Raised

3.12.8.3.1 Impact to Property Due to CPO on a Protected Structure

Summary of issue raised

The submission raised concerns regarding the impact of the CPO on Beauchamp House which a protected structure and included within the National Inventory of Architectural Heritage (NIAH).

The respondent further raised concerns regarding the impact to the boundary walls that form part of the curtilage of the setting of the Protected Structure.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing

safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Beauchamp House landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.263. The permanent land take is shown in Plot 1069(1).1d and the temporary land take is shown in Plot 1069(2).2d.

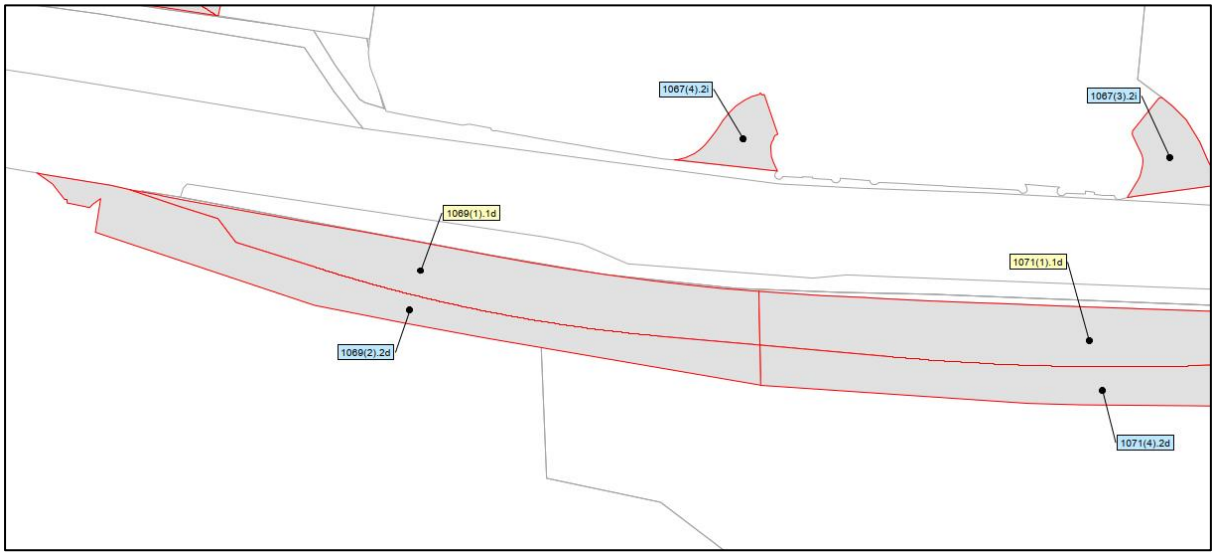


Figure 3.263: Extract from CPO Deposit Map at Beauchamp House (Sheet 07)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath and cycle track on the Dublin Road, hence meeting the objectives of BusConnects, as shown in Figure 3.264 extract from 04-Typical Cross section Drawing Chapter 4 (Proposed Scheme Description) Vol 3 Part 1 of 3 of EIAR. It is proposed to widen the road on the west side of the Dublin Road, which will impact the boundary wall and trees in the frontage of the Beauchamp House property.

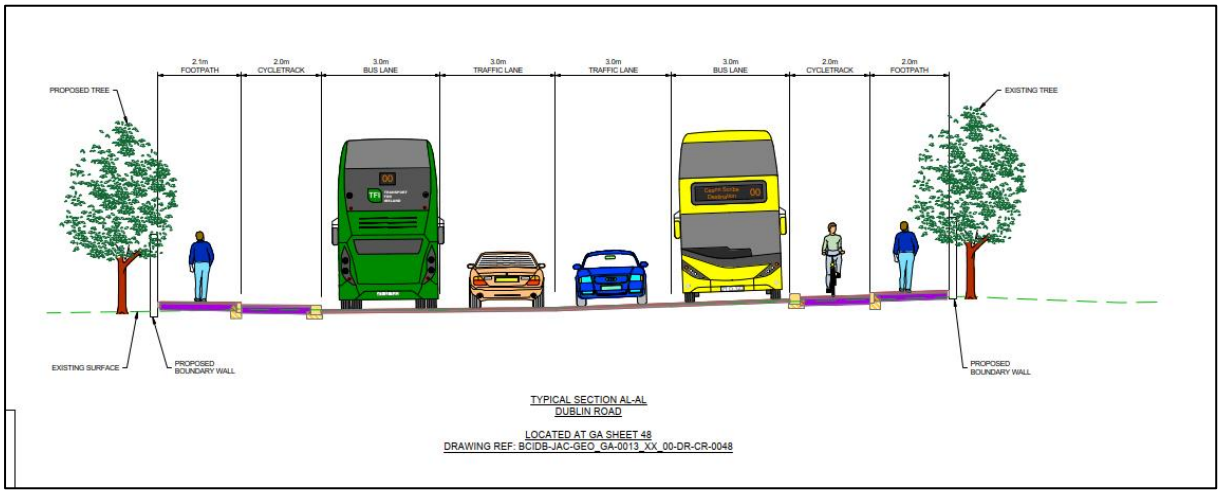


Figure 3.264: Extract from Typical Cross-section at Beauchamp House (Sheet 21)

The Proposed Scheme General Arrangement design at the location of the Beauchamp House is shown in the 02-General Arrangement drawings Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 48 and shown in Figure 3.265.

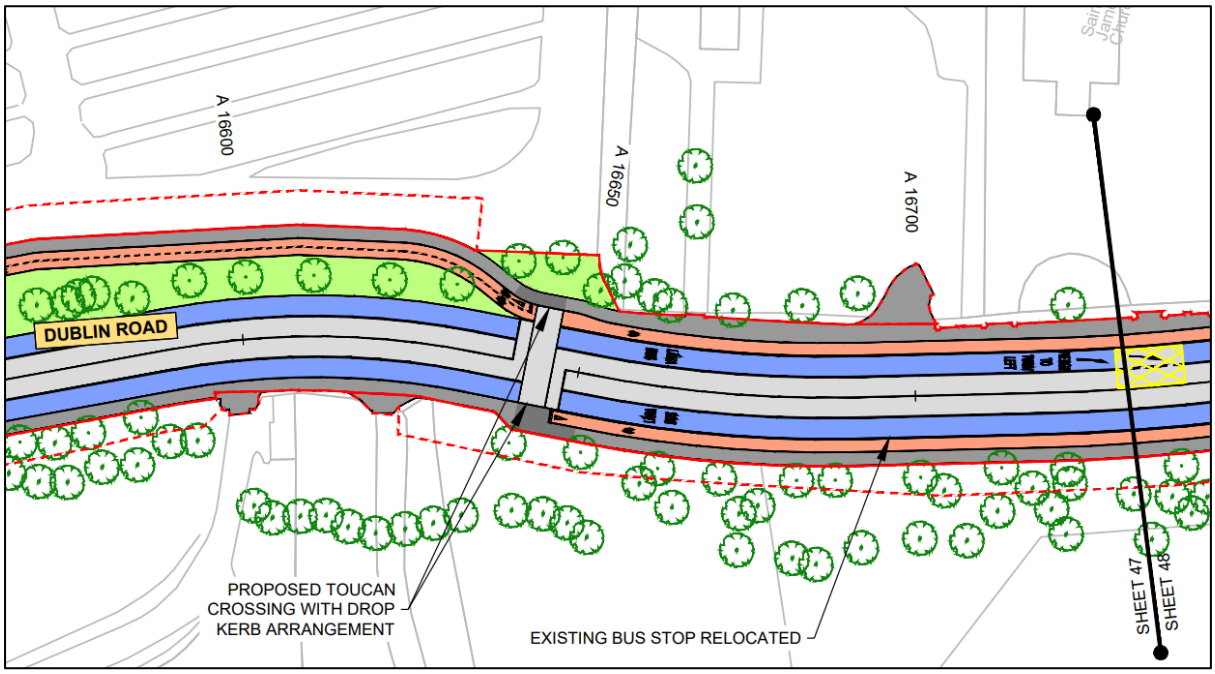


Figure 3.265: Extract from General Arragement Drawings at Beauchamp House (Sheet 47)

The proposed works would require set-back of the existing boundary wall, which will relocated along the Beauchamp House frontage and rebuilt stone walls, like for like.

As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, the reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

The Proposed Scheme Boundary Treatment design at the location of the Beauchamp House is shown in the 07- Fencing and Boundary Treatment Drawing Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 47 and shown in Figure 3.266.

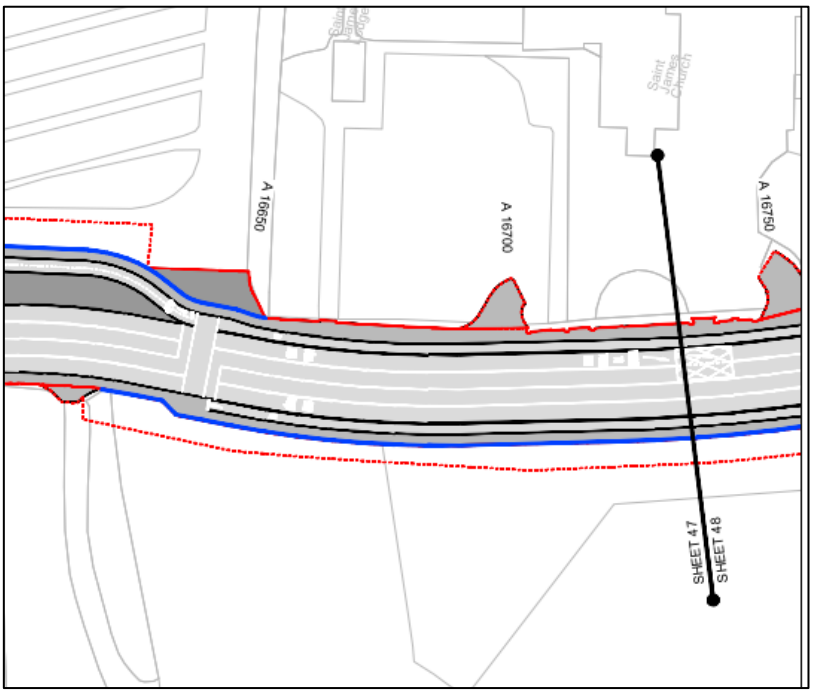


Figure 3.266: Extract from Boundary Treatment Drawing at Beauchamp House (Sheet 47)

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR assesses the impacts on architectural heritage as a result of the construction and operation of the Proposed Scheme. Figure 16.1 in Volume 3, Part 3 of 3 of the EIAR maps the architectural heritage features located within and adjacent to the boundary of the Proposed Scheme which have been assessed within Chapter 16. Figure 3.267 shows an extract from Figure 16.1 (Sheet 25) which shows the features within the Woodbrook Estate. All architectural heritage features are described in detail in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4 of the EIAR, including those shown in the extract from Figure 16.1 (Sheet 24) below, and all of the protected structures and features on the National Inventory of Architectural Heritage associated with Beauchamp House (Beauchamp House (DLR RPS 1862, NIAH 60260168), the designed landscape associated with Beauchamp House (NIAH 2552), and the demesne wall of Beauchamp House (CBC0013BTH030, CBC0013BTH031)). All of these features are further described in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR.

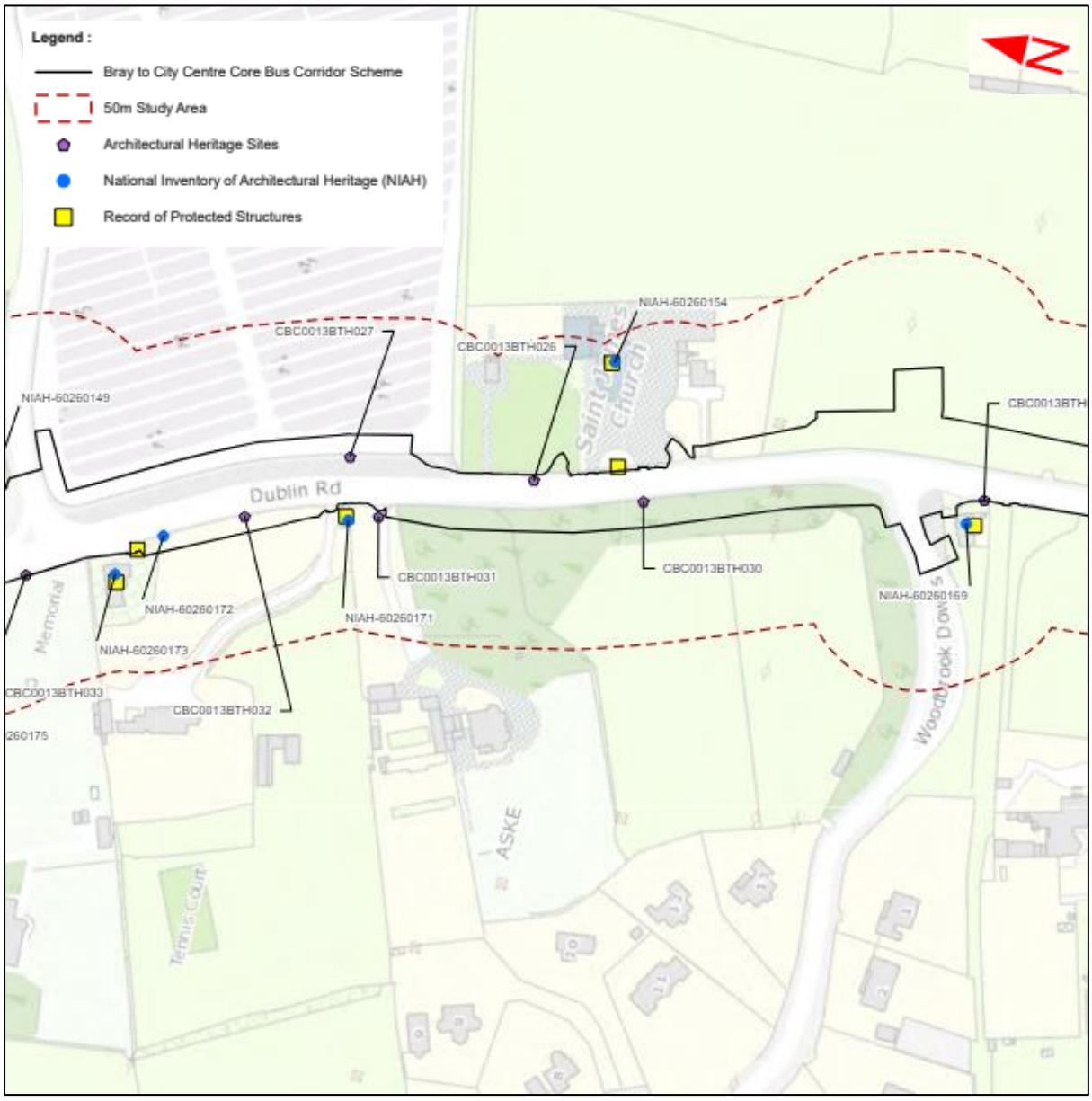


Figure 3.267: Extract from Architectural Heritage Drawings (Figure 16.1) at Beauchamp House (Sheet 24)

The assessment of the Construction Phase impact on Beauchamp House is described in Section 16.4.3.5 (Designed Landscapes) where it describes the potential impact on the boundary of Beauchamp House as follows:

'*The proposed land take to accommodate a bus and cycle lane on the west side of the Dublin Road will directly impact on the 19th century coursed granite rubble demesne wall (CBC0013BTH030) with bevelled granite cap to Beauchamp House (NIAH 2552, DLR RPS 1862), necessitating its removal and reinstatement. It is of Medium Sensitivity. Trees along the boundary will be retained for the most part though some will be removed. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary.*'

Mitigation measures to reduce the impact on the boundary of Beauchamp House are described in Section 16.5.1.5 in Chapter 16 as follows:

'*Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Slight and Long-Term.*'

The mitigation measures outlined in Chapter 16, and recorded in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR are also included in the Construction Environmental Management Plan included as Appendix A5.1 in Volume 4, Part 1 of 4 of the EIAR, and will ensure that impacted heritage boundaries through Shankill are reconstructed to match the existing and reinstate the curtilage of the Protected Structure, using the existing wall stone and materials where suitable for reuse in order to retain as much of the historic fabric as possible.

3.12.8.3.2 Impact to Trees and Biodiversity

Summary of issue raised

The submission was also concerned regarding the removal of trees from the demesne, in relation to the protected structure commenting that the overall changes to the land would have significant negative impacts.

The submission continues to note that the proposals will remove numerous trees which will have a very significant negative impact on the streetscape along the section of Dublin Road, impacting the sylvan character of the area.

The submission notes that the removed trees have not been replaced with a significant number of new trees.

The submission requests further information for the streetscape photomontages regarding the time since planting of trees, to understand the short- and medium-term impacts, including Year 1, 5 and 10.

The submission comments the changes at Beauchamp House will negatively impact trees of various species in the dense mature woodland. It goes further, commenting that the Tree Removal Plan did not survey each tree individually to be lost on lands, and adequate mitigation measures have not been considered.

The submission raised concerns relating to the biodiversity within the Proposed Scheme. The submission requests full tree surveys are undertaken to assess for bat activity prior to making a decision on the application.

The submission continued to raised concerns linked specifically to Beauchamp House and the impact to species and habitats in the over 200 year old woodland.

Response to issue raised

Refer to Section 3.9.3.11 on Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) of this report for further information on assessment of the impact on trees, biodiversity and landscape through Shankill. The following provides information specific to Beauchamp House.

The proposed works would require loss of mature trees along the frontage of the Beauchamp House. New trees are proposed in the residual green area to restore the sylvan character of the road at this location.

The Proposed Scheme Landscape design at the location of the Beauchamp House is shown in Sheet 47 of the Landscape Drawings (drawing set 05 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR and is shown in Figure 3.268.

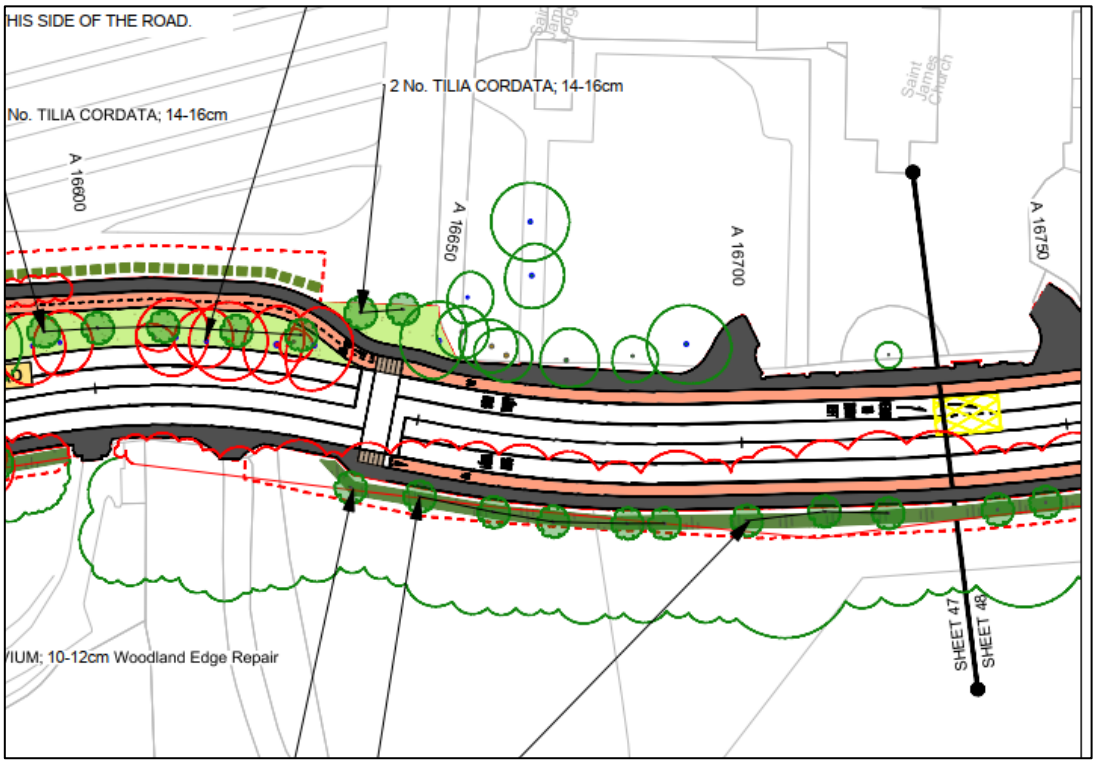


Figure 3.268: Extract from Landscape Drawings at Beachamp House (Sheet 47)

As shown in the above figure, there will be impacts on trees along the front of Beauchamp House. An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4, Part 4 of 4 of the EIAR. As per the Tree Schedule in that report, the proposed removals in the respondent's property are a mixed species group (Tree Number G0090) described in the as '*comprising ash, lime, yew, sycamore and elder that extend along boundary stone wall*', which has been assessed as a Category B2 group (moderate landscape value and conservation). The Tree Schedule states that c.1911m^2 of this group will need to be removed to facilitate the road widening, however it should be noted that this area of removal is not only within the land parcel in question, but covers the whole length on the western side of the road from the entrance to Beauchamp House to the Woodbrook Downs junction.

As shown in the Landscape General Arrangement Drawings in Volume 3 of the EIAR (Figure 3.268 above), it is proposed to plant a number of trees along the boundary of Beauchamp House to mitigate for the proposed tree losses and repair the edge of the woodland, including the species taxus baccata, sorbus torminalis and acer pseudoplantus, as well as a band of new planting denoted as '*Proposed Native Planting*' in the drawing legend. Sheet 48 of the Landscape General Arrangement drawings includes the following description of the boundary proposals:

'*Partial loss of tree group on west side of road. Wall removed and set back re-using existing stone where possible. New planting to the rear of the new wall*.'

The submission describes the photomontages relevant to Beauchamp House (View 08 and 09) and states that it is '*not clear if the planting shown in the views will appear as visualised or over a certain time i.e. after a 10-year period*'. Section 17.5.2.1 of Chapter 17 describes the photomontages stating that '*The proposed Views are shown with proposed planting at approximately 10 to 15 years post-completion of the Construction Phase*'.

The NTA are satisfied that a suitable, robust assessment of the impacts of the Proposed Scheme based on both desk studies and appropriately planned field surveys as further described in Section 3.9.3.10 Adequacy of Environmental Assessment of this report. The Construction Phase mitigation measures described within the EIAR are replicated in the CEMP (Appendix A5.1 in Volume 4, Part 1 of 4 of the EIAR) and will be requirements of the appointed contractor(s) during pre-construction and construction.

3.12.8.3.3 Non-compliance with Policy, Zoning and LAP

Summary of issue raised

The submission states that the Proposed Scheme contravenes a number of objectives within the DLRCC Development Plan and the Woodbrook-Shanganagh Local Area Plan, including zoning, heritage and ecology objectives.

Response to issue raised

Appendix A2.1 (Planning Report) in Volume 4 Part 1 of 4 of the EIAR sets out the planning context for the development of the Proposed Scheme, in which it identifies the existing policy framework for the Proposed Scheme in the context of relevant international, European, national, regional and local planning strategy, plan and policy documents. Section 3.7.3 of the Planning Report addresses the Proposed Scheme in the context of the DLRCC Development Plan 2022-2028. As outlined in Section 3.7.3 '*The vision of the DLRCDP (DLRCC 2022) is to 'embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations' The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county*'.

Table 3.13 in the Planning Report lists the key transport policies from the DLRCC Development Plan which are relevant to the Proposed Scheme and includes a scheme response for each. The section on the DLRCC Development Plan concludes with the statement that, '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022)*'.

Section 3.7.3.4 of the Planning Report specifically discusses the relevant LAPs within the DLRCC area, including the Woodbrook-Shanganagh LAP 2017-2023. Table 3.14 in the Planning Report lists the key objectives within that LAP which are relevant to the Proposed Scheme and includes a scheme response for each. The section on the relevant LAPs concludes stating that '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor adjoining the LAP area. It will facilitate a modal shift towards public transport and active travel modes which is are key objectives of the Stillorgan LAP (2018) and Woodbrook Shanganagh LAP (2017)*'.

With specific respect to the zoning of the lands, Section 4 of the Planning Report describes the zoning and map based objectives for all development plans relevant to the Proposed Scheme. The response with respect to the zoning and mapped objectives for Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) of the Proposed Scheme is as follows:

'*The Proposed Scheme is consistent with the policies and objectives of the DLRCDP (DLRCC 2022) as set out above and in Appendix 1 (Local Policy). The Proposed Scheme is largely within the existing public road / pavement area and where required, in general, only small portions of those zoning objectives listed above may be necessary to facilitate the Proposed Scheme. However, the main use associated with the zoning objective will remain*.'

Aside from the zoning objectives, the submission specifically describes a number of policies and objectives relevant to the Proposed Scheme at Beauchamp House. The submission describes a number of heritage, biodiversity and landscape objectives from the Woodbrook-Shanganagh Local Area Plan, stating that the Proposed Scheme contravenes these objectives.

With respect to Objective BH5 '*To seek to retain key historic landscape features*', the Proposed Scheme design has sought to retain historic landscape features where possible, while also still delivering on the objectives of the Proposed Scheme (and the transport objectives of the County Development Plan and Local Area Plan). A robust route selection and design refinement process was undertaken in order to

identify the optimum route through the Shankill section of the Proposed Scheme (refer to Part 1 of Section) above Section 3.9.3.1.2 on Consideration of Alternatives and Options Assessment in Shankill for further detail on the alternatives considered and options selection process for this section of the Proposed Scheme).

With respect to Objective QR12 '*Planning applications for all future development shall be accompanied by an ecological assessment, informed by ecological surveys where relevant, of how proposed developments are compliant with provisions of both the Local Area Plan and the County Development Plan relating to the protection and management of ecology, including protected species such as badgers, bats and owls. Disturbance or destruction to the resting places of protected species will be avoided where possible. In the instances where avoidance is not possible a full assessment will be carried out by a qualified ecologist and the derogation licence process will be followed through engagement with the NPWS*', a comprehensive EIAR and NIS was completed for the Proposed Scheme, with Chapter 12 (Biodiversity) in Volume 2 of the EIAR describing the ecological assessment, which was completed by suitably qualified and experienced ecologists, informed by a number of different field surveys spanning over several years (as described within Chapter 12). See the previous response (Section 3.12.8.3.2) as well as Section 3.9.3.10 and Section 3.9.3.11 for more detail on the ecological assessment undertaken, which includes assessment of the impact on protected species and outlines comprehensive mitigation measures for the protection of such species during both the Construction and Operational Phase of the Proposed Scheme. The NTA are also currently in the process of applying for a bat derogation licence through the NPWS for the 19 trees identified through the surveys as having "potential roost features".

With respect to Objective T8 '*To seek to retain the sylvan character of the Dublin Road in any road improvement schemes and to ensure that any toss of mature trees will be mitigated by replacement tree planting with consideration also to the reinstatement of any historic walls or features along any new road alignment*', the Proposed Scheme is in alignment with this objective given that replacement planting to repair the woodland boundary and reinstatement of the boundary wall is proposed as described in Parts 1 and 2 of this response.

The Proposed Scheme will facilitate the delivery of the key transport policies within the DLRCC Development Plan as listed in Table 3.13 in the Planning Report, while minimising impact on the zoning objectives and policies / objectives within the DLRCC Development Plan or the Woodbrook-Shanganagh LAP as far as possible.

3.12.9 81 – Fr. Michael O'Sullivan SAC, PP (St Anne's Church)

3.12.9.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, it is proposed that the St Anne's Roundabout (Dublin Road/ Shanganagh Road/ Corbawn Lane) is to be upgraded to a signalised junction with new pedestrian crossing facilities and SCP for buses. Corbawn Lane is to be an exit only junction on to Shanganagh Road. A dedicated right-turn lane is proposed from Shanganagh Road on to Beechfield Manor. A dedicated left turn lane from Shanganagh Road into Beechfield Manor is also to be provided.

Along Dublin Road adjacent to The Resource Centre and St Anne's Church it is proposed to provide a southbound bus lane, a bi-directional cycle track on the eastern side and general traffic lanes in each direction. The existing pedestrian crossing adjacent to St Annes Church and The Resource Centre is to remain as part of the proposals, alongside the bus stops, with one being relocated.

The existing road cross section at this location consists of a small roundabout, with a single lane, access is available to Dublin Road, Shanganagh Road, and Corbawn Lane. Footways goes around the edge of the roundabout, cycle lanes currently stop on Dublin Road to the north, with unsignalized crossings on every roundabout, with small islands in between the lanes. Along Dublin Road adjacent to The Resource Centre and St Anne's Church the existing road cross section in this location provided a footpath on each side of the road with general traffic lanes in each direction. There was no bus lane provided in this location, but on-road cycle lanes were provided in both a northbound and southbound direction.

The Proposed Scheme design at St Anne's Church along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 43 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.269.

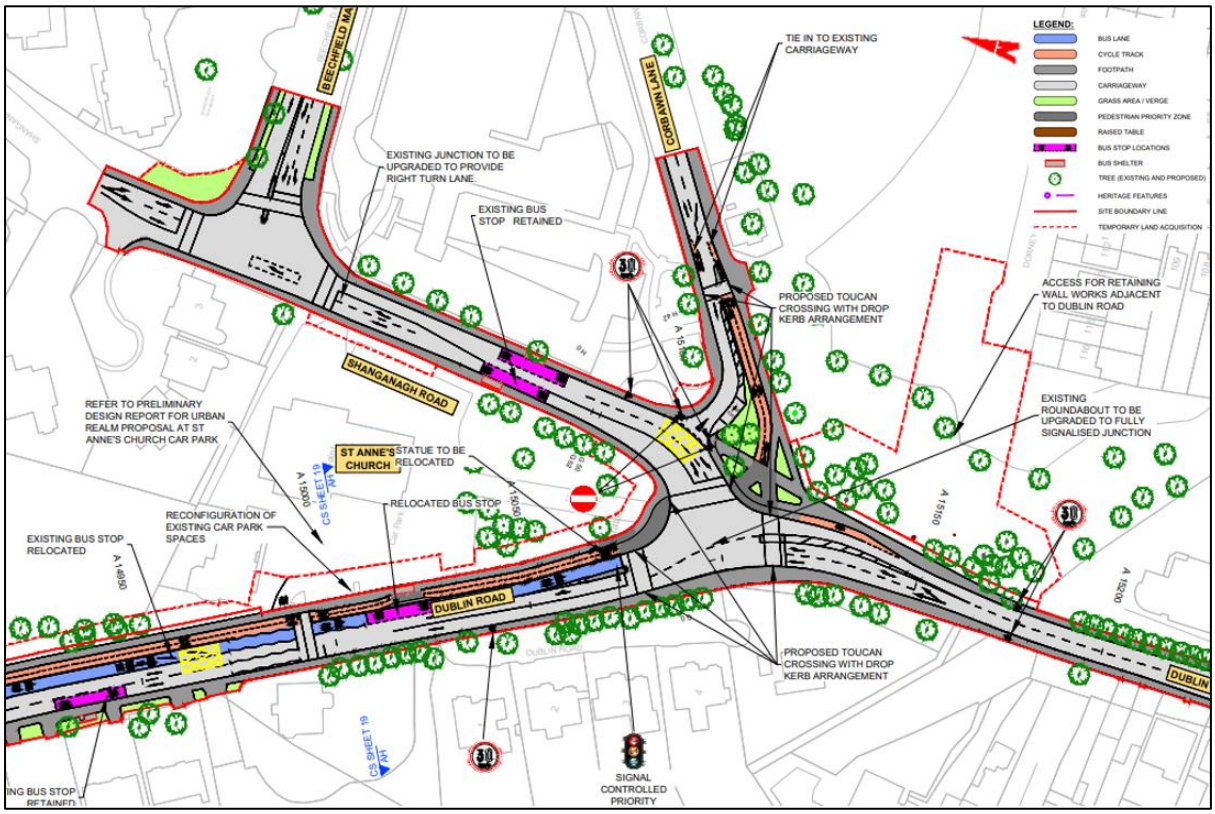


Figure 3.269: Extract from General Arrangement Drawing at St Anne's Church on Dublin Road (Sheet 43)

3.12.9.2 Summary of Issues Raised

The submission raises six potential issues:

1) Protected Structure Status
2) Loss of Parking
3) Impact to Property, Boundary Walls, Trees, Hedgerows and Biodiversity
4) Increase in Traffic in Shankill and Corbawn Lane
5) Lack of Consultation

3.12.9.3 Responses to Issues Raised

3.12.9.3.1 Protected Structure Status

Summary of issue raised

The submission noted the importance of St Anne's Church and how when it was built in 1933 it was to provide a striking perspective when viewed from the bridge. The church is a protected structure and that protection includes its curtilage (the land and outbuildings immediately surrounding the structure which is (or was) used for the purposes of the structure).

Response to issue raised

The NTA notes the comments regarding the importance of St Anne's Church and that the structure has protected status, noting the curtilage is included in that protection. Chapter 5 (Construction) in Volume 2 of the EIAR describes the proposals for land acquisition and boundary treatments in Section 5.5.2.1 as follows:

'*Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.*'

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment of impacts on heritage features, including protected structures. A full assessment of the potential impacts on St Annes Church has been undertaken, with the feature described within Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR (see Table 3.71, Table 3.72, and Table 3.73 below) and is mapped on Sheet 22 of Figure 16.1 (Architectural Heritage) in Volume 3 of the EIAR (see Figure 3.270 below).

Table 3.71: Inventory entry for St Anne's Church in Appendix A16.2 in Volume 4 of the EIAR

Identification No.	RMP DU026-109
Additional Identifiers	DLR RPS 1805, NIAH 60260114
Legal Status	Recorded Monument and Protected Structure
Location	Saint Anne's Catholic Church Shankill
Date of Construction	Built 1931-3
Original Use	Church
Description	Detached seven-bay double-height Catholic church, designed 1930-1 by Ashlin and Coleman (formed 1903) of Suffolk Street, Dublin. Opened 1933. On a T-shaped plan originally six-bay double-height comprising seven-bay double-height nave opening into four-bay single-storey lean-to side aisles with single-bay (single- or two-bay deep) single-storey triple-pile transepts (north). Extended, 1971, producing present composition. Interior contains a cross from Kiltuc Church, giving it archaeological interest
Significance Rating	Regional
Categories of Special Interest	Architectural, Archaeological, Artistic, Historical, Social, Technical
Sensitivity	Medium
Sources	Dúchas 1995, Dúchas 1998, NMS 2020a and 2020b, DLR 2022, NIAH 2020a, Nd OSI 1937 to 1953, Archiseek 2020a, Ball 1903, Bennett 2005, Bence Jones 1988, Dean 2016, Galavan 2017, Daly et al.1998, Hone Craig and Fewer 2002, IAA 2020, Joyce 1913, Kelly 1996, Lewis, 1837, M'Cready 1892, Corlett 1999, Pearson 1998 Turner 1983, Price 1942, Williams 1994, Field Survey
Photographs	

Table 3.72: Inventory entry for St Anne's Church in Appendix A16.2 in Volume 4 of the EIAR

Identification No.	CBC0013BTH233
Location	Saint Anne's Catholic Church Shankill.
Legal Status	Protected as in the curtilage of a protected structure RMP DU026-109, DLR RPS 1805
Date of Construction	Mid-20th century, after the building of Saint Anne's Catholic Church built in 1936
Original Use	Statue of Our Lady
Description	Statue of Our Lady
Significance Rating	Local Importance
Categories of Special Interest	Artistic, Historic, Social, Cultural
Sensitivity	Low Sensitivity
Sources	DLR 2022, NMS 2020a, OSI 1940 to 1944, Corlett 1999, Pearson 1998, O'Mahony 2015, Field Survey
Photographs	

Table 3.73: Inventory entry for St Anne's Church in Appendix A16.2 in Volume 4 of the EIAR

Identification No.	CBC0013BTH062
Location	Boundary Saint Anne's Catholic Church Shankill
Legal Status	Protected as in the curtilage of a Protected Structure (Saint Anne's Catholic Church Shankill RMP DU026-109, DLR RPS 1805).
Date of Construction	Church is early 20th century but the walling is probably 19th century as it corresponds with the walls on the opposite side of the road (CBC0013BTH063, CBC0013BTH061, CBC0013BTH060, CBC0013BTH058) and the nearby Bridge (CBC0013BTH059) walls.
Original Use	Boundary walls
Description	Low coursed granite rubble wall with bevelled granite cap
Significance Rating	Regional
Categories of Special Interest	Historical, Architectural, Technical
Sensitivity	Medium
Sources	IAA 2020a, Archiseek 2020a, Lewis, 1837, Ball 1903, Joyce 1913, Price 1942, Hone Craig and Fewer 2002, Turner 1983, Corlett 1999, Pearson 1998, Galavan 2017, Daly et al.1998,OSI 1837 to 1843, OSI 1908 to 1911, OSI 1940 to 1944, Field Survey
Photographs	 

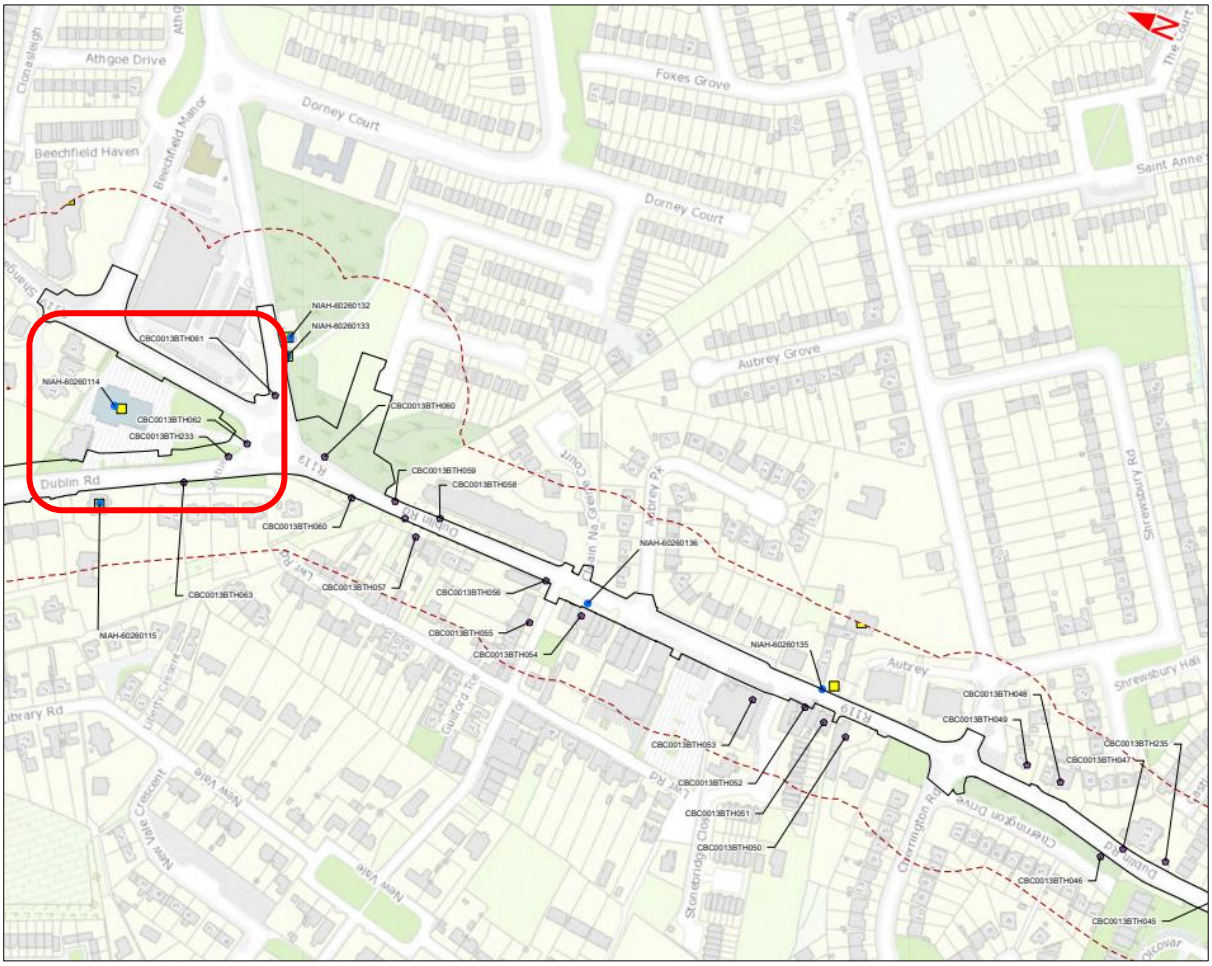


Figure 3.270: Extract from Figure 16.1 (Sheet 22) in Volume 3 showing the location of St Annes Church, Statue of Our Lady and Boundary Wall

DLR RPS 1805 / RMP DU026-109 & CBC0013BTH062 (Church & Boundary Wall)

Section 16.4.3.1 of Chapter 16 describes the potential direct impact at the site as follows:

'The proposed land take on the east side of the Dublin Road and west side of Shanganagh Road will impact on the granite wall boundary wall (CBC0013BTH062) to Saint Anne's Catholic Church Shankill (RMP DU026-109, DLR RPS 1805). The church is of Regional Importance and Medium Sensitivity. Trees along the boundary and the grounds will be retained for the most part though some will be removed and replaced. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary.'

With respect to mitigation measures, Section 16.5.1.1 of Chapter 16 states:

'Mitigation will include recording of the feature by an appropriate architectural heritage specialist engaged by the appointed contractor, prior to of the Construction Phase, in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. A similar boundary treatment will be reinstated on the new alignment which will reduce the magnitude of the impact from Medium to Low. The predicted post-mitigation impact is Direct, Negative, Slight and Temporary.'

CBC0013BTH233 (Statue of Our Lady)

Section 16.4.3.7.3 of Chapter 16 describes the potential direct impact at the site as follows:

'The statue of Our Lady in the grounds of Saint Anne's Catholic Church Shankill (CBC0013BTH233) will be repositioned to accommodate a land take on the east side of the Dublin Road. The statue is of Local importance and Low Sensitivity. There is potential for damage of the sensitive fabric during its removal, transport, storage, and reassembly. The magnitude of this impact is High. The predicted Construction Phase impact is Direct, Negative, Moderate and Temporary.'

With respect to mitigation measures, Section 16.5.1.7.3 of Chapter 16 states:

'Mitigation includes the recording of the statue and its component parts prior to the works, labelling the affected fabric prior to its careful dismantling and removal to safe storage, and the reinstatement of the statue in the vicinity of its original location. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee the labelling, taking-down and reinstatement of the trough. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. This will reduce the magnitude of the risk from High to Low. The predicted residual Construction Phase impact is Direct, Negative, Slight and Temporary.'

As outlined within Chapter 16, all heritage walls and boundary features, where impacted, will be deconstructed and reinstated in accordance with Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4, Part 3 of 4 of the EIAR.

As described above, with the mitigation measures described, the residual impacts on the heritage features of St Anne's Church will reduce to Direct, Negative, Slight and Temporary.

3.12.9.3.2 Loss of Parking

Summary of issue raised

The submission raised concern over the negative impact on parking (stated as 76 spaces reducing to 50 spaces in the submission) at St. Anne's Church. Further concerns were also raised that the Proposed Scheme would reduce the already limited number of parking spaces which are currently used at times of funerals taking place, which frequently cannot be fully accommodated due to the existing available parking.

Response to issue raised

The parking spaces at St Annes Church have been identified as informal parking spaces in Parking and Loading assessment described in Section 6.4.6.1.5.4 of Chapter 6 (Traffic and Transport) of Volume 2 of the EIAR, and states:

'There are currently 83 informal parking spaces at St Anne's Church. It is proposed to reconfigure St. Anne's Church car park which will result in no overall loss in the number of car parking spaces. As such, the impact of this change is considered to be Negligible and Long-term.'

Section 9.2 of Appendix G (Parking Survey Report) describes the design impacts and the impact on the informal parking at St Annes Church which is adjacent to Shankill Roundabout and can be seen in Figure 3.271 and Figure 3.272.

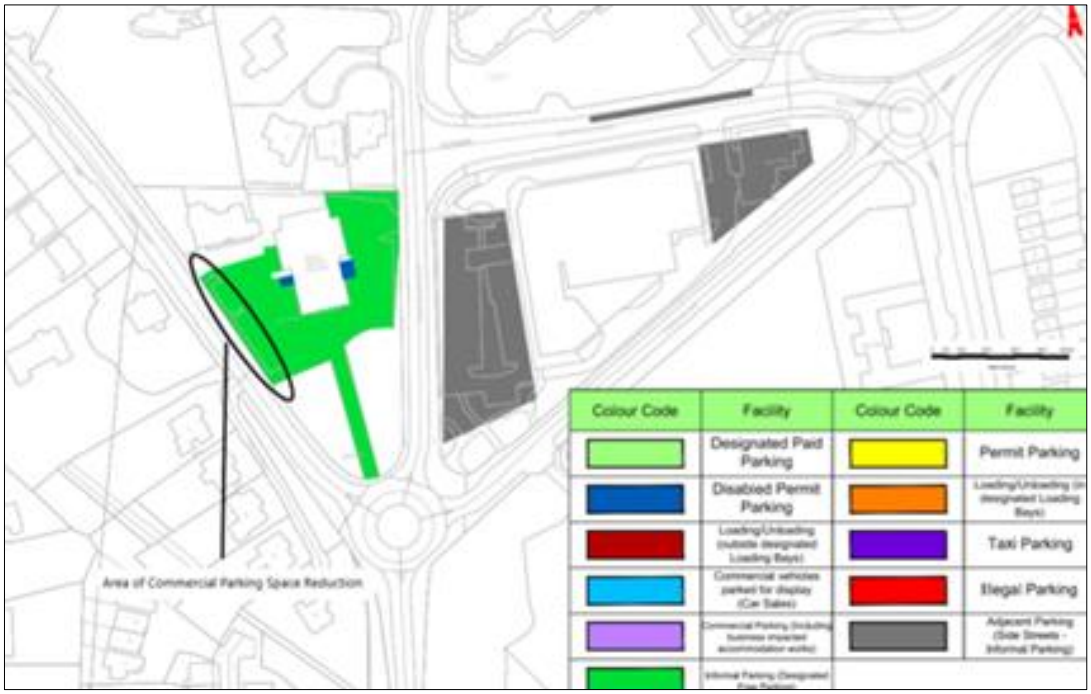


Figure 3.271: Extract from Appendix G (Parking Survey Report) (Figure 9.2)

Figure 3.272: Existing parking aerial view at St Annes Church and The Resource Centre on Dublin Road (Image Source: Google)

Figure 3.272 above shows that there will be no impact to the existing 83 parking spaces and 3 disabled parking spaces at St Annes Church as part of the Proposed Scheme proposals. The car park will be reconfigured to maintain existing number of car park spaces.

3.12.9.3.3 Impact to Property, Boundary Walls, Trees, Hedgerows and Biodiversity

Summary of issue raised

The submission raised concerns regarding the loss of land and the impact on the striking perspective of the church noting impacts to the boundary wall(s), gardens, loss of trees and the loss of mature hedgerows.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in Paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from St Anne's Church and the Resource Centre is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.273. The permanent land take is shown in Plot 1095(2).2i and 1095(3).2i and the temporary land take is shown in Plot 10795(1).1i.

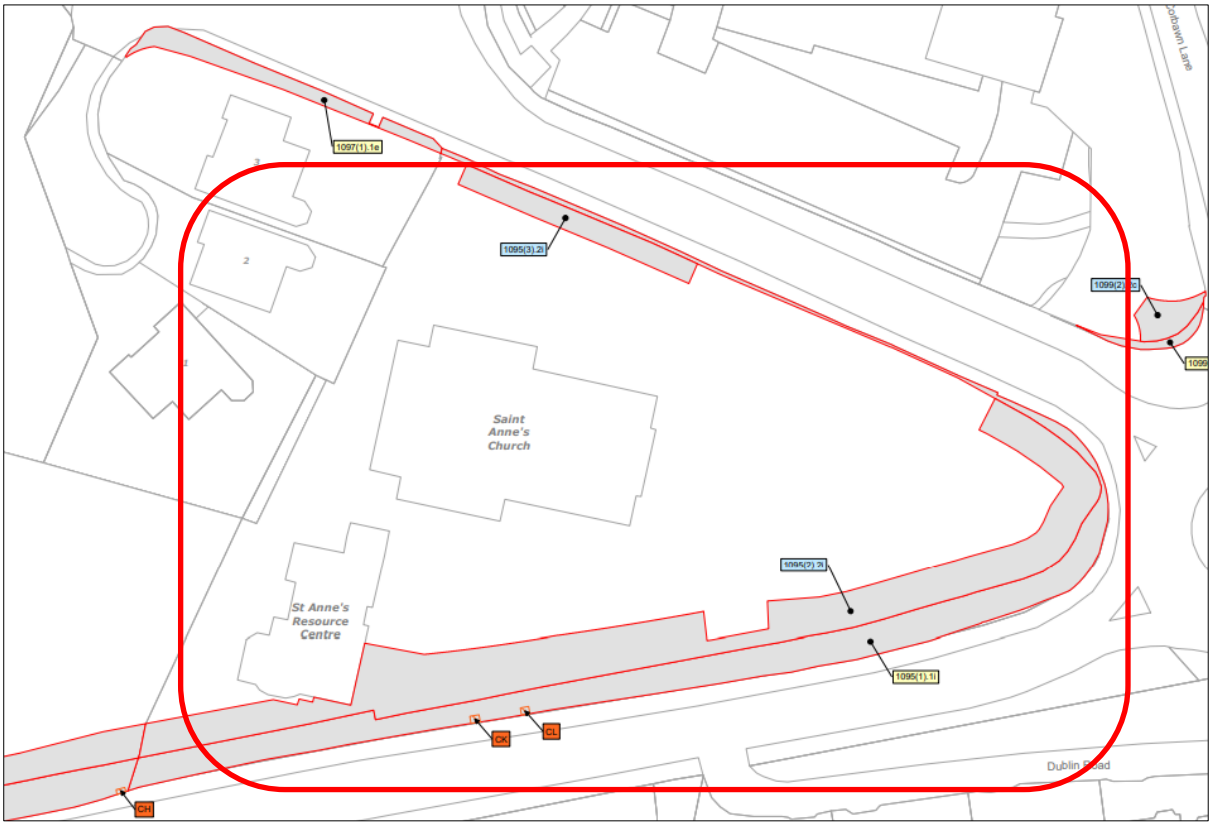


Figure 3.273: Extract from Deposit Map at St Anne's Church on Dublin Road (Sheet 10)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath, and cycle track on Dublin Road, hence meeting the objectives of BusConnects, as shown in Figure 3.269 extract from 02-General Arrangement Drawing in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 43. The proposal at the location of the St Anne's Church is to widen the road on the eastern side to provide a continuous bus lane, bi-directional segregated cycle tracks (on the eastern side) and footpaths in both directions. The permanent land take will impact the churches boundary wall(s), hedgerows, Our Lady statue, gardens, and trees.

The proposed works would require set-back of the existing boundary wall at St Anne Church and The Resource Centre. As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, the reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

The Proposed Scheme Boundary Treatment design at the location of St Anne's Church is shown in the 07- Fencing and Boundary Treatment Drawing in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 43 and shown in Figure 3.274, which shows a continuous boundary wall set-back with the gate.

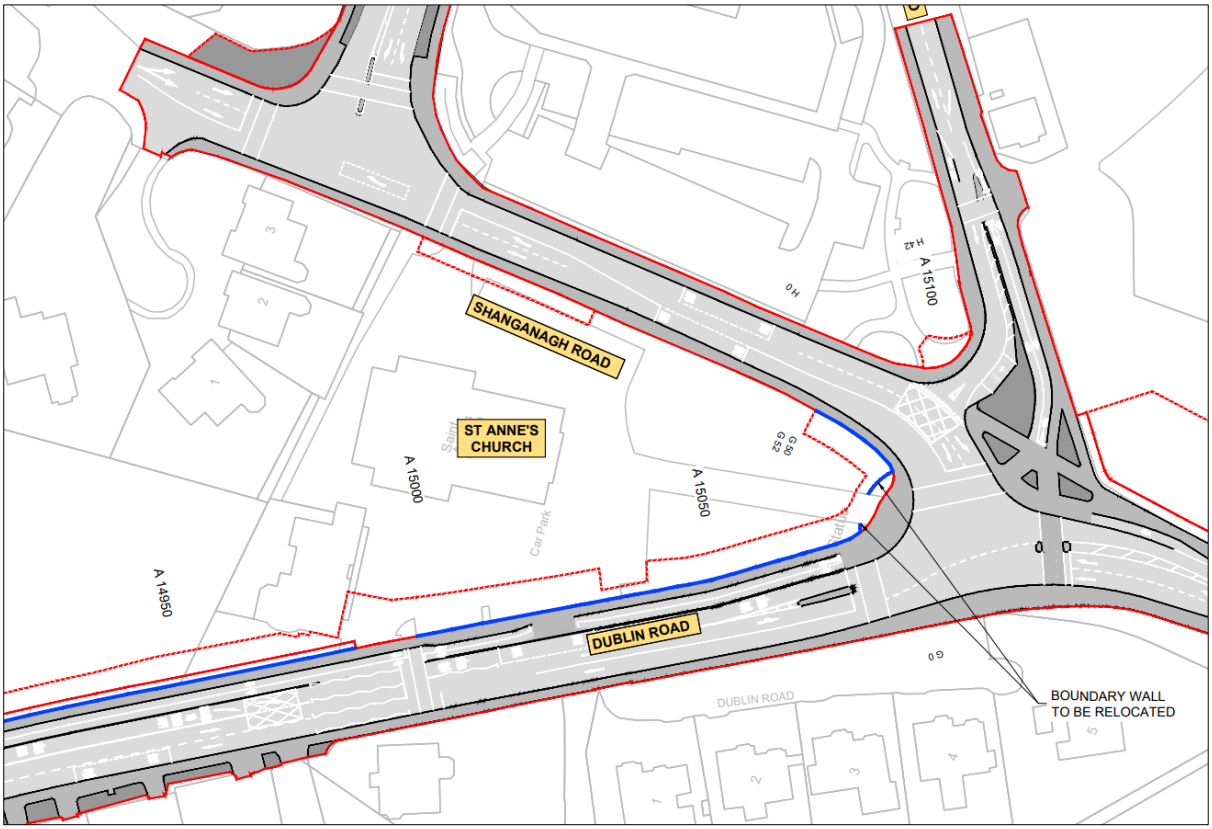


Figure 3.274: Extract from Boundary Treatment Drawing at St Anne's Church on Dublin Road (Sheet 43)

The Proposed Scheme would require loss of mature hedgerows along the existing boundary of the grounds to the church as well as a single wild cherry tree. This tree has been surveyed as a Category C tree with poor structural condition. New hedgerows are proposed along the new set back boundary of the church grounds as well as new flowering cherry trees to enhance the setting of the church as a local area enhancement. The Our Lady statue will be re-positioned along with any reinstatement of the affected grounds that are associated with the Proposed Scheme works.

The Proposed Scheme Landscape design at the location of St Anne's Church is shown in the 05-Landscape Drawings in Chapter 4 (Proposed Scheme Description) Volume 3, Part 1 of 3 of EIAR on Sheet 43 and is shown in Figure 3.275.

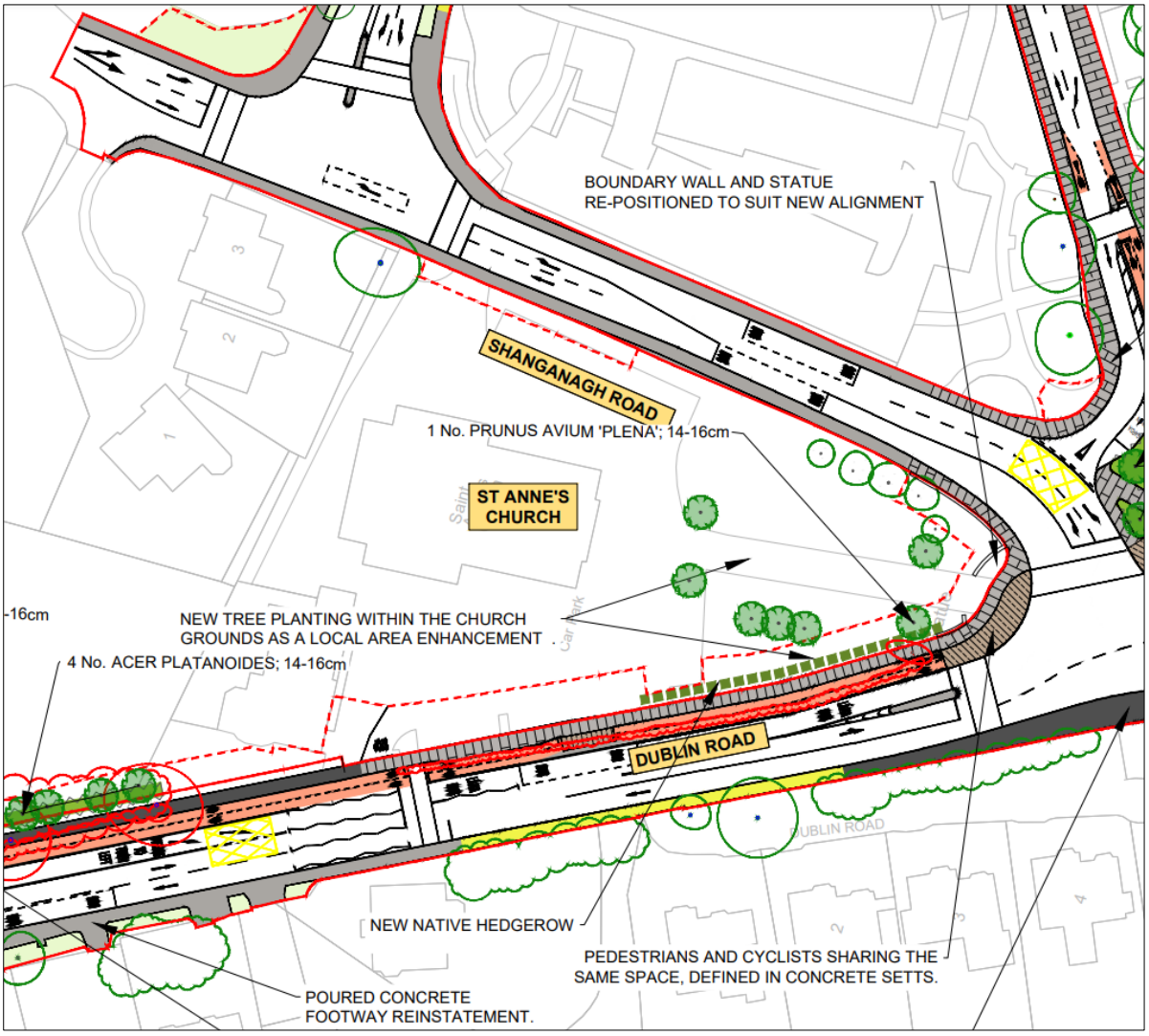


Figure 3.275: Extract from Landscape Drawings at St Anne's Church on Dublin Road (Sheet 43)

The CPO of lands at St Anne's Church will result in further consultation with the landowner / parish to ensure all boundaries and other aspects of the church affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual in Volume 2 of the EIAR states: 'W*here properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

Section 4.5.3.8 Chapter 4 (Proposed Scheme Description) Vol 2 of EIAR notes the following on the proposed urban realm at St Anne's Church.

'Image 4.11 shows an example of how the urban realm improvements could be undertaken in the accommodation works area associated with St Anne's Church. The church forecourt and grounds can be redesigned to adjust the parking layout to ensure no net loss of spaces as well as including a tree avenue towards the southern elevation. A new stone boundary wall and associated ornamental planting and concrete paving can be created as a focal point at the pedestrian entrance to accommodate the re-positioned statue. The surrounding footways that form part of the Proposed Scheme are to be reinstated with concrete paving and kerbs will match existing.

Image 4.11: St Anne's Church Grounds

3.12.9.3.4 Increase in Traffic in Shankill and Corbawn Lane

Summary of issue raised

The submission raised concern regarding the impact of the Proposed Scheme and therefore the associated traffic movements due to implementing the Proposed Scheme. Specific concerns around rerouting all traffic in and out of the Corbawn area therefore rendering Corbawn Lane unused / redundant. The submission also notes the past proposals of a similar design implemented which lasted a year before the previous existing situation was re-implemented.

Response to issue raised

Refer to Section 3.9.3.5 on Impact on Traffic Flows, Speed Limit, and Traffic Calming of this report.

Refer to Section 3.9.3.4.3 on Signalisation of Dublin Road / Shanganagh Road / Corbawn Lane Junction (St Anne's Roundabout) of this report for further details on the impacts of signalisation of St Anne's Roundabout.

3.12.9.3.5 Lack of Consultation and Engagement

Summary of issue raised

As part of the submission, it was noted that there has been no public engagement with the residents of Shankill and therefore it is not possible to understand the basis of the changes proposed for Shankill as part of the Proposed Scheme.

Response to issue raised

Refer to Section 3.9.3.15 on Public Consultation and Engagement of this report for further information on Consultation and Engagement.

3.12.10 165 & 166 – Rathmichael National School & Rathmichael Parish School

3.12.10.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, between Loughlinstown Roundabout and Stonebridge Road, it is intended to provide a bus lane and general traffic lane in both directions. Where bus lanes are not continuous, Signal Controlled Bus Priority has been provided.

Segregated cycle tracks are not proposed to be provided between Loughlinstown Roundabout and Stonebridge Road along the Proposed Scheme. It is intended to provide a two-way cycle track from Stonebridge Road on the Dublin Road as far as the Shanganagh Road junction, and on Stonebridge Road as far as Stonebridge Lane to provide a cycle link to the two schools on Stonebridge Road.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 42 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.276.

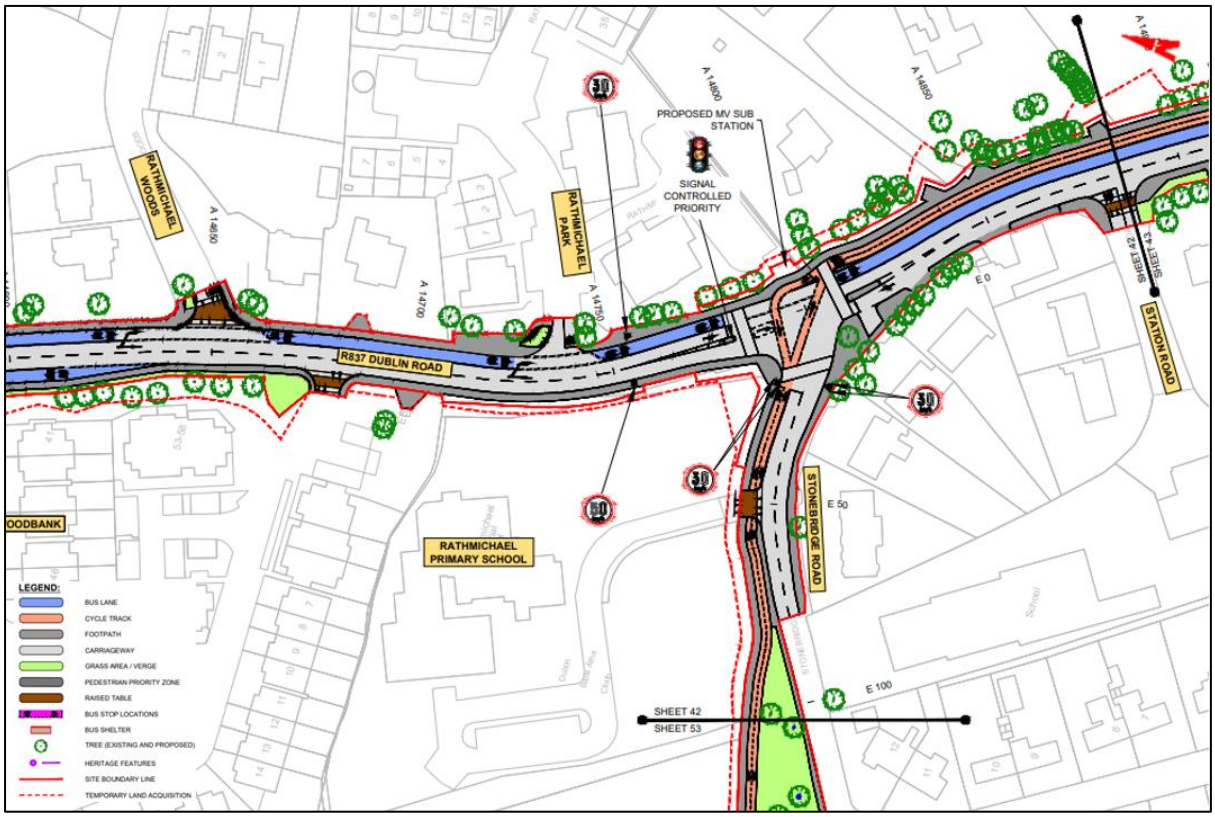


Figure 3.276: Extract from General Arrangement Drawing at Dublin Road & Stonebridge Road (Sheet 42)

3.12.10.2 165 – Rathmichael National School

The submission raises seven potential issues:

1) Quality of Maps and Plans
2) Impact on Boundary Wall and Planting
3) Concern for Impact on School Facilities
4) Proposed Outdoor Canopy
5) Impact to Cycling Infrastructure
6) Construction Management

7) Oral Hearing Request

3.12.10.2.1 Quality of Maps and Plans

Summary of issue raised

The submission raised concerns regarding the accuracy of maps and the areas of land acquisition in the CPO schedules submitted to ABP due to the dense planting around the boundaries and consequently the absence of a measured survey of the positions of the existing boundary walls and fences.

Response to issue raised

The General Arrangement drawings are displayed on Ordnance Survey mapping which is regularly updated by Ordnance Survey Ireland. Whilst the designs are displayed on this mapping, up-to-date and detailed topographical survey of all areas within the proposed site boundary has been undertaken to inform the design development.

3.12.10.2.2 Impact to Boundary Wall and Landscape Due to the CPO

Summary of issue raised

The submission commented on the replacement of the boundary and retaining walls as part of the Proposed Scheme and raised concerns with the minimal amount of detail given regarding their finish, in reference to this the submission requests that the details of the finishes of the two proposed retaining walls are agreed to its satisfaction prior to any construction works commencing.

The submission also noted that a detailed landscape plan and planting specification for the boundaries with the school which provided for native planting that will promote the reestablishment of the existing native flora and fauna habitat is agreed to its satisfaction.

Response to issue raised

As set out in Paragraph 2 of the statutory notice which was served, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme cross-section as presented in an Appendix in 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, in Part 1 of 3 of the EIAR on Sheet 42 Figure 3.276 above under Proposed Scheme Description. As part of the proposed works both permanent and temporary land take is required to facilitate the proposed scheme cross-section along the Dublin Road.

The permanent and temporary land take required at this location is shown in the Deposit Maps, as shown in Figure 3.277. The permanent land take is shown in 1104(1).1h, 1104(2).1i, 1104(3).1i, 1104(4).1i, and 1106(1).1i. The temporary land take is shown in 1104(5).2h, 1104(6).2i, and 1106(2).2i.

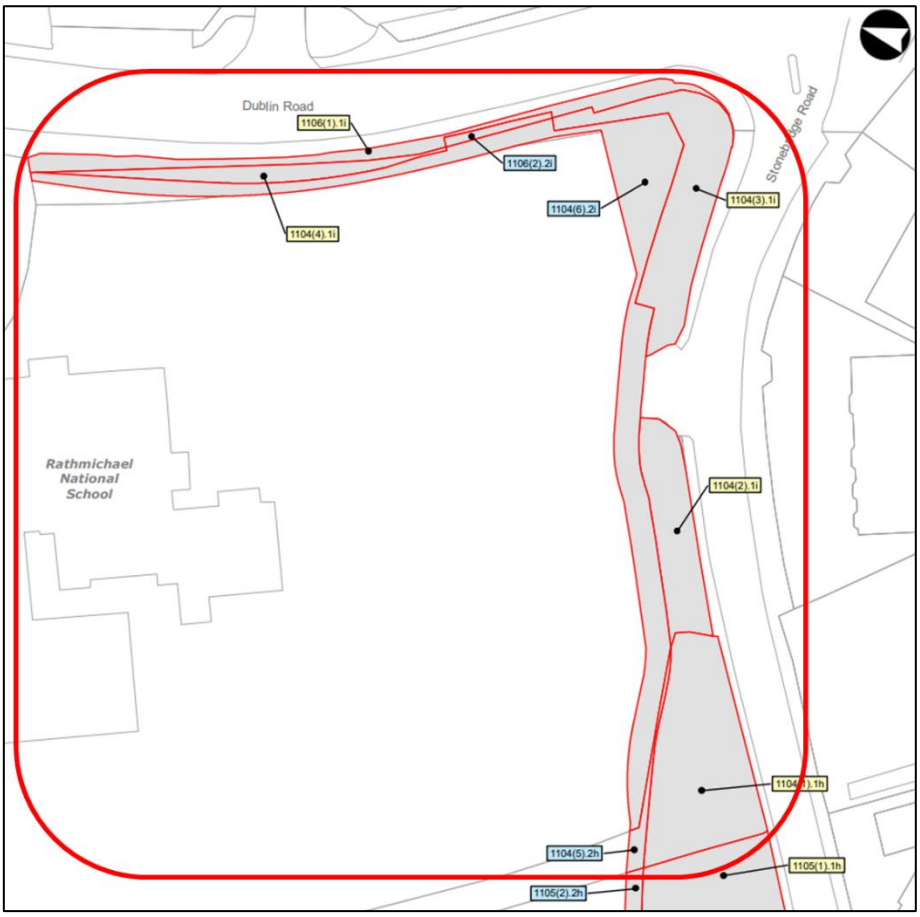


Figure 3.277: Extract from CPO Deposit Maps at Dublin Road (Sheet 11)

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/and or accommodation works. Temporary land take will be returned back after construction, reinstated in the same condition as existing.

For this specific area, the proposed the boundary treatment is presented as an Appendix in 07-Fencing and Boundary Treatment Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, in Part 1 of 3 of the EIAR on Sheet 42 and shown in Figure 3.278. The drawing indicates a proposed Reinforced Concrete Retaining Wall beginning at Chainage E10 along Stonebridge Road and ending at Chainage A14770 on the Dublin Road to match the existing arrangement. Elsewhere on the boundary of the property along the Dublin Road, the drawing indicates that a boundary wall and fence are proposed to replace the existing boundary arrangement.

Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

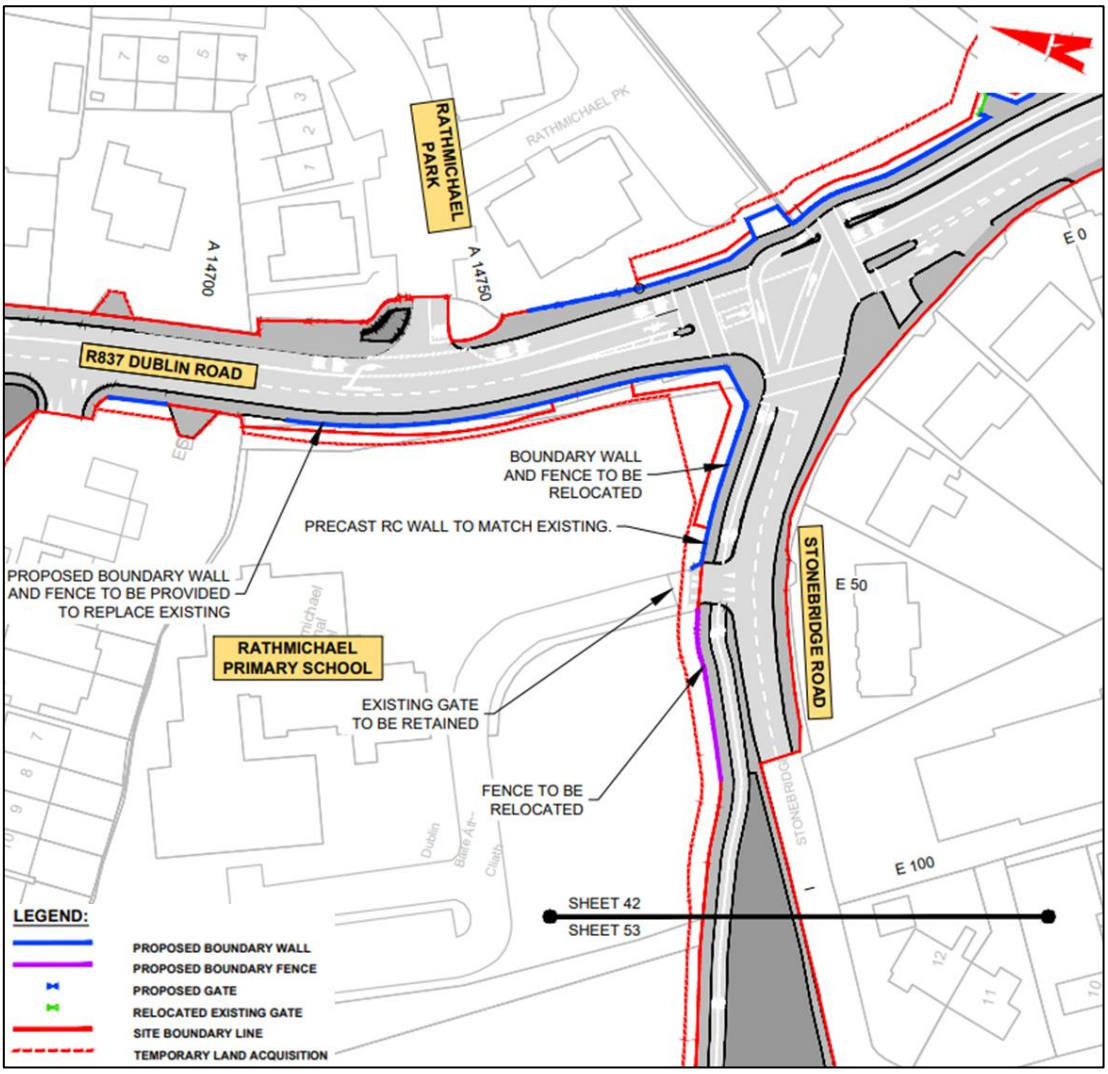


Figure 3.278: Extract from Fencing and Boundary Treatment Drawings at Rathmichael Parish School (Sheets 42)

Section 4.6.8 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR summarises the proposed structures in Table 4.29 including proposed retaining walls, which indicates a proposed Reinforced Concrete Retaining Wall beginning at Chainage E10 along Stonebridge and ending at Chainage A13770 along the perimeter of the property to match the existing arrangement. A retained earth embankment structure is proposed for the boundary of the property adjacent to the Dublin Road beginning at Chainage A14700 and ending at Chainage A14750. The structures for the Proposed Scheme are presented in 18-Structure General Arrangement Drawing Sheet 43 Chapter 4 (Proposed Scheme Description) Vol 3 Part 2 of 3 of EIAR, as shown in Figure 3.279.

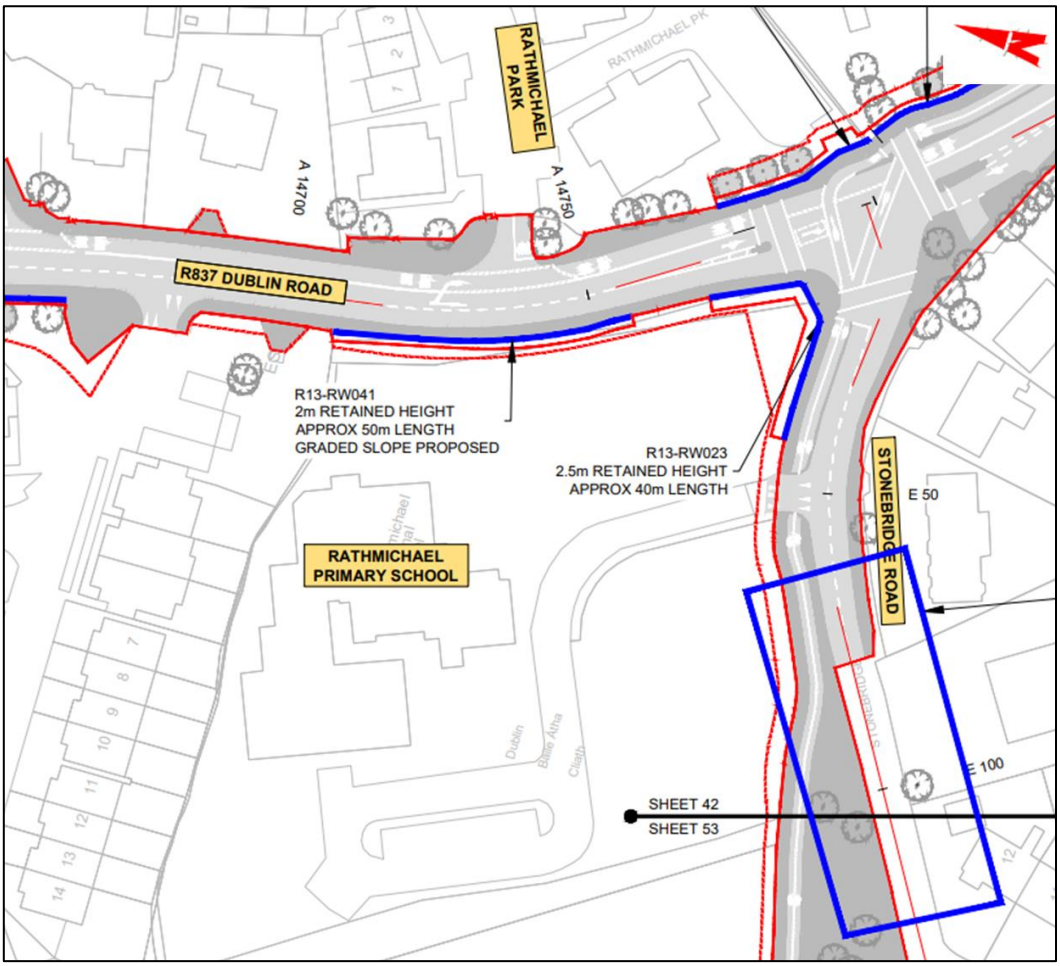


Figure 3.279: Extract from Structures General Arrangement Drawings – (Sheets 42)

The Landscaping General Arrangement drawings (drawing set 05 accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape design for the Proposed Scheme at Rathmichael School is shown on Sheet 42 (see Figure 3.280 below).

Figure 3.280 shows a band of "Proposed Ornamental Planting" around the southern and eastern edge of the school grounds, and includes the following note on the proposed boundary planting at the school:

'*New ornamental planting to back of retaining wall. Detail to be agreed with school*.'

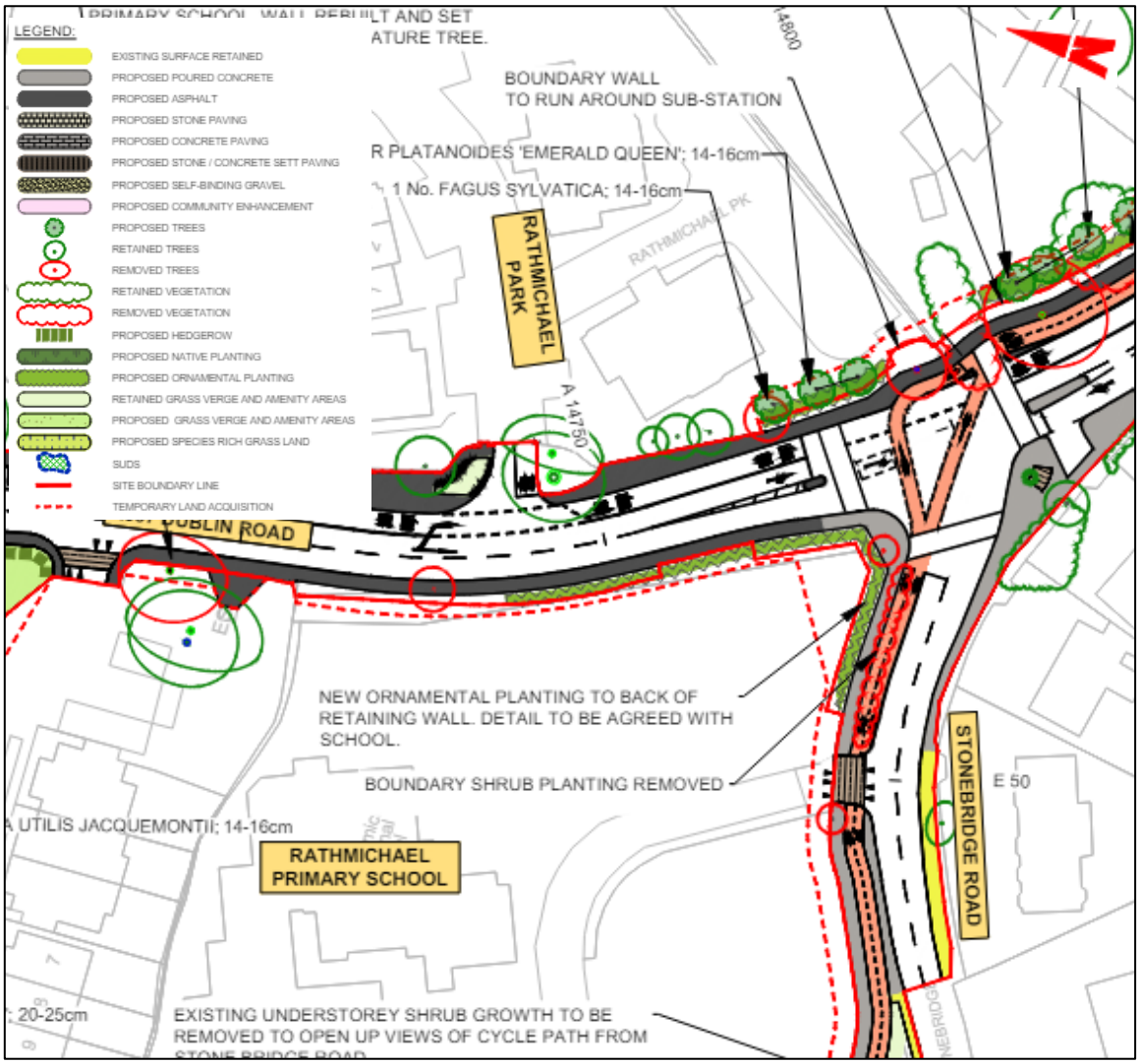


Figure 3.280: Extract from Landscaping General Arrangement Drawings (Sheet 42)

3.12.10.2.3 Concern for Impact on School Facilities

Summary of issue raised

The submission raised concerns regarding the impact to the school not being fully recognised due to the high level and scale of the maps and drawings. The CPO on Dublin Road will permanently acquire land and temporarily acquire land abutting the multiuse games area.

Response to issue raised

Section 10.4.3 of Chapter 10 (Population) of Volume 2 of the EIAR provides details of the construction phase impacts on communities. The land take impacts on community facilities during the construction phase are shown in Table 10.9 of Section 10.4.3 of the EIAR and shown in Table 3.74.

Table 3.74: Extract from EIAR Chapter 10 (Table 10.9)

Community Area	Nature of Effect / Number of Community Facilities Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Booterstown	0	2	2	0
Cabinteely	0	2	0	0
Donnybrook	0	1	1	0
Foxrock	0	2	0	0
Kilmacud - Stillorgan	0	3	0	0
Little Bray	0	6	2	0
Mount Merrion	0	4	0	0
Shankill	0	3	7	0
University (Newman) Church	0	1	0	0
TOTAL	**0**	**24**	**12**	**0**

Table 3.74 shows that no community facilities are expected to experience significant land take impacts during the Construction Phase of the Proposed Scheme. However, Rathmichael National School is expected to experience a Negative, Moderate and Short-Term impact during the Construction Phase.

Section 10.4.4 of Chapter 10 (Population) of Volume 2 of the EIAR provides details of the operational phase impacts on communities. The land take impacts on community facilities during the operation phase are shown in Table 10.12 of Section 10.4.3 of the EIAR, and shown in Table 3.75.

Table 3.75: Extract from EIAR Chapter 10 (Table 10.12)

Community Area	Nature of Effect / Number of Community Facilities Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Booterstown	0	2	0	0
Cabinteely	0	1	0	0
Donnybrook	0	0	1	0
Foxrock	0	2	0	0
Kilmacud - Stillorgan	0	2	0	0
Little Bray	0	5	2	0
Mount Merrion	0	4	0	0
Shankill	0	4	6	0
TOTAL	0	20	9	0

Table 3.75 shows there are no community facilities that are expected to experience significant permanent landtake during the Operational Phase of the Proposed Scheme. However, Rathmichael National School is expected to have Negative, Moderate, Long-Term impacts during the Operational Phase.

NTA notes the concern on the impact to the Rathmichael National and in particular the sports pitches within the School ground. The sports pitch and the residual impacted working area part of the temporary land take will be reinstated and returned back to the School post completion of construction works. Figure 3.281 below shows Aerial view of the School ground with the Proposed Scheme land take and demonstrates that the sports pitch will not be impacted during the works as part of permanent land take.

Figure 3.281: Existing Aerial View at Stonebridge Road

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

NTA acknowledge positive and constructive liaison with the Rathmichael Primary School through the design stage. These are matters that can be successfully addressed between the Rathmichael Primary School and the NTA.

3.12.10.2.4 Proposed Outdoor Canopy

Summary of issue raised

The submission noted that planning permission has been granted as of May 2023 for the construction of an outdoor canopy in the northeastern corner of the property adjacent to the Proposed Scheme boundary. The submission notes that this has not been factored into the Proposed Scheme design and that they require notice that the canopy will not be impacted by the construction of the Proposed Scheme.

Response to issue raised

The NTA notes planning permission has been granted as of May 2023 for the construction of an outdoor canopy in the northeastern corner of the property adjacent to the Proposed Scheme boundary which will not be impacted by the Proposed Scheme.

NTA acknowledge positive and constructive liaison with the Rathmichael Primary School through the design stage. These are matters that can be successfully addressed between the Rathmichael Primary School and the NTA.

3.12.10.2.5 Impact to Cycle Infrastructure

Summary of issue raised

The current layout raised concerns within the submission due to the lack of segregated cycle tracks on Dublin Road, as well as cycle connections from the local schools to the wider area, the Proposed Scheme only connects the two schools by cycle lane. The submission further notes the lack of segregated cycle facilities on Corbawn Lane or through the village centre, which therefore do not provide access to the school for children by bike. The submission notes that as these cycle tracks do not form part of a larger network, their benefit to connectivity has not been assessed or justified, therefore it is unsure to if they are needed.

Response to issue raised

Refer to response in Section 3.9.3.7 on the Impact on Cycle Infrastructure in this report for further details on impacts to cycle infrastructure and impacts to cycling-related safety in Shankill.

3.12.10.2.6 Construction Management

Summary of issue raised

The submission raised concern regarding the works impacting the school during its operational times over the 12 month period. It is noted in the submission that EIAR notes the Proposed Scheme as a Noise Sensitive Location. The impact to the School is suggested to be a significant to very significant impact. The submission therefore considers the construction environmental management plan laid out in the CEMP (Appendix 5.1 of Volume 4 of the EIAR) is not appropriate.

The submission commented on the impact to the students, commenting that their ability to take part in extracurricular activities must be maintained.

The respondent requests that a specific and detailed construction environmental management plan (CEMP) for works around and on the school grounds is put in place before the works commence, it also requests that the Board of Management is engaged by the appointed contractor from the outset in the preparation of this plan.

Response to issue raised

Section 5.3.3.3 of Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities between Loughlinstown Roundabout and Shanganagh Road.

The expected construction duration for Section 3a (Loughlinstown Roundabout and Shanganagh Road) will be approximately 12 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3. The duration of the works will vary from property to property, but access and egress will be maintained at all times. An indicative Proposed Scheme construction programme is shown in Table 5.2 of Section 5.4 and shown in Table 3.76 below as Section 3a.

As described in Section 5.5.3.2 of Chapter 5 of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

Table 3.76: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

A Construction Environmental Management Plan (CEMP) is included as Appendix A5.1 in Volume 4, Part 1 of 4 of the EIAR. As stated in the CEMP's Introduction, '*The CEMP comprises the construction mitigation measures, which are set out in the EIAR, and the Natura Impact Statement (NIS), and will be updated to include any additional measures required pursuant to conditions attached to An Bord Pleanála's decision*'. Section 5.1.9 of the CEMP provides the schedule of environmental commitments where all of the mitigation and monitoring measures from the EIAR and NIS are described.

Noise mitigation measures are included in Table 5.2 (Mitigation Number NV1 to NV12) and include measures such as:

- Selection of quiet plant;
- Control of noise sources;
- Screening;
- Hours of work;
- Liaison with the public; and
- Monitoring.

As described in Section 9.5.1.3, Table 9.50 in Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR, following the implementation of the mitigation measures the impact significance drops to Negative, Slight to Moderate and Temporary at noise sensitive locations within 10-15m of the works, becoming Not Significant at distances greater than that during school time (Monday to Friday 07:00-19:00).

The CEMP also includes the following management plans:

- Construction Traffic Management Plan (Section 5.2);
- Invasive Species Management Plan (Section 5.3);
- Surface Water Management Plan (Section 5.4);
- Construction and Demolition Resource and Waste Management Plan (Section 5.5); and
- Environmental Incident Response Plan (Section 5.6).

Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Section 5.2 of the Construction Environmental Management Plan (CEMP) included in EIAR Volume 4 Appendix A5.1, contains the Construction Traffic Management Plan (CTMP). Section 5.2.1.2 of this document outlines the objectives of the CTMP as follows:

- *'Outline minimum road safety measures to be undertaken, including site access/egress locations, during the works;*
- *Provide measures that respond to all road user needs including public transport, pedestrians, cyclists and vehicular traffic;*
- *Ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme;*
- *Demonstrate to the NTA, the appointed contractor and suppliers, the need to adhere to the relevant guidance documentation for such works; and*
- *Identify objectives and measures for inclusion in the management, design and construction of the Proposed Scheme to control the traffic impacts of construction insofar as it may affect the environment, local residents and the public in the vicinity of the construction works.'*

Regarding the scheduling of construction works, the NTA will take into account the sensitivity of the school and will endeavour to schedule works in the vicinity of the school to take place outside of school hours or during holiday periods. Matters in this respect will be agreed between the NTA and the school board.

The areas affected by temporary land acquisition will be returned to the owners on completion of the works. As noted above, details regarding temporary access will be discussed with the landowners prior to construction starting. Where possible, works will be done in a phased manner.

3.12.10.2.7 Oral Hearing Request

Summary of issue raised

The submission requested that the Board hold and Oral Hearing.

Response to issue raised

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.12.10.3 166 – Rathmichael Parish School

3.12.10.3.1 Summary of Issues Raised

Refer to Section 3.12.10.2 (165 – Rathmichael National School) in this report for a summary of submissions raised.

3.12.10.3.2 Responses to Issues Raised

Refer to Section 3.12.10.2 (165 – Rathmichael National School) in this report for a summary of responses to submissions raised.

3.12.11 170 – Red Rock Donnybrook Ltd.

3.12.11.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor from Eglinton Terrace southwards to Eglinton Road a dedicated bus lane, segregated cycle track, and general traffic lane will be provided in each direction.

The Proposed Scheme design on Donnybrook Road is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and the extract is shown in Figure 3.282.

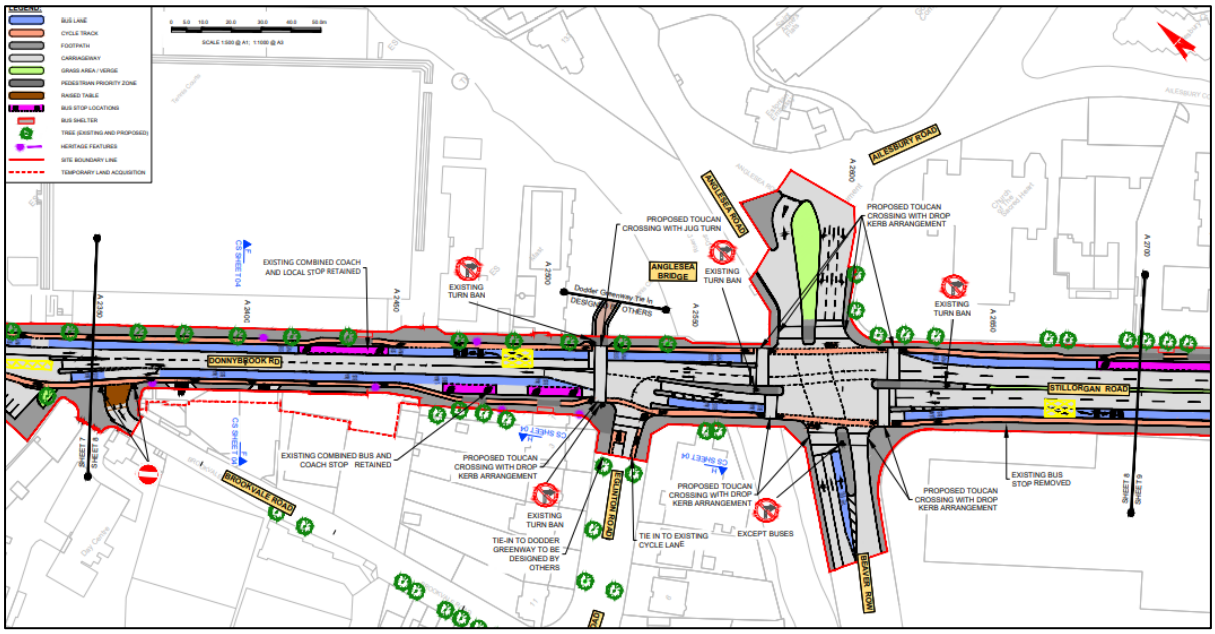


Figure 3.282: Extract from General Arrangement Drawing at Donnybrook Road (Sheet 08)

3.12.11.2 Summary of Issues Raised

The submission broadly welcomes the Proposed Scheme but requests Board to amend the application and CPO as applied as it relates to applicant's landholding (and excludes applicant's landholding from CPO), as both the Proposed Scheme and the proposed '2023 Purpose Build Student Accommodation Scheme' of Red Rock Donnybrook Ltd landholding (using the layout arrangements as previously agreed with the NTA) can be accommodated along the applicant's landholding on the Donnybrook Road.

On 11th August 2022, ABP granted permission for the development of the Built to Rent Scheme. Condition 10 of the ABP Oder included the specific requirements of interface with the Proposed Scheme as noted below:

'Condition no 10 of the Board's Order included the specific requirements which our client is happy to facilitate as part of the subject lands (and any current/ future development proposals.)

- *The development interface with the BusConnects proposals which shall be clearly depicted and made available in Irish Transverse Mercator ITM coordinates.*
- *Demonstration of how the building construction, operation and maintenance will be managed in relation to the overhang along Donnybrook Road with consideration towards safety and any proposed disruption to public space, bus, cycle and pedestrian movements.*
- *The footpath under the overhang shall be maintained free from all obstruction, such as advertising, seating, signs.*
- *The substratum under the proposed overhang, which shall be free from construction such as such as underground services, columns, pillars or any other obstruction and*
- *The provision of adequate public lighting.'*

The submission mentions that the Red Rock Development Ltd discussed requirements with NTA during the initial application and the appeal process and an agreed line for setback of the building line between applicant and NTA was provided at ground floor and basement level to ensure the proposed redevelopment of landholding would not prejudice future delivery of the Proposed Scheme. The submission notes that a similar arrangement can be accommodated for the Proposed 2023 Purpose Build Student Accommodation Scheme.

The submission notes that the Proposed 2023 Purpose Build Student Accommodation Scheme draft design takes into account the Proposed Scheme and the typical cross-section of 18.5m at this location has been accommodated in the developer's current designs. There are permanent works located within the Proposed Scheme permanent land acquisition area. This is shown in Figure 3.283.

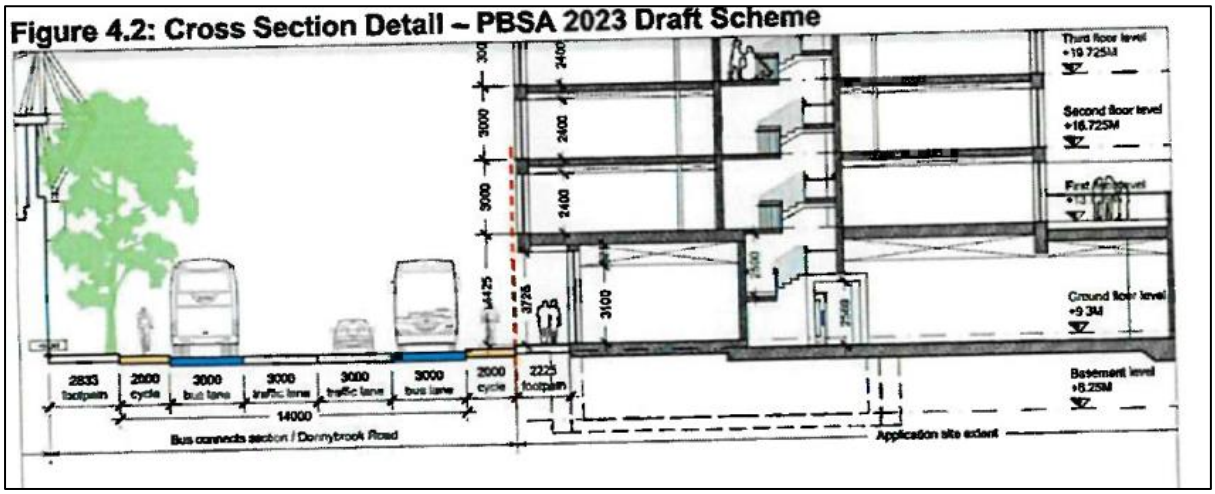


Figure 3.283: Extract of typical cross-section at Donnybrook Road at the Proposed Development

The submission requests that ABP takes into consideration the existing ABP Planning permission and agreed approach relating to the boundary of the proposed development which was previously agreed with the NTA and requests to exclude applicant's landholding from CPO.

3.12.11.3 Response to Issues Raised

The Proposed Scheme design at the Red Rock Donnybrook Ltd proposed '2023 Purpose Build Student Accommodation Scheme' landholding is shown in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.282 above.

In this submission, John Spain Associates on behalf of Redrock Donnybrook Ltd confirms its support for the Proposed Scheme and acknowledges the positive and constructive engagement with NTA and goes on to state on page 1 of the submission:

'At the outset our client broadly welcomes the Bray to City Centre Core Bus Corridor Scheme which will provide an enhanced high quality/frequency bus service along this key route and for the District Centre of Donnybrook.

Our Client is grateful for the engagement with the NTA and more recently our Client also engaged with the NTA in relation to the subject lands and a letter from NTA is included in the submission (Appendix 3).'

NTA acknowledges the positive and constructive liaison with Redrock Donnybrook Ltd and advised that the proposed '2023 Purpose Build Student Accommodation Scheme' would not prejudice the future delivery of the Proposed Scheme. The NTA have provided a letter of acknowledgement listing the conditions, as noted below:

The NTA response letter to Redrock Donnybrook Ltd dated 10th October 2023:

'In relation to the interface between the proposed development and the Bray to City Centre Core Bus Corridor Scheme on Donnybrook Road. The NTA are satisfied that the proposed development, as amended and indicated in the above drawings, would not prejudice the delivery of the CBC, subject to the following being addressed to the satisfaction of the planning authority:

1. *The development interface with the BusConnects proposals should be clearly depicted within the developer's planning application documentation and the design should be made available in ITM coordinates.*

2. *The developer should demonstrate how the building construction, operation and maintenance will be managed in relation to the overhang along Donnybrook Road with consideration towards safety and any proposed disruption to public space, bus, cycle and pedestrian movements.*

3. *Maintenance of the footpath under the overhang shall be free from all obstructions, such as advertising, seating, signs etc.*

4. *The provision of adequate public lighting.*

5. *The NTA as part of the Bray to City Centre Scheme intend to CPO the substratum under the proposed overhang, therefore there should be no construction in this area such as underground services, columns, pillars or any other obstructions.*

In undertaking our role as a statutory consultee under Article 28 of the Planning and Development Regulations (2001-1), the NTA reserves the right to submit further observations on other aspects of the proposed development at any subsequent stage of the planning process.'

The submission also raises queries in relation to the purposes for which the NTA has made the CPO. As set out in Paragraph 2 of the statutory notice which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is '*for the purposes of facilitating public transport*'.

The Proposed Scheme has been designed to deliver upon the Proposed Sheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Developer's landholding is shown in the Deposit Maps in Figure 3.284 Plot 1017(1).1c is the permanent land take and plot 1017(2).2c is the temporary land take.

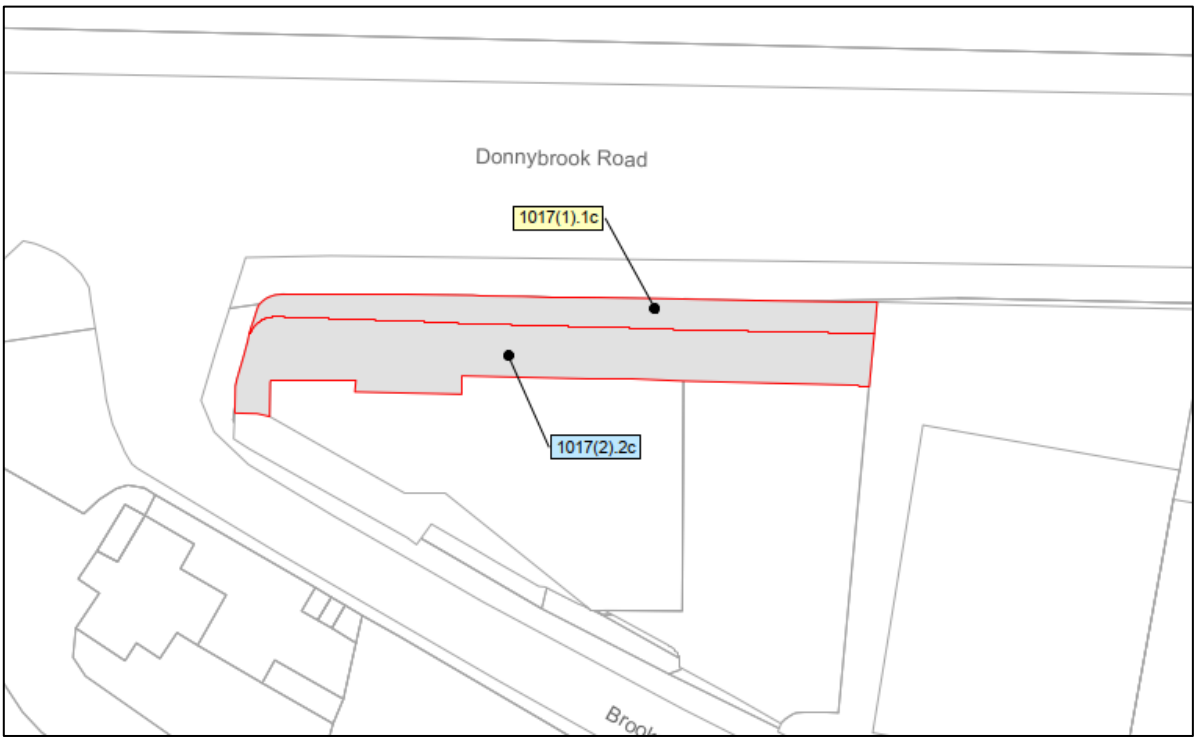


Figure 3.284: Extract from the CPO Deposit Map

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in Chapter 4 (Proposed Scheme Description), 02-General Arrangement Drawings in Volume 3, Part 1 of 3 of the EIAR.

The permanent land take is required to allow for the construction of the Proposed Scheme and achieve the Proposed Scheme standard cross-section at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The existing carriageway will be widened on the west side (within the Developer's landholding) to allow for bus lane, cycle track and footpath. The standard cross-section provided at this location is the optimum cross-section which meets the Design Guidelines Objectives in accordance with Section 2 (Figure 1) of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR. The Proposed Scheme typical cross-section at this location is shown in the Typical Cross Section Drawings Sheet 04 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR as shown in Figure 3.285.

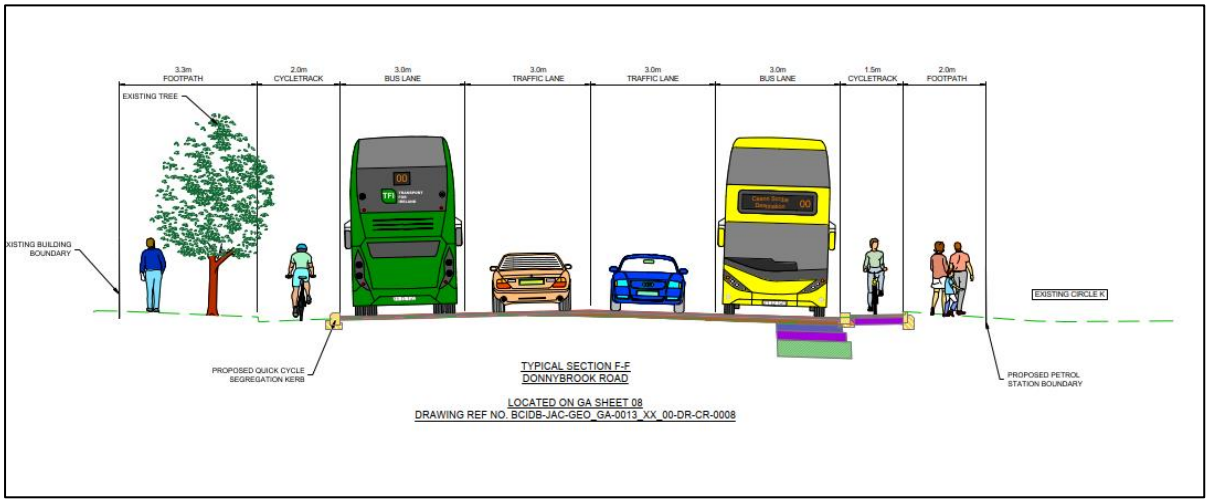


Figure 3.285: Extract from Typical Cross-section Drawing (Sheet 04)

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/ or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works.'

It goes on to state in Section 5.5.3.2 that:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

The NTA acknowledge the positive and constructive liaison that has occurred with the Red Rock Development Ltd throughout the design and planning process to date. These are matters that can be successfully addressed between the Red Rock Development Ltd and the NTA, in the absence of any approval condition.

3.12.12 171 – Religious Sisters of Charity

3.12.12.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor, it is proposed that single general traffic lanes, bus lanes and cycle lanes will run in both directions, toucan crossings will sit on both sides of the junction with Upper Dargle Road. A small section of two-way cycleway occurs on Dublin Road to the west of Lower Dargle Road, to link cyclists to the existing cycleway to the north of Dublin Road. A bus stop will be relocated on Castle Street closer to Upper Dargle Road.

The design for the Upper Dargle Road junction with the Dublin Road has removed the northbound left turn slip from the Dublin Road. The junction with the new road at Chapel Lane has also been upgraded to a signalised junction, including improved cycle and pedestrian movements.

The existing road cross section in this location provides a footpath on each side of the road with general traffic lanes in each direction, as well as cycle lanes on each side of the road. A signalised pedestrian crossing facilitates crossing at this location on Castle Street.

The Proposed Scheme along Dublin Road is shown in extracts from the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 51 and Sheet 52 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.286 and Figure 3.287.

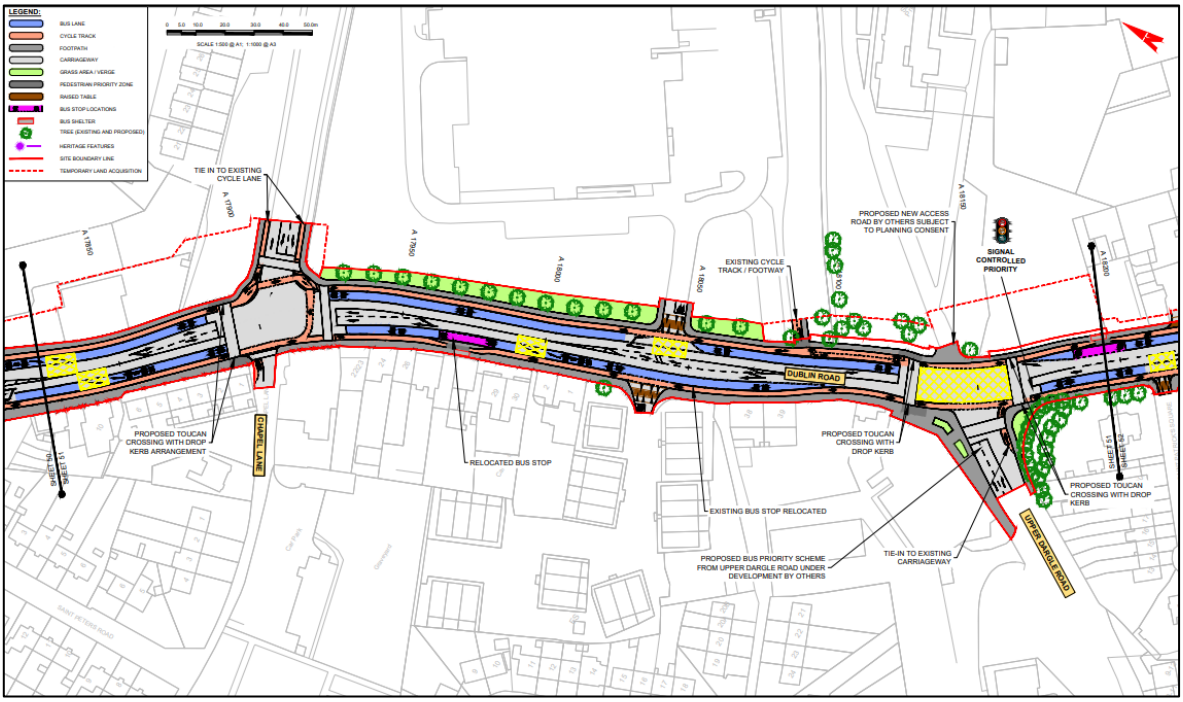


Figure 3.286: Extract from General Arrangement Drawing at North Wicklow Educate Together (Sheet 51)

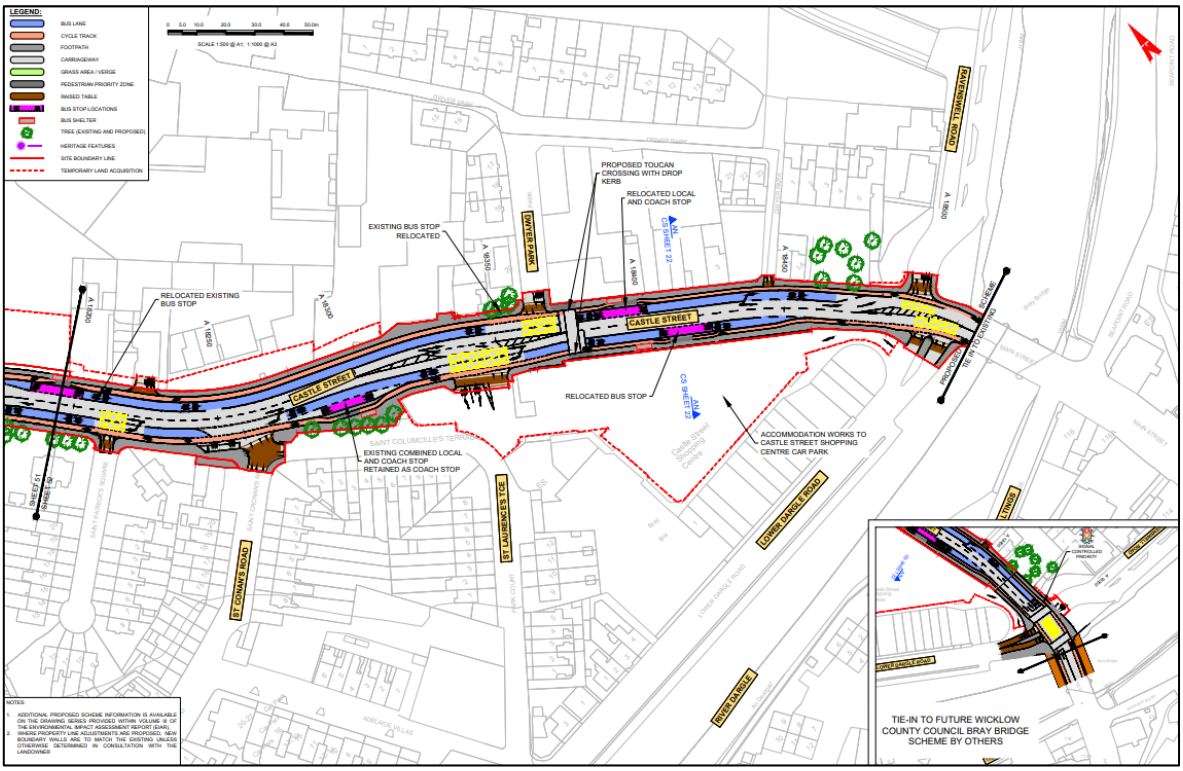


Figure 3.287: Extract from General Arrangement Drawing at North Wicklow Educate Together (Sheet 52)

3.12.12.2 Summary of Issues Raised

The submission raises three potential issues:

1) Insufficient Detail in Design
2) Temporary and Permanent Access
3) Impact on Future Development.

3.12.12.3 Responses to Issues Raised

3.12.12.3.1 Insufficient detail in design

Summary of issue raised

The NTA have not provided sufficient detail of the works to enable RSC Caritas CLG to fully consider the impact of the Proposed Scheme on the property.

Further detail is required, including continuity and reinstatement of any services.

Response to the issue raised

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum Proposed Scheme as presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

As part of the Proposed Scheme, the permanent land take is required to allow for the construction of the Proposed Scheme and achieve the Proposed Scheme standard cross-section at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The existing carriageway will be widened on the east side along Dublin Road to allow for bus lane, cycle track, footpath, and junction design. The standard cross-section provided at this location is the optimum Proposed Scheme cross-section which meets the Design Guideline Objectives in accordance with Section 2 (Figure 1) of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR. The Proposed Scheme typical cross-section at this location is shown in the Typical Cross Section Drawings as an Appendix 04-Typical Cross-section Drawing Sheet 22 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR as shown in Figure 3.288.

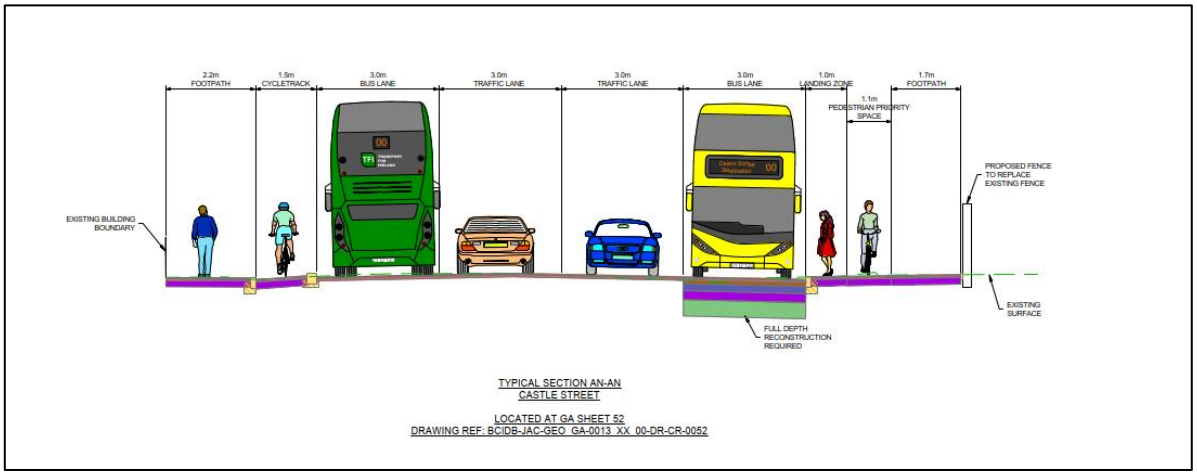


Figure 3.288: Extract from Typical Cross-section Drawing (Sheet 22)

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/and or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

The Proposed Scheme design at the location of the North Wicklow Educate Together is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 51 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 and is shown in Figure 3.286. The permanent and temporary land take required at this location is shown in the Deposit Maps, as shown in Figure 3.289, and details listed in the CPO Schedule.

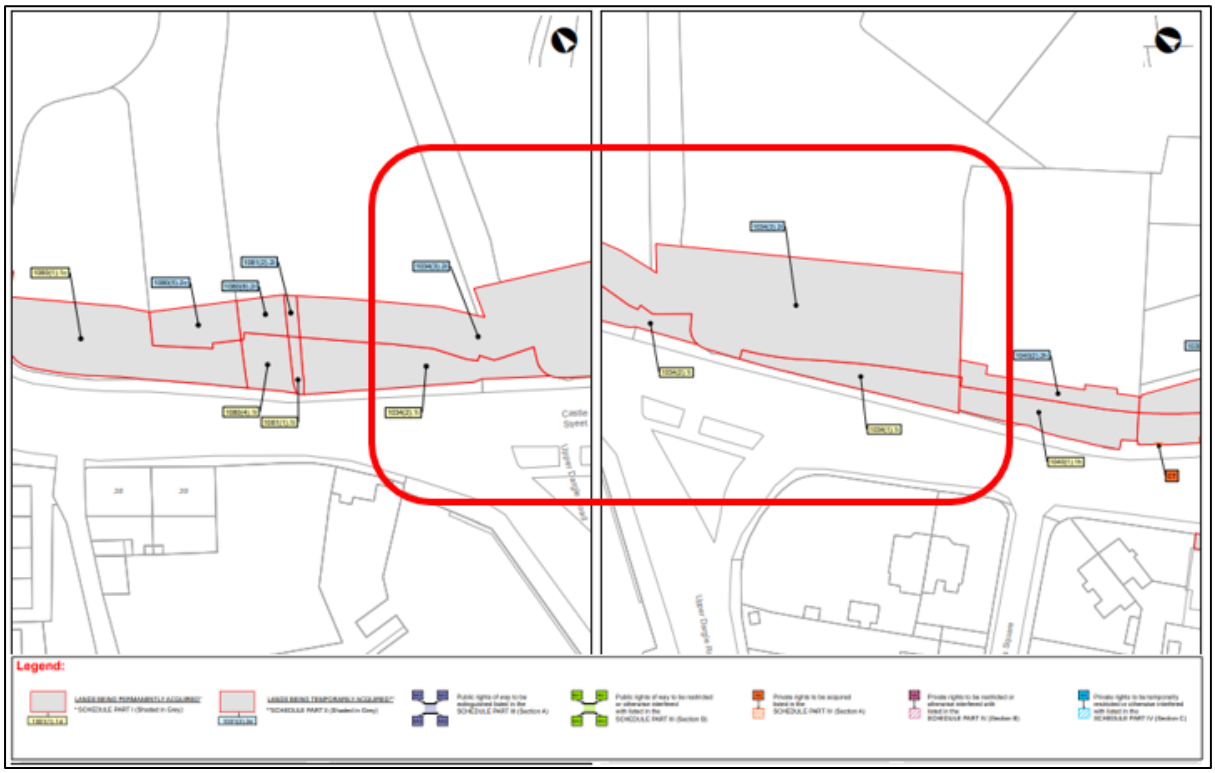


Figure 3.289: Extract from CPO Deposit Maps at North Wicklow Educate Together (Sheets 01 and 02)

The EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the *"precise details of the proposed construction works"* and all of the *"proposed ancillary and consequential works for the Braay to City Centre Core Bus Corridor Scheme"*

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 4.5.4 notes details for the Section 4 Bray North to Bray South.

The design details are also shown in Chapter 4 (Proposed Scheme Description) Part 1 and Part 2 of 3 Figures in Volume 3 of the EIAR.

Chapter 5 (Construction) in Volume 2 of the EIAR describes the construction activities along the Proposed Scheme.

Additionally, Preliminary Design Report and the associated Appendices of the PDR, part of Supplementary information, also gives description of the design details of the Proposed Scheme.

The design of the Proposed Scheme has been developed to a stage where all potential environmental impacts can be identified, and a fully informed environmental impact assessment has been carried out.

An overview of the EIAR and its main findings are included in the Non-Technical Summary in Volume 1 of the EIAR. A summary list of all predicted significant residual impacts is provided in Chapter 23 (Summary of Significant Residual Impacts) in Volume 2 of the EIAR.

Refer to Section Adequacy of Environmental Assessment in this report for further information on the Environmental Impacts.

Details of the proposed design at the location in question can be seen in Figure 3.290, Figure 3.291, Figure 3.292, and Figure 3.293 below.

Figure 3.290: Existing aerial view at North Wicklow Educate Together with Proposed Land Acquisition

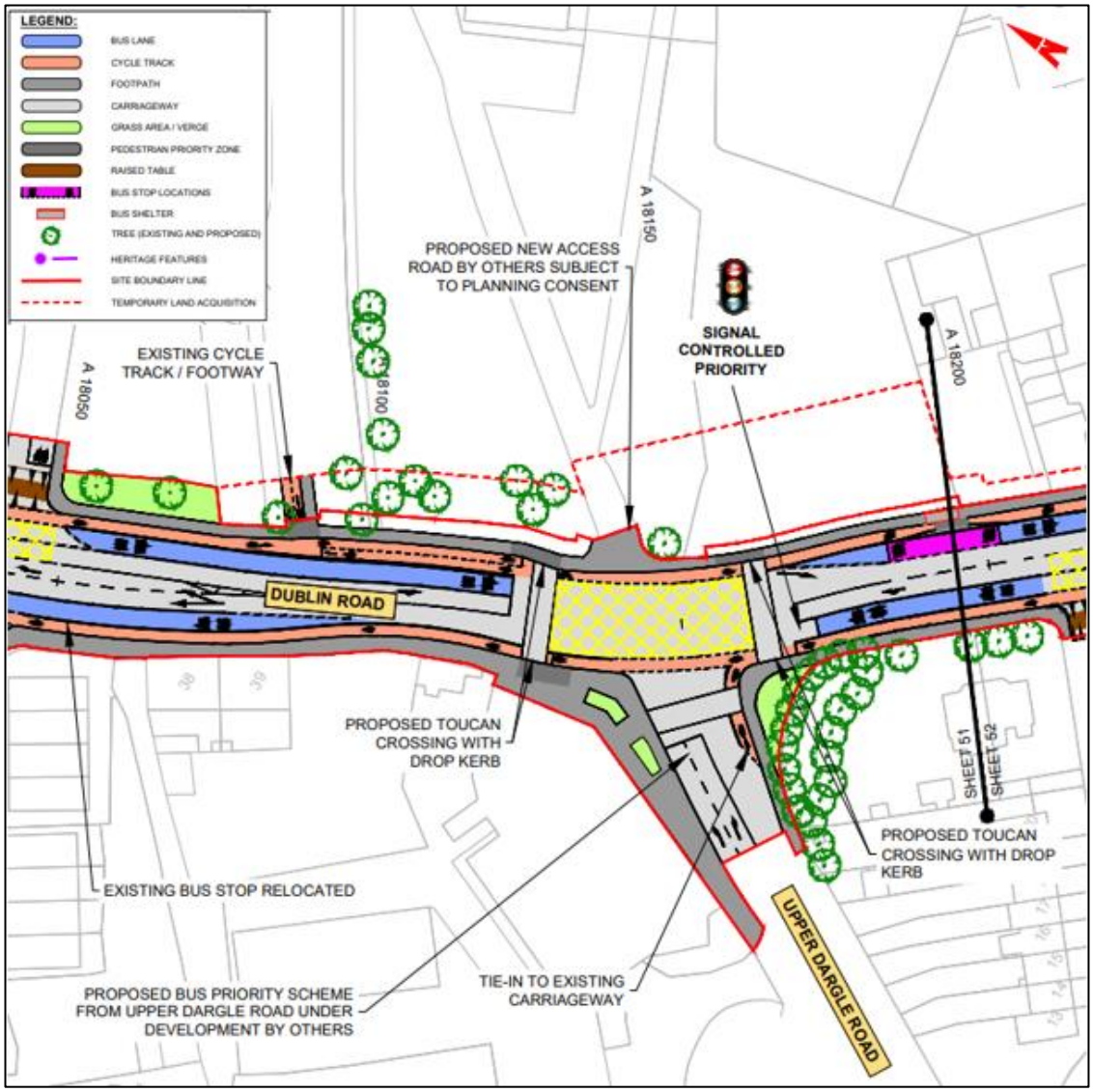


Figure 3.291: Extract from General Arrangement Drawing at North Wicklow Educate Together (Sheet 51)

Figure 3.291 above shows the tie-in to proposed new access road by others, subject to planning permission.

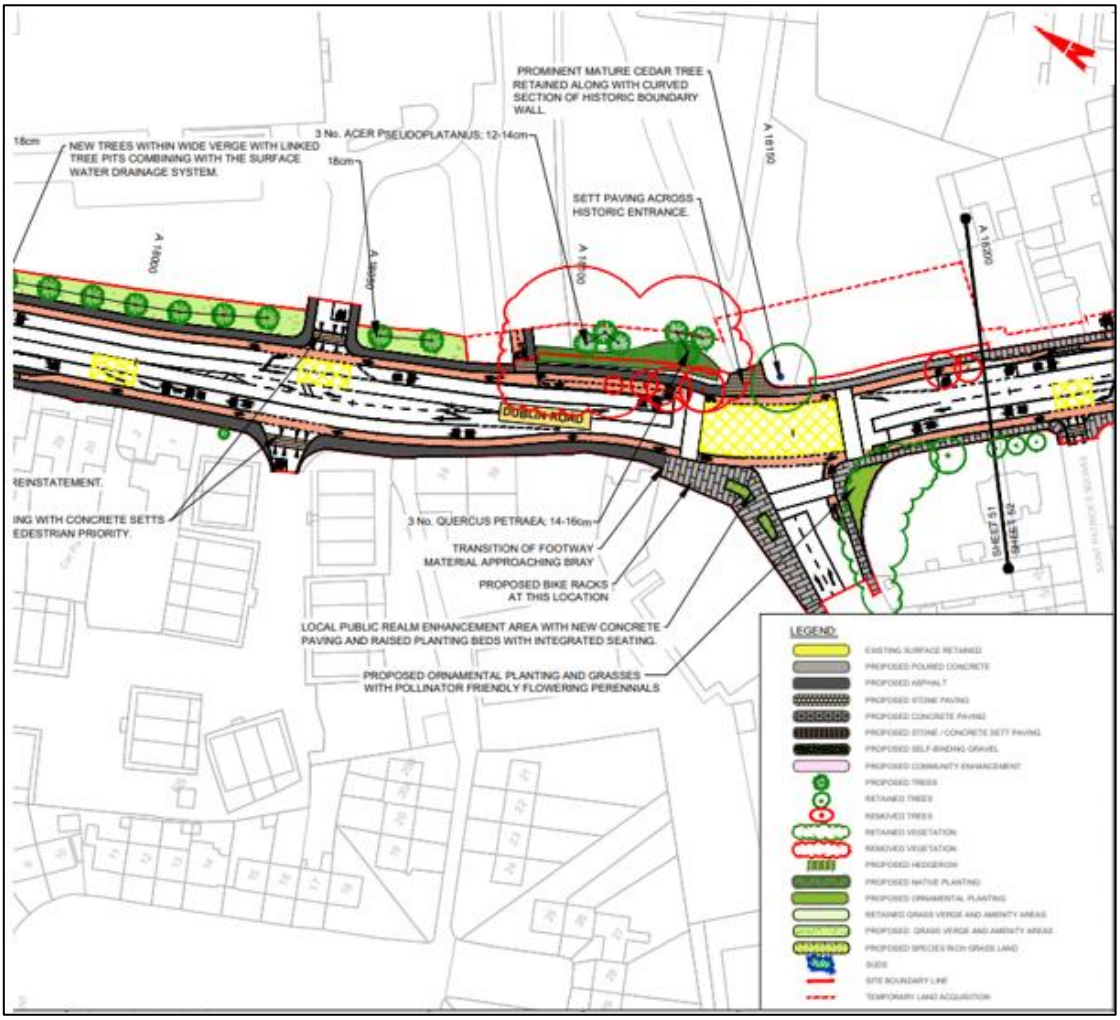


Figure 3.292: Landscaping General Arrangement Drawing at North Wicklow Educate Together (Sheet 51)

Figure 3.292 above shows the *'Prominent mature cedar tree retained along with curved section of historic boundary wall'* to the front of the North Wicklow Educate Together.

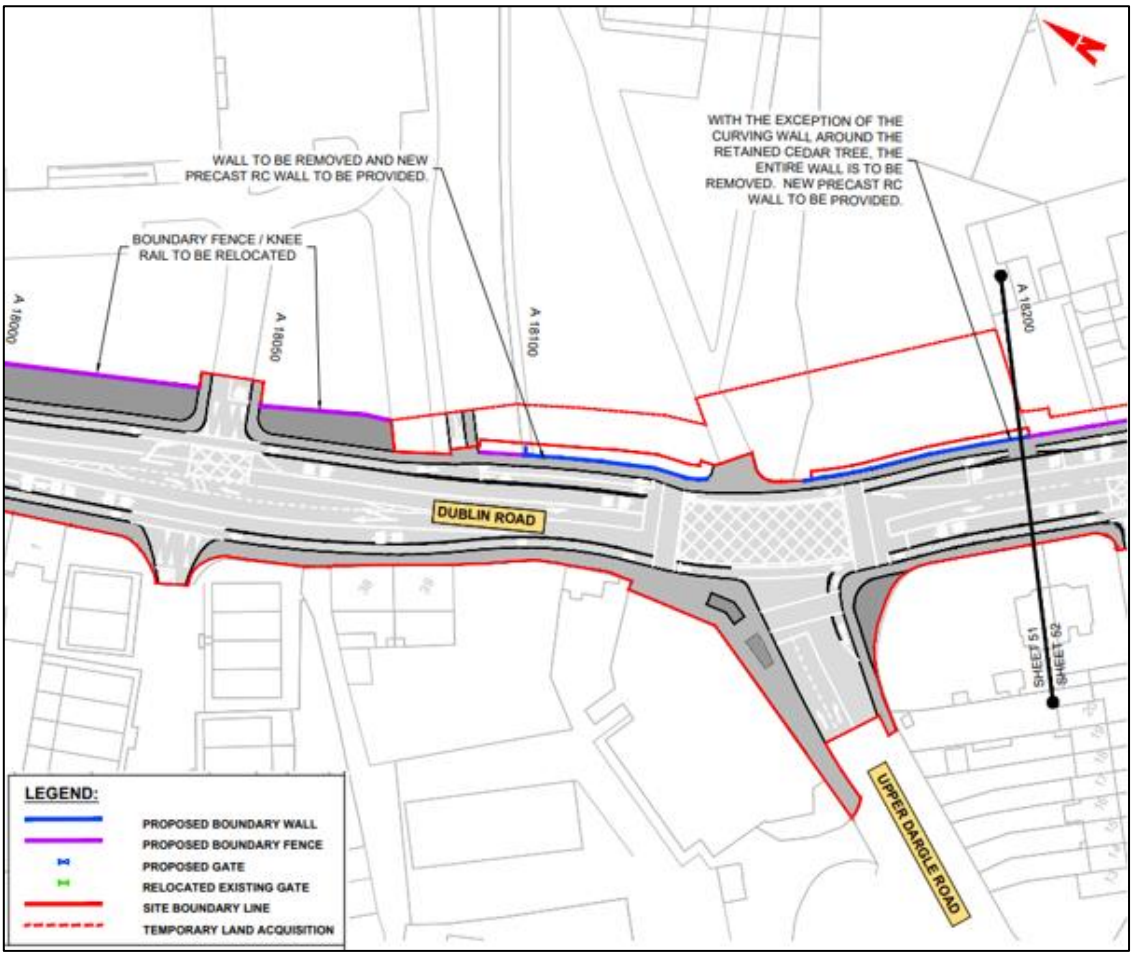


Figure 3.293: Extract from Fencing and Boundary Treatment Drawing at North Wicklow Educate Together (Sheet 51)

Figure 3.293 above shows the existing boundary walls to be removed (except for the curving wall around the retained cedar tree) and proposed new precast reinforced concrete boundary walls to be provided, to tie into the existing access.

As noted in Chapter 4 Proposed Scheme Description) in Volume 2 of the EIAR, reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis.

Section 4.6.18.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a summary of the accommodation works and boundary treatment for the entirety of the Proposed Scheme and notes that:

'There are a number of areas along the extents of the route where the Proposed Scheme will result in the requirement for accommodation works and boundary treatments. Specific accommodation works are considered on a case-by-case basis. To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics, unless a section of street can benefit from urban improvement appropriate to the area.'

In relation to the continuity or reinstatement of any existing services, Section 19.5.1.1 in Chapter 19 (Material Assets) in Volume 2 of the EIAR also provides narrative in relation to the proposed works for each of these services:

'*All possible precautions will be taken by the appointed contractor to avoid unplanned interruptions to any services during the Construction Phase of the Proposed Scheme. Proposed utility works are based*

on available records, and preliminary site investigations. Prior to excavation works being commenced, localised confirmatory surveys will be undertaken by the appointed contractor to verify the results of the pre-construction assessments undertaken and reported in this EIAR. Where works are required in and around known utility infrastructure, precautions will be implemented by the appointed contractor to protect the infrastructure from damage, in accordance with best practice methodologies and the requirements of the utility companies, where practicable. Protection measures during construction will include warning signs and markings indicating the location of utility infrastructure, safe digging techniques in the vicinity of known utilities, and in certain circumstances where possible, isolation of the section of infrastructure during works in the immediate vicinity.'

Regarding unavoidable disruptions to utilities and service infrastructure, Section 19.5.1.1 outlines that works will be carefully planned in consultation with each utility provider, interruptions will be time-bound so far as is reasonably practicable in order to minimise service disruption and prior notification issued to impact properties.

'Where diversions, or modifications, are required to utility infrastructure (as listed in Section 19.4.3), service interruptions and disturbance to the surrounding residential, commercial and / or community property may be unavoidable. Where this is the case, it will be planned in advance by the appointed contractor. Required service interruptions will generally only occur for a set period of time per day (a set number of hours not exceeding eight hours where reasonably practicable) and will generally not be continuous for full days at a time. Prior notification will be given to all impacted properties. This notification will include information on when interruptions and works are scheduled to occur and the duration of such interruption. Any required works will be carefully planned by the appointed contractor to ensure that the duration of interruptions is minimised in so far as is practicable.'

The following drawing series provide information in relation to utility services at the property and are provided as Appendices in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR.

- 13-ESB Asset Alterations – Low voltage overhead diversion;
- 14-Gas Networks Ireland Asset Alterations – Low pressure underground diversion; and
- 15- Irish Water Asset Alterations – 100mm watermain diversion.

NTA are satisfied above information in the EIAR does provide sufficient details to appreciate the specifics and assessment of the Proposed Scheme.

3.12.12.3.2 Temporary and permanent access

Summary of issue raised

One submission noted that further detail is required on the provisions for safe uninterrupted access during and after the works.

Response to the issue raised

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Appendix A5.1 (CEMP), Section 5.2.1.2 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Section 5.3.4.2 provides details of the construction activities between Old Connaught Avenue to Upper Dargle Road. The expected construction duration for the section will be approximately 9 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3.

The temporary land acquisition area is required to carry out the works, including landscaping and boundary wall construction. This area will be returned to the owners on completion of the works. As noted above, details regarding temporary access will be discussed with the business owners prior to construction starting.

At the location in question, during the operational stage, there will be no change to the existing access arrangements, as indicated on the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR.

3.12.12.3.3Impact on future development

Summary of issue raised

The Proposed Scheme shall also compromise the proposals for the construction of new access roads by Pizzaro Ltd / Shankill Property Investments Ltd.

Response to the issue raised

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the scheme and the proposed design takes them into consideration. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of the Proposed Scheme with other infrastructure projects and Section 4.6.6.3 states the list of infrastructure projects within the vicinity of the Proposed Scheme which will interface with the project. In relation to the North Wicklow Educate Together, the below infrastructure project is noted.

'St John of God Complex: Permission has been granted for revisions to and extension of the existing internal road to provide connection to an associated road proposal on the adjoining Industrial Yarns Complex and removal of existing vehicular access from the Dublin Road. The proposed realignment of the site access is at around chainage A18100 of the Proposed Scheme;'

The tie-in to the proposed new access at approximate chainage A18100 is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 51 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.294.

NTA are satisfied that the Proposed Scheme has been co-ordinated with the future scheme to provide for new access road.

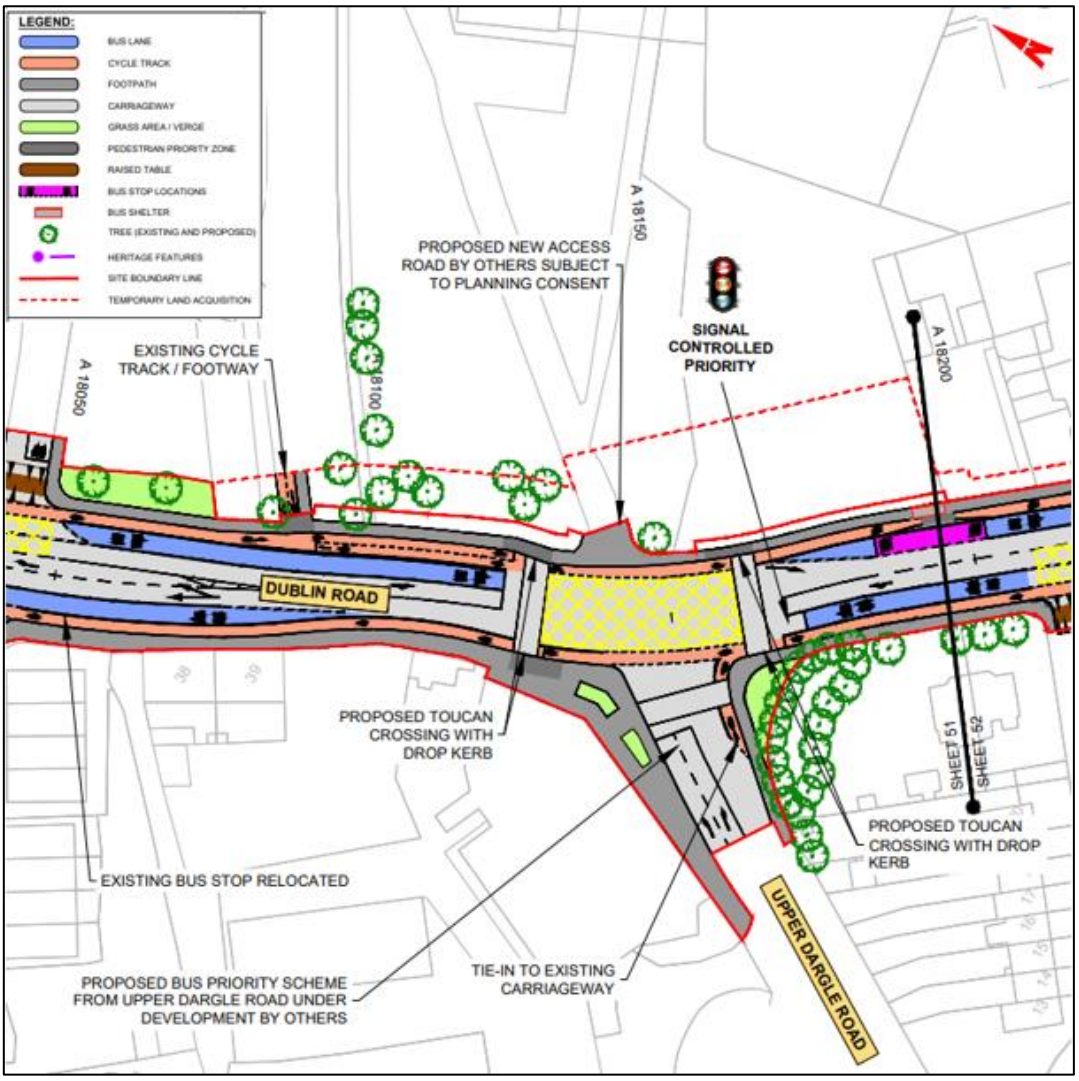


Figure 3.294: Extract from General Arrangement Drawing at North Wicklow Educate Together (Sheet 51)

3.12.13 175 – Ross Lawless and Lisa Kenny

3.12.13.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, the proposed design between the Dublin Road/ Shanganagh Road/ Corbawn junction and Crinken Lane retains the existing general traffic lanes with no bus or cycle lanes, apart from a section of the northbound carriageway where a bus lane is provided from Crinken Lane to a new junction at the entrance to Olcovar. Signal-controlled bus priority will be provided along this section of Shankill village. A cycle lane is proposed in the northbound carriageway only.

From Crinken Lane to the Wilford Roundabout it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes. Southbound bus lane commences south of the property at Crinken Lodge at Shanganagh Castle Housing Development. The Southbound cycle track commences along with the southbound bus lane.

The existing road cross section in this location provides a footpath on each side of the road with general traffic lanes and advisory cycle lanes in each direction.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 46 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.295.

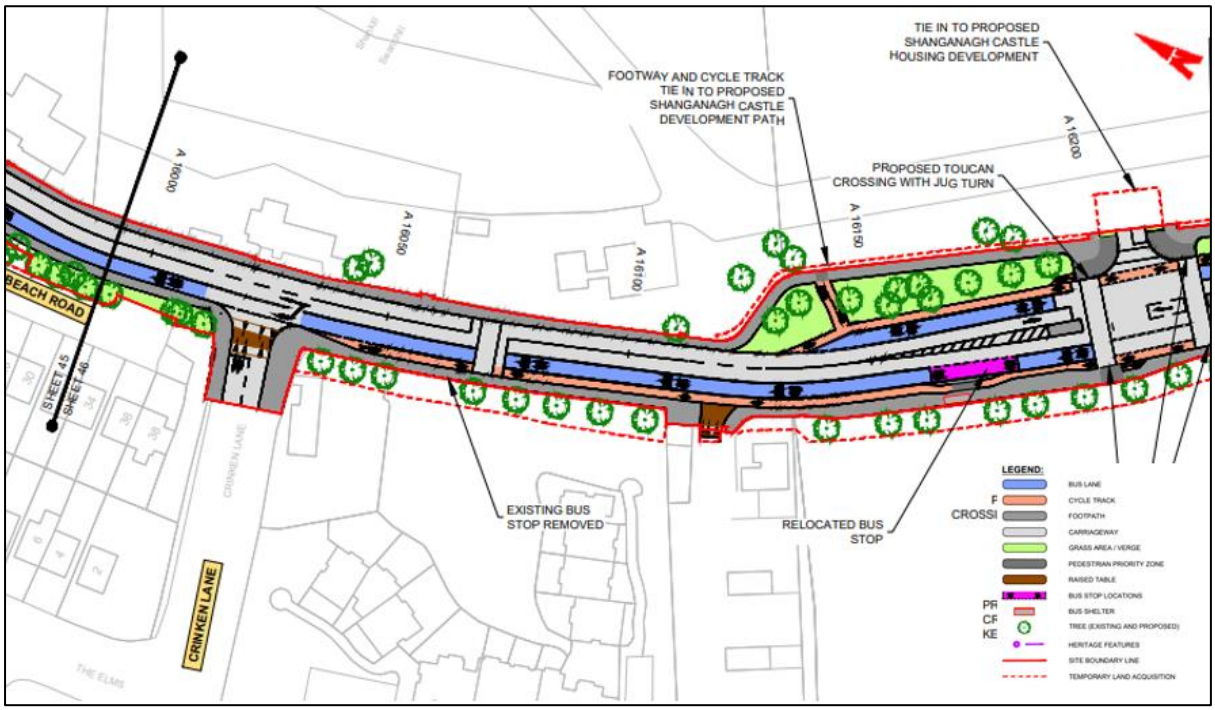


Figure 3.295: Extract from General Arrangement Drawing at Dublin Road (Sheet 46)

3.12.13.2 Summary of Issues Raised

The submission raises eight potential issues:

1) Impact to Property Due to CPO
2) Query on Site Being Used as Construction Compound
3) Extent of Temporary Land Take and Impact on Residents During Construction
4) Legal Owners
5) Need for the Proposed Scheme in Shankill
6) Impact on Shankill village and Local Business in Shankill
7) Impact on Parking and Business in Bray
8) Impact to Trees and Biodiversity in Shankill

3.12.13.3 Responses to Issues Raised

3.12.13.3.1 Impact to Property Due to CPO

Summary of issue raised

The submission notes the age of the property, commenting the Lodge is the original gate lodge to Crinken House, and is dated to 1872.

The submission raised concerns regarding the proximity to the Proposed Scheme due to both permanent and temporary land acquisition.

The submission notes the loss of mature trees within the property. The objector requests replanting of suitable screening along the boundary wall.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Crinken Lodge landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.296. The permanent land take is shown in Plot 1082(1).1d and the temporary land take is shown in Plot 1082(2).2d.

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath and cycle track on the Dublin Road, hence meeting the objectives of BusConnects, as shown in Figure 3.296 extract from 02-General Arrangement Drawing Sheet 46 Chapter 4 (Proposed Scheme Description) Vol 3 Part 1 of 3 of EIAR.

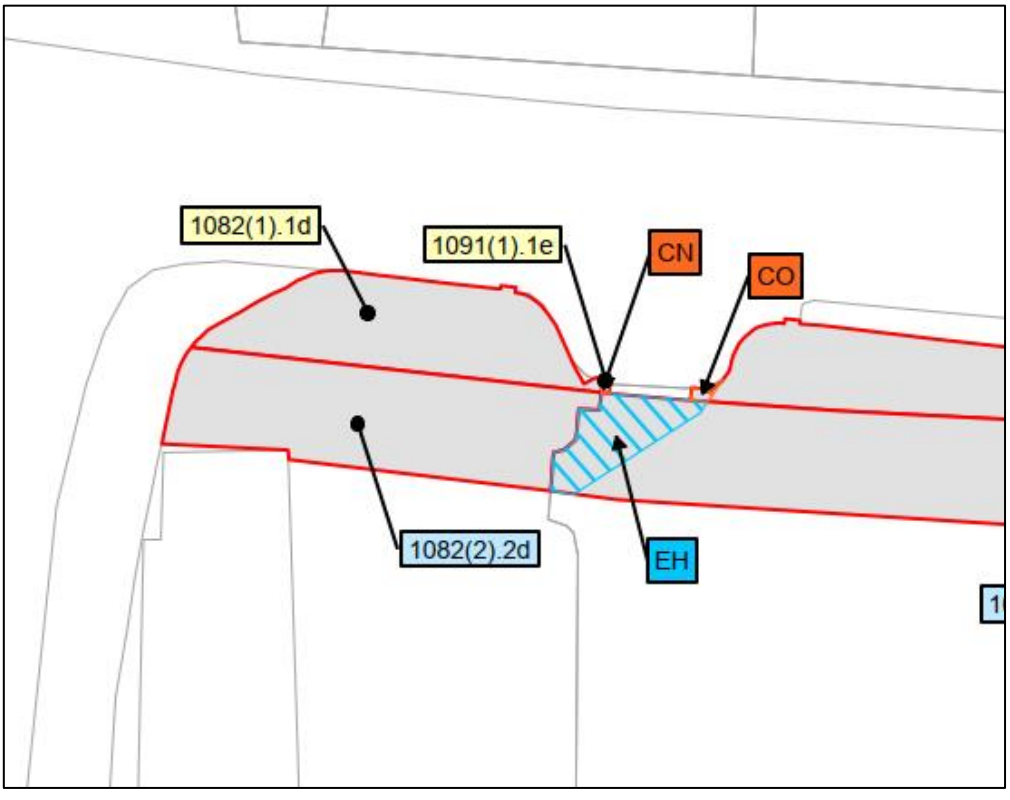


Figure 3.296: Extract from CPO Deposit Map at Crinken Lodge (Sheet 08)

The proposal at the location of the Crinken Lodge is to widen the road on the west side to provide for continuous bus lane in northbound only and segregated cycle tracks and footpaths in both directions. Southbound bus lane is not provided at location of the Crinken Lodge property to minimise impact to the properties and will commence at the junction with Shanganagh Castle Housing Development.

The proposed works would require set-back of the existing boundary wall. As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, the reinstatement of property frontage including boundary walls, gates, railings driveway, footpath and landscaping will be on a like-for-like basis, and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis. The existing gate will be set-back at the same location.

The proposed works would require set-back of the existing boundary wall. The Proposed Scheme Boundary Treatment design at the location of the Crinken Lodge is shown in the 07- Fencing and Boundary Treatment Drawing Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 46 and shown in Figure 3.297.

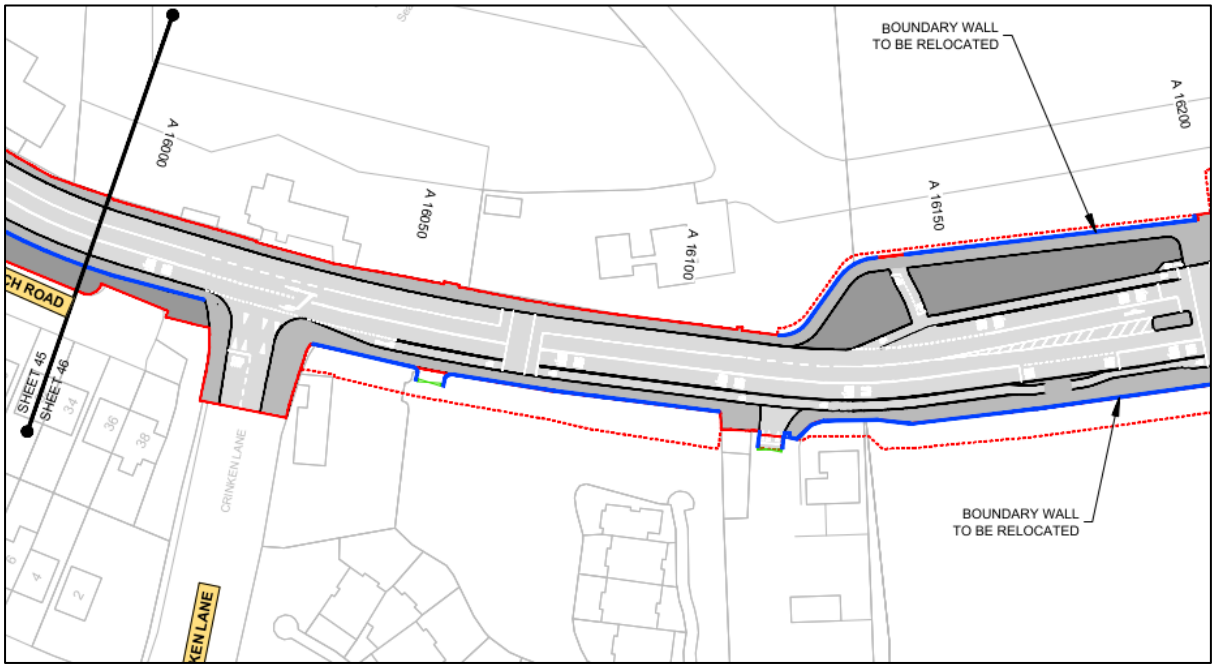


Figure 3.297: Extract from Boundary Treatment Drawing at Crinken Lodge (Sheet 46)

The proposed works would require loss of mature trees along the frontage of the house. New trees are proposed in the residual green area in front of the property frontage and reinstatement of the garden.

The Proposed Scheme Landscape design at the location of the Crinken Lodge is shown in the 05- Landscape Drawings Chapter 4 (Proposed Scheme Description) drawing Vol 3 Part 1 of 3 of EIAR on Sheet 46 and shown in Figure 3.298.

The CPO of lands at this location at Crinken will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states '*where properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

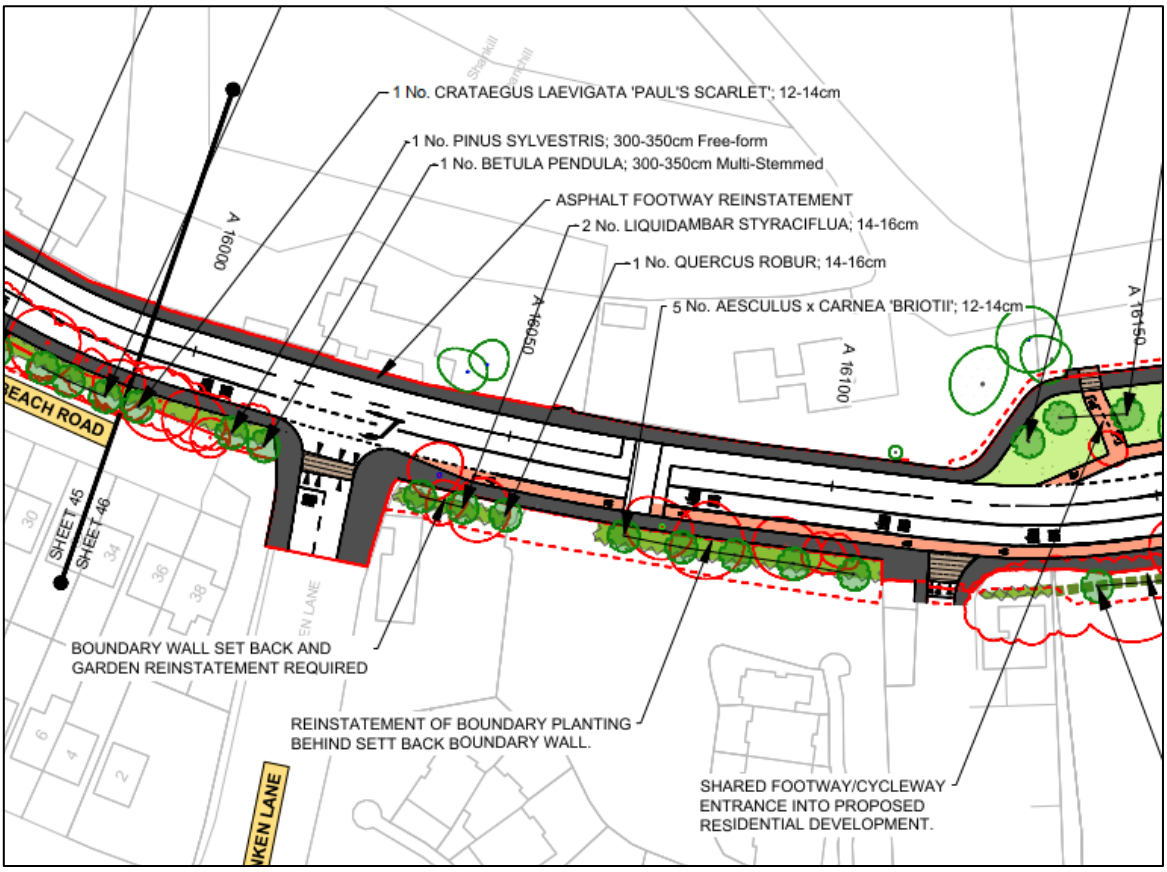


Figure 3.298: Extract from Landscape Drawings at Crinken Lodge (Sheet 46)

An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 Part 4 of the EIAR. As per the Tree Schedule in that report, the removals at that location are as follows:

- Two horse chestnut trees (Tree Numbers T0253 and T0254) – one has been assessed as a Category A1 tree (high value and conservations from an arboricultural perspective) and the other has been assessed as a Category B1 tree (moderate value and conservations from an arboricultural perspective); and
- A lime tree (Tree Number T0257) which has also been assessed as a Category A1 tree (high value and conservations from an arboricultural perspective).

As shown in Figure 3.298 above, it is proposed to replace the three lost trees with three new trees behind the reinstated wall in order to reinstate the planting at the edge of the garden. The landscaping proposals at this location are for the planting of two liquidambar styraciflua trees and one quercus robur tree.

The historic significance of the site is recognised within the EIAR. Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment of the impacts on heritage features as a result of the Construction and Operational Phases of the Proposed Scheme. As shown in Figure 3.299 below, the walls and entrance gates are marked in Figure 16.1 (Architectural Heritage) Sheet 23 in Volume 3 of the EIAR.

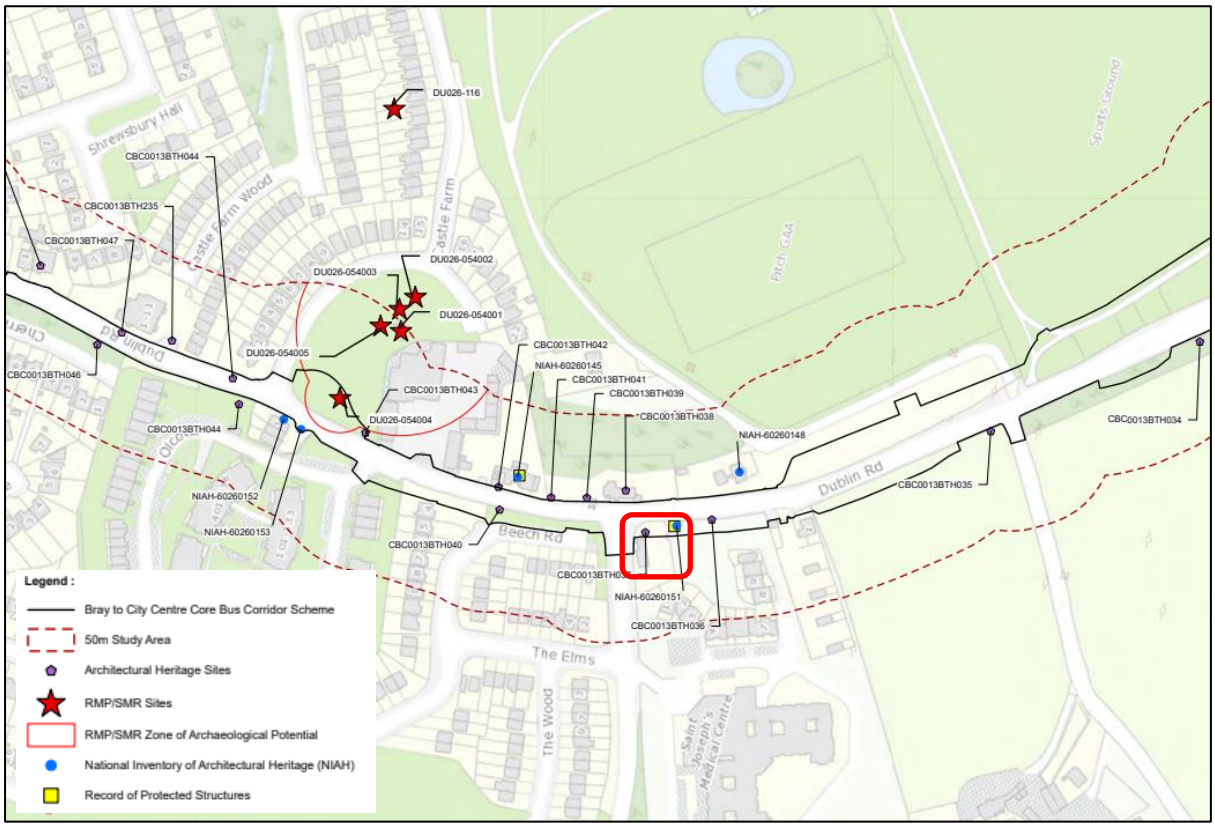


Figure 3.299: Extract from Architectural Heritage Drawings (Figure 16.1 in Volume 3 of the EIAR) at Crinken Lodge (Sheet 23)

The heritage features associated with Crinken Lodge are also included in the Inventory of Architectural Heritage Sites in Appendix A16.2 in Volume 4 Part 3 of 4 of the EIAR. The Crinken House gates and railings are included in the inventory given their designation on the Dún Laoghaire-Rathdown Record of Protected Structures (RPS Reference 2074) and their being recorded in the National Inventory of Architectural Heritage (NIAH Reference 60260151). The boundary wall to the north of the Crinken House gates and railings (the Crinken Lodge boundary wall) also has its own entry in Appendix A16.2 (Reference CBC0013BTH037) given its association with the protected gates and railings.

Section 16.4.3 of Chapter 16 describes the Construction Phase impacts on features of architectural heritage significance. The assessment describes the potential impact as a result of the road widening and boundary relocation at this location as follows:

'*The proposed land take on the west side of the Dublin Road to the south of Crinken Lane will directly impact on the gates railings (DLR RPS 2074) and the crenelated demesne wall on either side of the gates (CBC0013BTH037, CBC0013BTH036) of Crinken House (DLR RPS 1971) necessitating their removal and reinstatement. The gates are of Regional Importance and Medium Sensitivity. Trees along the boundary will be retained for the most part though some will be removed and replaced. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary*.'

Section 16.5.1 of Chapter 16 describes the proposed Construction Phase mitigation measures to reduce impacts on architectural heritage. The mitigation specific to the walls and gates at Crinken Lodge are described as follows:

'*Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Slight and Long-Term*.'

3.12.13.3.2 Query on Site Being Used as Construction Compound

Summary of issue raised

The submissions notes that the existing access and the temporary area should not be used for storage of construction material and heavy machinery should not be allowed.

Response to issue raised

In order to construct the Proposed Scheme, the appointed contractor will require construction compounds from which they can manage the delivery of the Proposed Scheme. Section 5.7 of Chapter 5 (Construction) in Volume 2 of EIAR describes the locations of the construction compound as noted below:

'Figure 5.1 of Volume 3 of the EIAR shows the locations for the Construction Compounds in relation to the Proposed Scheme. The Construction Compound locations have been selected due to the amount of available space, their relative locations near to the majority of the Proposed Scheme major works, and access to the National and Regional Road network. Refer to Chapter 6 (Traffic & Transport) of the EIAR for an assessment of the construction traffic.

- *The Construction Compound BR1 will be located south-west of the Wilford Junction, with access/egress from Dublin Road, as shown in Image 5.1*
- *Construction Compound BR2 will be located east of Stillorgan Road, with access/egress from Fosterbrook, as shown in Image 5.2.'*

There is no construction compound proposed at the Crinken Lodge property.

3.12.13.3.3 Extent of Temporary Land Take and Impact to Residents During Construction

Summary of issue raised

The submission requests that the small portion of the project should be built from roadside, hence reducing the extent of the temporary land take to enhance the health and welfare of the occupants.

The respondents raised concern relating to the impact to their property, commenting on the impact to their ability to reside in the residence, with the works effecting their day to day occupation of the property and requests strict condition in place on the contractor during construction works.

The objector requests to fence the area for screening, to allow the health and wellbeing of residents and allow them to convalesce in the quiet atmosphere needed outdoors, further concerns noted that the respondent is home due to health and open space is needed to aid her recovery.

The submission queries access arrangement and request a condition for access and right of way to be maintained through the works.

Response to issue raised

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

When roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable. As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Section 5.10.1 of the EIAR, Volume 2, Chapter 5 (Construction) states the following on the Construction Environmental Management Plan:

'As stated in Section 5.1, a CEMP has been prepared for the Proposed Scheme and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to finalising the Construction Contract documents for tender, so as to include any additional measures required pursuant to conditions attached to An Bord Pleanála's decision. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CEMP the manner in which it is intended to effectively implement all of the applicable mitigation measures identified in this EIAR. The CEMP has regard to the guidance contained in the Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA 2007), and the handbook published by CIRIA in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

Details of mitigation measures proposed to address potential impacts arising from construction activities are described in Chapter 6 to Chapter 21, as appropriate, and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

A number of sub-plans have also been prepared as part of the CEMP and these are summarised in the following sections. For the avoidance of doubt, all of the measures set out in the CEMP and the sub-plans appended to this EIAR will be implemented in full by the appointed contractor to the satisfaction of the NTA.'

Section 5.10.1.1, Construction Traffic Management Plan (CTMP), goes on to state:

'The CTMP has been prepared to demonstrate the manner in which the interface between the public and construction-related traffic will be managed and how vehicular movement will be controlled. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CTMP the manner in which it is intended to effectively implement all the applicable mitigation measures identified in this EIAR and any additional measures required pursuant to conditions imposed by An Bord Pleanála, should they grant approval.'

Section 5.2 of the Construction Environmental Management Plan (CEMP) included in EIAR Volume 4 Appendix A5.1, contains the Construction Traffic Management Plan (CTMP). Section 5.2.1.2 of this document outlines the objectives of the CTMP as follows:

- *'Outline minimum road safety measures to be undertaken, including site access/egress locations, during the works;*
- *Provide measures that respond to all road user needs including public transport, pedestrians, cyclists and vehicular traffic;*
- *Ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme;*
- *Demonstrate to the NTA, the appointed contractor and suppliers, the need to adhere to the relevant guidance documentation for such works; and*

- *Identify objectives and measures for inclusion in the management, design and construction of the Proposed Scheme to control the traffic impacts of construction insofar as it may affect the environment, local residents and the public in the vicinity of the construction works.'*

Section 5.10.2 of the EIAR, Volume 2, Chapter 5 (Construction) then describes the Construction Phase mitigation measures as follows:

'Mitigation and monitoring measures have been identified as environmental commitments and overarching requirements which shall avoid, reduce or offset potential impacts which could arise throughout the Construction Phase of the Proposed Scheme. These mitigation and monitoring measures which are relevant to the Construction Phase of the Proposed Scheme are detailed in Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) and in Appendix A5.1 CEMP in Volume 4 of this EIAR.'

Section 5.1052 of the EIAR, Volume 2, Chapter 5 (Construction) notes the requirement of Construction Health and Safety as follows:

'The requirements of Number 10 of 2005 – Safety, Health and Welfare at Work Act 2005, and S.I. No. 291/2013 – Safety, Health and Welfare at Work (Construction) Regulations, 2013 (hereafter referred to as the Regulations), and other relevant Irish and European Union safety legislation will be complied with at all times. As required by the Regulations, a Safety and Health Plan will be formulated which will address health and safety issues from the design stages through to the completion of the Construction Phase. This plan will be reviewed as the Proposed Scheme progresses. The contents of the Safety and Health Plan will follow the requirements of the Regulations. In accordance with the Regulations, a 'Project Supervisor Design Process' has been appointed and 'Project Supervisor Construction Stage' will be appointed, as appropriate.'

Chapter 10 (Population) in Volume 2 of the EIAR assesses the impact on local communities and businesses with respect to land use and accessibility. Section 10.4.3.1.2.1 of Chapter 10 identifies Crinken Lodge as one of seven residential properties which will experience a Negative, Significant and Short-Term impact as a result of the land take during the Construction Phase. Section 10.4.4.1.2.1 of Chapter 10 identifies Crinken Lodge as one of three residential properties which will continue to experience a Negative, Significant and Long-Term impact through the Operational Phase as a result of the permanent land take at the property.

Chapter 11 (Human Health) in Volume 2 of the EIAR describes the assessment of the impact of the Proposed Scheme on health during both the Construction and Operational Phases. The chapter identifies '*the wider determinants of health that would likely be affected by the Proposed Scheme and how these effects are associated with health outcomes*', and also '*assesses risk to human health from environmental hazards, for example, noise, air pollution and water quality impacts*'. The assessment considered the Construction Phase impacts on the health of people living along and/or using the corridor under the following headings:

- Temporary Impacts on Access to Health and Education Services;
- Health Impacts from Temporary Traffic Diversions;
- Health Impacts from Temporary Traffic Congestion;
- Construction Related Air Pollution and Health;
- Construction Noise and Vibration and Health;
- Health Impacts from Land-take and Impacts on Property; and
- Other Environmental Hazards.

Table 11.7 in Chapter 11 summarises the potential Construction Phase impacts on human health, with impacts such as traffic, air pollution and noise related to construction summarised as follows:

- Health impacts from temporary traffic congestion:
    - '*Negative, Slight, Temporary to Short-Term for the general commuting population*'; and

- ‘*Negative, Moderate, Temporary to Short-Term for more sensitive people (e.g. those who suffer from mental health conditions such as anxiety)*’.

- Construction Related Air Pollution – Construction Traffic and Plant Emissions: ‘*Neutral and Short-Term on the basis that the air quality assessment assesses construction traffic air emissions as neutral and short-Term, so no human health impact could be attributable to the Proposed Scheme*’;

- Construction Related Air Pollution – Dust: ‘*Negative, Slight and Short-Term on the basis that there would be potential concern about risk from construction emissions which individuals may associate with their symptoms*’; and

- Construction Related Noise: ‘*Negative, Moderate and Temporary on the basis that no change in health status is anticipated from the temporary and occasional construction noise impacts*’.

Section 11.5.1 of Chapter 11 describes the measures for mitigating the impacts of the Construction Phase, including the following:

‘*Good and regular communication, and fair and appropriate compensation will be important in minimising impacts on landowners affected by land acquisition and compulsory purchase of property. It is noted that residents in rented accommodation would have less power in these circumstances than landlords. However, by ensuring sufficient time to prepare and adapt, it is likely that tenants could retain some control over the situation, which would provide some protection against, and mitigation for, impacts on mental wellbeing*.’

‘*Mitigation for adverse psychosocial responses to the Construction Phase will include providing the public with sufficient information to enable people to plan their days, journeys and activities around the construction works and take control of their options to some extent. The NTA will manage and take responsibility for community liaison and engagement. This will include timely communication to the local community on the planned works activities, timings and traffic management. A point of contact will be provided by the NTA where residents and other interested parties may have their concerns and queries addressed. This will help allow for any shift workers to make arrangements when works are likely to be close by their premises. These requirements are set out in the CEMP (see Appendix A5.1 in Volume 4 of this EIAR)*.’

Once operational, Chapter 11 assesses the Operational Phase impacts as largely very positive, summarising the potential Operational Phase impacts in Section 11.4.4.9 as follows:

‘*The pathways to the greater predicted health effects are permanent changes in transport provision and access which would bring multiple pathways associated with health improvement such as opportunities for improved physical activity (active travel), reduced air pollution, opportunities for more equitable transport and access to services, and opportunities for more social interaction. Health effects such as reduced burden of disease associated with greater physical activity, access to health services and improved safety for vulnerable road users are expected to be Significant, Positive and Long-Term*.’

NTA are satisfied that suitable traffic management measures will be ensured during construction works to maintain safe access to the property all times.

NTA are satisfied the suitable measures will be ensured during construction to minimise impact to the residents.

3.12.13.3.4 Need for the Proposed Scheme in Shankill

Summary of issue raised

The submission goes on to note Dublin Road at this location has been subject to improvements of a footpath and cycle lanes, commenting that anymore improvements would be a waste of public money. The submission also raises concern that this would not improve the bottlenecks that would occur at Shankill as part of the Proposed Scheme.

Response to issue raised

Refer to response in Section 3.9.3.1 on Need for the Proposed Scheme in this report.

Refer to response in Section 3.9.3.2 on Benefits of the Scheme in this report.

Refer to response in Section 3.9.3.3 on Impact to Bus Services & Journey Time Benefits in this report.

Refer to response in Section 3.9.3.5 on Impact on Traffic Flows, Speed Limit, and Traffic Calming in this report.

Refer to response in Section 3.9.3.4 on Upgrade Roundabouts to Signalised Junction and Signal Control Priority in this report.

3.12.13.3.5 Impact to Shankill Village and Local Business in Shankill

Summary of issue raised

The submission raised concerns that the Proposed Scheme will cause devastation to the historic village of Shankill, impacting the character of the area and living in Shankill.

The submission commented on the adverse impact to local businesses as well as the reduction in car parking which would lead to business closures and job losses both in Shankill.

Response to issue raised

Refer to response in Section 3.9.3.13 on Impact to Shankill Village & Community in this report.

Refer to response in Section 3.9.3.17 on Impact to Business in this report.

3.12.13.3.6 Impact Parking and Business in Bray

Summary of issue raised

The submission commented on the adverse impact to local businesses as well as the reduction in car parking which would lead to business closures and job losses in Bray, specifically Castle Street.

Response to issue raised

Refer to response in Section 3.11.3.1 on Removal of parking spaces and impact on business in this report, for further details on impact to parking and business in Castle Street, Bray.

3.12.13.3.7 Impact to Trees and Biodiversity in Shankill

Summary of issue raised

Concern for the removal of 330 mature trees in the Shankill section, which they believe could be 1000 trees, due to impact on private gardens.

The submission raised concerns for the impact on the flora and fauna and impact to habitats within the area. The respondent also raised concerns for the impact to wildlife due to loss of habitats, especially bee and bird populations. The submission requests to protect the loss of biodiversity.

Response to issue raised

Refer to response in Section 3.9.3.11 on Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in this report for further details on the loss of tress and biodiversity in Shankill.

3.12.14 185 - Shanganagh Marble & Stone Centre

3.12.14.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor, it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks behind the tree line and general traffic lanes in each direction. A new pedestrian crossing is proposed south of Allies River Road.

The existing road cross section in this location provides a footpath on each side of the road with general traffic lanes in each direction. Currently a bus lane runs north bound with a cycle track running in the southbound direction.

In order to achieve the required cross section of the Proposed Scheme, land acquisition is necessary from private properties along this section of Dublin Road.

The Proposed Scheme along Dublin Road is shown in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.300.

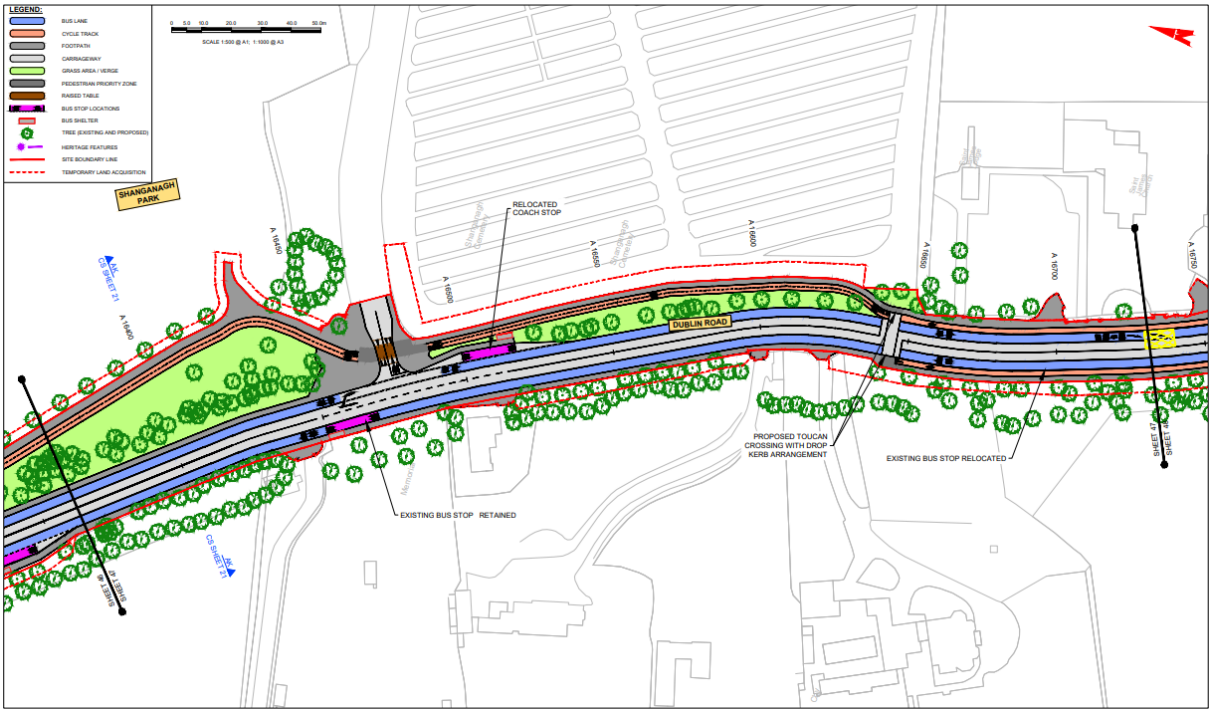


Figure 3.300: Extract from General Arrangement Drawing at Dublin Road (Sheet 47)

3.12.14.2 Summary of Issues Raised

1) Protected Structure Status
2) Land Use Zoning
3) Negative Impact of Client's Business Operations
4) Alternative Options

3.12.14.3 Responses to Issues Raised

3.12.14.3.1 Protected Structure Status

Summary of issue raised

The submission noted the importance of the unique characteristics and historical importance of the property in question are noted by DLRCC in their Development Plan. The structure is protected by the council and therefore the submission notes that the following is protected:

- The interior of the structure
- The land in its curtilage; *the land and outbuildings immediately surrounding the structure which is (or was) used for the purposes of the structure.*
- Any other structures on that land and their interiors

- All fixtures and features forming part of the interior and exterior of the protected structure or any structure on the property.

Response to the issue raised

The NTA notes the comments regarding the unique characteristics and historical importance of the property and that the structure has protected status, noting the above bullet points are also protected. Chapter 5 (Construction) in Volume 2 of the EIAR describes the proposals for land acquisition and boundary treatments in Section 5.5.2.1 as follows:

'*Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.*'

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the assessment of impacts on heritage features, including protected structures. A full assessment of the potential impacts on the Shanganagh Marble and Stone Centre (formerly Hackett Memorial Hall) (RPS 1858) has been undertaken, with the hall and the adjoining milestone (which is within the curtilage of the Protected Structure and is therefore also protected as part of RPS 1858) described in separate entries within Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR (see Table 3.77 and Table 3.78 below), and mapped in Figure 16.1 (Sheet 24) (see Figure 3.301 below).

Table 3.77: Inventory entry for Shanganagh Marble and Stone Centre in Appendix A16.2 in Volume 4 of the EIAR

Identification No.	DLR RPS 1858
Additional Identifiers	NIAH 60260173
Legal Status	Protected Structure
Location	Shanganagh Marble And Stone Centre (Formerly Hackett Memorial Hall) Dublin Road, Shankill
Date of Construction	1889
Original Use	Hackett Memorial Hall
Description	The building was built in 1889 as parochial hall and design by William Kaye-Parry (1853-1932). It was built as a memorial to Reverend John Winthrop Hackett MA (1804-88) of the nearby Saint James's Parsonage (DLR RPS 1860, 2001) and opened in 1890. The building was sold in 1984 and is now the Shanganagh Marble and Stone Centre. The building is a detached five-bay, single-storey building L-shaped in plan. In their appraisal the NIAH stated that the building represents an important component of the late nineteenth-century built heritage of the County due to its architectural composition, compact form, decorative features such as the terracotta and brick enrichments and gothic style and retains much of its original fabric. In particular, the Celtic strap work-detailed Hackett Memorial Rose window was indicated as being of artistic interest while the exposed timber roof construction was regarded as being of technical interest. In addition, the hall contributes positively to street scape.
Significance Rating	Regional
Categories of Special Interest	Architectural, Artistic, Historical, Social, Technical
Sensitivity	Medium
Sources	DLR 2022, NIAH 2020a and 2020b, 1889 to 1892, OSI 1907 to 1911 and OSI 1937 to 1953, Archiseek 2020a, Ball 1903, Bennett 2005, Bence Jones 1988, Dean 2016, Galavan 2017, Daly et al.1998, Hone Craig and Fewer 2002, IAA 2020, Joyce 1913, Kelly 1996, Lewis, 1837, M'Cready 1892, Corlett 1999, Pearson 1998 Turner 1983, Price 1942, Williams 1994, Field Survey
Photographs	

Table 3.78: Inventory entry for milestone at corner of Shanganagh Marble and Stone Centre in Appendix A16.2 in Volume 4 of the EIAR

Identification No.	DCC RPS 1858
Additional Identifiers	NIAH 60260172, DLRIHS 857 CBC0013MS001
Location	On west side of old Dublin Road at Crinken
Legal Status	Protected Structure
Date of Construction	1844 to 1909
Original Use	Milestone / milepost
Description	Milestone / milepost
Significance Rating	Regional Importance
Categories of Special Interest	Historic, Technical, Social
Sensitivity	Medium Sensitivity
Sources	DLR 2022, NIAG 2020a, OSI 1837 to 1843, OSI 1908 to 1911, OSI 1940 to 1944, Corlett 1999, Pearson 1998, Field Survey
Photographs	

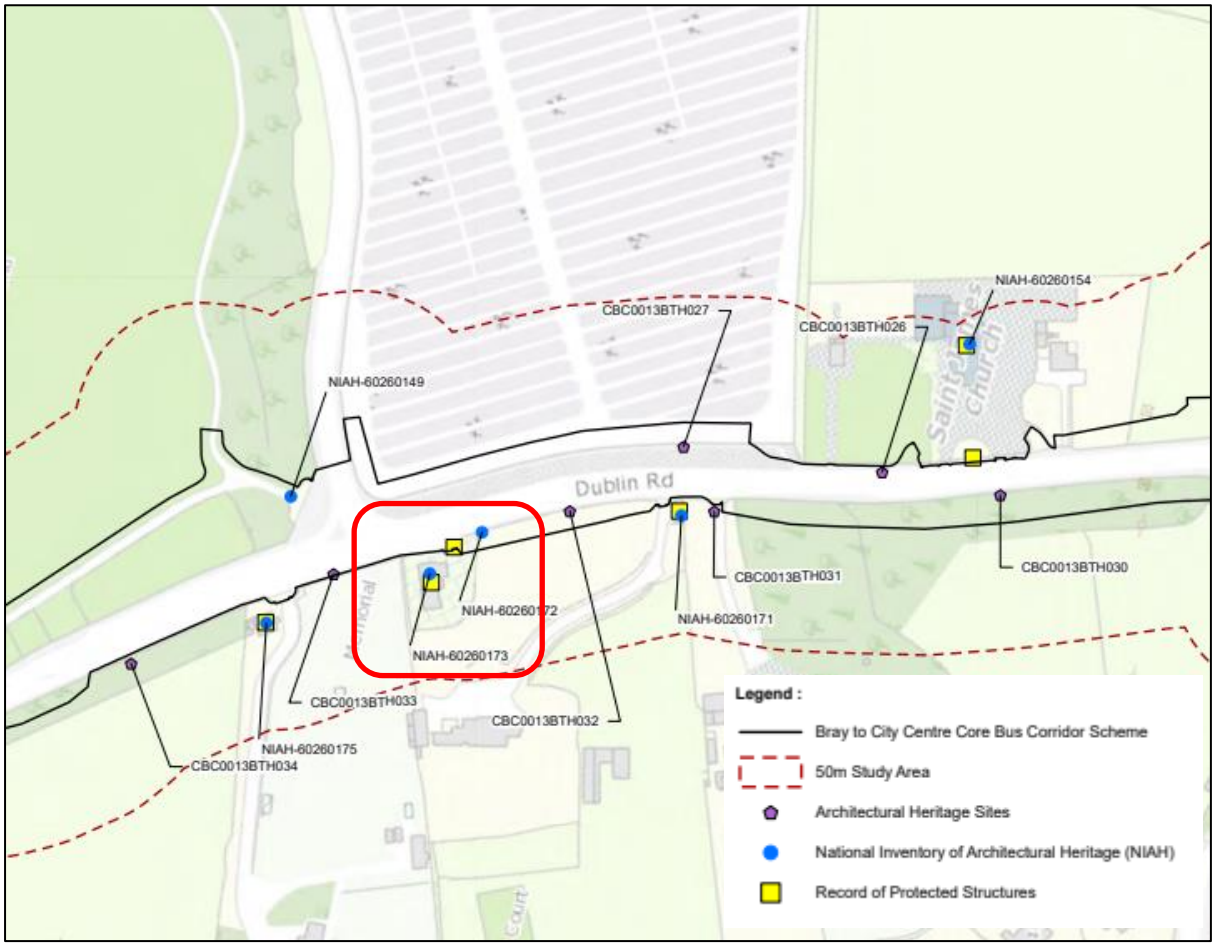


Figure 3.301: Extract from Figure 16.1 (Sheet 24) in Volume 3 showing the location of the Shanganagh Marble and Stone Centre

Section 16.4.3.7.3 in Chapter 16 describes the potential direct impact at the site as follows:

'The Milestone on the west side of old Dublin Road at Crinken (DCC RPS 1858, NIAH 60260172) will be repositioned to accommodate a land take on the west side of the road to the south of the Hackett Memorial Hall. The milestone is of regional importance and medium sensitivity. There is potential for

damage of the sensitive fabric during its removal, transport, storage, and reassembly. The magnitude of this impact is High. The predicted Construction Phase impact is Direct, Negative, Significant and Temporary.'

With respect to mitigation measures, Section 16.5.1.7.3 in Chapter 16 states:

'The Milestone on west side of old Dublin Road at Crinken (DCC RPS 1858, NIAH 60260172) will be repositioned to accommodate a land take on the west side of the road to the south of the Hackett Memorial Hall. It will be temporarily removed to ensure its protection, before being reinstated within the vicinity of the existing. There is potential for damage of the sensitive fabric during its removal, transport, storage, and reassembly. The predicted pre-mitigation Construction Phase Impact is Direct, Negative, Significant and Temporary. The mitigation includes the recording of the milestone in position prior to the works, labelling the affected fabric prior to its careful dismantling and removal to safe storage, and the reinstatement of the milestone. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The works to the historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 in Volume 4 of the EIAR. The predicted post-mitigation impact is Direct, Negative, Slight and Temporary.'

As outlined within Chapter 16, all heritage walls and boundary features including those marking the curtilage of Protected Structures, where impacted, will be deconstructed and reinstated in accordance with Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4, Part 3 of 4 of the EIAR.

A robust alternatives assessment has been undertaken for this section of the Proposed Scheme in order to avoid impacts on protected structures as far as reasonably practicable, while still achieving the objectives of the Proposed Scheme. This alternatives assessment is outlined in Section 2.13.6.3.4 below. The NTA are satisfied that the mitigation measures as outlined above will reduce the potential negative impacts on the protected structures associated with the construction works at Shanganagh Marble and Stone Centre as outlined in Chapter 16.

3.12.14.3.2Land use zoning

Summary of issue raised

The submission wishes to note the importance of the subject property and surrounding lands and that they are zoned under a GB land use zoning.

Response to the issue raised

Appendix A2.1 (Planning Report) in Volume 4 Part 1 of 4 of the EIAR sets out the planning context for the development of the Proposed Scheme, in which it identifies the existing policy framework for the Proposed Scheme in the context of relevant international, European, national, regional and local planning strategy, plan and policy documents. Section 3.7.3 of the Planning Report addresses the Proposed Scheme in the context of the DLRCC Development Plan 2022-2028. As outlined in Section 3.7.3 '*The vision of the DLRCDP (DLRCC 2022) is to 'embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations' The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county*'.

Table 3.13 in the Planning Report lists the key transport policies from the DLRCC Development Plan which are relevant to the Proposed Scheme and includes a scheme response for each. The section on the DLRCC Development Plan concludes with the statement that, '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022)*'.

With specific respect to the zoning of the lands, Section 4 of the Planning Report describes the zoning and map based objectives for all development plans relevant to the Proposed Scheme. The response with respect to the zoning and mapped objectives for Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) of the Proposed Scheme is as follows:

'*The Proposed Scheme is consistent with the policies and objectives of the DLRCDP (DLRCC 2022) as set out above and in Appendix 1 (Local Policy). The Proposed Scheme is largely within the existing*

public road / pavement area and where required, in general, only small portions of those zoning objectives listed above may be necessary to facilitate the Proposed Scheme. However, the main use associated with the zoning objective will remain.'

The Proposed Scheme will facilitate the delivery of the key transport policies within the DLRCC Development Plan as listed in Table 3.13 in the Planning Report, while having minimal impact on the zoning objectives and policies within the DLRCC Development Plan.

3.12.14.3.3Negative impact on business operations

Summary of issue raised

The submission raised concerns regarding the proposed CPO having a significant impact, both temporary and permanent to the business operations on the site. The business is believed to be impacted in terms of everyday operations and profitability due to the removal of the forecourt area used for customer parking.

Response to the issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Shanganagh Marble and Stone landholding is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.302. The permanent land take is shown in Plot 1079(1).1c and 1075(1).1z and the temporary land take is shown in Plot 1075(2).2c and 1079(2).2c.

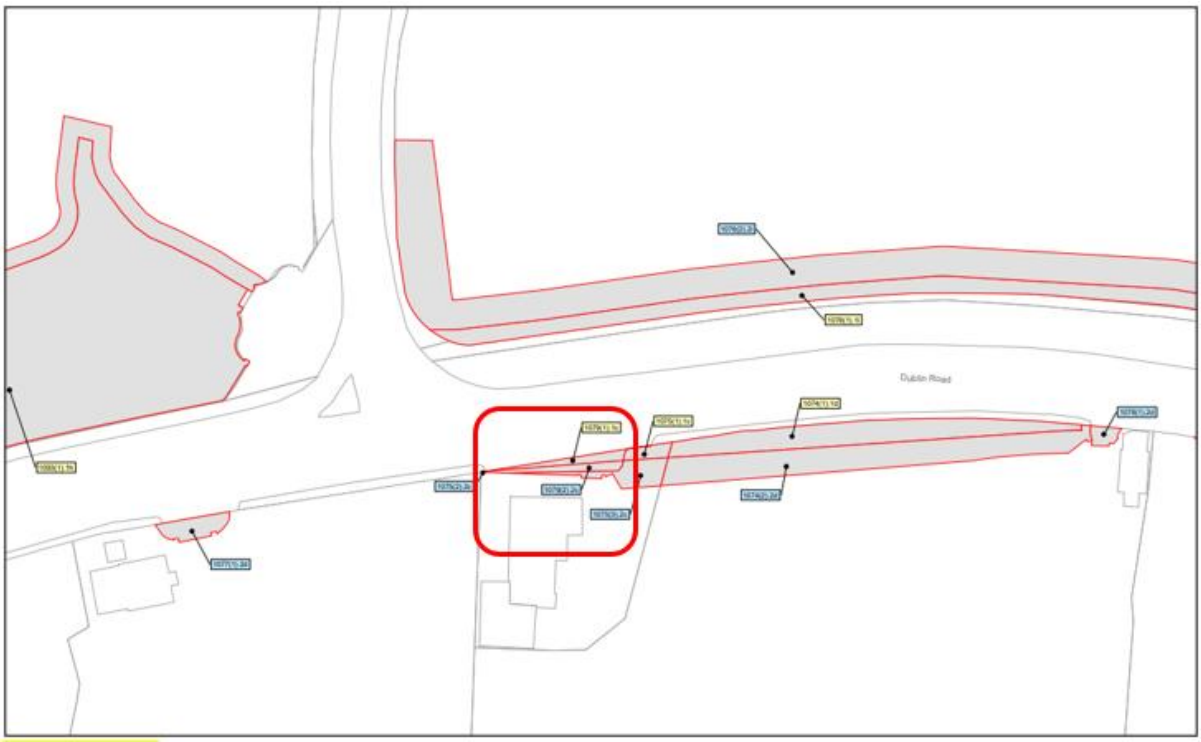


Figure 3.302: Extract from Deposit Map at Shanganagh Marble and Stone Centre (Sheet 07)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath and cycle track in both directions on the Dublin Road, hence meeting the objectives of BusConnects, as shown in Figure 3.300 extract from 02-General Arrangement Drawing Chapter 4 (Proposed Scheme Description) Volume 3 Part 1 of 3 of the EIAR on Sheet 47. The proposal at the location of the Shanganagh Marble and Stone is to widen the road on the west side to provide for continuous bus lane, segregated cycle tracks and footpaths in both directions. The permanent land take will impact the property frontage which is used as informal parking space by the customers.

The parking space at the property frontage (outside the gate) has not been identified as a formal or informal parking space in Parking and Loading assessment described in Section 6.4.6.1.2.4 in Chapter 6 (Traffic & Transport) of Volume 2 of the EIAR due to the presence of a footway / entrance and the absence of relevant signage and/or demarcation.

It is evident that there is an entrance gate with associated space at the front of the property, which is in the existing situation used for parking at this property and will be impacted by the Proposed Scheme. The General Arrangement Drawing as shown in Figure 3.300 indicates the area to the front of the property, beyond the existing entrance gate on Dublin Road that will be reinstated on completion of works.

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned after construction, reinstated in the same condition as existing.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'*Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.*

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'Details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

The NTA acknowledge the positive and constructive liaison that has occurred with the Shanganagh Marble and Stone Centre throughout the design and planning process to date.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

3.12.14.3.4Alternative options

Summary of issue raised

The submission suggests to widen the Dublin Road in the east side towards Shanganagh Park and Shanganagh Cemetery, as this will remove the impact to their property.

Response to the issue raised

Refer to response in Section 3.9.3.1.2 on Consideration of Alternatives and Options Assessment in Shankill in particular section from Cricken Lane to Wilford Roundabout.

Options were considered at the Feasibility stage and both options considered (Route 1 and Route 2) part of option for EPR Route 2B would have the same impact on the property of Shanganagh Marble and Stone. The Emerging Preferred Route was further developed to minimise impact to Shanganagh Marble and Stone to inform the Proposed Scheme.

NTA is satisfied that reasonable alternatives have been considered to inform the Proposed Scheme at the location of Shanganagh Marble.

3.12.15 192 – Sir Marc Cochrane

3.12.15.1 Description of Proposed Scheme at this Location

From Crinken Lane to the Wilford Roundabout it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes. Signal-controlled bus priority will be used northbound from Wilford Junction for a short distance as far as Woodbrook College.

Where appropriate, roadside trees shall be retained by locating the proposed footpaths and cycle tracks behind the tree line. Improved lighting and crowning of trees will be provided to enhance visibility. The existing pedestrian crossing at Woodbrook College is to be moved southwards to provide a crossing point close to the relocated southbound bus stop.

From the Dublin Road / M11 junction (Wilford Roundabout) to the Lower Dargle Road, it is proposed to continue with a bus lane, general traffic lane and a segregated cycle track in each direction. All junctions have been developed further to provide improved cycle movements. It is proposed to replace the Wilford Roundabout with a new signalised junction.

The proposed works will impact the existing Woodbrook Side Lodge, which is a heritage structure located at the southern end of the Woodbrook Estate in Bray. It is proposed to demolish the existing lodge and build a new lodge building further east of its present location to allow for road widening in that area. In order to reduce the heritage impact associated with the demolition, it is proposed to reuse some of the materials from the existing lodge within the new lodge, where it is fit for reuse. Refer to the Woodbrook Side Lodge Plans and Elevations drawings (BCIDB-JAC-BLD_ZZ-0013_XX_01-DR-AA-0001, BCIDB-JAC-BLD_ZZ-0013_XX_02-DR-AA-0001) in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 2 of 3 of the EIAR for detail on the proposals to rebuild the Woodbrook Side Lodge residential property.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 49 and Sheet 50 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.303 and Figure 3.304.

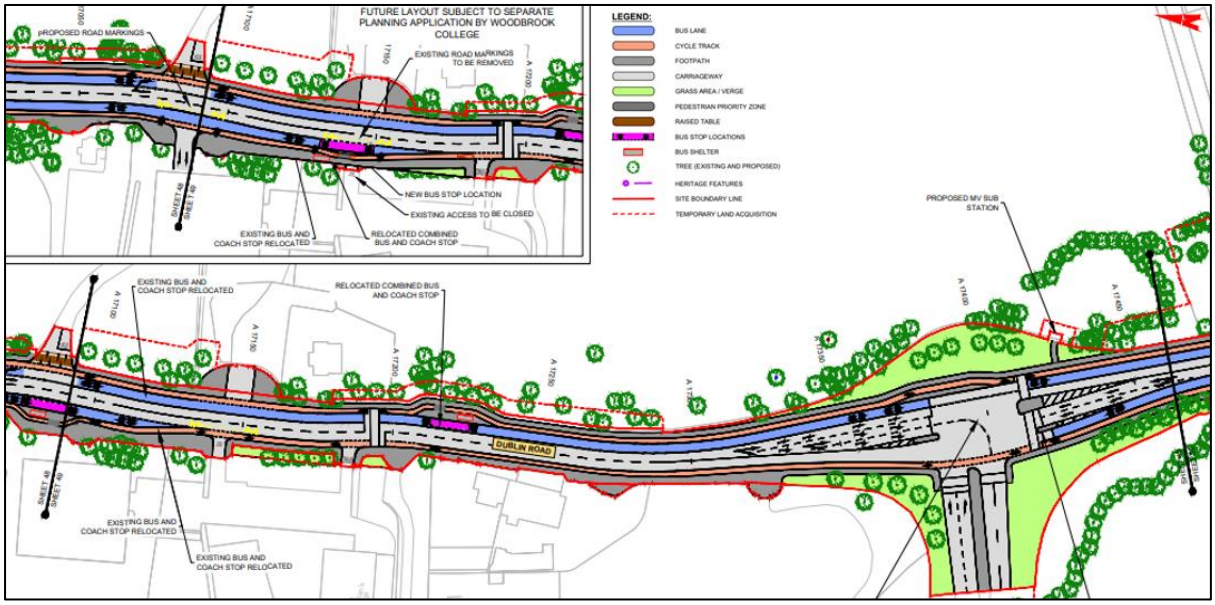


Figure 3.303: Extract from General Arrangement Drawing at Dublin Road (Sheet 49)

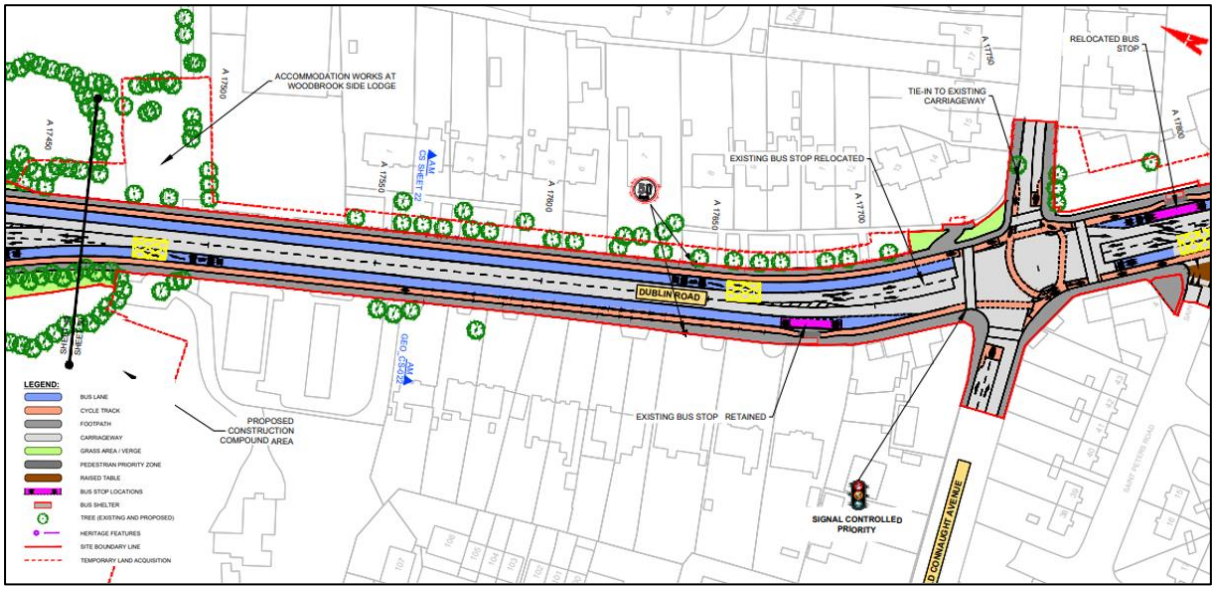


Figure 3.304: Extract from General Arrangement Drawing at Dublin Road (Sheet 50)

3.12.15.2 Summary of Issues Raised

The submission raises five potential issues:

1) Land Use and Non-compliance with DLRCC Development Plan and Shanganagh-Woodbrook LAP

2) Significant Impacts on Woodbrook Estate Heritage Features and Mature Trees Including Demolition of Protected Structure (Woodbrook Side Lodge)

3) Impact During Construction

4) Alternative Proposals

5) Consultation

3.12.15.3 Responses to Issues Raised

3.12.15.3.1 Land Use and Non-compliance with DLRCC Development Plan and Shanganagh-Woodbrook LAP

Summary of issue raised

The submission summarised concerns of non-compliance with policies and objectives of the Shanganagh-Woodbrook Local Area Plan (2017-2023) and the policies and objectives of the Dun Laoghaire-Rathdown County Development Plan 2022-2028, including relating to the land zoning of the area, commenting it is zoned as green belt, meaning it should be used to protect and enhance the open nature of lands between urban areas, rather than remove trees like suggested.

Response to issue raised

Appendix A2.1 (Planning Report) in Volume 4 Part 1 of 4 of the EIAR sets out the planning context for the development of the Proposed Scheme, in which it identifies the existing policy framework for the Proposed Scheme in the context of relevant international, European, national, regional and local planning strategy, plan and policy documents. Section 3.7.3 of the Planning Report addresses the Proposed Scheme in the context of the DLRCC Development Plan 2022-2028. As outlined in Section 3.7.3 '*The vision of the DLRCDP (DLRCC 2022) is to 'embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances the environment for future generations' The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county*'.

Table 3.13 in the Planning Report lists the key transport policies from the DLRCC Development Plan which are relevant to the Proposed Scheme and includes a scheme response for each. The section on the DLRCC Development Plan concludes with the statement that, '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor. It will facilitate a modal shift towards public transport and active travel modes which is a key objective of the DLRCDP (DLRCC 2022)*'.

Section 3.7.3.4 of the Planning Report specifically discusses the relevant LAPs within the DLRCC area, including the Woodbrook-Shanganagh LAP 2017-2023. Table 3.14 in the Planning Report lists the key objectives within that LAP which are relevant to the Proposed Scheme and includes a scheme response for each. The section on the relevant LAPs concludes stating that '*The Proposed Scheme will deliver the infrastructure necessary to enhance public transport, walking and cycling networks along the route corridor adjoining the LAP area. It will facilitate a modal shift towards public transport and active travel modes which is are key objectives of the Stillorgan LAP (2018) and Woodbrook Shanganagh LAP (2017)*'.

With specific respect to the zoning of the lands, Section 4.3 and 4.4 of the Planning Report describes the zoning and map based objectives as per the DLRCC Development Plan relevant to the Woodbrook Estate lands. The response with respect to the zoning and mapped objectives for both sections is:

'*The Proposed Scheme is consistent with the policies and objectives of the DLRCDP (DLRCC 2022) as set out above and in Appendix 1 (Local Policy). The Proposed Scheme is largely within the existing public road / pavement area and where required, in general, only small portions of those zoning objectives listed above may be necessary to facilitate the Proposed Scheme. However, the main use associated with the zoning objective will remain*.'

The Proposed Scheme will facilitate the delivery of the key transport policies within the DLRCC Development Plan as listed in Table 3.13 in the Planning Report, while having minimal impact on the zoning objectives and policies within the DLRCC Development Plan or the Woodbrook-Shanganagh LAP.

With respect to the submission's concerns regarding the impacts on heritage features and protected structures, and the resulting non-compliance with the DLRCC Development Plan, the following section (Section 2) addresses those issues specifically. A full description of the alternatives assessment undertaken at this location is provided in a subsequent section of this response (Section 4).

3.12.15.3.2 Significant Impacts on Woodbrook Estate Heritage Features and Mature Trees Including Demolition of Protected Structure (Woodbrook Side Lodge)

Summary of issue raised

The submission notes that Woodbrook Estate and associated Walled Gardens are protected structures due to being listed in the DLRCC Record of Protected Structures (RPS) and the National Inventory of Architectural Heritage (NIAH) and therefore certain planning guidelines must be followed.

The submission raised concerns regarding the significant impacts on the protected structures as a result of the removal of the historic boundary wall and the demolition of Woodbrook Side Lodge which is a protected structure. The submission also states that the information provided is not sufficiently detailed with respect to the impact that the removal of the wall and trees will have on the wider setting of Woodbrook House and the curtilage of the protected structures.

The Dublin Road from the M11 access roundabout to Shankill Village has an historical character with granite boundary walls and gate lodges all flanked by mature tree stands on both sides of the roadway. The development proposals would require the removal of historical estate stone walls and significant numbers of mature trees close to the roadway significantly altering the sylvan character of the roadway.

The submission goes on to state that the changes proposed will have a direct impact on the visual amenity of the area as planting can take some years to mature and have the desired visual screening affect, as it's not clear from the photomontages reflect the growth of tress after a number of years.

South of the gated entrance the proposed southbound bus stop and carriageway necessitates widening in close proximity to Woodbrook which results in the loss of mature trees, with set-back of the wall also required. This will impact on the setting of the protected structure through a change in the visual amenity of the demesne and loss of vegetative screening.

The submission notes that a new lodge will be rebuilt. The boundary wall, and pedestrian and vehicle gated access points to the Side Lodge are proposed to be rebuilt utilising existing materials where possible. The submission notes concerns that the new boundary wall to the Woodbrook Estate will not be constructed as a like for like replacement. The submission requests that the boundary treatments to the front of the property are agreed with the owner of Woodbrook House prior to construction, should the scheme be approved.

The submission requests a condition is made, if there is no alteration to the Proposed Scheme, that the reconstruction of the Side Lodge be complete within one year of its demolition.

The submission requests that the boundary treatments to the front of the property are agreed with the owner of Woodbrook House prior to construction, should the scheme be approved.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is *'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'.*

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) of the EIAR, which include enhancement of the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas

included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

The permanent and temporary land take required from the Woodbrook Estate landholding which premises the Side Lodge is shown in the Deposit Maps and details listed in the CPO Schedule, as shown in Figure 3.305 and Figure 3.306. The permanent land take is shown in Plot 1064(4).2d, Plot 1064(3).2d, Plot 1061(4).2d, Plot 1061(5).2d 1061(6).2d, Plot 1060(1).1d and Plot 1061(3)1d and the temporary land take is shown in Plot 1064(2).1d, Plot 1064(1).1d, 1061(1).1d, 1061(2d).1d, Plot 1060(2).2d and Plot 1061(7)2d.

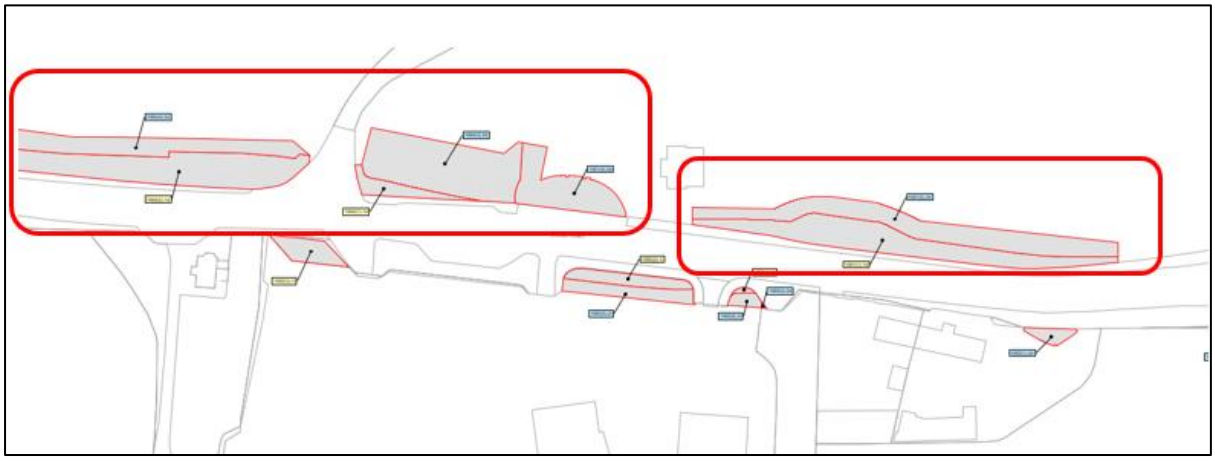


Figure 3.305: Extract from CPO Deposit Map (Sheet 005)

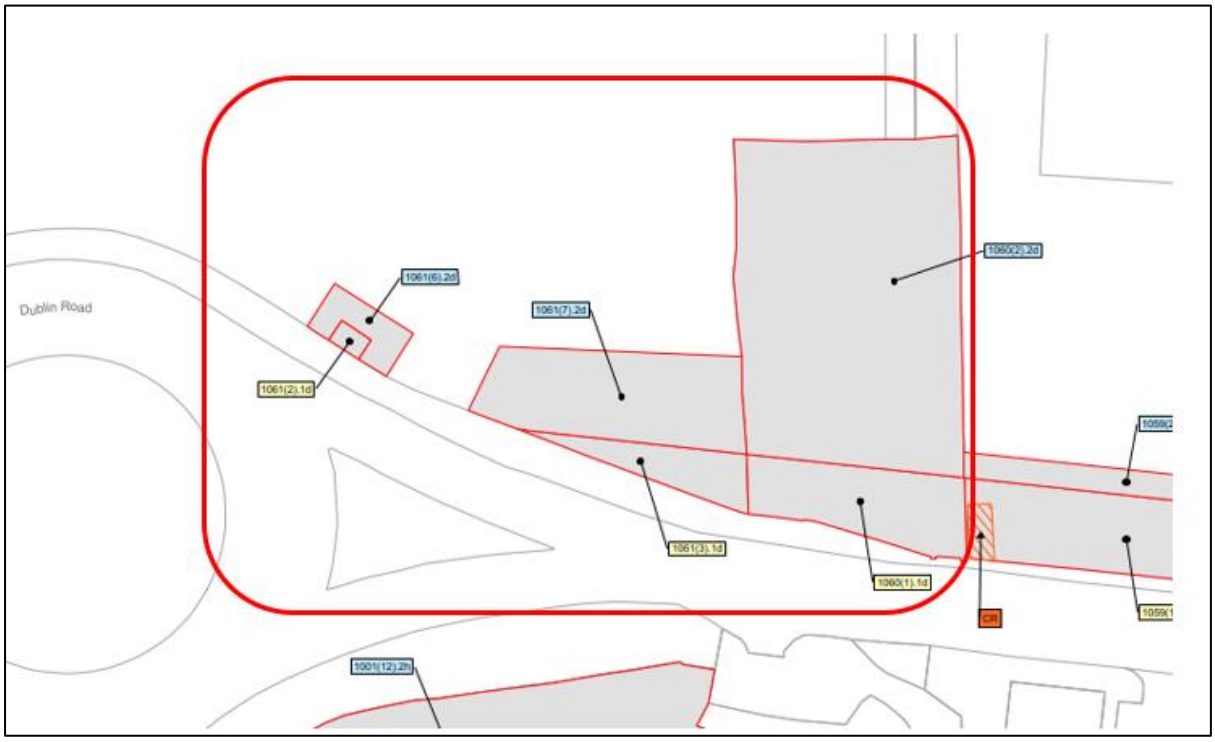


Figure 3.306: Extract from CPO Deposit Map (Sheet 003)

As part of the BusConnects Bray to City Centre CBC works, permanent land take (shown in the CPO maps) is required to provide for the desirable minimum width of the bus lane, footpath and cycle track on the Dublin Road, hence meeting the objectives of BusConnects as shown in Figure 3.307 at the Woodbrook Estate property in Shankill and Figure 3.308 at the Woodbrook Side Lodge property in Bray from Typical Cross section drawing Volume 3 Part 1 of 3 of the EIAR.

The proposal at the location of the Woodbrook Estate is to widen the road on the east side to provide for continuous bus lane, cycle track and footpath along with general traffic lane. Signal-controlled bus

priority will be used northbound from Wilford Junction for a short distance as far as Woodbrook College to minimise impacts to the existing building line on the northbound side of the Dublin Road and to the Woodbrook Estate retaining wall and adjacent mature trees running along the southbound side of the road i.e. approx. approx. Chainage A17140 to A17380 Northbound. Permanent land take is also required for the proposed combined bus and coach stop is proposed just south of the gated entrance to the Woodbrook Estate.

The permanent land take will impact the property boundary wall and trees fronting the property boundary wall.

The proposed works would require demolition of the existing Side Lodge, which will be rebuilt as part of the proposed mitigation works.

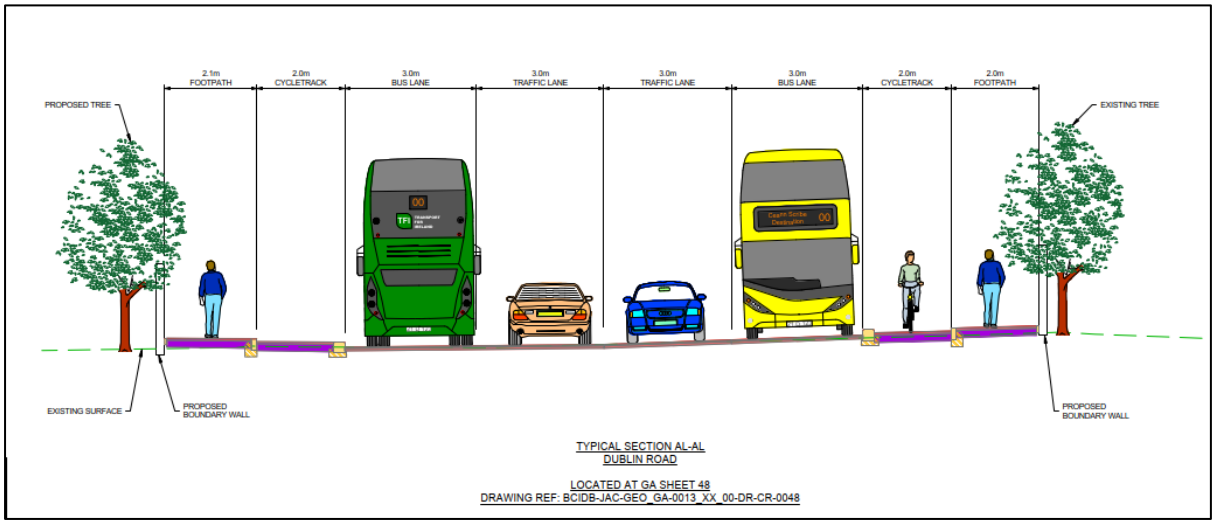


Figure 3.307: Extract from Typical Cross-section at Dublin Road, Shankill (Sheet 22)

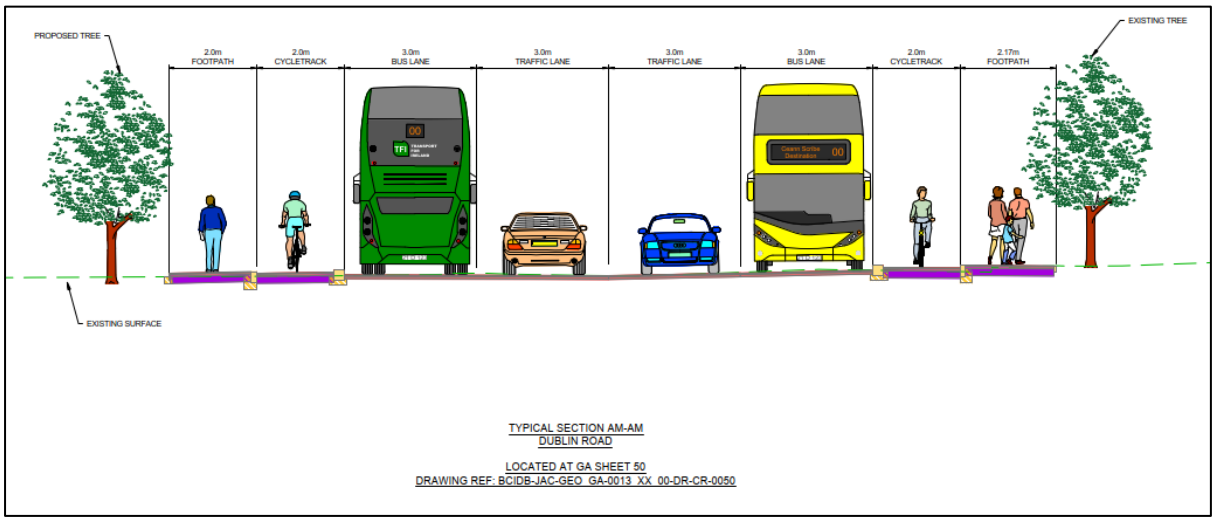


Figure 3.308: Extract from Typical Cross-section at Dublin Road, Woodbrook Side Lodge (Sheet 22)

The Proposed Scheme Landscape design on Dublin Road from the Woodbrook Downs to Woodbrook Side Lodge is shown in the Landscape Drawings in Volume 3, Part 1 of 3 on Sheet 48, 49 and 50 and shown in Figure 3.309, Figure 3.310, and Figure 3.311.

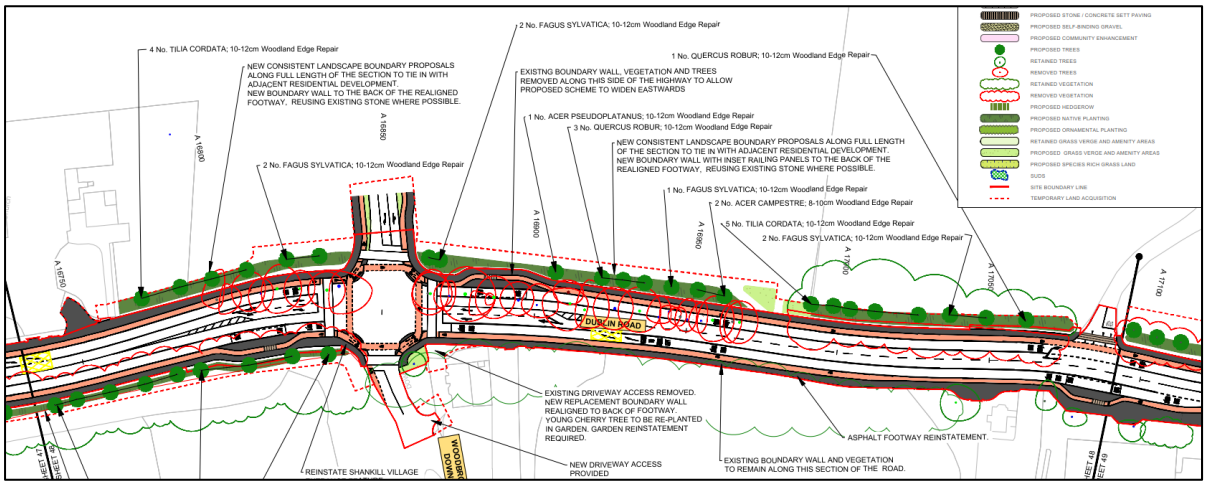


Figure 3.309: Extract from Landscape Drawings at Woodbrook Estate (Sheet 48)

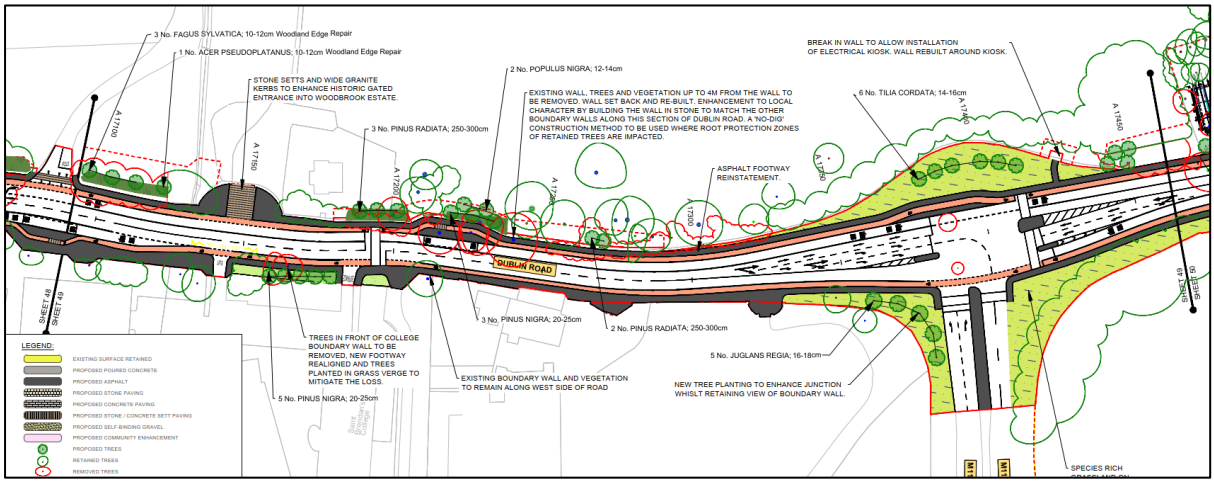


Figure 3.310: Extract from Landscape Drawings at Woodbrook Estate (Sheet 49)

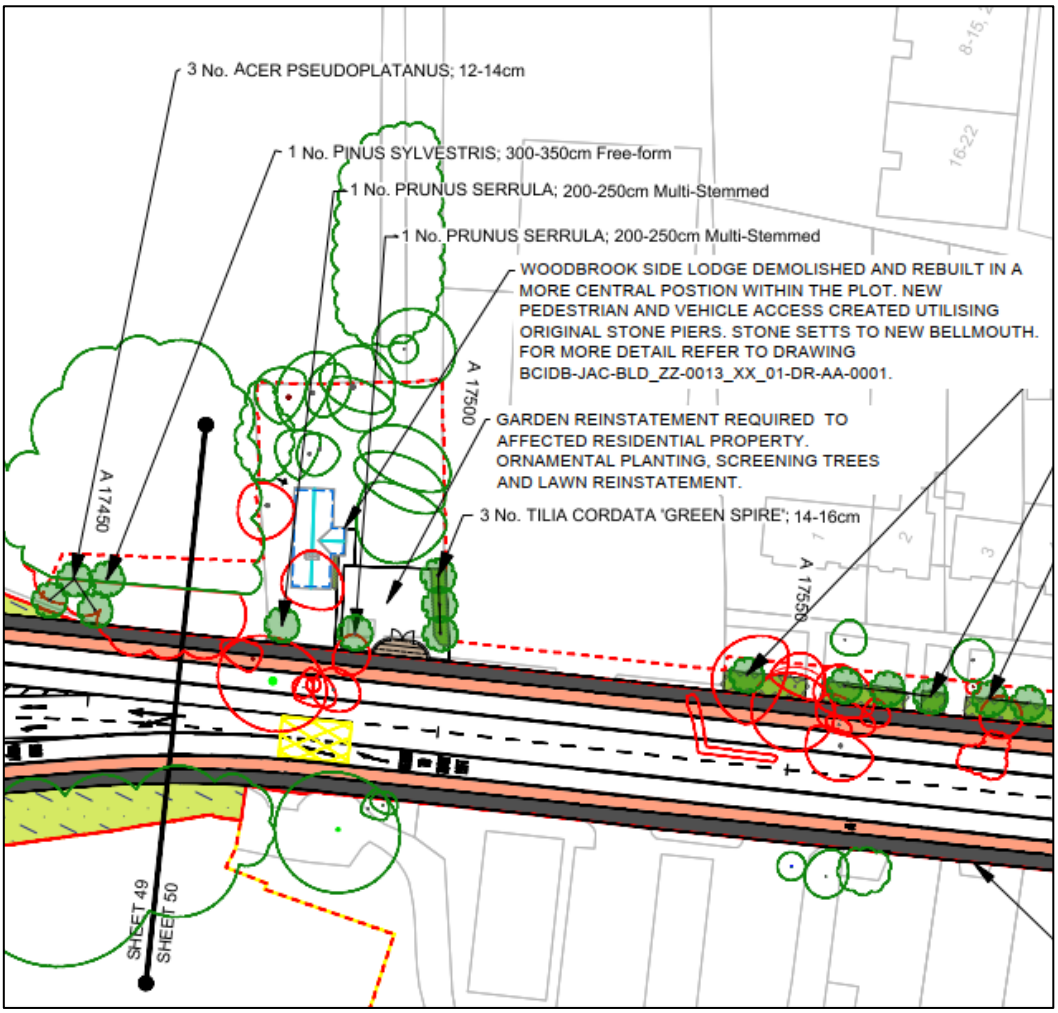


Figure 3.311: Extract from Landscape Drawings at Woodbrook Side Lodge (Sheet 50)

The proposed Woodbrook Side Lodge General Arrangement Drawing (Plans and Elevations) is shown in the Woodbrook Side Lodge General Arrangement Drawings in Volume 3, Part 2 of 3 of the EIAR with the existing and proposed location as shown in Figure 3.312.

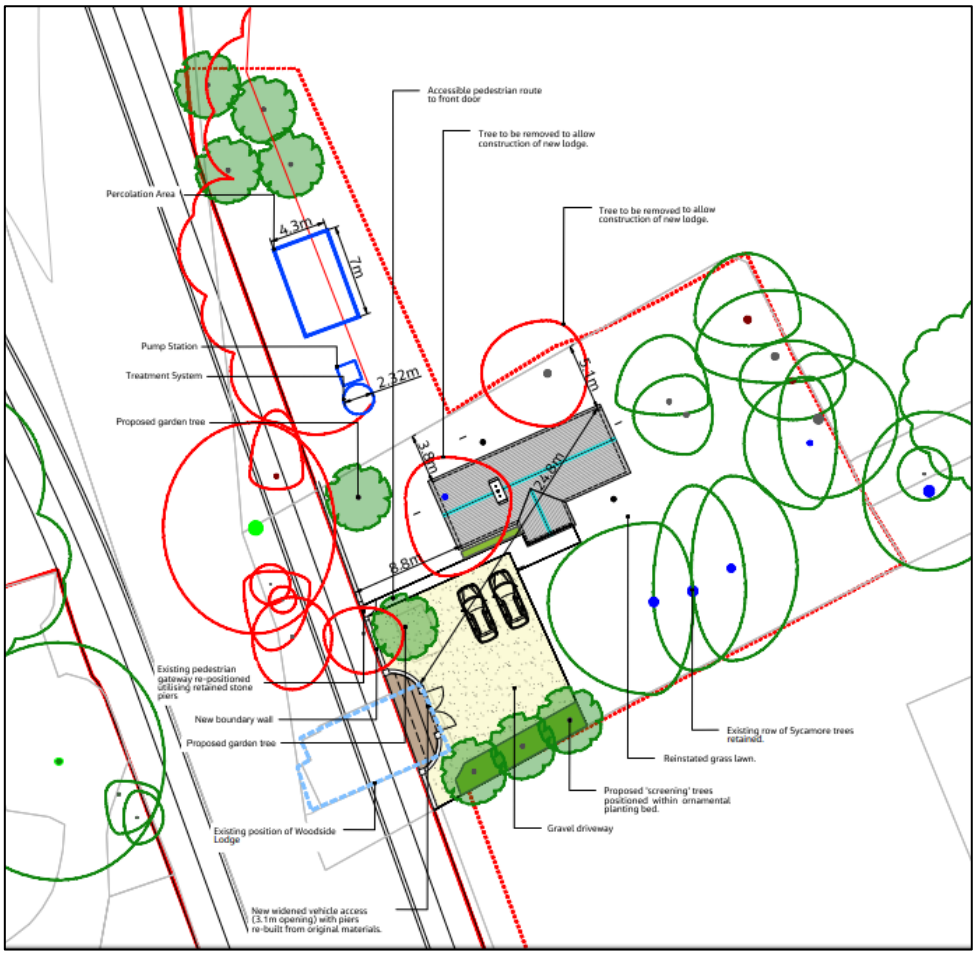


Figure 3.312: Extract from Proposed Woodbrook Side Lodge General Arrangement Drawing

The Proposed Scheme Boundary Treatment design at Woodbrook Estate and at the Side Lodge is shown in the 07- Fencing and Boundary Treatment Drawing Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 on Sheets 48 to 50 and shown in Figure 3.313, Figure 3.314, and Figure 3.315.

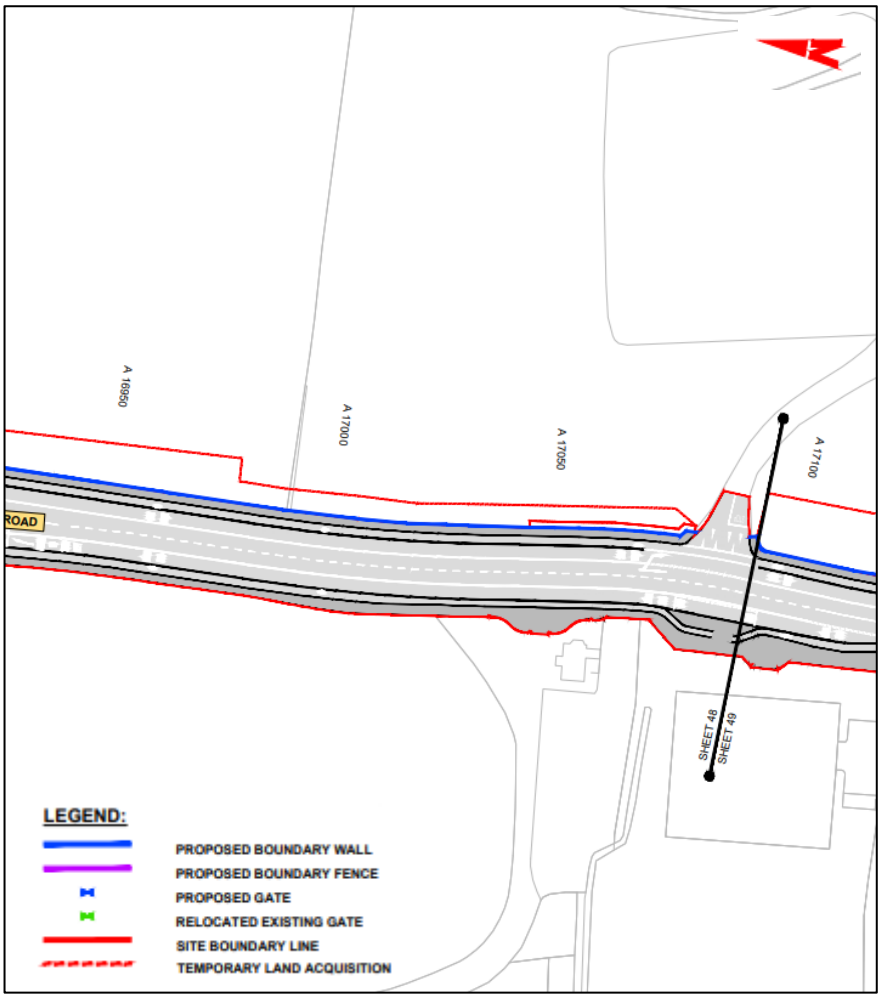


Figure 3.313: Extract from Boundary Treatment Drawing at Woodbrook Estate (Sheet 48)

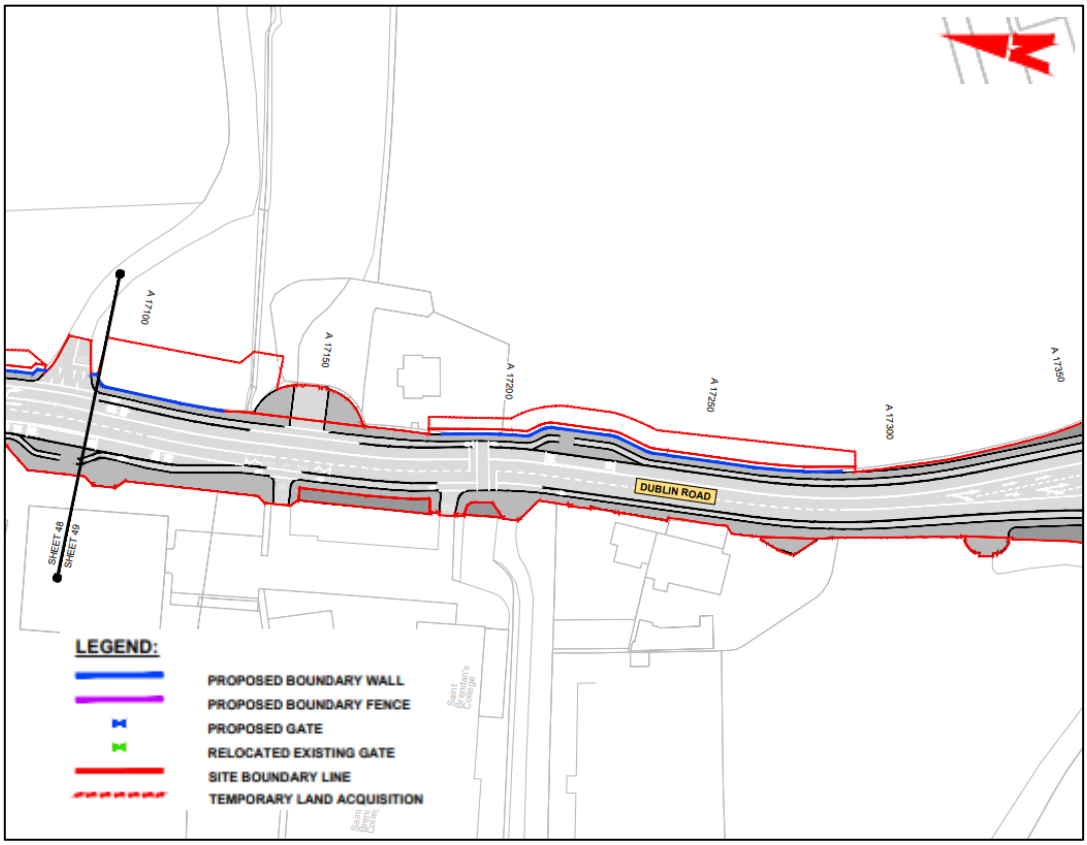


Figure 3.314: Extract from Boundary Treatment Drawing at Woodbrook Estate (Sheet 49)

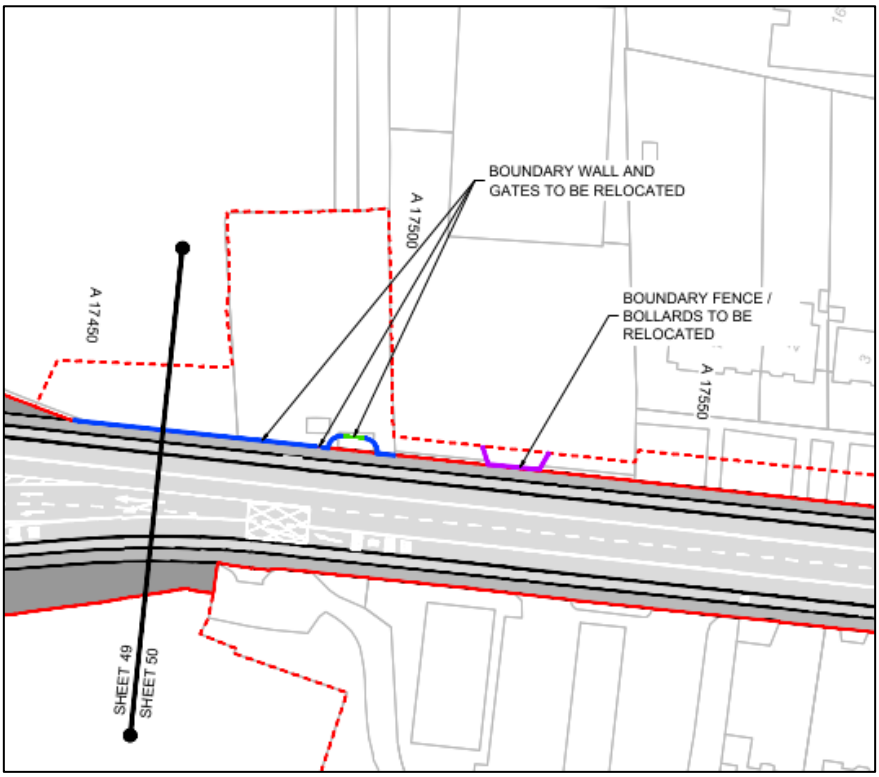


Figure 3.315: Extract from Boundary Treatment Drawing at Woodbrook Side Lodge (Sheet 50)

Section 4.5.3.8.2 of Chapter 4 (Proposed Scheme Description) Volume 2 of EIAR, notes the following on the landscape and boundary treatment:

'The historic gated entrance into the Woodbrook Estate remains unaffected by any carriageway widening. The surface treatment of the wide footway in front of the gates is enhanced with stone setts and wide granite kerbs. South of the gated entrance the proposed southbound bus stop and carriageway widening in close proximity to Woodbrook College results in the loss of some mature trees, with set-back of the wall also required. The alignment through this section has been considered carefully to minimise tree loss and retain a row of mature trees set further back. Replacement native planting is proposed to re-establish the vegetation belt along this side. The proposed wall reinstatement north of the M11 diverge junction will be detailed to match the stone material seen elsewhere along this section.

Immediately south of Wilford roundabout the Woodbrook Estate is impacted with the demolition of Woodbrook Side Lodge. A new lodge is to be rebuilt in a more central position within the plot and designed to meet current building regulations in a style similar to the existing. The boundary wall, and pedestrian and vehicle gated access points will also be rebuilt utilising existing materials where possible.'

Section 4.5.4.1 of Chapter 4 (Proposed Scheme Description) Volume 2 of EIAR, notes the following on the proposed works at the Woodbrook Side Lodge:

'The proposed works will impact the existing Woodbrook Side Lodge, which is a heritage structure located at the southern end of the Woodbrook Estate in Bray. It is proposed to demolish the existing lodge and build a new lodge building further east of its present location in order to allow for road widening in that area. In order to reduce the heritage impact associated with the demolition, it is proposed to reuse some of the materials from the existing lodge within the new lodge, where it is fit for reuse. Refer to the Woodbrook Side Lodge Plans and Elevations drawings (BCIDB-JAC-BLD_ZZ-0013_XX_01-DR-AA-0001, BCIDB-JAC-BLD_ZZ-0013_XX_02-DR-AA-0001) in Volume 3 of this EIAR for detail on the proposals to rebuild the Woodbrook Side Lodge residential property. This EIAR has assessed the impacts associated with the demolition and subsequent construction of a replacement lodge building. However, in order to ensure a worst-case scenario has been assessed, where relevant an assessment has also been done of a scenario in which the building is not replaced.'

Section 13.5 of the Preliminary Design Report part of Supplementary Information notes the following on the boundary treatment and accommodation works.

'The proposed cross-section widening south of Wilford Junction will require the demolition of the Woodbrook Side Lodge, which is part of the Woodbrook Estate. Proposed reinstatement works include the rebuild of the Side Lodge in a similar style to that of the existing property while adopting current building regulations. The new building position is such that tree impacts are minimised and accommodates a bell mouth entrance to the driveway and an entrance driveway that allows vehicles to turn within the plot. A new boundary wall is proposed to relocate pedestrian and vehicle openings and re-use the existing stone piers. Re-use of some materials such as roof slates, bricks, chimney pots and bargeboards is proposed where appropriate. The Side Lodge proposals are included in Appendix R.'

The landscaping drawing as shown in Figure 3.315 Sheet 50 notes the following:

'WOODBROOK SIDE LODGE DEMOLISHED AND REBUILT IN A MORE CENTRAL POSTION WITHIN THE PLOT. NEW PEDESTRIAN AND VEHICLE ACCESS CREATED UTILISING ORIGINAL STONE PIERS. STONE SETTS TO NEW BELLMOUTH. FOR MORE DETAIL REFER TO DRAWING BCIDB-JAC-BLD_ZZ-0013_XX_01-DR-AA-0001.

GARDEN REINSTATEMENT REQUIRED TO AFFECTED RESIDENTIAL PROPERTY. ORNAMENTAL PLANTING, SCREENING TREES AND LAWN REINSTATEMENT.'

The Woodbrook Side Lodge Plan and Elevation as show in Figure 3.311 notes the proposed works and use of existing material:

- *'Existing pedestrian gateway repositioned utilising retained stone piers;*
- *New widened vehicular access (3.1m opening) with piers rebuilt from original material;*
- *New boundary wall;*
- *Gravel driveway;*
- *Proposed screening trees positioned within ornamental planting bed;*
- *Existing natural slates to be re used from existing lodge and any new slates to be similar to the existing slates. The new overall roof construction to meet TGD L requirements.*
- *Existing bricks where possible to be salvaged and reused in a similar details to existing lodge. Any additional bricks to be new, in a similar style to existing.*
- *Chimney Pots to be salvaged from existing and reused where possible.'*

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR assesses the impacts on architectural heritage as a result of the construction and operation of the Proposed Scheme. Figure 16.1 in Volume 3 of the EIAR maps the architectural heritage features located within and adjacent to the boundary of the Proposed Scheme which have been assessed within Chapter 16. Figure 3.316 shows an extract from Figure 16.1 (Sheet 25) which shows the features within the Woodbrook Estate. All architectural heritage features are described in detail in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4 of the EIAR, including those shown in the extract from Figure 16.1 (Sheet 25) below, and all of the protected structures and features on the National Inventory of Architectural Heritage associated with Woodbrook Estate (Corke Lodge (DLR RPS 1869, NIAH 60260155, NIAH 60260156); Woodbrook House (DLR RPS 1870, NIAH 60260157, NIAH 60260158); Woodbrook Front Lodge (DLR RPS 1871, NIAH 60260160); the estate's gates, railings and walls (DLR RPS 1871, NIAH 60260161); and Woodbrook Side Lodge (DLR RPS 1874, NIAH 60260162)), the Woodbrook Estate as a designed landscape (NIAH 5676); and other structures of interest associated with the estate (the boundary walls (CBC0013BTH024) and the pedestrian and vehicular gates at the Side Lodge (CBC0013BTH021)).

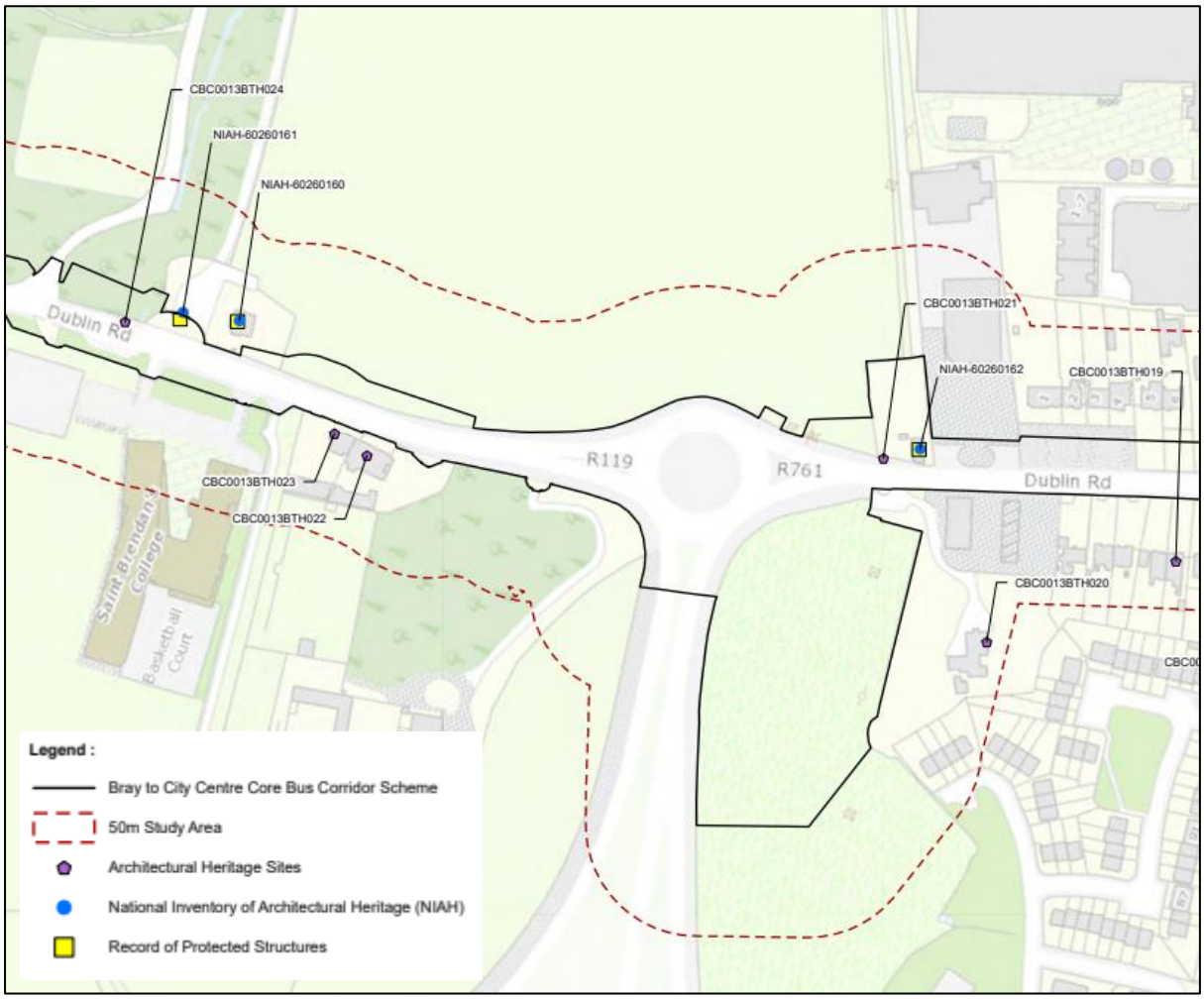


Figure 3.316: Extract from Architectural Heritage Drawings (Figure 16.1) at Woodbrook Estate (Sheet 25)

Woodbrook Side Lodge

The assessment of the impact on protected structures (Section 16.4.3.1) describes the potential impact on the Woodbrook Side Lodge as quoted below. Please refer to Section 4 (Alternative Proposals) of this response for detail on the full alternatives assessment undertaken for this area in an attempt to minimise / remove the impact on the protected structure.

'*The Proposed Scheme includes the construction of a replacement lodge to the east of the present location. The replacement lodge will be enlarged in order to comply with Building Regulations (existing building footprint is approximately 56m², proposed building footprint is approximately 79m²). This option has a precedent, as under the Dublin Road Improvement Scheme mentioned previously, the demolition and construction of a replacement Side Lodge was granted permission in 2009 (An Bord Pleanála Reference HA0020/KA0013). The boundary wall and gates would also be relocated to the east of their current location as part of the Proposed Scheme. Where the existing granite piers, jambs and lintels to the gates are found to be in good condition and suitable for reuse, they will be salvaged for anastylosis (the restoration of a structure by reassembling original materials, and incorporating new materials where required) and will be incorporated in a boundary wall which is to be rebuilt to match the existing. Construction of a replacement lodge represents a loss of historic fabric. Its relocation also alters the relationship with other structures in the demesne as the lodge is associated with Woodbrook House. The magnitude of impact is High. The potential Construction Phase impact will be Direct, Negative, Significant and Permanent.*

In order to ensure a worst-case scenario is assessed, the impact of not constructing a replacement lodge building has also been assessed. In this scenario, the boundary wall and pedestrian gates would be rebuilt to the east of their present location. Though the gates would be retained as a local reference, this option would result in the total loss of the Side Lodge. It would also negatively impact on the

demesne landscape and its relationship with the Front Lodge (DLR RPS 1871) as the lodge is one of a pair associated with the Demesne of Woodbrook House (NIAH 5676). The proposal removes the paired relationship of the lodges. The magnitude of impact is therefore High. The potential Construction Phase impact will be Direct, Negative, Significant and Permanent.'

Section 16.5.1.1 of Chapter 16 describes the mitigation measures which are proposed to reduce the impacts on protected structures during the Construction Phase of the Proposed Scheme. With respect to the Woodbrook Side Lodge, the mitigation measures are described as follows:

'*The existing lodge, gates and boundary wall have been inspected internally and externally to assess current condition. Photographs have also been taken (refer to Appendix A16.4 in Volume 4 of this EIAR). In addition to the photographic record already undertaken, mitigation during the Construction Phase will include labelling the affected masonry, brickwork, and joinery prior to their careful dismantling and removal to safe storage by the appointed contractor. Architectural heritage features such as bricks, timber barge boards and the stone plaques on the gables are a key part of the character of the Side Lodge and its relationship to the Front Lodge (DLR RPS 1871). The Front Lodge has similar detailing to its stack and gable. Where the bricks, bargeboards and stone plaques are found to be in good condition and suitable for reuse, they will be salvaged for anastylosis and will be incorporated in the new structure as detailed in the engineers drawings (in Volume 3 of this EIAR) and photographic record (Appendix A16.4 in Volume 4 of this EIAR). The bargeboards, brick courses, brick dressings and the plaques are to be reinstated on the gables to match the existing gables as indicated in the photographs in Appendix A16.4 in Volume 4 of this EIAR. The chimney will also be rebuilt. If found to be poor condition and unsuitable for reuse, facsimiles of the bargeboards will be made. New red clay bricks, where required, will be matched like for like to the existing in terms of size and colour. Inspection of the lodge revealed that the roof slates, ridge tiles and structure were replaced in a previous refurbishment, as were the rain water goods, render and the doors and windows. The walls will be dash rendered except where there are brick courses, dressings, or enrichments to the gables. The proposed fenestration and doors will be as specified on the engineers drawings. Elements such as the granite jambs and lintel to the pedestrian gate and the gate piers to the vehicular entrance will be incorporated in a boundary wall which would be rebuilt on the new alignment to match the existing boundary wall. An architectural heritage specialist will oversee the labelling, taking-down and reinstatement of affected historic fabric. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.*

Construction of the new lodge building, albeit using material from the original lodge, still represents a significant loss of original fabric as well as the relationship with other structures in the Demesne as the lodge is associated with Woodbrook House. Reconstruction in a historicist style is regarded negatively by heritage specialists as inauthentic (Bold and Pickard 2013). Article 15 of the 1964 Venice Charter states 'All reconstruction work should be ruled out "a priori". Only anastylosis, that is to say, the reassembling of existing but dismembered parts can be permitted'. Section 7.7.4 of the Architectural Heritage Protection Guidelines (DAHG 2011) states that reconstruction of details should be permitted on a selective rather than a systematic basis. Section 16.3.1 of the Architectural Heritage Protection Guidelines (DAHG 2011) states that where there has been a total loss, or near total loss of a historic building, the special interest which led to its inclusion in the RPS may be considered irredeemably lost and the building of a replacement will generally serve little purpose. However, if the building formed part of a larger architectural design or was an important urban or rural landmark, then the reconstruction in replica of at least the exterior of the building may be considered necessary in order to protect the setting of other historic structures. As the lodge is part of a demesne landscape associated with Demesne of Woodbrook House (NIAH 5676) and is one of a pair of gate lodges along with the Front Lodge (DLR RPS 1871), this would apply. Anastylosis will retain as much of the special interest of the lodge as possible though the patina of age will be lost. A new lodge building and the reconstruction of the associated boundary features will maintain their relationship (albeit altered) with Woodbrook House and its demesne. With mitigation, the impact magnitude is reduced from High to Medium. The predicted post-mitigation Construction Phase impact is Direct, Negative, Moderate and Permanent.

As outlined above, it is proposed to construct a new lodge to replace the Woodbrook Side Lodge (DLR RPS 1874), however in order to ensure a worst-case scenario is assessed, a scenario in which only the boundary wall and gates are rebuilt has also been assessed. The predicted pre-mitigation Construction Phase impact of demolishing the Side Lodge and reinstating only the boundary and gates is Direct, Negative, Significant and Permanent. There is very limited scope for mitigation in this worst-case

scenario but includes the recording of the Side Lodge and reinstatement of the boundary wall, vehicular and pedestrian entrance gates. The Side Lodge, boundary wall, dressed granite pedestrian gateway and entrance gates (CBC0013BTH021) have been photographed (refer to Appendix A16.4 in Volume 4 of this EIAR). The granite masonry of the gate piers, jambs and lintels are to be labelled by an appropriate architectural heritage specialist engaged by the appointed contractor, and carefully taken down in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The boundary treatment will be reinstated on the new alignment and the entrance gates reassembled as per photographs, survey drawings and the architectural heritage specialist's direction. The pedestrian gate has the inscription 'Side Entrance Woodbrook' to its lintel, therefore the reinstatement of this gate will serve as a local reference to the Side Lodge. The record of the Side Lodge, including the photographs in Appendix A16.4 in Volume 4 together with any surveys carried out as part of the proposed mitigation at the Side Lodge, will be lodged in the Irish Architectural Archive. Even with mitigation the proposal still results in the loss of the Side Lodge and also negatively impacts on the demesne landscape and its relationship with the Front Lodge (DLR RPS 1871) as the lodge is one of a pair associated with the Demesne of Woodbrook House (NIAH 5676). Given the very limited scope for mitigation in this worst-case scenario, the magnitude remains High. The predicted post-mitigation impact with respect to this worst-case scenario is Direct, Negative, Significant and Permanent.'

As described in Section 16.6.1.1 of Chapter 16, despite the mitigation measures outlined above, there will be a potentially significant residual impact associated with the demolition of the Side Lodge as described below:

'*It is proposed to construct a new Woodbrook Side Lodge (DLR RPS 1874) building and relocate the associated boundary wall, dressed granite pedestrian gateway and entrance gates (CBC0013BTH021) to the east of their current location. The lodge is associated with the secondary entrance to Woodbrook House (DLR RPS 1870, NIAH 60260157) and forms part of the demesne landscape (NIAH 5676). A new lodge building and the reconstruction of the associated boundary features will maintain their relationship (albeit altered), with Woodbrook House and its demesne landscape. The predicted residual impact is Direct, Negative, Moderate and Permanent.*

Under a worst-case scenario, Woodbrook Side Lodge (DLR RPS 1874) will be demolished without replacement resulting in the total loss of the lodge. There is very limited scope for mitigation, involving only the relocation of the associated boundary wall to the demesne landscape of Woodbrook House (NIAH 5676), dressed granite pedestrian gateway and entrance gates (CBC0013BTH021). The predicted residual impact in that worst-case scenario is Direct, Negative, Significant and Permanent.'

Heritage Boundary Walls

The rest of the impacts on the Woodbrook Estate are assessed under the designed landscapes section of Chapter 16 (Section 16.4.3.5) which describes the potential impact on the features of Woodbrook Estate as follows:

'*The proposed land take on the east side of the Dublin Road will directly impact on a 19th century demesne wall (CBC0013BTH025) which is of Medium Sensitivity, necessitating its removal and reinstatement. The wall is associated with Corke Lodge (DLR RPS 1869). New openings in this wall have been granted under a separate application for the Woodbrook SHD (Ref ABP30584419). The trees to the boundary will be replaced. The magnitude of impact is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary.*

The proposed land take on the east side of the Dublin Road will directly impact on the 19th century coursed granite rubble demesne wall with bevelled granite coping (CBC0013BTH024) necessitating its removal and reinstatement. The wall forms part of the 19th century demesne wall of Woodbrook House Demesne (NIAH 5676) and is of medium sensitivity. Trees along the boundary will be retained for the most part though some will be removed. The magnitude of impact on the demesne wall and demesne is Medium. The potential Construction Phase impact will be Direct, Negative, Moderate and Temporary

The proposed land take on the east side of the Dublin Road to the south of the Front Lodge (DLR RPS 1871) to Woodbrook House Demesne (NIAH 5676) will necessitate the removal of the boundary wall to Woodbrook House. The affected section of boundary wall is a replacement rather than the original demesne wall. Both are of low sensitivity, given that they are reconstructed boundaries rather than part of the historic demesne boundary wall. The southern portion was rebuilt when the Wilford Roundabout

was constructed. The portion with the staggered coping and pebbledash render is also a replacement wall. Trees along the boundary will be retained for the most part though some will be removed. The magnitude of impact is on the demesne is Low. The potential Construction Phase impact will be Direct, Negative, Slight and Temporary.'

Mitigation measures to reduce the impact on the designed landscape aspects of the Woodbrook Estate are described in Section 16.5.1.5 as outlined in the following paragraphs.

With respect to the demesne wall (CBC013BTH025) of Corke Lodge (DLR RPS 1869) and the demesne wall (CBC0013BTH024) to the north of the entrance gates (DLR RPS 1871) to Woodbrook House (DLR RPS 1870, NIAH 5676) the mitigation includes, '*recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.*'

Following the implementation of those mitigation measures, the impact magnitude on both sections of wall reduce from Medium to Low, and the predicted post-mitigation impact on both walls reduces to Direct, Negative, Slight and Long-Term.

For the proposed land take to the south of the Front Lodge (DLR RPS 1871) to Woodbrook House (DLR RPS 1870, NIAH 5676) which will impact on the boundary wall which is a replacement wall for the most part, the mitigation measures include, '*recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Not Significant and Long-Term.*'

As with the other walls, the magnitude of impact is reduced from Medium to Low following implantation of the mitigation measures, and therefore the impact reduces to Direct, Negative, Not Significant and Long-Term.

Trees, Landscape and Visual Impact

As shown in the above figures, there will be impacts on trees along the front of Woodbrook Estate and at Woodbrook Side Lodge. An Arboricultural Impact Assessment was undertaken, and is included as Appendix A17.1 in Volume 4 Part 4 of the EIAR. As per the Tree Schedule in that report, the proposed removals in the Woodbrook Estate are as follows:

- The following individual trees:
    - Lime tree (Tree Number T0074) which has been assessed as a Category B1 tree (moderate arboricultural value and conservation);
    - Pair of sycamore trees (Tree Number G0070) described as '*Pair of ivy clad stems forming spreading merged canopy*' and has been assessed as a Category B1 group (moderate arboricultural value and conservation);
    - Black pine tree (Tree Number T0069) which has been assessed as a Category B1 tree (moderate arboricultural value and conservation);
    - Black pine tree (Tree Number T0068) which has been assessed as a Category A1 tree (high arboricultural value and conservation);
    - Wych elm tree (Tree Number T0067) which has been assessed as a Category B1 tree (moderate arboricultural value and conservation);
    - Wild cherry tree (Tree Number T1531) within the grounds of the Side Lodge which has been assessed as a Category U tree (not suitable for retention);
    - Sycamore tree (Tree Number T1513) within the grounds of the Side Lodge which has been assessed as a Category A1 tree (high arboricultural value and conservation);
    - Wild cherry tree (Tree Number T1512) within the grounds of the Side Lodge which has been assessed as a Category A1 tree (high arboricultural value and conservation);

  - Wild cherry tree (Tree Number T1510) within the grounds of the Side Lodge which has been assessed as a Category C1 tree (low arboricultural value and conservation);
  - Wild cherry tree (Tree Number T1515) within the grounds of the Side Lodge which has been assessed as a Category B1 tree (moderate arboricultural value and conservation); and
  - Sycamore tree (Tree Number T1527) within the grounds of the Side Lodge which has been assessed as a Category C1 tree (low arboricultural value and conservation).
- The following tree groups:
  - Partial removal of a mixed species group (Tree Number G0088) which is described as '*Mixed species group that extends along boundary comprising mature high value and prominent trees that include beech, lime, horse chestnut*', and has been assessed as a Category A2 group (high landscape value and conservation);
  - Partial removal of a mixed species group (Tree Number G0075) which is described as '*Mixed species group comprising sycamore and leylandii that extends along boundary stone wall in private property*', and has been assessed as a Category C2 group (low landscape value and conservation);
  - Partial removal of a mixed species group (Tree Number G0073) which is described as '*Mixed species group comprising ivy clad sycamore and beech with merged canopies that extend east around rear of gardens*', and has been assessed as a Category C2 group (low landscape value and conservation); and
  - Partial removal of a mixed species group (Tree Number G1579) which is described as '*Dense mixed species group comprising sycamore, pine, beech, oak, wild cherry, horse chestnut and Norway maple, behind stone wall on open grass*', and has been assessed as a Category C2 group (low landscape value and conservation).

As shown in the Landscape General Arrangement Drawings in Volume 3 of the EIAR (Figure 3.309, Figure 3.310, and Figure 3.311 above), it is proposed to plant a number of trees along the boundary of Woodbrook Estate to mitigate for the proposed tree losses and repair the edge of the woodland, including the species tilia cordata, fagus sylvatica, quercus robur, acer pseudoplantus, pinus radiata, populus nigra, pinus nigra, pinus sylvestris and prunus serrula. Sheet 49 of the Landscape General Arrangement drawings includes the following description of the Woodbrook Estate boundary proposals: '*Existing wall, trees and vegetation up to 4m from the wall to be removed. Wall set back and re-built. Enhancement to local character by building the wall in stone to match the other boundary walls along this section of Dublin Road. A 'no-dig' construction method to be used where root protection zones of retained trees are impacted*.'

Section 5 of the Arboricultural Impact Assessment Report (Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR) describes mitigation and improvement measures including the following:

'*new planting should include a varied age and mix of tree species that are chosen with consideration to local site and environmental conditions, native environment, future use of the site, provision of ecosystem services and contribution that can be made to local communities. The aim should be to plant the 'right tree in the right place' to create a tree population that is both functional and resilient.*

Where it is proposed to create new green space, or where opportunities exist for new planting, consideration should also be given to the provision of succession planting to ensure continuous canopy cover in the local landscape, especially where there is an ageing tree population with little or no sign of recent tree planting.'

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 of Chapter 17 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below:

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.*'

'*Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.*'

'*The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.*'

As summarised in Table 17.9 of Chapter 17, the Construction Phase impact on trees and vegetation is predicted to be Negative, Very Significant, Short-Term. As summarised in Table 17.10 in Chapter 17, following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to Negative, Moderate / Significant, Long-Term.

Chapter 17 also specifically assesses the impact on Tree Preservation Objectives in Section 17.4.3.2.6 (Construction Phase) and Section 17.4.4.2.6 (Operational Phase). The Chapter lists all locations which are subject to Tree Preservation Objectives, with the list including Corke Lodge and Woodbrook Estate. During the Construction Phase the assessment concludes that '*The potential townscape / streetscape and visual impact of the Construction Phase on tree preservation objectives is assessed to be Negative, Very Significant and Short-Term*', while during the Operational Phase it states that:

'*Operation of the Proposed Scheme will not impact further on tree protection designations, however, the effects resulting from loss of trees removed during the Construction Phase will remain. Replacement trees are proposed where feasible and the negative effects will be reduced over the long-term as the proposed replacement trees mature. The sensitivity is very high and the magnitude of change will be high.*

The potential townscape / streetscape and visual impact of the Operation Phase on tree designations is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Significant and Long-Term.'

With respect to the townscape and streetscape character impacts in Section 3 of the Proposed Scheme (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) the Construction Phase impact is described in Section 17.4.3.1.3 as follows:

'*The baseline townscape is of very high sensitivity and construction of the Proposed Scheme will involve very substantial works along the road corridor. The Construction Phase involves demolition, excavation and construction works to kerbs, road carriageways, footpaths, junctions, surfacing and parking, utilities, and drainage features. The works will also involve long sections of temporary and permanent acquisition from Loughlinstown Roundabout to north of Shankill Village and from south of Shankill Village to Wilford Roundabout. This acquisition and associated works will give rise to substantial disruption, removal of existing boundaries, including established and historic stone walls, tree planting, and planting belts at a range of properties including residential, community / institutional, agricultural, public park and cemetery. The works will involve land acquisition from several residential properties, including established parkland properties such as Askefield House, Beauchamp House and Woodbrook House, which have attractive boundaries / stone walls and planted boundaries with the road corridor. Impact on the residential properties will remove sections of existing boundary walls and entrances, sections of driveway and established trees and hedgerows.*

The construction works will alter the existing streetscape character along this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Construction Phase on this section is assessed to be Negative, Very Significant / Profound and Temporary / Short-Term.'

The Operational Phase townscape and streetscape character impact specific to that section of the Proposed Scheme is described in Section 17.4.4.1.3 as follows:

'*The baseline townscape is of very high sensitivity and operation of the Proposed Scheme will involve very substantial changes along this section, with widening of the road corridor, permanent acquisition from 23 residential properties as well from Rathmichael parish National School, St. Anne's Church, and Shanganagh Park and Cemetery, with resultant setback of boundaries and continuing effects from loss of mature trees / plantings removed during the Construction Phase. However, there will be provision of*

substantial replacement planting to consolidate the boundaries and woodland edges throughout this section. Screening planting will be restored to the boundaries of all impacted residential properties. Over the long-term there will be a reduction of the negative effects associated with removal of trees and other vegetation. The Operational Phase will not alter the existing townscape character but will substantially alter the local streetscape amenity across much of this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Moderate and Long-Term.'

Section 6 of the submission describes the photomontages relevant to Woodbrook Estate and states that it is '*not clear if mature planting is proposed or if photomontages reflect growth of these trees after a number of years*'. As outlined above from the Arboricultural Impact Assessment Report, new tree planting will consist of a mix of ages and species. Chapter 17 (Landscape (Townscape) & Visual) describes the photomontages in Section 17.5.2.1 stating that '*The proposed Views are shown with proposed planting at approximately 10 to 15 years post-completion of the Construction Phase*'.

As described above, there will be visual and landscape impacts as a result of the widening of the Dublin Road in front of Woodbrook Estate, mitigation measures are proposed to mitigate the impact as far as reasonably practicable. A robust alternatives assessment was also carried out (as described in Section 4 below) in order to identify the optimum design and alignment through this section of the Proposed Scheme, with the least potential for impacts while still meeting the objectives of the Proposed Scheme.

Requested CPO Conditions

The submission requests, should the Board approve the Proposed Scheme that conditions be attached as follows:

- '*it is requested that the reconstruction of the Side Lodge be required by Condition and that these works be completed within 1 year of its demolition.*'
- '*it is requested that the boundary treatments and planting to the front of the property are agreed with the owner of Woodbrook Estate prior to construction*.'

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

Regarding the request to consult the landowner with respect to boundary wall please refer to response 3.12.15.3.1 above and also note below.

Reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

The NTA acknowledge the positive and constructive liaison that has occurred with the owners and consultants of the Woodbrook Estate throughout the design and planning process to date. These are matters that can be successfully addressed between the Woodbrook Estate owners and the NTA, in the absence of any approval condition.

3.12.15.3.3 Impact During Construction

Summary of issue raised

The submission notes concerns on impact during construction.

Response to issue raised

Chapter 5 (Construction) in Volume 2 of the EIAR describes the works required to construct the Proposed Scheme. The majority of the Woodbrook Estate is located within Section 3c of the Proposed

Scheme (Quinn's Road to Bray North (Wilford Roundabout)), with the Woodbrook Side Lodge located in Section 4a (Bray North (Wilford Roundabout) to Old Connaught Avenue). Section 5.3.3.3 of Chapter 5 describes the construction activity in Section 3c as follows:

'*Extensive modifications will be made to boundary walls, fencing, and accesses along Dublin Road. The footpath will be realigned at Castle Farm to retain prominent trees. The existing wall adjacent to the road will be removed and reinstated as a low wall to the back of the realigned footpath. A no dig construction method will be carried out at this location within the root protection area. A two-way cycle track will be constructed along Shanganagh Park and Shanganagh Cemetery. Various utility diversions and/or protections will be required; including electricity overhead lines and underground cables, water distribution, gas mains and telecommunications infrastructure. Vegetation and trees will be removed, and trees will be replanted along Dublin Road. The expected construction duration will be approximately 18 months*.'

Section 5.3.4.1 of Chapter 5 describes the construction activity in Section 4a as follows:

'Section 4a encompasses a length of approximately 300m along Dublin Road, between Wilford Roundabout and Old Connaught Avenue. The construction activities at Section 4a will comprise conversion of the Wilford Roundabout to a signalised junction, reconstruction and resurfacing of the roads, footpaths, and cycle tracks, and new kerbs. Construction activities will also consist of additional signage, new road markings, new and amended traffic signal infrastructure, new street furniture and landscaping works. Accommodation works will be carried out at Woodbrook Estate Side Lodge, including demolition and reconstruction of the building. Further information on the Woodbrook Estate Side Lodge demolition methodology is provided in Section 5.5.2.10. The Construction Compound (BR1) will be located at the Wilford Junction. Boundary walls, fencing, and bollards will be relocated along Dublin Road, and accesses will be modified. An MV Sub Station will be constructed at the Wilford Junction. Various utility diversions and/or protections will be required, including electricity overhead lines and underground cables, water distribution, gas mains and telecommunications infrastructure. Vegetation and trees will be removed, and trees will be replanted along Dublin Road. The expected construction duration will be approximately 12 months.'

As outlined above, the expected construction duration will be approximately 18 months for Section 3c and 12 months for Section 4a, as presented in Table 3.79. As shown in the table below, there is significant overlap between the proposed construction periods for both sections, therefore the total period across both sections would be approximately 21 months in total. However, it should be noted that work in individual areas and to individual lands within those sections will generally be shorter than the total duration for the whole section.

Table 3.79: Extract from EIAR Chapter 5 Construction Programme (Construction, Page 7)

Table 5.2: Proposed Scheme Construction Programme

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300												
Section 1b	15 months	1,300												
Section 2a	15 months	5,800												
Section 2b	12 months	5,700												
Section 3a	12 months	1,270												
Section 3b	9 months	500												
Section 3c	18 months	1,800												
Section 4a	12 months	300												
Section 4b	9 months	400												
Section 4c	9 months	350												

Section 5.5.2.10.1 notes the works involved in the demolition of the Woodbrook Side Lodge as follows:

'The existing single story residential property south-east of the Wilford Roundabout, at the south end of the Woodbrook Estate, will be demolished and reconstructed. The existing lodge will be demolished prior to construction of the new lodge, which will be constructed approximately 24m north-east of the existing lodge. Relocation of the existing lodge is required to facilitate the proposed carriageway cross-

section. The proposed lodge will re-use certain materials from the demolished lodge, where practicable. The occupants will need to be relocated during the demolition / construction of the residential property.

Prior to demolition of the property, the appointed contractor will undertake an asbestos survey. Should asbestos containing materials be found, it will be disposed of in accordance with the appropriate legislation. As there is an attic in the property, there will also be a requirement for a bat survey prior to demolition.

All existing services (including electricity, water, gas, and telecommunications) will be identified, located, and turned off, prior to demolition works, in liaison with local service providers. Temporary disruption to services may arise during the course of the work, however existing services will be re-instated. Considerable site clearance and topsoiling will be required to facilitate construction of the proposed lodge. Site clearance works will include removal of nine trees. Any materials remaining in or around the house (e.g. furniture, kitchen appliances etc.) will be segregated and removed off site to an appropriately licensed facility.

Demolition of the property will commence from the roof structure working downwards. The appointed contractor will require the use of excavators and/or other suitable equipment for the demolition works. The remaining concrete and masonry structures will then be demolished and temporarily stockpiled in an appropriate location within the Proposed Scheme boundary. All material will be removed off site to an appropriately licensed facility. Any materials that are planned to be reused, where practicable (e.g., roof slates, limestone stone elements), will be stored appropriately by the appointed contractor.

The existing on-site waste treatment system will be decommissioned and the percolation area backfilled with suitable material. The existing boundary wall and the two vehicular access gates will be demolished and a new (set-back) boundary wall will be constructed. The stone piers from the existing gateway will be retained for reuse for the new gateway.

Safe access to the adjacent commercial properties will be maintained throughout the demolition activities, unless otherwise agreed with the individual landowners.'

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works and/or accommodation works. Temporary land take will be returned back after construction, reinstated in the same condition as existing.

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'*Any land temporarily acquired from a landowner will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question.*

Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

It goes on to state in Section 5.5.3.2 that:

'details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'

Section 5.10.1 Chapter 5 (Construction) Volume 2 of EIAR states the following on the Construction Environment Management Plan:

'As stated in Section 5.1, a CEMP has been prepared for the Proposed Scheme and is included as Appendix A5.1 in Volume 4 of this EIAR. The CEMP will be updated by the NTA prior to finalising the Construction Contract documents for tender, so as to include any additional measures required pursuant to conditions attached to An Bord Pleanála's decision. It will be a condition of the Employer's Requirements that the successful appointed contractor, immediately following appointment, must detail in the CEMP the manner in which it is intended to effectively implement all of the applicable mitigation measures identified in this EIAR. The CEMP has regard to the guidance contained in the Guidelines for

the Creation, Implementation and Maintenance of an Environmental Operating Plan (NRA 2007), and the handbook published by CIRIA in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

Details of mitigation measures proposed to address potential impacts arising from construction activities are described in Chapter 6 to Chapter 21, as appropriate, and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

A number of sub-plans have also been prepared as part of the CEMP and these are summarised in the following sections. For the avoidance of doubt, all of the measures set out in the CEMP and the sub-plans appended to this EIAR will be implemented in full by the appointed contractor to the satisfaction of the NTA.'

Section 5.10.5 Chapter 5 (Construction) in Volume 2 of the EIAR describes the construction health and safety requirements as follows:

'The requirements of Number 10 of 2005 – Safety, Health and Welfare at Work Act 2005, and S.I. No. 291/2013 – Safety, Health and Welfare at Work (Construction) Regulations, 2013 (hereafter referred to as the Regulations), and other relevant Irish and European Union safety legislation will be complied with at all times. As required by the Regulations, a Safety and Health Plan will be formulated which will address health and safety issues from the design stages through to the completion of the Construction Phase. This plan will be reviewed as the Proposed Scheme progresses. The contents of the Safety and Health Plan will follow the requirements of the Regulations. In accordance with the Regulations, a 'Project Supervisor Design Process' has been appointed and 'Project Supervisor Construction Stage' will be appointed, as appropriate.'

Section 5.10.2 Chapter 5 (Construction) in Volume 2 of the EIAR describes the Construction Phase mitigation measures as follows:

'Mitigation and monitoring measures have been identified as environmental commitments and overarching requirements which shall avoid, reduce or offset potential impacts which could arise throughout the Construction Phase of the Proposed Scheme. These mitigation and monitoring measures which are relevant to the Construction Phase of the Proposed Scheme are detailed in Chapter 6 to Chapter 21, and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) and in Appendix A5.1 CEMP in Volume 4 of this EIAR.'

Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR includes the following monitoring and mitigation during the Construction and Operational Phase at the Woodbrook Estate and the Woodbrook Side Lodge as shown in Table 3.80 and Table 3.81.

Table 3.80: Extract from EIAR Chapter 22 Table 22.12 (Architectural Heritage Mitigation Measures)

Mitigation Number	EIAR Section Reference	Location	Description of Mitigation or Monitoring Measure / Environmental Commitment
AH3	16.5.1.1	Protected Structures: Woodbrook Side Lodge (DLR RPS 1874, NIAH 60260162) and associated boundary wall, dressed granite pedestrian gateway and entrance gates (CBC0013BTH021)	An architectural heritage specialist engaged by the appointed contractor will oversee the labelling, taking-down and reinstatement of affected historic fabric. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The record of the Side Lodge, including the photographs in Appendix A16.4 in Volume 4 together with any surveys carried out as part of the proposed mitigation at the Side Lodge, will be lodged in the Irish Architectural Archive. **Woodbrook Side Lodge (DLR RPS 1874, NIAH 60260162)** Mitigation will include labelling the affected masonry, brickwork, and joinery prior to their careful dismantling and removal to safe storage by the appointed contractor. Architectural heritage features such as bricks, timber barge boards and the stone plaques on the gables are a key part of the character of the Side Lodge and its relationship to the Front Lodge (DLR RPS 1871). Where the bricks, bargeboards and stone plaques are found to be in good condition and suitable for reuse, they will be salvaged for anastylosis and will be incorporated in the new structure as detailed in the engineers drawings (in Volume 3 of this EIAR) and photographic record (Appendix A16.4 in Volume 4 of this EIAR). The bargeboards, brick courses, brick dressings and the plaques are to be reinstated on the gables to match the existing gables as indicated in the photographs in Appendix A16.4 in Volume 4 of this EIAR. The chimney will also be rebuilt. If found to be poor condition and unsuitable for reuse, facsimiles of the bargeboards will be made. New red clay bricks, where required, will be matched like for like to the existing in terms of size and colour. Inspection of the lodge revealed that the roof slates, ridge tiles and structure were replaced in a previous refurbishment, as were the rain water goods, render and the doors and windows. The walls will be dash rendered except where there are brick courses, dressings, or enrichments to the gables. The proposed fenestration and doors will be as specified on the engineers drawings. **Associated boundary wall, dressed granite pedestrian gateway and entrance gates (CBC0013BTH021)** Elements such as the granite jambs and lintel to the pedestrian gate and the gate piers to the vehicular entrance will be incorporated in a boundary wall which would be rebuilt on the new alignment to match the existing boundary wall. The granite masonry of the gate piers, jambs and lintels are to be labelled by an appropriate architectural heritage specialist engaged by the appointed contractor, and carefully taken down in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The boundary treatment will be reinstated on the new alignment and the entrance gates reassembled as per photographs, survey drawings and the architectural heritage specialist's direction. The pedestrian gate has the inscription 'Side Entrance Woodbrook' to its lintel, therefore the reinstatement of this gate will serve as a local reference to the Side Lodge.
AH16	16.5.1.5	Designed Landscapes: Demesne wall (CBC0013BTH025) associated with Corke Lodge (DLR RPS 1869)	Mitigation will include recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.
AH17	16.5.1.5	Designed Landscapes: Granite rubble demesne wall with bevelled granite coping (CBC0013BTH024) to the north of the entrance gates (DLR RPS 1871) to Woodbrook House (DLR RPS 1870, NIAH 5676)	Mitigation will include recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.
AH18	16.5.1.5	Designed Landscapes: Wall south of the Front Lodge (DLR RPS 1871) to Woodbrook House (DLR RPS 1870, NIAH 5676)	Mitigation will include recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.
AH20	16.5.1.5	Designed Landscapes throughout (as required): 12 designated landscapes (Morehampton Grove (CBC0013BTH147), Ardmore House (DCC RPS 19), Woodview House (DLR RPS 9), Belfield House (DCC RPS 41), St Helen's (NIAH 2460), the entrance gates and gate lodge formerly associated with Claremont House (DLR RPS 2010,2077), Shanganagh Park Gates and Railings (NIAH 60260149), the boundary wall and gate piers of the Orchard (DLR RPS 1987), the boundary wall and gate piers of Askefield House (DLR RPS 1860, 2001), the boundary wall of the Aske (DLR RPS 1866), the entrance gates and boundary wall to Woodbrook House (DLR RPS 1870, 2090) and the entrance gates to Wilford House (DLR RPS 1873))	Mitigation will include recording, protection and monitoring of the sensitive fabric prior to and for the duration of the Construction Phase. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR.

Table 3.81: Extract from EIAR Chapter 22 Table 22.8 (Biodiversity Mitigation Measures)

Mitigation Number	EIAR Section Reference	Location	Description of Mitigation or Monitoring Measure / Environmental Commitment
BD11	12.5.1.4.1.3	Woodbrook Side Lodge	Protection of Bats During Demolition of Woodbrook Side Lodge In addition to the measures outlined above, the following are in respect of the removal (and relocation and rebuilding) of Woodbrook Side Lodge which has been identified as being potentially suitable to support roosting bats: Bats could occupy suitable roosting features at any time prior to the commencement of works. Therefore, there is an inherent risk that bats could be affected by the proposed demolition works. The following mitigation procedures will be followed: • Woodbrook Side Lodge must be re-surveyed prior to its demolition to ensure there are no roosting bats present. A suitably qualified and experienced ecologist must carry out internal and external inspections of the building as well as a minimum of one bat emergence survey and one bat re-entry survey during the active bat season (generally taken as mid-April to mid-September inclusive). • Where a bat roost is encountered, all relevant works will cease and an application for a derogation licence shall be submitted by the suitably qualified / licensed bat specialist to the NPWS to seek permission for the removal of the roost.
BD31	12.5.2.4.1.4	Woodbrook Side Lodge	**Bats** Monitoring of Confirmed Roost for Demolition of Woodbrook Side Lodge (Where a Roost is Confirmed) Where a compensatory roost is required to enable the demolition and later rebuilding of the lodge, this would require the application of a derogation licence, and approval of NPWS. The following precautionary approach is proposed to compensate for loss of as roost if confirmed. Given that the rebuilt house is privately owned, the use of bat bricks or similar is not proposed as access for post-installation monitoring (one, three and five years) cannot be guaranteed, and the light spill from adjacent road and commercial premises is considered unfavourable. Thus, similar to the installation of bat boxes for the loss of trees containing PRFs, it is proposed that species-specific bat boxes, of suitable capacity to reflect the nature of the roost to be removed will be installed in retained trees as close as is practical to the location of rebuilt Woodbrook Side Lodge, in trees to the immediate north-east. The boxes will be checked for presence of bats or signs of bat occupancy once per year in years one, three and five post-construction by an appropriately licensed and qualified ecologist. The results of these surveys will be shared with BCI, the local authority Biodiversity Officer and the NPWS. While the success of the proposed bat mitigation strategy will not be measured by occupancy of roosts by bats, it is considered to be best practice and appropriate to implement a monitoring plan to gather information and assess whether the bat population has responded favourably to mitigation measures. Post-works licence returns would likely be required for the discharge of obligations attached to the derogation licence (which could be in addition to the strategy in respect of the roost removal, to which will need to be submitted to the Department of Housing, Local Government and Heritage, following the completion of licensable works.

3.12.15.3.4 Alternative Proposals

Summary of issue raised

The submission notes that they do not consider that the application has sufficiently demonstrated that exceptional circumstances apply which justify the demolition of Woodbrook Side Lodge, as there are alternatives that may be possible.

The submission suggests that a far less substantial impact could occur on the Woodbrook Estate with a shared cycle and bus lane on both sides of the road or signal controlled bus priority, similar to other areas of the route. The suggestion would provide a more direct route for cyclists and reduce the impact to Woodbrook, combined with a 30kph speed limit along Dublin Road this could reduce the lands needed from Woodbank and protect the protected structure set for demolition within the Proposed Scheme as well as any further visual or historical impacts. The submission mentioned that the NTA were provided with the alternative suggestions.

Response to issue raised

Article 5(1)(d) of Directive 2011/92/EU, as amended by Directive 2014/52/EU (hereafter known as the EIA Directive) requires that an Environmental Impact Assessment Report (EIAR) contains '*a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and the main reasons for the option chosen, taking into account the effects of the project on the environment'*.

EIAR Chapter 3 (Consideration of Alternatives) in Vol 2 of EIAR provides details of the alternatives considered.

This section describes the various route alternatives considered to inform the Preferred Route Option between in the vicinity of the landholding of Woodbrook Estate at Dublin Road (Crinken Lane to Bray North at Wilford Roundabout).

Proposed Scheme at Dublin Road (Crinken Lane to Wilford Roundabout)

The existing provision over this length comprises a two-lane carriageway with advisory cycle lanes from Wilford Roundabout as far as Shanganagh Cemetery. From here, the cross-section switches to two traffic lanes, a northbound bus lane and a southbound advisory cycle lane until alongside Shanganagh Park. It then transitions back to two lanes with advisory cycle lanes from Shanganagh Park to Crinken Lane.

The Emerging Preferred Route in this section proposed footpaths, segregated cycle tracks, a dedicated bus lane and a general traffic lane in both directions, thus upgrading the existing cycling infrastructure.

The Preferred Route Option is in line with the EPR option with further design development.

The Proposed Scheme provides for a full suite of footpath, segregated cycle track, general traffic lane and bus lane in both directions. Cycle tracks and/or footpaths have been brought behind the roadside treeline where suitable, to maintain the roadside tree canopy along the road. To optimise the protection of the roadside trees in front of Shanganagh Cemetery, a section of the northbound cycle track has been relocated to the eastern side of the route to create a two-way cycle track from St. James Church, behind the roadside trees at Shanganagh Cemetery, and across Shanganagh Park. The northbound cycle track crosses back to the west side of the road before Allies River Road. Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here until the Woodbrook college.

Section 3.4.1.3.1 of the EIAR Volume 2 Chapter 3 (Consideration of Alternatives) summarises the alternatives considered and the design development. This is further explained in detail in Section 6.4.2 of the Preferred Route Option, as part of the Supplementary Information.

'The design for this section was developed further as part of the Preferred Route Options development following completion of additional topographical and tree surveys, which allowed for a more detailed analysis of the impacts the proposed EPR would have. The assessment also took into account the responses from the Non-Statutory Public Consultations which outlined that heritage wall and roadside tree loss along this section would impact on the visual identity and feel for this length of road.

Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here until the Woodbrook college. In this section widening has been provided in the east side to minimise impact to the properties. Signal priority measures which commenced in the adjacent section through Shankill village were extended for southbound buses as far as the Shanganagh Castle grounds to reduce impact on properties.

Cycle tracks and/or footpaths have been brought behind the roadside treeline where suitable, to maintain the roadside tree canopy along the road. At these locations, the intention is to remove the ground-level shrubbery and crown the trees to ensure there is visibility from the road to the newly relocated footpaths and cycle tracks. To optimise the protection of the roadside trees in front of Shanganagh Cemetery, a section of the northbound cycle track has been relocated to the eastern side of the route to create a two-way cycle track from St. James Church, behind the roadside trees at Shanganagh Cemetery, and across Shanganagh Park. The northbound cycle track crosses back to the west side of the road before Allies River Road.

The design has been co-ordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook. These developments have been considered when assessing the most appropriate local alignment, in addition to newly available survey information. In particular, tree survey information has been carefully considered when refining the alignment, to prioritise retention of significant mature trees.

Liaison has taken place with DLRCC to ensure that the design takes into consideration the emerging Shanganagh Park and Cemetery Masterplan interactions with the Proposed Scheme.

The above design development has enabled a reduction in impact on adjacent heritage walls, properties and trees that was evident as a result of the updated topographical survey and tree survey in the area, while maintaining the proposed bus priority infrastructure.'

During the Feasibility and Route Selection stage, alternate route option was considered as part of Route 2B between Crinken Lane and Wilford Roundabout, which will bring cyclists off-line from the main route running east of the Dublin Road. Option 1 part of the Route 2B options was the preferred option over Option 2, as it keeps directly on the main route as aligns with the GDA Cycle Network Plan and meets overall BusConnects objectives.

Section 3.3.2.3 of the EIAR Volume 2 Chapter 3 (Consideration of Alternatives) also summarises the route options considered at the Feasibility stage and the assessment to inform the Emerging Preferred Route option (EPR).

'Following the Stage 1 sifting process, five viable route options for Section 3 were taken forward for

assessment and further refinement as shown in Image 3.13. These five route options were as follows:

- *Route 2A would run parallel to the M11 on a newly constructed busway from Wilford Junction through to Loughlinstown Roundabout and then along the N11 to the Wyattville Interchange;*
- *Route 2B would run via the Dublin Road from Wilford Junction, through Shankill and onto the N11 at Loughlinstown Roundabout to the Wyattville Interchange;*
- *Route 2C would run via the Dublin road and Crinken Lane, and join a newly built bus-way parallel to the M11 at Loughlinstown Roundabout, before following the existing N11 to the Wyattville Interchange;*
- *Route 2D would have buses follow the same route as Route 2B, but general traffic could be diverted around Shankill Village using a newly constructed road on the same alignment as that proposed for the bus route in 2C. A Bus Gate would be put in place on the Dublin Road between the Shanganagh Road and Lower Road junctions; and*
- *Route 2E would combine routes 2A and 2B whereby the route would run parallel to the M11 on a newly constructed busway from Wilford Junction to the intersection with Crinken Lane, then it would run along the Dublin Road from Crinken Lane to Loughlinstown Roundabout and along the N11 to the Wyattville Interchange.*

A schematic route alignment of the five route options presented in Figure 3.317, extract Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR.

Image 3.13: Section 3 Route Options Remaining After Stage 1 Sifting (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

Figure 3.317: Extract Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of EIAR (Image 3.13)

For the Route Option 2B section Wilford Roundabout to Crinken Lane two options were considered.

- *Option 1 – providing parallel bus lanes, cycle tracks and footpaths in a 20m cross-section. Southbound footpath to run through Shanganagh Park (chosen option);*
- *Option 2 – providing dedicated bus lanes and footpaths with a section of off-line cycle tracks running to the east of the Dublin Road.'*

Table 3.82 presents the multi-criteria assessment of the Route Options 2A, 2B, 2C, 2D and 2E, extract from Appendix M (Bray to UCD CBC Feasibility and Options Report) of the Preferred Route Options Report, part of Supplementary Information.

- Based on the assessments above it has been determined that while not the most favourable from an environment perspective Route Option 2B offers the preferred route option for the following reasons:
- It has the lowest capital cost of the five schemes
- It has significant benefits in terms of integration, accessibility and social inclusion as it serves the catchment of Shankill, integrates with the DART and provides continuous cycle facilities
- While not the most preferable of the schemes under journey time reliability, it would still deliver a high level of service for bus passengers
- In terms of safety, the five schemes are considered equal

Route Option 2B was identified as the preferred option for this section and is brought forward as the Emerging Preferred Route. Scheme 2A was the next preferred as it offers the best journey time reliability and has significant environmental benefits compared to the other schemes, however it has significant disbenefits in terms of integration.

Table 3.82: Extract from Appendix M of Preferred Route Options Report (Table 6.6 and 6.7 MCA for Section 3)

Table 6.6 Section 2 Route Options Assessment Summary (Sub-Criteria)

Assessment Criteria	Sub-Criteria	2A	2B	2C	2D	2E
Economy	Capital Cost					
	Journey-time reliability and quality of service					
Integration	Land Use Integration					
	Residential Population and Employment Catchments					
	Transport Network Integration					
	Cyclists and pedestrian Integration					
Accessibility and Social Inclusion	High volume trip attractors					
	Deprived Geographic Areas					
Safety	Road Safety					
Environment	Archaeological, Architectural and Cultural Heritage					
	Flora and Fauna					
	Soils and Geology					
	Hydrology					
	Landscape and visual					
	Noise, Vibration and Air					
	Land Use and the Built Environment					

Table 6.7 Route Options Assessment Summary (Main Criteria)

Assessment Criteria	2A	2B	2C	2D	2E
Economy					
Integration					
Accessibility and Social Inclusion					
Safety					
Environment					

EIAR Volume 2 Chapter 3 (Consideration of Alternatives) further summarises *'Overall 2B overall was deemed to be the most advantageous route, even though it was not the most advantageous under the Environment criterion. This is due to its comparatively lower cost; significant benefits in terms of integration, accessibility and social inclusion as it serves the catchment of Shankill, integrates with the DART and provides continuous cycle facilities; and it would deliver a high level of service for bus passengers. Therefore 2B was brought forward into the Emerging Preferred Route.'*

The detail assessment of the sub-options under Route Option 2B is discussed below, as noted in Section 6.2.3.2 of the Appendix M - Bray to UCD Core Bus Corridor - Feasibility and Options Report, of the Preferred Route Options Report, as part of the Supplementary Information.

'Option 1 - This option proposes providing a typical 20m wide cross section including bus lanes and cycle tracks in each direction, bounded by footpaths. This option would require in the order of 7m of additional lands to facilitate road widening, including mature trees, and the setting back of boundary walls, on one or both sides of the road.

Option 2 - This option would provide a 16m cross section on the Dublin Road, comprising 2m footpaths, and 3m bus and running lanes in each direction. This option would require in the order of 4m of additional lands to facilitate road widening on one or both sides of the road, along with a further 3m to 4m strip of additional lands further east to provide the cycle track. Between St. James' Church and Crinken Lane the provision of off-line cycle tracks is constrained by the church and adjacent Shanganagh Cemetery and therefore cycle tracks along the Dublin Road would be provided. This scheme option would avoid some of the mature trees by passing the cycle track around the back of the tree line where possible, however a large number of trees would still be affected.

A summary of the ranking of route options against the scheme sub-criteria is presented in Table 6.2 of the Appendix M.

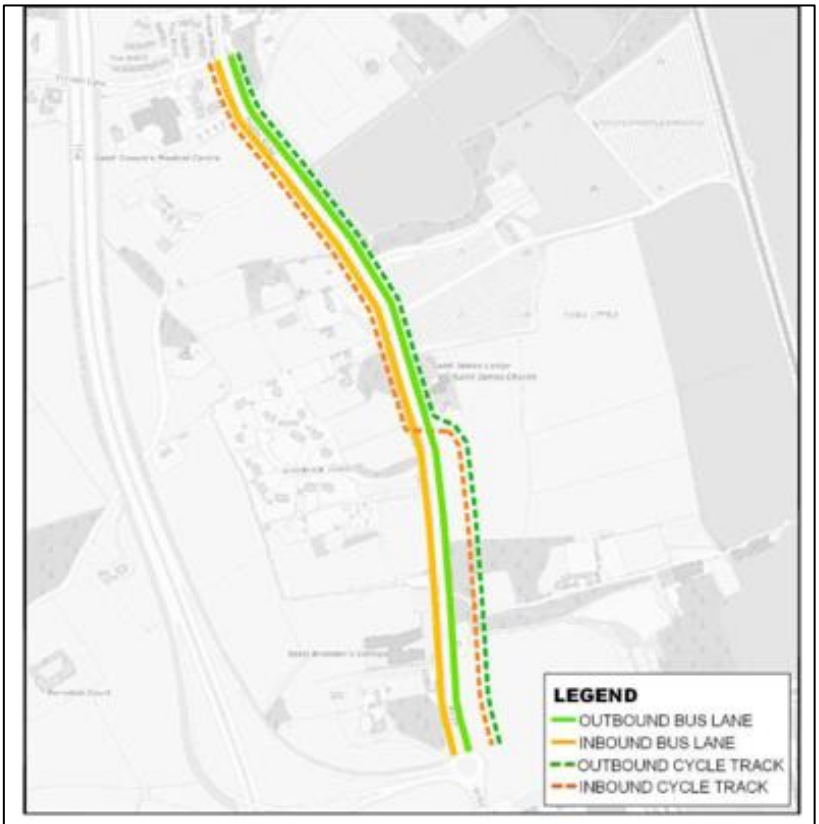


Figure 6.10 Wilford to Crinken Option 2 Scheme Design

Table 6.2 - Wilford Junction to Crinken Lane Scheme Assessment

Assessment Criteria	Sub-Criteria	Option 1	Option 2
Economy	Capital Cost		
	Journey-time reliability and consistency		
Integration	Land Use Integration		
	Residential Population and Employment Catchments		
	Transport Network Integration		
	Cyclists and pedestrian Integration		
Accessibility and Social Inclusion	High volume trip attractors		
	Deprived Geographic Areas		
Safety	Road Safety		
Environment	Archaeological, Architectural and Cultural Heritage		
	Flora and Fauna		
	Soils and Geology		
	Hydrology		
	Landscape and visual		
	Noise, Vibration and Air		
	Land Use and the Built Environment		

Option 1 requires land acquisition and road widening to facilitate the proposed scheme, resulting in the loss of significant mature trees and setting back of existing boundary walls. Option 2 provides a reduced cross section along the Dublin Road in comparison to Option 1, and will therefore require less road widening and is slightly more preferable in terms of Landscape and Visual, but will still result in the loss of significant mature trees and walls bounding the road. The cost of Option 2 is higher as additional works and land acquisition would be required along the cycle route. The cycle route for Option 1 follows a more direct route along the Dublin Road and does not require northbound cyclists to cross the road, as is the case for Option 2, and therefore Option 1 is slightly more preferable in terms of Cyclist and Pedestrian Integration.

There is little to differentiate between the options, however in reference to the overall scheme objectives Option 1 provides for cyclists directly along the route identified in the GDA Cycle Network Plan and is therefore considered preferable and is brought forward for this section of Option Route 2B.'

Both options considered at the Feasibility stage (Route 1 and Route 2) part of option for EPR Route 2B would have the same impact on the property of Woodbrook Estate north of Wilford Roundabout.

Proposed Scheme at the vicinity of Woodbrook Side Lodge (Wilford Roundabout to Corke Abbey Avenue Junction)

Section 3.4.1.4.1 of Chapter 3 (Consideration of Reasonable Alternatives) in Vol 2 of EIAR, describes the various alternatives considered in the vicinity of the Woodbrook Side Lodge.

'3.4.1.4.1 Woodbrook Side Lodge

Alternatives to the design of the Proposed Scheme in the vicinity of the Woodbrook Side Lodge (a residential dwelling and a Protected Structure) at the northern end of Section 4 were also considered. Given the impact to a Protected Structure at this location, further assessment was carried out to examine whether there were any viable alternative options which would avoid the impact to the Protected Structure. Further details on the Woodbrook Side Lodge and its status as a Protected Structure are provided in Chapter 16 (Architectural Heritage).

The EPR proposal at the location of Woodbrook Side Lodge was for the existing carriageway to be widened to include for the full BusConnects cross-section (i.e. a footpath, cycle track, bus lane and general traffic lane in each direction). In order to accommodate the road widening at this location, it would be necessary to demolish Woodbrook Side Lodge. It is proposed to build a replacement of the residential property at a new location east of its current location at the southern end of the Woodbrook estate. This option allows sustainable transport modes to achieve priority and safety. The EPR option requires the full widening to occur on the eastern side of the existing carriageway.

The following alternative options were assessed:

- ***EPR Option** – as described above;*
- ***Do Minimum Option**: retain existing cross-section at this location, and use signal-controlled bus priority. Signal-controlled bus priority (whereby traffic signals are used to enable buses to get priority ahead of other traffic on single lane road sections) was considered between Wilford Junction and Old Connaught Avenue in order to reduce the impact on land take and avoid the demolition of Woodbrook Side Lodge, as well as land take impacts to other properties along Dublin Road. For signal-controlled bus priority to operate successfully, queues cannot be allowed to develop on the shared bus / traffic lane portion, as this will result in delays on the bus service. The Wilford junction is strategically important, with high traffic volumes associated with it to gain access to and exit from the M11. Sufficient traffic signal green time for general traffic is required to avoid queues backing up on the M11. In addition, sufficient traffic signal green time for buses along the Proposed Scheme is required to provide bus priority and improve bus journey times. Junction modelling of this option showed queuing at all arms of the junction, resulting in delays to bus services and excessive queues on the M11 off-slip;*
- ***Alternative Option 1** – Full BusConnects Cross-Section, Widening to the West: As per the EPR option, but with the widening to occur exclusively on the western side of the carriageway, instead of the eastern side. This option would avoid impact on the Protected Structure, however it would result in other environmental impacts including significant impacts as a result of land take on the Circle K petrol station which would likely impact the viability of the business, and on front gardens for more residential properties on the western side of the Dublin Road than would be impacted on the eastern side of the road, including the need to realign the boundary of Rathmore (identified in Chapter 16 (Architectural Heritage) as a heritage feature);*
- ***Alternative Option 2** – Full BusConnects Cross-Section, Balanced Widening on Both Sides: As per the EPR option, but with the widening to be shared across both sides of the carriageway. This option would still impact on the Woodbrook Side Lodge given its current proximity to the road, as well as on the Circle K petrol station, and on properties on both sides of the Dublin Road as a result of the land take required on both sides.*
- ***Alternative Option 3** – Reduced Cross-Section (Shared Bus / Cycle Lane): A reduced cross section, whereby there would be a footpath, bus lane and general traffic lane in each direction, with the cyclists required to share the bus lane. This reduced cross-section would reduce the total extent of the land-take required, however would still require widening in order to accommodate the two new bus lanes. Under this alternative option, three sub-options were assessed:*
    - ***Sub-Option 3a (Widening to the east)** – Impact on the properties on the eastern side of the Dublin Road, including Woodbrook Side Lodge;*
    - ***Sub-Option 3b (Widening to the west)** – Avoids impact on the Woodbrook Side Lodge,however as with Alternative Option 1, would still result in land-take at the Circle*

K petrol station and the residential front gardens along the western side of the Dublin Road; and

- ***Sub-Option 3c (Balanced widening on both sides)** – As with Alternative Option 2, but with a reduced cross-section. Again, this option would impact on more properties than either SubOption 3a or 3b, while also still impacting on the Woodbrook Side Lodge and the Circle K petrol station.*

In terms of impact on the Woodbrook Side Lodge, the only alternative options that would avoid impact are the Do Minimum Option, Alternative Option 1 and Alternative Option 3b. All other alternative options would still impact on the Woodbrook Side Lodge given its existing location in close proximity to the road.

The Do Minimum Option would result in additional queuing on all arms of the nearby Wilford junction and result in delays to bus services and lack of segregated cycling infrastructure. This route is identified as a Primary Cycle Route within the 2022 Greater Dublin Area Cycle Network Plan, therefore the lack of segregated cycling infrastructure does not meet the BusConnects objectives.

Alternative Option 1 would result in more environmental impacts including more land take impacts on commercial and residential property above that of the EPR Option, including potentially impacting on the viability of the Circle K petrol station business and impacting the curtilage of Rathmore (identified in Chapter 16 (Architectural Heritage) as a heritage feature). Alternative Option 3b would similarly impact on the same properties as Alternative Option 2, albeit with slightly reduced land take required.

Alternative Option 3 provides for journey time reliability for the buses, however these sub-options do not provide segregated cycling infrastructure in this section of the Proposed Scheme, which is identified as a Primary Cycle Route as outlined above. The cyclists would have to share the bus lane on a proposed Primary Cycle Route and therefore it will not meet the BusConnects objectives and would impact the safety of the cyclists in particular on the immediate approaches to a significant junction accessing the M11. The EPR Option performs better than Alternative Option 3 in terms of integration with the transport network and safety.

Following the consideration of the above alternative options, the EPR option is considered to more benefits win comparison to other options. The EPR Option is therefore the PRO for this section for the following reasons:

- *It provides journey time reliability for buses and cyclists;*
- *It performs well with respect to integration and road safety;*
- *While it impacts on the Woodbrook Side Lodge (Protected Structure), it is considered to have less environmental impacts, particularly with regard to land take from other private properties and businesses.'*

Section 6.5.3 of the Preferred Route Options Report part of Supplementary Information notes the MCA for the above mentioned options at Woodbrook Side Lodge as noted in Table 3.83 and Table 3.84.

Table 3.83: Extract from Preferred Route Options Report (Table 6.15 MCA)

The MCA tables are included in **Appendix K**. A summary of the MCA for this is provided in **Table 6.15.**

MCA Criteria	Assessment Sub-Criteria	EPR Option	Do Minimum	Option 1	Option 2	Option 3a	Option 3b	Option 3c
Economy	1a Capital Cost							
	1b Transport Reliability and Quality							
Integration	2a Land Use Integration							
	2b Residential Population and Employment Catchments							
	2c Transport Network Integration							
	2d Cycle Network Integration							
	2e Traffic Network Integration							
Accessibility and Social Inclusion	3a Key Trip Attractors							
	3b Deprived Geographic Areas							
Safety	4a Road Safety							
Environment	5a Archaeology and Cultural Heritage							
	5b Architectural Heritage							
	5c Flora & Fauna							
	5d Soils and Geology							
	5e Hydrology							
	5f Landscape and Visual							
	5g Air Quality							
	5h Noise and Vibration							
	5i Land Use Character							

Table 6.15: MCA at Section 6.5.3

Table 3.84: Extract from Preferred Route Options Report (Table 6.15 MCA Summary)

MCA Criteria	EPR Option	Do Minimum	Option 1	Option 2	Option 3a	Option 3b	Option 3c
Economy							
Integration							
Accessibility and Social Inclusion							
Safety							
Environment							

Table 6.16: Section 3.5.3 MCA Summary

Following the consideration of the above alternative options, the EPR option is considered to more benefits win comparison to other options and is the Preferred Route Option to inform the Proposed Scheme, which will have impact on the Woodbrook Side Lodge.

Section 3.3.2.4 of the EIAR Volume 2 Chapter 3 (Consideration of Reasonable Alternatives) summarises the route options considered at the Feasibility stage and the assessment to inform the Emerging Preferred Route option (EPR) in Section 4 of the Proposed Scheme.

'Following the Stage 1 sifting process, two viable route options for Section 4 were taken forward for assessment and further refinement as shown in Image 3.14. These two route options were as follows:

- *Route 1A would run via Castle Street and Dublin Road to Wilford Roundabout; and*
- *Route 1B would run via Quinsborough Road (northbound direction) / Florence Road (southbound direction), parallel to the DART line across the River Dargle via a new bridge, through the old Bray Golf Club lands onto Dublin Road to Wilford Roundabout.*

Both routes overlap at their start and end points. Both options also overlap on the Dublin Road from approximately Chapel Lane to Wilford Roundabout.

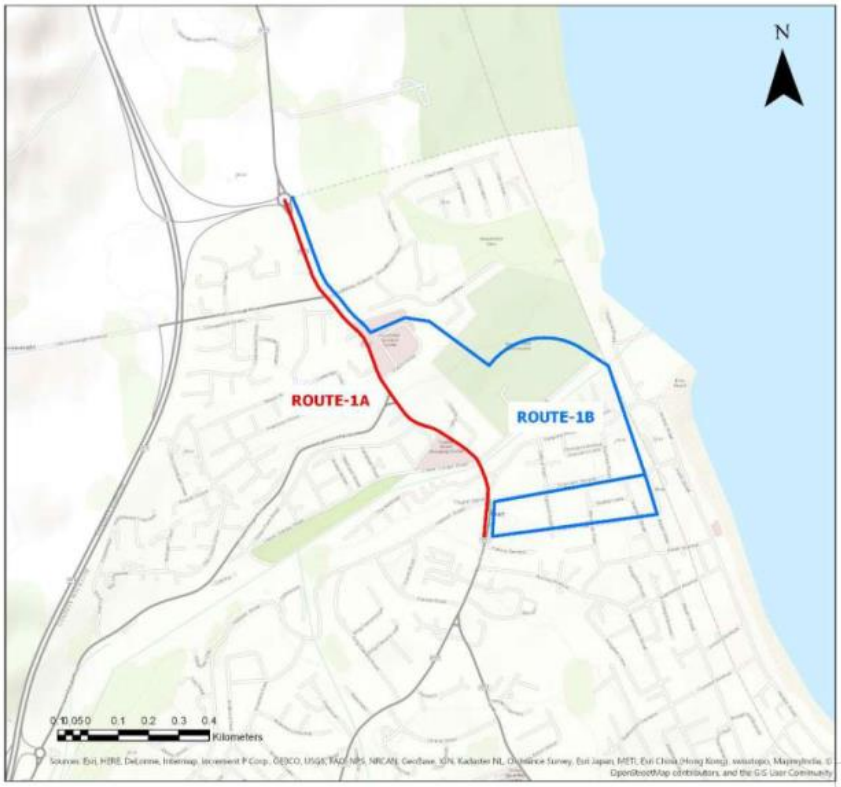


Image 3.14: Section 4 Route Options Remaining After Stage 1 Sifting (Bray to UCD CBC Feasibility and Options Report (NTA 2017))

Overall 1A was deemed to be the most advantageous route. This is due to its significantly lower cost; the likelihood of less impact on the environment; and it was the preferred option under the Safety criterion. Therefore 1A was brought forward into the Emerging Preferred Route.'

Both options considered at the Feasibility stage (Route 1A and Route 1B) would have the same impact on the Woodbrook Side Lodge.

Appendix M - Bray to UCD Core Bus Corridor - Feasibility and Options Report of the Preferred Route Options Report, as part of the Supplementary Information, summarises the assessment of route options in Bray.

The Emerging Preferred Route Option is shown in Appendix N of the Preferred Route Options Report, as part of the Supplementary Information.

NTA are satisfied that consideration of reasonable alternatives have been considered to inform the Proposed as per EIA Directive.

3.12.15.3.5 Consultation

Summary of issue raised

The submission notes that they have engaged extensively with the NTA through public consultations and direct discussion and suggested amendments to previous iterations have not been taken into account as part of the current designs.

Response to issue raised

As part of the scheme development stage, various non-statutory public consultation processes have been undertaken. These processes are in excess of the requirements of the Aarhus Convention, whose obligations are already enshrined in Irish legislation including "statutory public consultations" which is the stage that the project has now reached.

Given the nature of such infrastructure schemes as BusConnects Core Bus Corridors, there is invariably a substantial amount of technical information which needs to be provided, so as to ensure that the consent application is comprehensive in nature to meet legislative requirements and provide the competent authority with the necessary information to allow them to reach a decision. Volume 1 of the EIAR comprises the Non-Technical Summary of the EIAR for the Proposed Scheme. Chapter 1 in Volume 2 of the EIAR contains information on the content and structure of the EIAR. Section 1.5.6 of Chapter 1 sets out the information which must be contained in the EIAR. The NTA has sought to make the information as concise as possible, while ensuring that the necessary information has been provided. Section 1.5.7 of Chapter 1 sets out the structure of the EIAR. It is considered that the structure of the EIAR does provide the necessary legibility for those interested parties (both lay persons and technical specialists) to find the information of relevance to them. While the EIAR has been prepared in compliance with the EIA Directive, it has also been written to make it accessible to a wider, non-specialist audience in so far as possible.

In May 2017 the NTA launched the BusConnects Programme and then in June 2018 published the Core Bus Corridors Project Report. The report was a discussion document outlining proposals for the delivery of Core Bus Corridor Routes across Dublin.

Since the commencement of the non-statutory period of the CBC Infrastructure Works, there has been a total of three rounds of non-statutory public consultation.

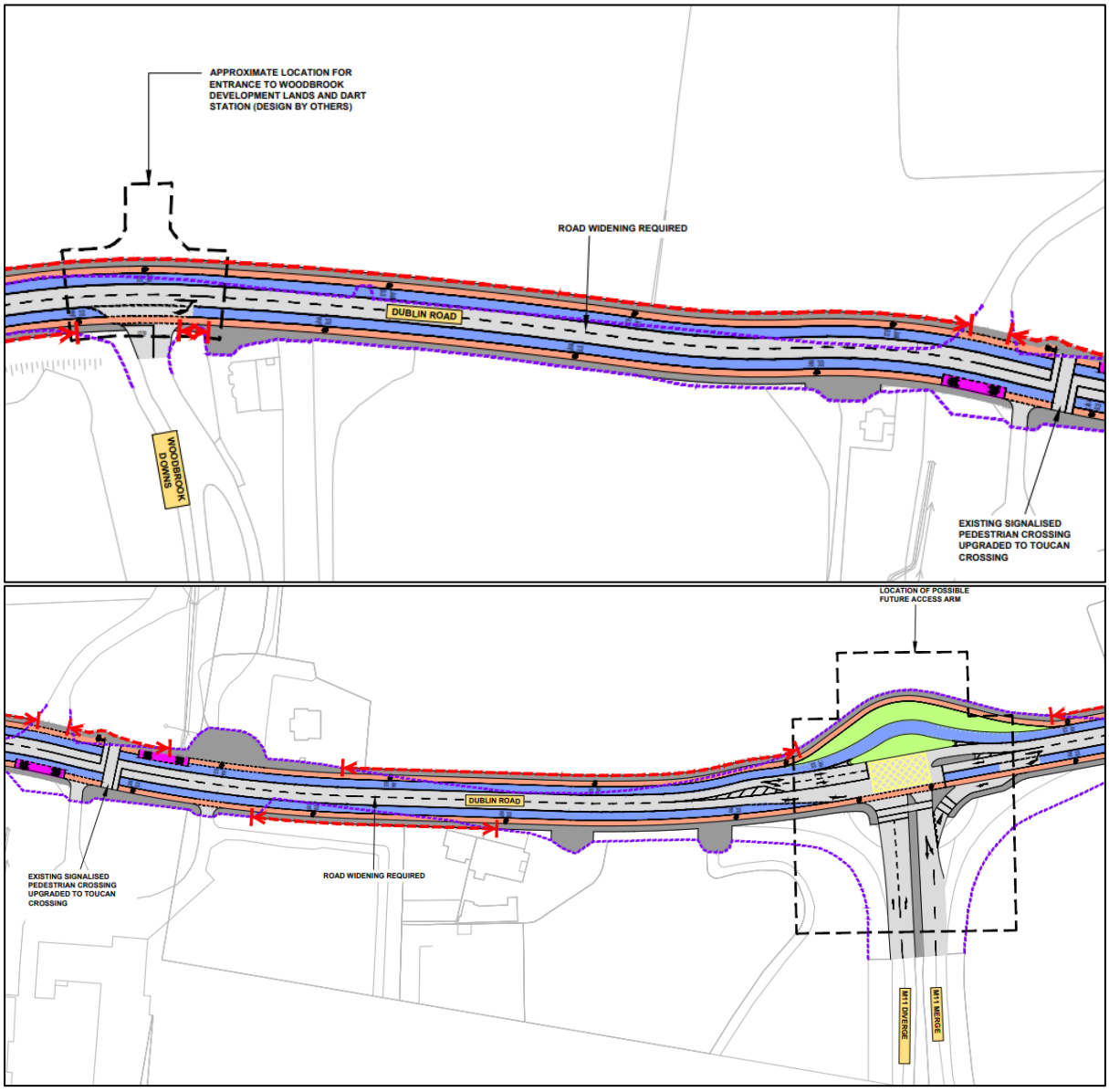
The term "non-statutory" is used to describe the public consultation which occurred from [2018 to 2022] because this consultation process with the public and interested stakeholders was undertaken by the NTA on a voluntary basis and was not required by law. The purpose of this process was to inform the public and stakeholders of the evolution of the proposal from an early stage and to seek feedback on the design proposals.

This is in contrast with the statutory consultation period which ran from 15 August 2023 to 10 October 2023 during which an opportunity was provided to members of the public, including Sir Henry Marc Cochrane, (as well as certain prescribed bodies) to make submissions to An Bord Pleanála in accordance with Section 51 of the Roads Act 1993 (as amended).

First Round of Non-Statutory Public Consultation – The first round of non-statutory public consultation on the Emerging Preferred Route Options was from November 2018 until March 2019 divided into three phases. The reason it was divided into three phases was primarily due to the fact that the BusConnects Infrastructure team carried out all aspects of the first round without external design service providers having been appointed at that stage. Moreover, the BusConnects Infrastructure team sought to gain maximum engagement from the public from the commencement of the CBC Infrastructure Works to raise awareness, establish relationships and gain immediate insight and knowledge of the issues at an early stage.

It was also important that at the start of the non-statutory consultation that considerable time and resources were dedicated by the BusConnects Infrastructure team to initiate contact with potential impacted properties. Each of the potentially impacted property owners were offered the opportunity to meet with members of the BusConnects Infrastructure team on a one-to-one basis which meant a significant amount of resources had to be dedicated to this process.

The Emerging Preferred Route Option at the Woodbrook Estate is presented in Appendix N of the Preferred Route Options Report, part of Supplementary Information and shown in Figure 3.318. The Proposed Scheme drawings in the published consultation brochure presented bus lane, cycle track and footpath in both directions along the entire section along the Woodbrook Estate.



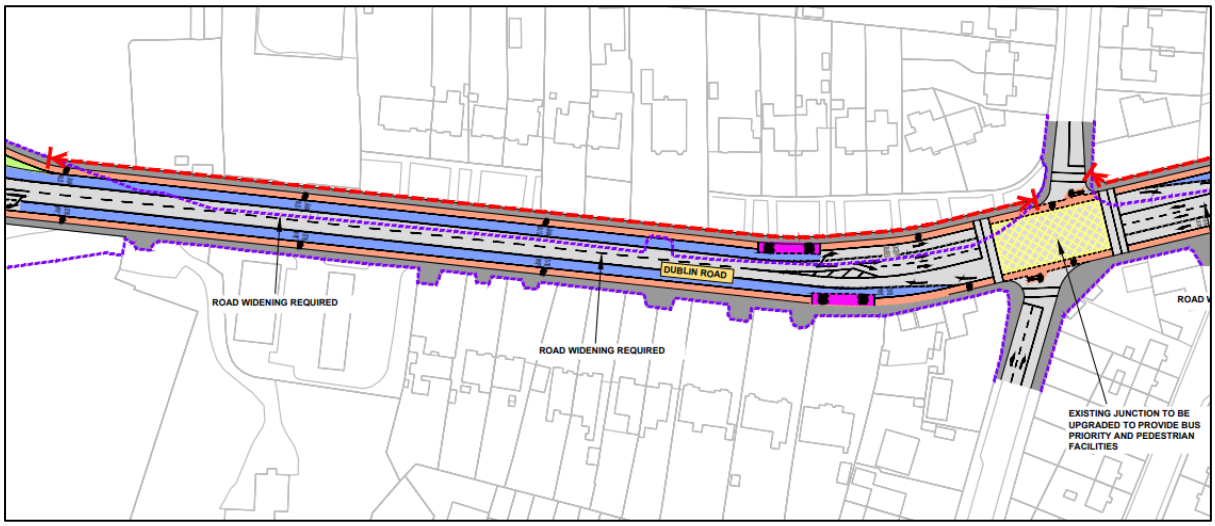


Figure 3.318: Extract from Emerging Preferred Route at Woodbrook (Appendix N)

Second Round of Non-Statutory Public Consultation – The non-statutory public consultation for the Preferred Route Options ran from March 2020 to April 2020 as Ireland entered the first lockdown due to the Covid-19 pandemic. The consultation continued in deference to the number of online submissions received during this period. A number of public facing elements of the consultation were cancelled in line with Government health guidelines, however, all other elements of the consultation including online versions of the brochures, supporting documentation were available. Other communication tools including the Freephone, email and digital aspects remained active for submissions to be received.

The Draft Preferred Route Option at the Woodbrook Estate is presented in Appendix O of the Preferred Route Options Report, part of Supplementary Information and shown in Figure 3.319. The Proposed Scheme drawings in the published consultation brochure presented bus lane, cycle track and footpath in both directions along the entire section along the Woodbrook Estate, with change in layout at Wilford roundabout with regards to bus lane.

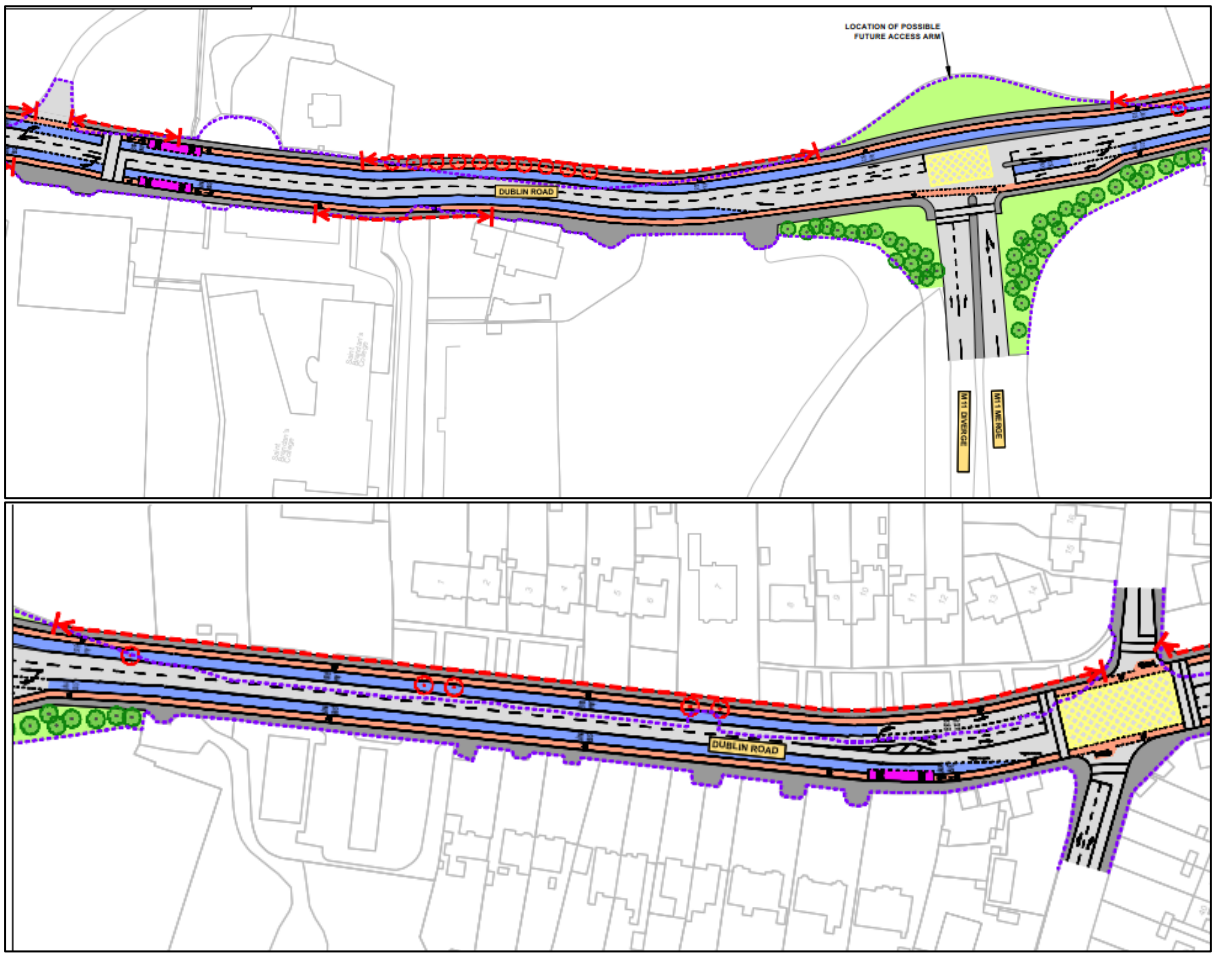


Figure 3.319: Extract from Draft Preferred Route at Woodbrook (Appendix O)

Third Round of Non-Statutory Public Consultation – This round of non-statutory public consultation for the Preferred Route Options from November 2020 to December 2020 was added due to the disruption caused to the second-round consultation process. It was important that further engagement was facilitated to communicate design development changes prior to concluding the determination of the Preferred Route Options. Methods had emerged whereby traditional public information events could be replaced by virtual online alternatives to offset the restrictions that continued associated with the Covid-19 Pandemic. Accordingly, all elements of the public consultation and stakeholder engagement were conducted virtually or online in line with the Government health guidelines.

The Preferred Route Option Third Round of Consultation at the Woodbrook Estate is presented in Appendix P of the Preferred Route Options Report, part of Supplementary Information and shown in Figure 3.320. The Proposed Scheme drawings in the published consultation brochure presented signal control priority north of Wilford roundabout till Woodbrook college, the design was developed to minimise impact to properties frontage and mature trees in the Woodbrook Estate. The Proposed Scheme alignment was also moved further west to minimise impact to the Woodbrook Estate and the mature trees north of the Wilford junction.

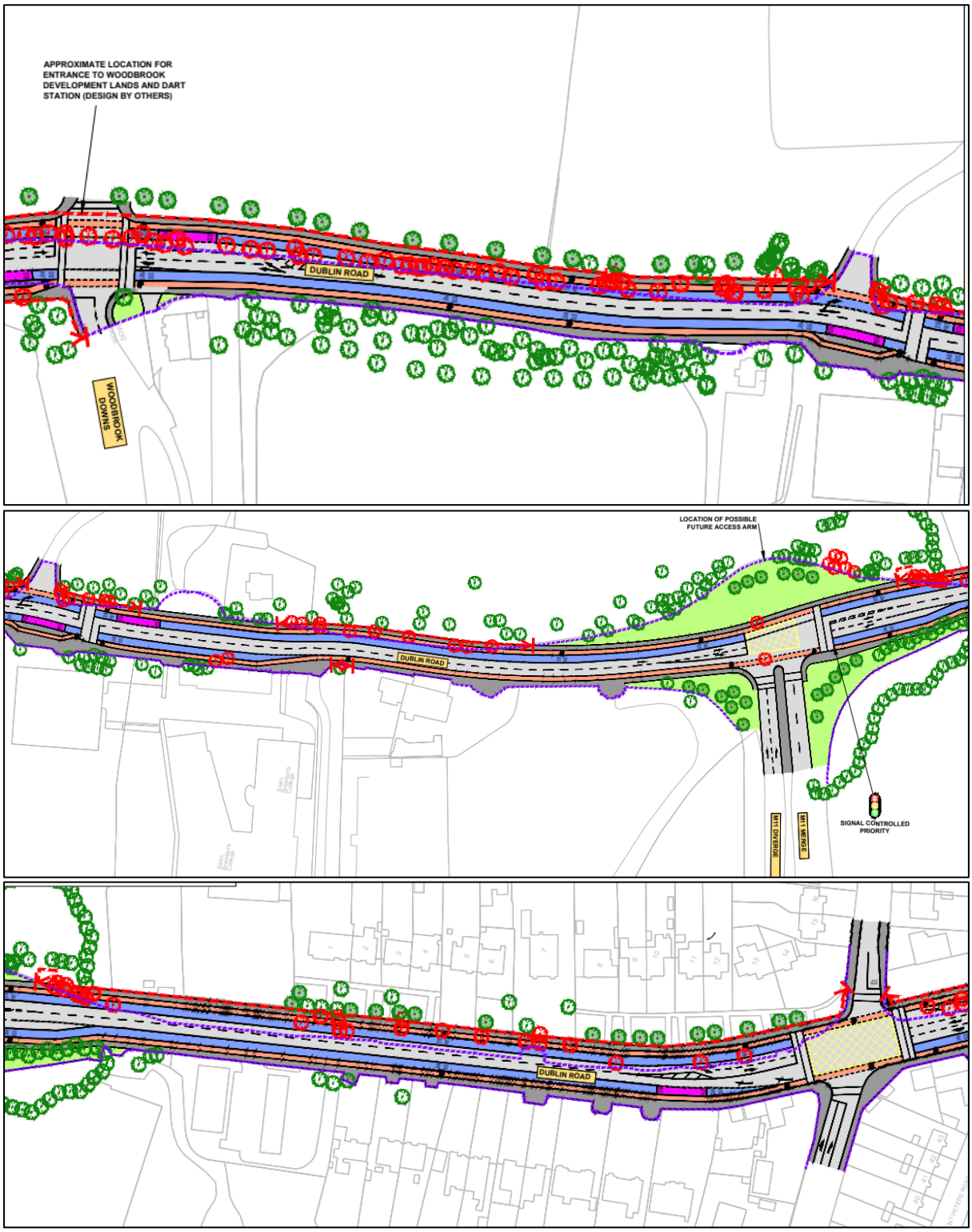


Figure 3.320: Extract from Preferred Route Third Round of Consultation at Woodbrook (Sheet 81, 82 and 83)

The Proposed Scheme provides for a full suite of footpath, segregated cycle track, general traffic lane and bus lane in both directions. Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here until the Woodbrook college.

Section 3.4.1.3.1 of the EIAR Volume 2 Chapter 3 (Consideration of Alternatives) summarises the alternatives considered and the design development. This is further explained in detail in Section 6.4.2

of the Preferred Route Option, as part of the Supplementary Information. Refer to response no 5 for details.

The following is provided as part of the Preferred Route Options Report, part of Supplementary Information:

- Appendix M provides Emerging Preferred Route Public Consultation Feb 2019
- Appendix O provides Preferred Route March 2020
- Appendix P provides Preferred Route Third Round of Public Consultation November 2020

Public Consultation Part 1 and Part 2, part of Supplementary Information.

Additional Public Consultation Reports are also provided under the Preferred Route Options Report Appendix B and C, part of Supplementary Information.

The NTA acknowledge the positive and constructive liaison that has occurred with the owners and consultants of the Woodbrook Estate throughout the design and planning process to date. There have been numerous communications (emails, letters and phone calls) with the representatives of Sir Henry Marc.

3.12.16 200 – The Congregation of Christian Brothers

3.12.16.1 Description of Proposed Scheme at this Location

In order to achieve the scheme objectives along this section of the corridor, it is proposed that from Crinken Lane to the Wilford Roundabout northbound and southbound bus lanes, segregated cycle tracks and general traffic lanes will be provided. Signal-controlled bus priority will be used northbound from Wilford Junction for a short distance as far as Woodbrook College. Where appropriate, roadside trees shall be retained by locating the proposed footpaths and cycle tracks behind the tree line. Improved lighting and crowning of trees will be provided to enhance visibility.

The existing road cross section at the location of Woodbrook College provides footways on both sides of the road, general traffic lanes and advisory cycle lane in both directions. Continuous bus lane is provided in the southbound direction and the northbound bus lane commences north of the Woodbrook College existing exit.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 49 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.321.

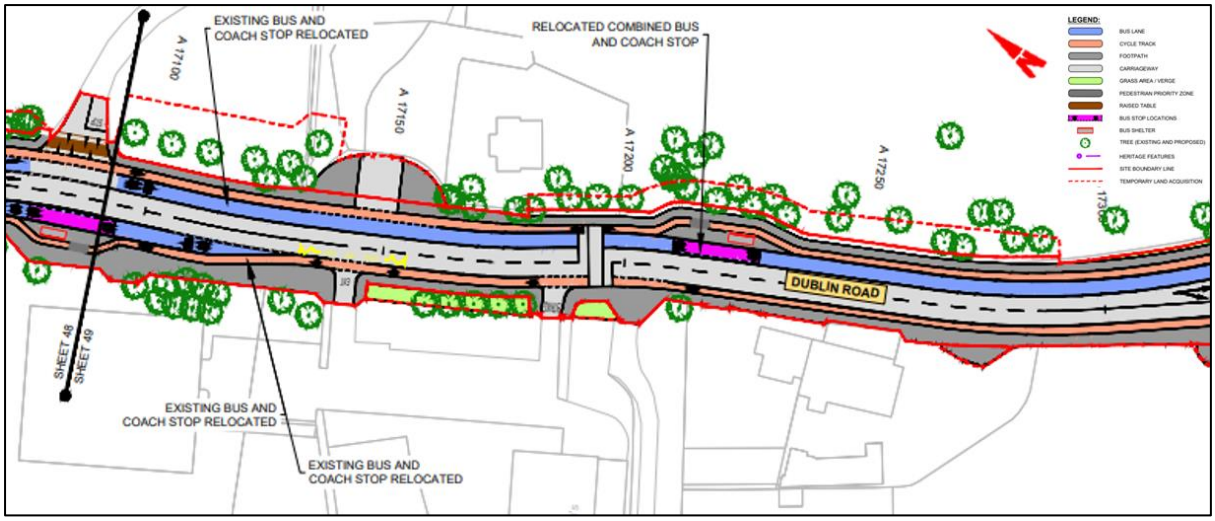


Figure 3.321: Extract from General Arrangement Drawing at Dublin Road (Sheet 49)

3.12.16.2 Summary of Issues Raised

The submission raises one potential issue:

1) Relocation of Bus Stop and Access/ Egress to the Proposed Development at Woodbrook College

3.12.16.3 Responses to Issues Raised

3.12.16.3.1 Relocation of Bus Stop and Access/ Egress to the Proposed Development at Woodbrook College

Summary of issue raised

The submission raised concerns in relation to the proposal to relocate the bus stop on Dublin Road as part of the Proposed Scheme, as it will impact the opportunity for the new proposed access for the new all-weather facility at rear of Woodbrook College. The submission comments that a relocation of the Proposed Scheme bus stop to existing location will facilitate the new access and egress proposal as part of the proposed re-development of Woodbrook College site.

The submission requests An Bord Pleanála to consider the alternative bus stop location proposal. The amendment to the Proposed Scheme will then provide for access to the rear of Woodbrook College to allow for the proposed school development.

The respondent comments that the school's engineer met with BusConnects team and an alternative bus stop location was suggested. The respondent requests for An Bord Pleanála to consider this alternative.

Response to issue raised

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

As set out in paragraph 2 of the statutory notice which was served upon the objector, the CPO is "*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*". Further, the face of the CPO itself also indicates that it is "*for the purposes of facilitating public transport".*

Further, as set out in paragraph 10 of that notice, the EIAR which was prepared in respect of the Bray to City Centre Core Bus Corridor Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the "*precise details of the proposed construction* works" and all of the "*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*" as requested in this submission.

The Proposed Scheme has been designed to deliver upon the Proposed Scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR, which include enhancement to the potential for cycling by providing safe infrastructure for cycling. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the Proposed Scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

As noted in Section 4.6.4.5 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR:

'To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.

- *The criteria for consideration when locating a bus stop are as follows:*
- *Driver and waiting passengers are clearly visible to each other;*
- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*

- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken as set out in Bus Stop Review Analysis in Appendix H.2 (using the methodology as set out in Appendix H.1) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Bus Stop Review Analysis Appendix H2 notes the following in relation to the proposed bus stop near the Woodbrook College on Dublin Road at this section of the Proposed Scheme:

'Bus Stop 4128 (Southbound)

Move downstream to create space for waiting students and cycle track integration.

Bus Stop 4202 (Northbound)

Moved slightly from current location following discussion with school on site access…Move to upstream of pedestrian signal to improve journey times…. An island layout is proposed, this is the preferred layout for both cyclists/pedestrians.'

Bus stop 4202 is relocated north of the existing temporary access at chainage 16+900 as shown in Figure 3.322 below.

Figure 3.322: Existing street view at Dublin Road (Woodbrook college) (Image Source: Google)

There have been communications (emails and phone calls) with Woodbrook College and their Engineers and Architects, where the issue related to the College's proposed re-development was discussed.

The Proposed Scheme design on Dublin Road at Woodbrook College is shown on the General Arrangement Drawings Sheet 49 which are provided in Chapter 4 (Proposed Scheme Description) in Part 1 of 3 of Volume 3 of the EIAR can be seen in Figure 3.323.

If an alternate location of the bus stop at NB chainage 17+150 is required as part of the College's re-development, it is shown that this alternative location is compatible with the Proposed Scheme design and the access and egress arrangements as part of the College's re-development. This is shown as a *'future layout subject to separate planning application by Woodbrook College'* in the General Arrangement Drawing (Sheet 49).

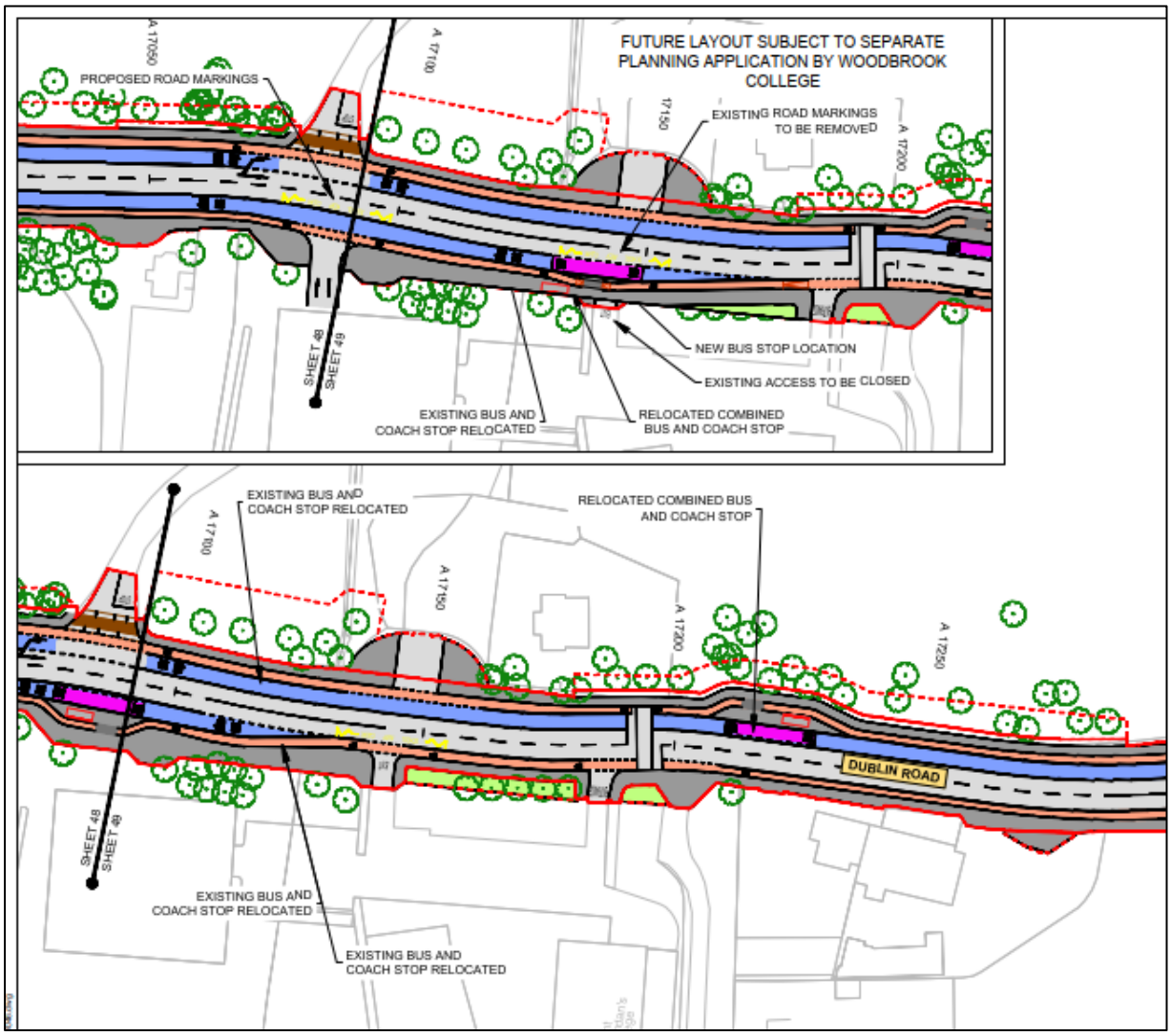


Figure 3.323: Extract from General Arrangement Drawing at Woodbrook College (Sheet 49)

Section 4.6.6.3 Chapter 4 (Proposed Scheme Description) Vol 2 of EIAR, notes a number of infrastructure projects that are planned within the vicinity of the Proposed Scheme which will interface with the proposals. These are outlined below and refer the text related to the co-ordination with the St Brendan College:

'Saint Brendan's College

Planning permission has been granted for a development which will consist of demolition of the existing 1970s two storey school building and ancillary buildings and the construction of a new, part single-storey, part 2-storey school building. Modifications to the existing boundary walls and ancillary site

works including new landscaping, playground areas and car parking are also proposed. The site is at around chainage A 17100 of the Proposed Scheme.

Recently the site is undergoing plan for major extension to the Woodbrook College. Discussions have taken place with DLRCC and the Woodbrook College to co-ordinate the design with the Proposed Scheme, in particular the bus stop and access to the college. The new proposed access to the College and the associated relocated bus stop is subject to separate Planning application by Woodbrook College. A planning application has not been lodged at the time of writing this report.'

NTA are satisfied Proposed Scheme bus stop design has been carefully considered at the location of Woodbrook College and assessed in the EIAR.

If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage its agent/valuer in preparing, negotiating, and advising on compensation.

The NTA acknowledge the positive and constructive liaison that has occurred with the Woodbrook College and the Architects and Engineers throughout the design and planning process to date. These are matters that can be successfully addressed between the Woodbrook College and the NTA, in the absence of any approval condition.

3.12.17 206 – Trustees of St James Church, c/o Robert Thompson

3.12.17.1 Description of Proposed Scheme at this Location

In order to achieve the Proposed Scheme objectives along this section of the corridor, it is proposed to provide northbound and southbound bus lanes, segregated cycle tracks behind the tree line and general traffic lanes in each direction.

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two toucan crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line.

A new pedestrian crossing is proposed south of Allies River Road (north of St James Church) with a relocated bus stop to the south of Shanganagh Cemetery.

New residential development is under construction at Woodbrook Downs. The proposed signalised junctions at the Woodbrook SHD development and bus stops have been coordinated with the development proposals and incorporated within the design.

The existing road cross section in this location provides a footpath on each side of the road with general traffic lanes in each direction. Currently a bus lane starts at Askefield House and runs northbound with an advisory cycle lane running in the southbound direction.

The Proposed Scheme design along Dublin Road is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 and Sheet 48 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.324 and Figure 3.325.

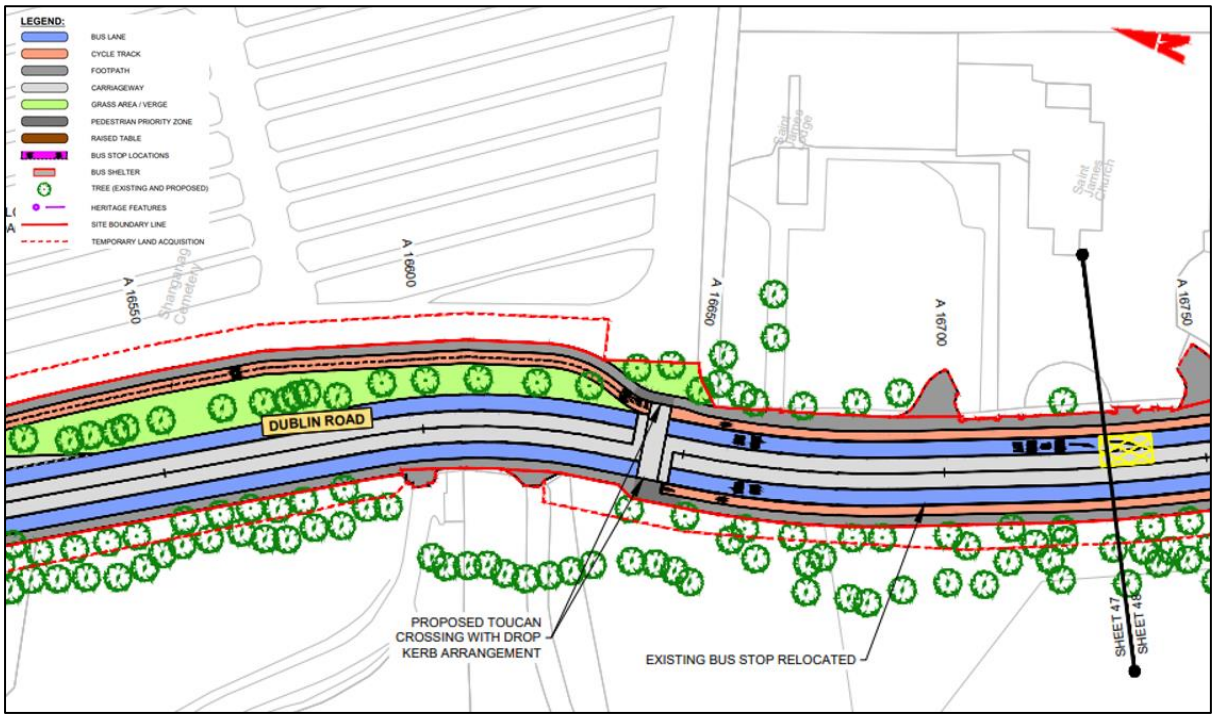


Figure 3.324: Extract from General Arrangement Drawing at Dublin Road (Sheet 47)

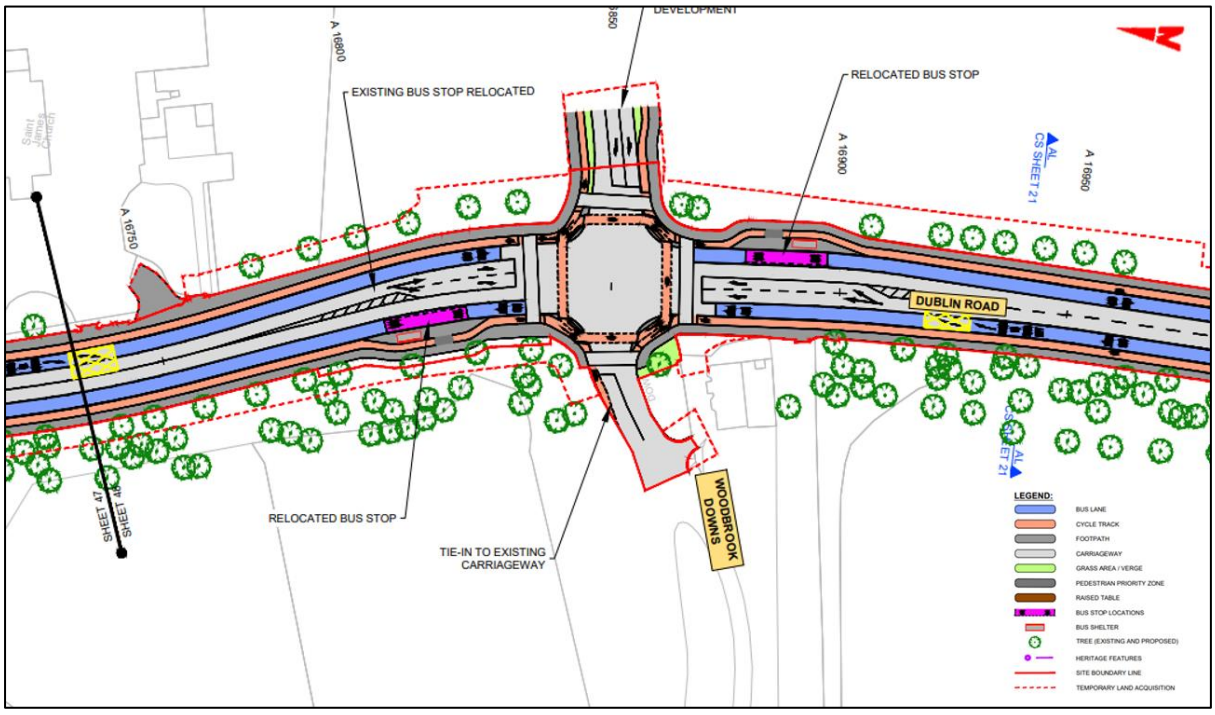


Figure 3.325: Extract from General Arrangement Drawing at Dublin Road (Sheet 48)

3.12.17.2 Summary of Issues Raised

The submission raises six potential issues:

1) Impact to Boundary Wall and Trees
2) Impact to Access
3) Missing CPO Detail
4) Project Timelines
5) Design Details and Constitutional Rights

6) Oral Hearing Request

3.12.17.3 Responses to Issues Raised

3.12.17.3.1 Impact to Boundary Wall and Trees

Summary of issue raised

The submission raised concerns regarding the reinstatement of the existing boundary wall for the Parsonage.

Response to issue raised

As set out in Paragraph 2 of the statutory notice which was served, the CPO is 'for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the 'precise details of the proposed construction works' and all of the 'proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme'.

The Proposed Scheme has been designed to deliver upon the scheme objectives set out in Chapter 1 (Introduction) in Volume 2 of the EIAR. In some areas, land acquisition is required to deliver what has been determined to be the most appropriate design configuration that meets these objectives. All areas included in the CPO have been carefully considered and only included where deemed absolutely necessary to meet the scheme objectives and to construct the Proposed Scheme with permanent and temporary acquisitions respectively.

In this specific area, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme cross-section as presented in an Appendix in 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, in Part 1 of 3 of the EIAR on Sheet 47 and Sheet 48 and shown in Figure 3.324 and Figure 3.325 above under Proposed Scheme Description. As part of the proposed works both permanent and temporary land take is required to facilitate the proposed scheme cross-section along the Dublin Road. It is proposed to widen the road on the west side of the Dublin Road at the location St James's Church access and egress, which is not impacted and temporary land take is required for re-surfacing of the access/ egress. Further south at the St James Church The Parsonage, it is proposed to widen the road on the east side of Dublin Road, which requires land take from The Parsonage to facilitate the Proposed Scheme cross-section.

The permanent and temporary land take required at this location is shown in the Deposit Maps, as shown in Figure 3.326. The permanent land take is show in 1067(1).1i and the temporary land take is shown in 1067(2).2i, 1067(3).2i, and 1067(4).2i.

The temporary land take is required for the duration of the construction period to allow working space for the construction works and boundary works/and or accommodation works and also for re-surfacing works of the existing access and egress to the St James Church. Temporary land take will be returned back after construction.

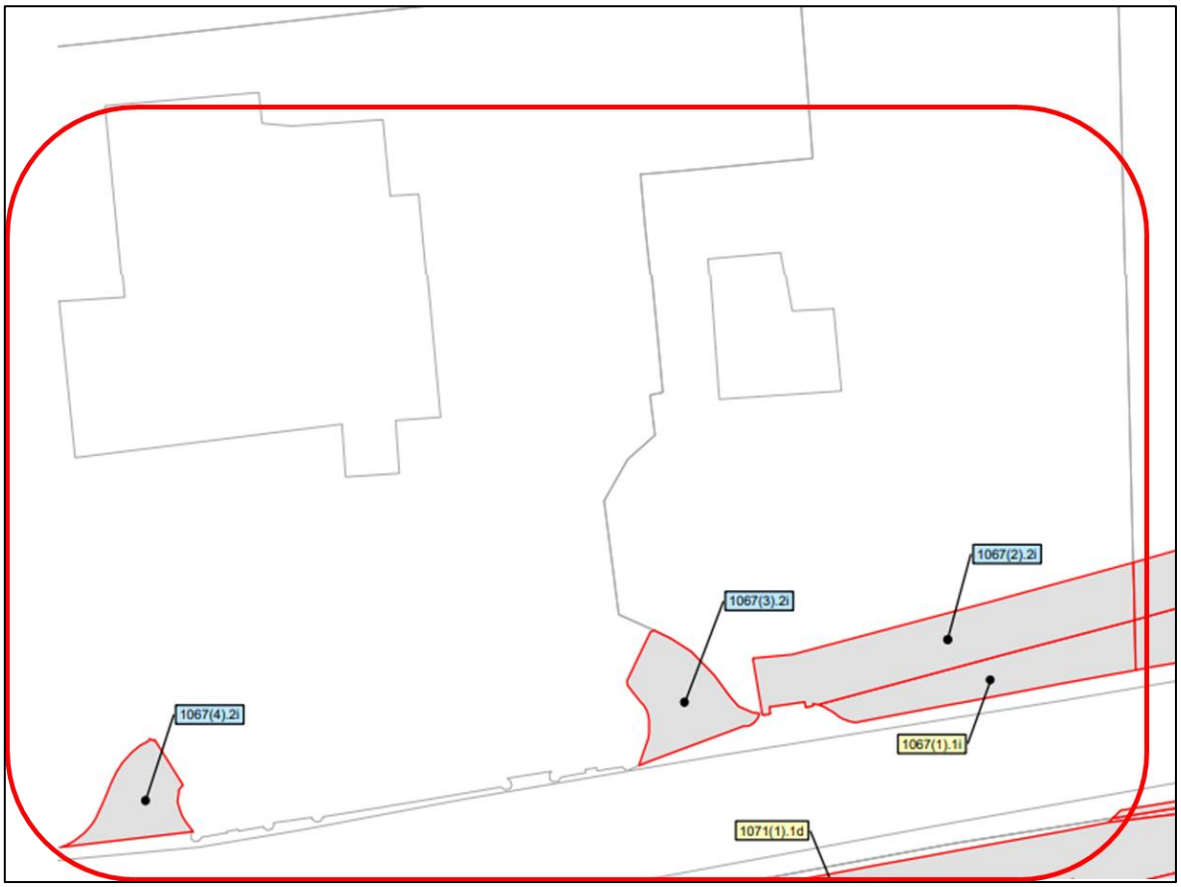


Figure 3.326: Extract from CPO Deposit Maps at Dublin Road (Sheet 06)

Impact to boundary wall

The proposed boundary treatment is presented as an Appendix in 07-Fencing and Boundary Treatment Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, in Part 1 of 3 of the EIAR on Sheet 47 and Sheet 48 and shown in Figure 3.327 and Figure 3.328. The drawings show that an existing boundary wall will be set-back and reinstated along the frontage of the St James Church Parsonage with re-using existing stone, where possible. There will no impacts to the existing boundary wall along the extents of the St James Church.

Section 4.5.3.8.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR notes that: '*The stone piers and railings forming the boundary of Crinken Church remain untouched. The proposed alignment along the west side results in tree loss to the front face of the woodland block which will be repaired with a band of native planting set behind the reinstated stone wall.'*

As noted in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners in line with any formal agreements and in accordance with any embedded mitigations identified in the EIAR or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application. The reinstatement of the boundary treatment will ensure a physical boundary is provided between the Proposed Scheme and the property, on a 'like for like' basis. The existing access gate will be set-back at the same location.

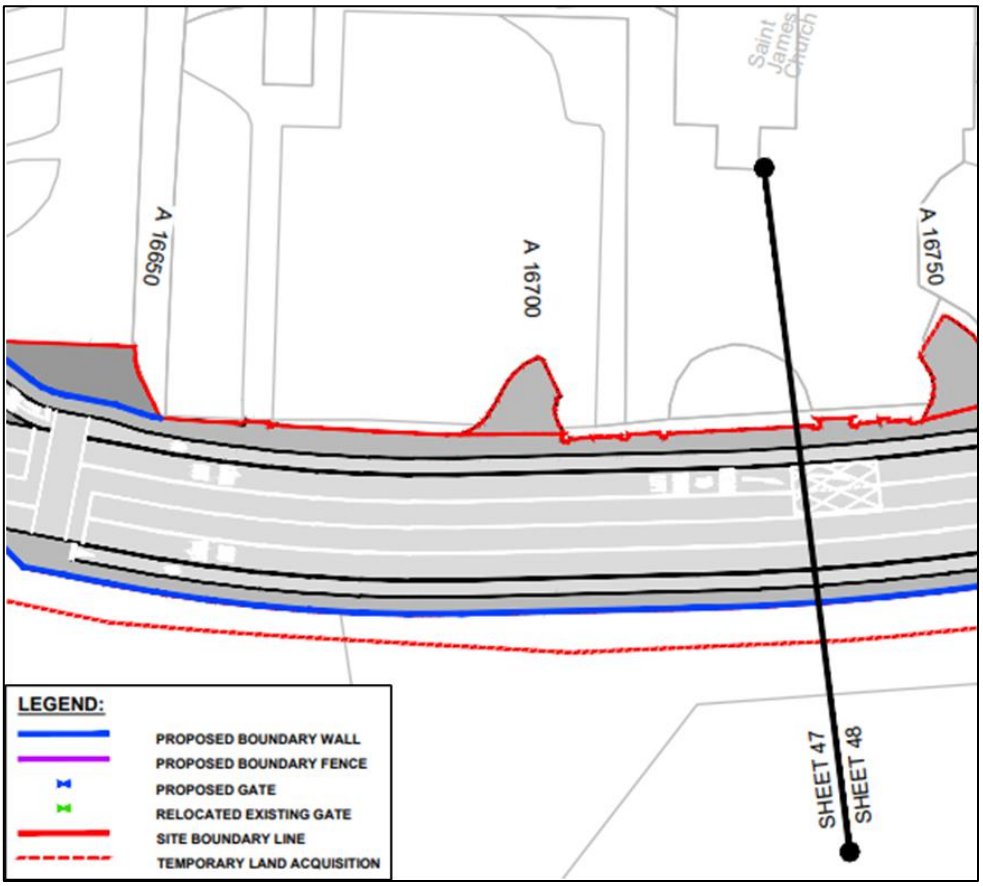


Figure 3.327: Extract from Fencing and Boundary Treatment Drawings at Dublin Road (Sheets 47)

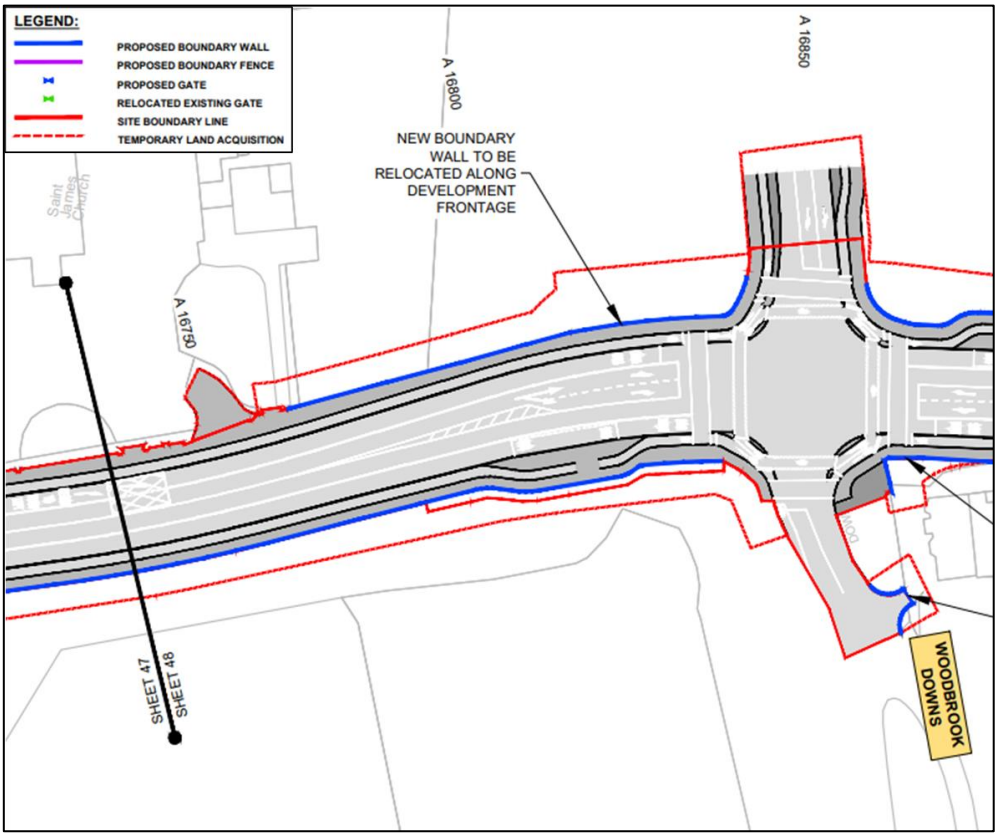


Figure 3.328: Extract from Fencing and Boundary Treatment Drawings at Dublin Road (Sheets 48)

Impact to Trees

There will be no impact to trees along the frontage of St James Church. There will be an impact to the existing tree group along the inside of The Parsonage boundary wall.

An Arboricultural Impact Assessment was undertaken and is included as Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR. The assessment includes an inventory of all trees on the Proposed Scheme, with all trees at this location assessed for age, quality and usable life expectancy. It should be noted that trees with a stem diameter less than 75mm (when measured at 1.5m above ground) and ornamental garden plants are not surveyed. The trees are located along the property boundary parallel to Dublin Road. They have been surveyed as a mixed species group that extends along the boundary comprising mature high value and prominent trees that include beech, lime, horse chestnut. It is likely that most of this linear group of trees will need to be removed for the proposed road widening. Any existing trees located far enough back from the scheme extents will be retained and protected.

Figure 3.329 and Figure 3.330 shows an extract from the Landscaping General Arrangement Drawings which are provided as an Appendix in the 05-Landscape Design Drawings in Chapter 4 (Proposed Scheme Description) on Sheet 47 and Sheet 48 in Volume 3, Part 1 of 3 of the EIAR.

A new belt of mixed native woodland trees are proposed to reinstate a vegetated frontage to properties along this section. A mix of whips and standard trees (trees with a girth of 8-10cm, and a height of 2.5-3m) is proposed to reinstate the vegetated boundary. The new planting will be positioned behind the new stone boundary wall which replicates the current arrangement of landscape elements.

The proposal as described in Figure 3.329 and Figure 3.330 below comprises new consistent landscape boundary proposals along full length of the section to tie in with adjacent residential development. The following new trees along with a belt of native planting are proposed to be planted inside of the new set back boundary wall of the Parsonage:

- 2 number Tillia Cordata

The same belt of proposed planting extends further south along the neighbouring property boundary which also contributes to a tree lined frontage along this section of Dublin Road.

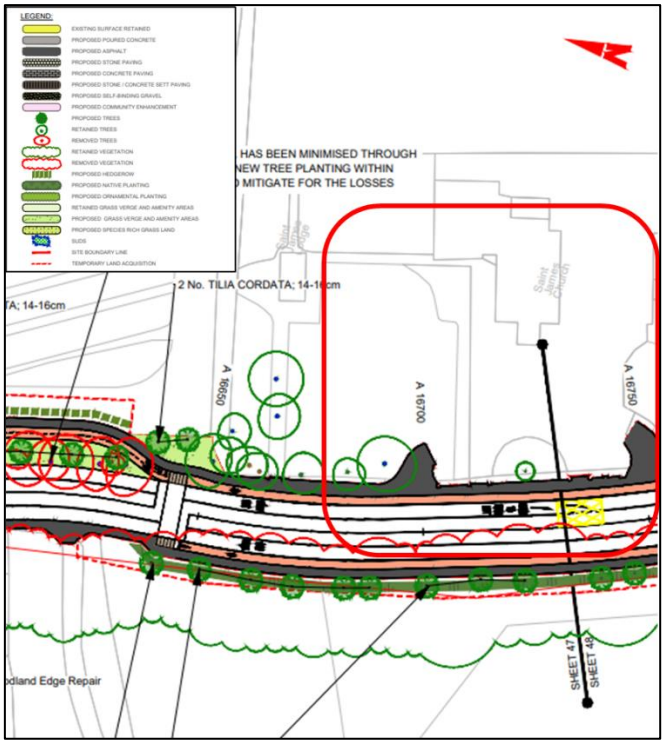


Figure 3.329: Extract from Landscaping General Arrangement Drawings – (Sheets 47)

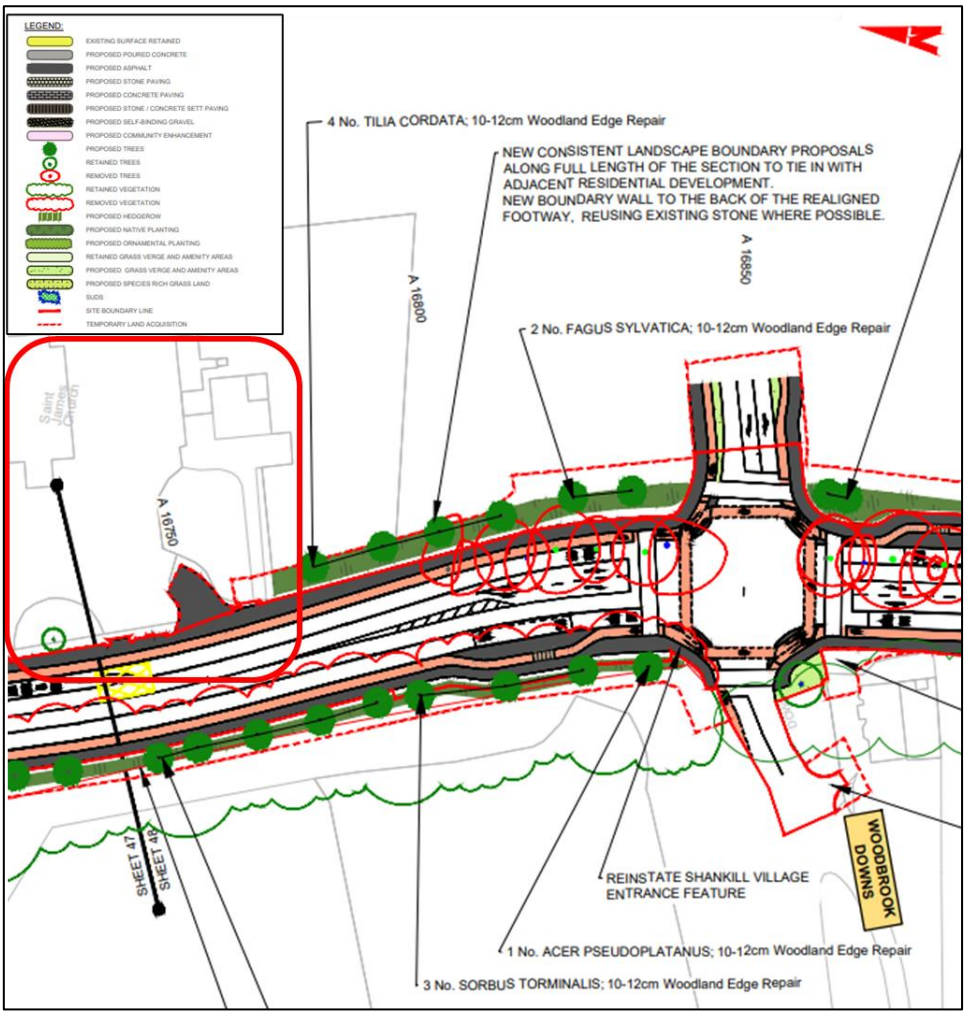


Figure 3.330: Extract from Landscaping General Arrangement Drawings – (Sheets 48)

The CPO of lands at this location at St James Church and the Parsonage will result in further consultation with the landowner to ensure all boundaries and other aspects of the property affected by the land acquisition are reinstated on a like for like basis. Section 17.5.1 of Chapter 17 Landscape (Townscape) & Visual of Volume 2 of the EIAR states '*where properties are subject to permanent and/or temporary acquisition appropriate measures will be put in place by the appointed contractor to provide for protection of features, trees and vegetation to be retained, and for continued access during construction and for adequate security and screening of construction works. All temporary acquisition areas will be fully decommissioned and reinstated at the end of the Construction Phase or at the earliest time after the reinstatement works are completed to the satisfaction of the NTA*'.

3.12.17.3.2 Impact to Access

Summary of issue raised

The submission raised concern regarding reinstatement of the existing boundary wall for the Parsonage and noted that there is no information or drawings indicating if accesses to the Church and the Parsonage will be altered. It is requested that access ways are altered as there may be a requirement for alternative drainage to be provided.

Response to issue raised

As part of the Proposed Scheme works, temporary land take is required at the two access and egress to the St James Church ground. The temporary land take is required for the duration of the construction period for re-surfacing of the access/ egress. Temporary land take will be returned after construction.

Temporary land take is also required at the access/ egress to The Parsonage to allow for construction works and boundary and/or accommodation works including planting. Temporary land take will be returned after construction.

With regards to the access/ egress to the St James Church and The Parsonage during construction, when roads and streets are being upgraded, there will be some temporary disruption / alterations to access to premises in certain locations along the Proposed Scheme. Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable.

As described in Section 5.5.3.2 of Chapter 5 (Construction) of Volume 2 of the EIAR, '*details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.'*

Additionally, Section 5.2.1.2, Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 states that an objective of the Construction Traffic Management Plan is to *'ensure disruption is minimised, with access to houses and businesses maintained, as is reasonably practicable in delivering the Proposed Scheme.'*

Chapter 5 (Construction) in Volume 2 of the EIAR gives a description of the Construction Phase of the Proposed Scheme, including with respect to temporary land acquisition. Specifically, Section 5.5.2.1 states the following:

'Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.'

3.12.17.3.3 Project Timelines

Summary of issue raised

The submission raised the issue that they could see no indication of how long the works will take.

Response to issue raised

Section 5.3.3.3 of Chapter 5 (Construction) of Volume 2 of the EIAR provides details of the construction activities between Quinn's Road and Bray North (Wilford Roundabout).

The expected construction duration for Section 3c (Quinn's Road to Bray North (Wilford Roundabout)) will be approximately 18 months. However, construction activities at individual plots will have shorter durations than outlined in overview of construction works presented in Section 5.3. The duration of the works will vary from property to property, but access and egress will be maintained at all times. An indicative Proposed Scheme construction programme is shown in Table 5.2 of Section 5.4 and shown in Table 3.85 below as Section 3c.

Table 3.85: Extract from Chapter 5 (Construction) (Table 5.2)

Section Ref.	Approximate Construction Duration	Approximate Length (m)	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	15 months	1,300	■	■	■	■	■							
Section 1b	15 months	1,300		■	■	■	■	■						
Section 2a	15 months	5,800		■	■	■	■	■						
Section 2b	12 months	5,700	■	■	■	■								
Section 3a	12 months	1,270					■	■	■	■				
Section 3b	9 months	500							■	■	■			
Section 3c	18 months	1,800					■	■	■	■	■	■		
Section 4a	12 months	300								■	■	■	■	
Section 4b	9 months	400										■	■	■
Section 4c	9 months	350								■	■	■		

As described in Section 5.5.3.2 of Chapter 5 of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area. The duration of the works will vary from property to property, but access and egress will be maintained at all times.

3.12.17.3.4 Design Details and Constitutional Rights

Summary of issue raised

The submission raised the concern that the design had insufficient detail and that it would be premature for the Bord to make decision with this amount of detail as it would be an infringement on Constitutional Rights to quiet enjoyment of property.

The submission requested any further information in relation to the property that is supplied to ABP be sent to their client in a timely manner. The respondent also requests the NTA reimburse the land and client's costs in dealing with the submission.

Response to issue raised

The submission makes an assertion that the proposed scheme would constitute an infringement of their Clients constitutional right to the quiet enjoyment of their property due to lack of design put forward as part of the Planning application.

It is clear from the face of the CPO itself and on the statutory notice served therein that the lands are being acquired for the purposes of the Bray to City Centre Core Bus Corridor Scheme to facilitate public transport, and such issues have been comprehensively addressed in Chapter 1 (Introduction) in Volume 2 of the EIAR. They are also explained below in response to this submission.

As set out in Paragraph 2 of the statutory notice, which was served upon the objector, the CPO is '*for the purposes of the construction of the Bray to City Centre Core Bus Corridor Scheme together with all ancillary and consequential works associated therewith for the purposes of facilitating public transport*'. Further, the face of the CPO itself also indicates that it is 'for the purposes of facilitating public transport'.

Further, as set out in Paragraph 10 of that notice, the EIAR which was prepared in respect of the Proposed Scheme was available for inspection physically and on the NTA's dedicated website for this Proposed Scheme, and that EIAR contains all of the '*precise details of the proposed construction works*' and all of the '*proposed ancillary and consequential works for the Bray to City Centre Core Bus Corridor Scheme*'.

Powers of NTA and Statutory basis for the CPO Application

Refer to response in Section 3.1.4.1 on the Constitutional requirements of CPO on 'Powers of NTA'.

Purpose of the CPO of the land

Refer to response in Section 3.12.17.3.1 on the Impact to Boundary Wall and Trees above for further details on the purpose of the CPO at this location.

Proposed Scheme Details

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the details of the design of the Proposed Scheme. Section 4.5.3 notes details for the Section 3 Loughlinstown Roundabout to Bray North (Wilford Roundabout).

EIAR Assessment

Refer to Section 3.9.3.10 on the Adequacy of Environmental Assessment of this report.

Constitutional Rights

Refer to response in Section 3.1.4.1 on Constitutional requirements of CPO and also note below.

A comprehensive process was undertaken in relation to the route selection for the Proposed Scheme. Section 3.3 of EIAR Chapter 3 Reasonable Alternatives provides a detailed summary of this, with further details provided in the Preferred Route Option Report provided in the Supplementary Information submitted with the application for the Proposed Scheme. In terms of alternative solutions, Chapter 3 of the EIAR sets out the reasonable alternatives studied and the main reasons for the selection of the Proposed Scheme taking into account the effects on the environment. Within this Chapter consideration is given to strategic alternatives including both light rail and metro. Section 3.2.5 of this chapter states

that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. Section 3.3 of Chapter 3 of the EIAR set out that design development and assessment work was carried on this section of the Proposed Scheme. The design development in Section 3 to inform the Proposed Scheme is documented in Section 6.5 of the Preferred Route Option Report, part of Supplementary Information.

Please refer to response in Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill covering the alternatives considered and design development to inform the Proposed Scheme, in particular section between Cricken Lane to Wilford Roundabout.

Both options considered at the Feasibility stage (Route 1 and Route 2) part of option for EPR Route 2B would have the same impact on the property of St James Church and The Parsonage.

NTA are satisfied that consideration of reasonable alternatives have been considered to inform the Preferred Route Option in this section of the he Dublin Road (Crinken Lane to Wilford Roundabout) and in the vicinity of St James Church.

If the CPO is confirmed by An Bord Pleanála, and the NTA exercises its powers of acquisition pursuant to the confirmed CPO, the owners, lessees and occupiers of those acquired lands will be entitled to submit a claim for compensation which, in default of agreement, will be determined by a Property Arbitrator, pursuant to a separate statutory scheme and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

In light of all of the above, the NTA is satisfied that the making of the CPO is reasonable and justified and does not represent a disproportionate interference with the objector's constitutionally protected property rights.

3.12.17.3.5 Oral Hearing Request

Summary of issue raised

The submission requested that the Board hold an Oral Hearing.

Response to issue raised

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.13 Submissions in Relation to the Whole Proposed Scheme

3.13.1 Overview of Submissions Received

Table 3.86 below lists the 13 individual submissions made in respect of the Whole Proposed Scheme.

Table 3.86: Submissions Made in Respect of the Whole Proposed Scheme

No	Name	No	Name	No	Name
23	Brendan Heneghan	63	DCC Submission	204	TII
32	Ciaran Cuffe MEP	64	Dublin Commuter Coalition	210	Wicklow County Council
36	Cllr. Carrie Smyth	65	DLRCC	211	Wicklow County Council
39	Cllr. Michael D. Clark and Others	97	Ivana Bacik TD		
58	Development Applications Unit	134	Michael Philips		

Issues and responses for submissions related to the whole Proposed Scheme are detailed in the individual submission sections below.

3.13.2 23 – Brendan Heneghan

Summary of Issues Raised

This submission raised the following issues:

1) All one Scheme and therefore should be all one fee;
2) Deficiency in consultation process;
3) Errors in Proposed Scheme application;
4) Traffic counts;
5) Impact to the Southside of Dublin;
6) Concern on bus gates at Lesson Street;
7) Impact to trees in Shankill;
8) Replacement of roundabouts at St Anne's Church;
9) Combined cycle infrastructure;
10) Alternate N11/M11 Interim Bus Priority Scheme;
11) Option Assessment not comprehensive and Preferred Route Assessment not appropriate.

3.13.2.1 All one Scheme and therefore should be all one fee

Summary of issues raised

The submission notes that generally BusConnects has always been presented as one Scheme and it is clear that all Proposed Schemes are interrelated. In particular, the Blackrock Scheme and the Bray Scheme have significant effects on each other and meet close to UCD.

The submission notes that the fees must be paid for each individual Scheme submission. BusConnects has multiple corridors and the submission notes that they have paid a total of Euro 500 fee to date for

submissions of all the BusConnects Schemes to date. The submission further requests the Board to refund all fees paid beyond the first fee (Euro 450).

The submission also notes that as part of submissions for other BusConnects Schemes general points have been raised earlier and repeated in all submissions, an example being the removal of roundabouts and traffic modelling.

Response to issues raised

The NTA acknowledge the interface of the Proposed Scheme with the Belfield-Blackrock to City Centre Scheme and the interface and cumulative assessment has been considered in the EIAR.

The fees payable for observations / submissions are determined by An Bord Pleanála, as allowed by Section 144 of the Planning and Development Act 2000, as amended.

The NTA notes the comment on points raised under submissions for each Proposed Scheme and that a few general points have been repeated in submissions for other Proposed Schemes. Comprehensive responses to each issue raised as part of the individual Proposed Scheme submission have been provided in the individual response document for each of the Proposed Schemes.

3.13.2.2 Deficiency in consultation process

Summary of issues raised

The submission raised concerns regarding the Aarhus Convention and that appropriate consultation has not taken place during the development of the Proposed Scheme. The submission goes on to say that the lengthy document for Public Consultation Part 1 and 2 (in the Supplementary Information) are misleading to show that proper Consultation has taken place.

The submission acknowledges that it's the Board to exercise its discretion to hold an oral hearing and requests an Oral Hearing.

Response to issues raised

Refer to Section 3.9.3.15 in this report for further information on the Public Consultation.

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.13.2.3 Errors in Proposed Scheme application

Summary of issues raised

The submission notes that the site notices may had procedural errors and therefore the affected applications should be rejected for not allowing more time to review.

The submission queries that reading the Planning documents, it is not clear what planning permission is being applied for to the ABP.

The submission raised concerns relating to the CPO of the lands, commenting that these have not been detailed within the application in significant detail. The CPO documents give the gross area of land take and not the dimensions making it difficult to understand.

The submission notes that it omits impact the Proposed Scheme will have on the current bus services (7b, 45, 84 and 145), which are believed to be key to the application of the Proposed Scheme. This reduction of service is also a feature of the entire corridor as the 46A will reduce in frequency from every 8 minutes to every 10 minutes.

Response to issues raised

Site Notices

The NTA complied with all statutory notice requirements in respect of the application for approval of the Proposed Scheme and the application for confirmation of the CPO. In addition, non-statutory site

notices were erected in 81 locations along the route of the Proposed Scheme in certain locations where lands are proposed to be compulsorily acquired or where it is proposed to acquire, restrict or otherwise interfere with existing public and private rights of way thereby supplementing the statutory notices for the CPO which were (i) published in a national and a local newspaper and (ii) sent to owners, lessees and occupiers of the lands included in the CPO. A total of 176 site notices were erected and maintained during the 12 weeks consultation period, with periodical review.

The NTA notes the comment in relation to the errors in the site notices. NTA are satisfied that the information provided under the non-statutory site notices are in order and are available on the Proposed Scheme website - https://brayscheme.ie/.

Planning application submitted to An Bord Pleanála

The Proposed Scheme is an application for approval of a proposed road development under section 51 of the Roads Act 1993 (as amended).

The Proposed Scheme Compulsory Purchase Order CPO is an application under Section 76 of the Third Schedule of the Housing Act 1966 as extended by Section 10 of the Local Government (No 2) Act 1960 and amended by the Planning and Development Act 2000 (as amended).

Compulsory Purchase Order and Schedule

The CPO and Schedule has been prepared in accordance with the requirements under the Section 76 of the Third Schedule of the Housing Act 1966 (as extended and amended). Deposit Maps are prepared for the Proposed Scheme and individual landowner maps have been issued to the impacted landowner with the CPO pack. The CPO Schedules states the following:

- *'The land described in Part I of the CPO Schedule hereto and coloured grey on the said deposited maps is land being permanently acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.*
- *The land described in Part II of the CPO Schedule hereto and coloured grey on the said deposited maps is land being temporarily acquired other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.'*

If the CPO is confirmed by An Bord Pleanála, a *'Notice to Treat'* will be served on each landowner whose land is being acquired. Following service of the Notice to Treat, each landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of the claim) for the landowner to engage their own agent / valuer in preparing, negotiating, and advising on compensation.

Current Bus Services

BusConnects is the National Transport Authority's programme to greatly improve bus services in Irish cities. It is a key part of the Government's policy to improve public transport and address climate change in Dublin and other cities across Ireland. BusConnects is a key component within a number of Government and regional policies which include the National Development Plan 2021-2030, Climate Action Plan 2023, the National Planning Framework 2040 and the Greater Dublin Area Transport Strategy 2022-2042. The BusConnects Programme consists of the following and details can be seen in the NTA website: https://busconnects.ie/cities/dublin/

- Core Bus Corridor Infrastructure Works
- Orbital Corridor Infrastructure Works
- Network Redesign
- New Bus Stops and Shelters
- Park and Ride
- State of Art Ticketing System
- Zero Emissions Bus Fleet

The Proposed Scheme is part of the Core Bus Corridor Infrastructure Works which will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor. The Proposed Scheme has an overall length of approximately 18.5km and in addition, the section of Stonebridge Road included in the design measures approximately 200m.

Section 6.4.6.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents the operational impacts for bus passengers and operators. The Proposed Scheme will address sustainable mode transport infrastructure deficits while contributing to an overall integrated sustainable transport system as proposed in the GDA Strategy. It will increase the effectiveness and attractiveness of bus services operating along the corridor and will result in more people availing of public transport due to the faster, more reliable journey times which the Proposed Scheme provides. This in turn will support the future increase to the capacity of the bus network and services operating along the corridor and thereby further increasing the attractiveness of public transport. Services 7b, 45A, 84 and 145 are not specifically discussed in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR which focuses on the E1 service to demonstrate the benefits of the scheme on bus journey times. Where services 7b, 45A, 84 and 145 use the Proposed Scheme corridor they will experience the same benefits as E1 in whole or in part. In addition to this, the significant segregation and safety improvements to walking and cycling infrastructure that is a key feature of the Proposed Scheme will further maximise the movement of people travelling sustainably along the corridor. The combined effect of these changes will therefore cater for higher levels of future sustainable population and employment growth.

In the absence of the Proposed Scheme, bus services will be operating in a more congested environment, leading to higher journey times and lower reliability for bus journeys. This limits their attractiveness to users, and this will lead to reduced levels of public transport use, making the bus system less resilient to higher levels of growth. The absence of walking and cycling measures that the Proposed Scheme provides will also significantly limit the potential to grow those modes into the future.

Overall, the Proposed Scheme provides bus journey time benefits and will make a significant contribution to the overall aims of BusConnects that is a key part of the GDA Strategy and will enable the city to grow sustainably into the future. This would not be possible in the absence of the Proposed Scheme.

3.13.2.4 Traffic counts

Summary of issues raised

The submission highlighted concerns relating to the provision of traffic counts on the Proposed Scheme, commenting that the counts and data available on the southside of Dublin is wholly unintelligible compared to the northside causes discrimination. The submission requests traffic data to be provided in IDASO format.

Response to issues raised

Section 6.4.5.2.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents a review of the existing traffic data survey available for the area of interest was undertaken from the following sources:

- NTA Traffic Count Database: A mixture of Automatic Traffic Counts (ATC) and Junction Turning Counts (JTC) from previous studies covering a range of years; and
- TII Counters: Permanent TII ATCs located on national strategic roads across the network with data publicly available online.

The NTA, Dublin City Council, and the other local authorities undertake periodic counts within their administrative areas in connection with their own local schemes. These surveys are conducted throughout the year and a limited set of data was available within the area of the Proposed Scheme.

Information on bus passenger volumes was already available and included in the modelling process as part of the ERM base model calibration and validation, which includes the annual canal and M50 cordon counts as well as ticketing data.

Due to the scale of the CBC Infrastructure Works, the Proposed Scheme required a full set of consistent updated traffic counts for a neutral period e.g. November / February when schools, colleges were in session. Traffic surveys were undertaken in November 2019 and February 2020 (Pre-COVID) with the surveyed counts used as inputs to the model calibration and validation process of the strategic model and micro-simulation model. The two types of counts used in the study are Junction Traffic Counts (JTCs) and Automatic Traffic Counts (ATCs).

The JTCs are 24-hour counts broken down into 15-minute segments over a full day. All main junctions along the Proposed Scheme have been included and provide information on the volume, and types of vehicles, making turning movements at each location. This data is utilised within the models to ensure that the flow of vehicles through the main junctions on the network is being represented accurately.

The ATC data provides information on:

- The daily and weekly profile of traffic within the study area of the Proposed Scheme; and
- Busiest time periods and locations of highest traffic demand on the network.

Both sets of counts were surveyed by Nationwide. The JTCs were surveyed on the 19th of November 2019 and the 13th of February 2020. The ATCs were surveyed in November 2019 and February 2020. The survey overview is provided in Table 4.1 of Appendix A6.1 (Transport Impact Assessment Report) in Volume 4, Part 1 of 4 of the EIAR, as seen in Table 3.87 below.

Table 3.87: Survey Overview (Table 4.1 in EIAR Appendix A6.1)

Table 4.1: Survey Overview

Survey Type	Company	Number	Date
JTC	NATIONWIDE	59	Tue 19/11/2019, Thu 13/2/2020
ATC	NATIONWIDE	20	19/11/2019 - 26/11/2019, 2/2/2020 - 16/2/2020

Figure 3.331 below shows the locations of the 59 JTC counts, and 20 ATC counts for the Proposed Scheme.

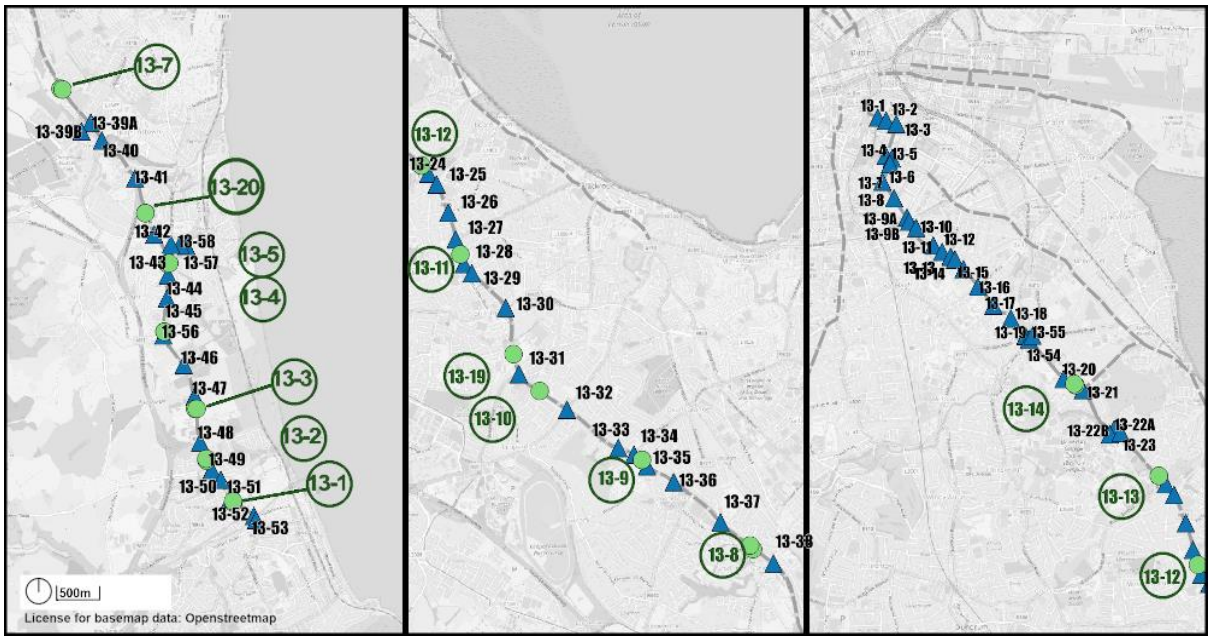


Figure 3.331: Extract from TIA, ATC and JTC traffic count locations

Figure 3.331 also shows that traffic counts were taken in both a northbound and southbound direction.

The ATCs were taken for an entire week. A summary of the collected data can be found in Appendix A6.1 (Transport Impact Assessment Report) in Volume 4, Part 1 of 4 in the EIAR.

3.13.2.5 Impact to the Southside of Dublin

Summary of issues raised

The submission commented that the Proposed Scheme will sever most of the main roads in the southside of Dublin for motorists including areas such as Mount Brown, Clogher Road, Lower Kimmage Road, Lower Rathmines Road, and Lower Leeson Street.

Response to issues raised

BusConnects Dublin was launched in 2017. It is a multi-faceted programme comprising several elements including the Core Bus Corridors (CBCs), which will provide approximately 230km of bus priority and approximately 200km of cycle routes.

It is the largest ever investment programme on the bus network to deliver high levels of bus priority on all the main corridors to support and significantly improve the operation of bus services now and into the future. It is proofed for resilience to enable the operation for more frequent services as required. The Proposed Scheme is a fundamental element of this ongoing work.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling on this key access corridor in the Dublin region.

The Proposed Scheme will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.

Section 7.2.1 of the Transport Impact Assessment in Volume 4, Appendix A6.1 of the EIAR discusses the cumulative impact of the full suite of Core Bus Corridors. It identifies that it is "*anticipated there will be a reduction in general traffic (car) trips of approximately 13,000 and 25,000 on a typical weekday (7am-7pm) in 2028 and 2043 respectively. This represents the equivalent of the removal of up to 78km of traffic queues in 2028 and 150km by 2043 across the Dublin road network*". Diagrams 7.13 to 7.16 contained in the Transport Impact Assessment in Volume 4, Appendix A6.1 of the EIAR show that changes in traffic flows along the roads identified in the submission, Mount Brown, Clogher Road, Lower Kimmage Road, Lower Rathmines Road, and Lower Leeson Street, are not predicted to detrimentally impact the performance of the road network. The diagrams also indicate that trips by private car into the city centre will remain possible along the routes in question or those adjacent streets as evidenced by the traffic redistribution. Section 7.2.1.4 of Transport Impact Assessment in Volume 4, Appendix A6.1 of the EIAR identifies that "*the level of traffic redistribution is shown to reduce between the Opening and Design years as further modal shift from car to sustainable modes occurs during the period, facilitated by the further roll out of the GDA Transport Strategy measures and, importantly, the sustainable mode capacity provided Core Bus Corridor schemes*". The implementation of all Core Bus Corridors will allow the road network to accommodate significant levels of additional travel growth by sustainable modes while maintaining access to the city centre by private car for those that require it, thus balancing the needs of all users.

Concern on Bus Gate at Lesson Street

Summary of issues raised

The submission raises concerns and objects to the bus gate at Lower Leeson Street. The submission notes the prohibition of traffic driving into St Stephen's Green South at this point as this is an important cross city route from east to west and will cause interference with the Luas Network.

In terms of bus gates across the Proposed Scheme and in generally, the submission raised concerns with the bus gates applying on weekends, as that could interfere with the religiously observant on Sundays. The submission requested that the bus gates operate 6am to 10am, Monday to Friday only.

Response to issues raised

A 'bus gate' is a short stretch of road which has restricted access to public transport and other authorised vehicles only. This short length of road is restricted exclusively to buses, taxis, cyclists, and emergency vehicles. It facilitates bus priority by removing general through traffic along the overall road where the

bus gate is located. General traffic is directed by signage to divert towards other roads before it arrives at the Bus Gate. Vehicles that are permitted to use a bus gate will be indicated with signage.

The Proposed Scheme at the Lesson Street Lower and Hatch Street is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 01 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.332.

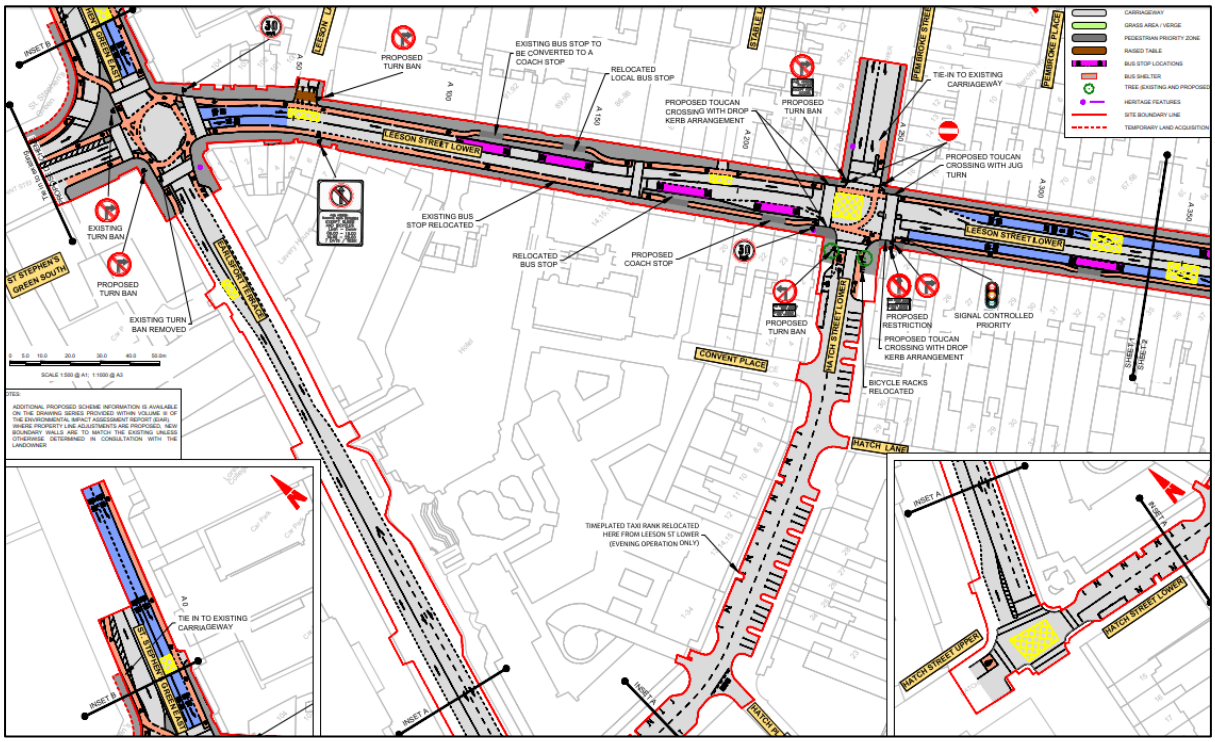


Figure 3.332: Extract from General Arrangement Drawing at Lesson Street Lower (Sheet 01)

A bus gate is proposed between R138 Leeson Street Lower / R138 St. Stephen's Green East / Earlsfort Terrace junction and R138 Leeson Street Lower / Hatch Street Lower / R138 Pembroke Street Upper. The bus gate will prioritise buses moving along Leeson Street Lower. Without the bus gate some of the benefits of the Proposed Scheme, such as a decrease in bus journey times, an increase in bus journey time reliability, and the associated increase in us of public transport relating from those, will not be realised.

Bus Gate is provided at the northern end of the Proposed Scheme on Leeson Street Lower, between the junction with Earlsfort Terrace (St Stephen's Green) and Leeson Lane. Between these points, only bus, taxi, cycle, and emergency vehicle access will be permitted on the Leeson Street Lower carriageway for the duration of the bus gate operational hours. Traffic approaching Leeson Street Lower from the Hatch Street Lower junction will be restricted to buses and local access only at all times of day.

The purpose of the bus gate at this location is to limit the carriageway traffic between St Stephen's Green and Hatch Street Lower to buses and local access only. Southbound general traffic is already not presently permitted on this section of Leeson Street Lower. The diversion of northbound general traffic allows a reduction in carriageway cross section to accommodate suitable footway and cycle track widths while maintaining bus priority.

Northbound general traffic will be diverted via Hatch Street Lower and Earlsfort Terrace. This requires the conversion of the northbound bus lane on Earlsfort Terrace to a general traffic lane. Earlsfort Terrace is on an orbital route and carries up to six bus services per hour in each direction, whereas Leeson Street Lower is on a spine route and carries up to 16 buses per hour in each direction. The existing left turning ban at Earlsfort Terrace towards St Stephen's Green North has been removed to facilitate the general traffic movement.

General traffic will be restricted from proceeding north at the Leeson Street Lower / Hatch Street junction by traffic restrictions, supporting traffic signs and (if deemed necessary) by bus lane enforcement cameras. Local access from the south will be maintained at this junction for those vehicles wishing to

access Leeson Lane and other accesses off Leeson Street Lower, which may be controlled by permit if necessary.

Section 6.4.6.2.7.3 and Section 6.4.6.2.7.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that Leeson Street Lower experiences a *'profound reduction in up to -1068 combined traffic flows during the AM Peak Hour and a profound reduction in up to -1108 combined traffic flows during the PM Peak Hour'*. Overall, there is a profound reduction of combined general traffic flows along Leeson Street Lower during the AM and PM Peak Hour in 2028 Opening Year. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential *'Positive, Slight to Profound and Long-Term impact'* on the direct study area.

Full bus priority with cycle lanes is provided at Leeson Street Lower / Hatch Street Junction where buses and cyclists can move together in north and southbound direction. There are also improved pedestrian crossing opportunities and improved operational safety at the junction by splitting side road movements. Side roads have been split which reduces capacity for the mainline, although there are improvements to operational safety at the junction.

Section 6.4.6.2.7.3 and Section 6.4.6.2.7.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that Hatch Street Lower experiences an *'increase of 329 combined flows in the AM Peak Hour and 399 combined flows in the PM Peak Hour'.* To determine the significance of negative impact, a further assessment was undertaken to determine the significance of the impact to the V / C ratio at Leeson Street Lower / Pembroke Street Upper / Hatch Street Lower junction. The significance of the change in V / C ratio for Leeson Street Lower / Pembroke Street Upper / Hatch Street Lower junction demonstrates a low magnitude of impact in the PM Peak Hour for the 2028 scenario and in both the AM and PM Peak Hours for the 2043 scenario. This demonstrates that Leeson Street Lower / Pembroke Street Upper / Hatch Street Lower junction operates at a maximum V / C ratio of below 85%. This indicates Leeson Street Lower / Pembroke Street Upper / Hatch Street Lower junction will operate well, with spare capacity that could accommodate additional traffic that may occur as a result of traffic redistribution following the delivery of the Proposed Scheme.

Bus Gate Operation Hours

The hours of operation of the bus gate will be subject to on-going review based on prevailing traffic conditions and the goal of achieving the project objectives. The NTA and local authorities will co-operate in good faith to address any issues with the hours of operation that may arise during the lifetime of the Proposed Scheme.

Where bus gates are proposed these may not always operate on 24 hours / 7-day week basis subject to how necessary they are to ensure bus priority in certain directions at certain times. The proposed bus gate at Lesson Street will operate in mornings between 6am to 10am and in the evenings between 4pm and 8pm 7-days a week, to consider local access required for deliveries for the businesses and access to school and university and religious institutions.

3.13.2.6 Impact to trees in Shankill

Summary of issues raised

The submission raises concern that removal of 500 trees in Shankill is very destructive to environment and should be avoided. The submission raised concerns relating to the impact to the bat population due to the felling of trees, in both Shankill and other parts of the Proposed Scheme. The respondent also notes the impact to the black headed gull and the herring gull, both amber listed species, and queries the analysis of the impact to these birds, or the species which reside in the stream which flows under the road north of Woodbrook College.

Response to issues raised

Refer to Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in Shankill.

3.13.2.7 Replacement of roundabouts at St Anne's Church

Summary of issues raised

The respondent requested a more in-depth analysis of the roundabout at St Anne's Church to determine whether the removal of the roundabout is needed in line with DMURS guidance. The respondent further raised concerns regarding the impact on the junction, commenting that a green light will result in speeding traffic whereas the roundabout slows traffic down. The submission requests for an oral hearing on the topic.

Response to issues raised

Refer to response in following sections and also note below:

- Section 3.9.3.4.1 on Upgrade of Existing Roundabouts to Signalised Junctions; and
- Section 3.9.3.4.3 in this report for further information on Signalisation of Dublin Road / Shanganagh Road / Corbawn Lane Junction (St Anne's Roundabout).

A 30km/h speed limit would be in place for the Shankill village to enhance safety in this shared section of road. The 30kh/h speed limit commences from Dublin Road junction with Stonebridge Road to upto junction with Olcovar.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with signalisation of the junction and any issues related to speeding.

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.13.2.8 Combined cycle infrastructure

Summary of issues raised

The submission raised concerns regarding the lack of continuous cycle track through the Proposed Scheme. The submission notes there are two locations there is combined two-way cycle track on outbound side and the inclusion of combined cycle track which will result in inbound cyclists having to cross the road four times, therefore the works should focus on possibility of continuous cycle lanes.

Response to issues raised

Refer to Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure and also note below.

NTA acknowledges there are two key locations where two-way cycle tracks are provided in the outbound direction. These are proposed at:

- The N11 Loughlinstown to Cherrywood section to retain existing infrastructure in the outbound direction. Two-way cycle track inbound direction are also retained along with proposal for Quiet Street to provide connectivity to the existing cycling infrastructure and local connections to Cheerywood.
- Dublin Road through Shanganagh Park and Shanganagh Cemetery to integrate with the proposed Shanganagh Castle Housing Development, proposed Shanganagh Park Masterplan and retain trees along the Shanganagh Cemetery. Toucan crossings are proposed at both ends of the two-way cycle track.

The details of the design and the proposed toucan crossings at these locations are discussed below.

Section 6.4.6.1.5.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states the key infrastructure changes to pedestrian links along Section 3 of the Proposed Scheme include:

- *'Provision of pedestrian crossings on all arms at Shanganagh Road / Beechfield Manor junction, R119 Dublin Road / Lower Road / Cluain Na Gréine Court junction, R119 Dublin Road / Olcovar junction, R119 Dublin Road / Shanganagh Castle development lands entrance junction;*

- *Provision of new mid-link pedestrian crossings along R837 Dublin Road (north of the R837 Dublin Road / Seaview Park junction), R119 Dublin Road (southeast of the R119 Dublin Road / Allies River Road junction) and R837 Dublin Road (southeast of Shanganagh Cemetery access). This will enable improved connectivity between bus stop and facilities; and*

- *Approximately 120m of Shanganagh Road has been widened to achieve improved footway widths.'*

Two-way Cycling infrastructure on the N11 Loughlinstown to Cherrywood - Section 4.11.3 and 4.11.4 of the Preliminary Design Report, part of Supplementary Information, notes that the existing footpath in the inbound direction from St Columcille's Hospital and Loughlinstown Roundabout is retained as existing. This inbound cycle track joins the local Bray Road which serves residential and mainly commercial properties and has low traffic and low vehicle speeds. This stretch of Bray Road is proposed as Quiet Street, where the cyclists will share the space with general traffic. The proposed Quiet Street, approx. over 400m, continues to serve the Cherrywood Road and then joins the existing two-way cycle track infrastructure at the Wyattville Junction and further connects to the N11 inbound direction. Improvements have been made to cycle track provisions at the Wyattville Road Junction. The traffic on the Bray Road is low and is considered appropriate to be used as a Shared Space.

The existing adjacent northbound Bray Road slip towards Cherrywood Road will be retained in its current two-way layout.

To facilitate local access, this cycle route is supplemented in places with bi-directional cycle track sections on one or both sides of the N11 which includes two-way cycle track from Wyatville junction to Loughlingstown Roundabout on the west-side. This is in line with retaining and improving the existing infrastructure along the N11 section.

The existing toucan crossing at the end of Wyatville Junction slip road (Chainage A13450) has been improved for pedestrian and cyclists' safety, which integrates with the proposed Quiet Street treatment and local connections towards Cherrywood.

The Proposed Scheme design at the end of Wyatville Junction Slip Road is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 38, Sheet 39, and Sheet 40 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.333, Figure 3.334, and Figure 3.335.

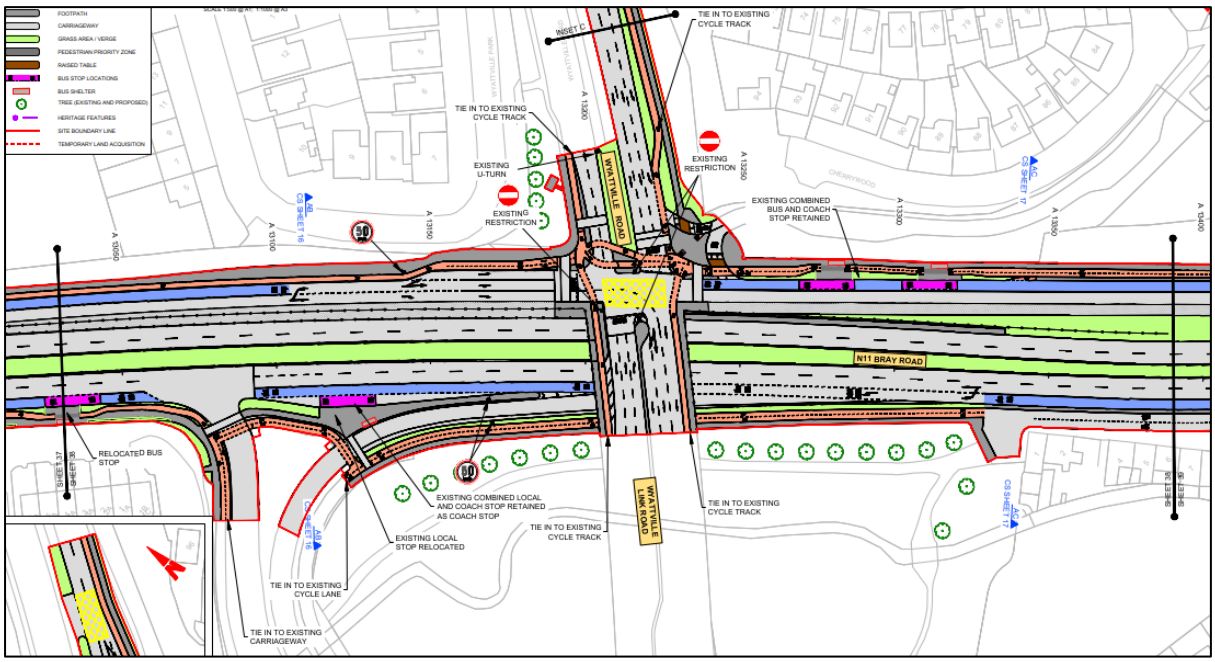


Figure 3.333: Extract from General Arrangement Drawings (Sheet 38)

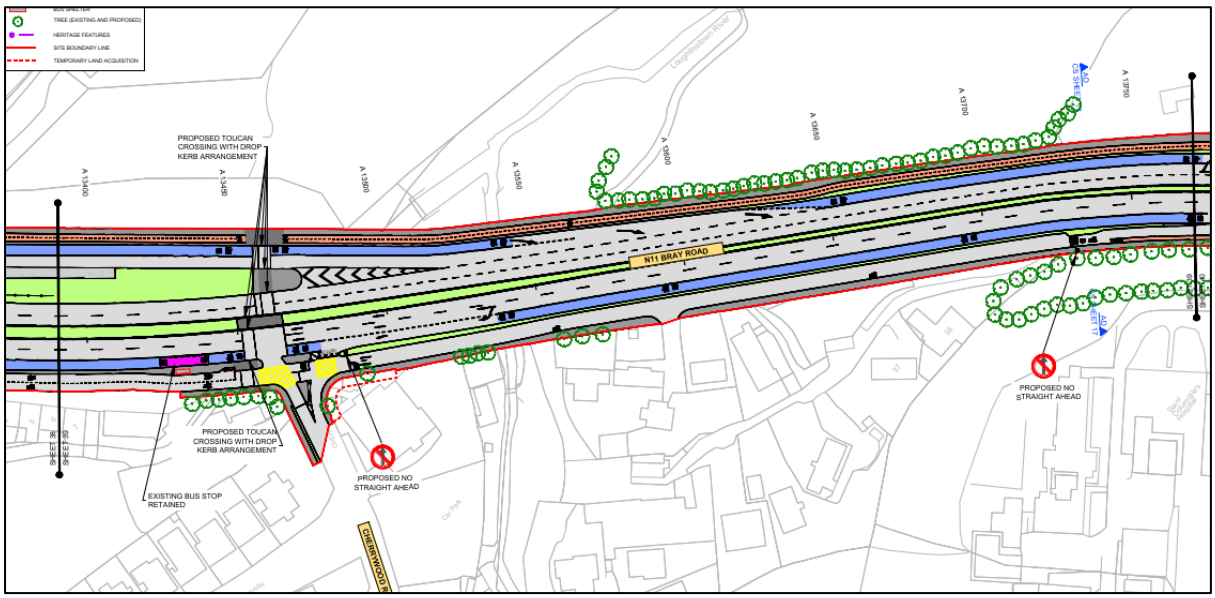


Figure 3.334: Extract from General Arrangement Drawings (Sheet 39)

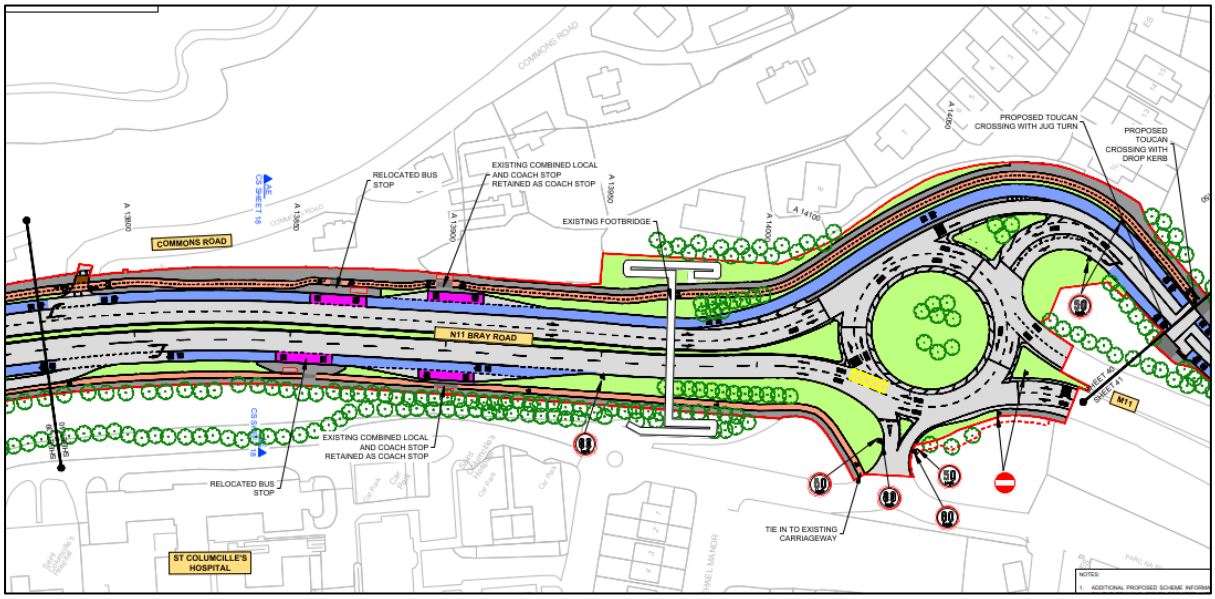


Figure 3.335: Extract from General Arrangement Drawings (Sheet 40)

Section 4.11.4 of the Preliminary Design Report, part of Supplementary Information, notes the following:

'A quiet street cycle route is proposed on the west side of the N11 commencing north of Loughlinstown roundabout (chainage A13780), the route passes residential and commercial premises along a local road with low traffic and low vehicle speeds before joining up with a dedicated section of cycle path approximately 100m south of the Wyattville Road Bridge (chainage A13310). In addition to this, local connections are provided from the scheme corridor's main cycle track to existing quiet streets at certain locations, where appropriate.'

Section 4.6.3.4 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, notes the following on the Quiet Street treatment:

'4.6.3.4 Quiet Street Treatment

Where the Proposed Scheme cannot facilitate cyclists without significant impact on bus priority, alternative cycle routes are explored where appropriate and feasible away from the Proposed Scheme bus route. Such offline options may include directing cyclists along streets with minimal general traffic other than car users who live on the street. Guidance in this regard has been provided within the PDGB which states:

'Diversions of proposed cycle facilities on to quieter parallel routes, to avoid localised narrowing of cycle tracks on the main CBC route, is to be considered in the context of the CBC route being listed as a primary cycle route as per the Greater Dublin Area Cycle Network Plan. These diversions, however, may also be considered where appropriate cycle facilities cannot be provided along the CBC route without significant impact.'

These are called Quiet Streets due to the low volume of only local general traffic users travelling at low speed and are deemed suitable and safe for cyclists sharing the roadway with the general traffic without the need to construct segregated cycle tracks or painted cycle lanes. The Quiet Street Treatment would involve appropriate advisory signage and lane marking for both the general road users and cyclists.

On the Proposed Scheme a Quiet Street cycle route is proposed on the west side of the N11, commencing north of Loughlinstown Roundabout, the route passes residential and commercial premises along a local road (Bray Road) with low traffic and low vehicle speeds before joining up with a dedicated section of cycle path approximately 100m south of the Wyattville Road Bridge. In addition to this, local connections are provided from the Proposed Scheme's main cycle track to existing quiet streets at certain locations, where appropriate.'

Section 6.4.6.1.2.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that along Section 2 (Donnybrook to Loughlinstown Roundabout), the Proposed Scheme will have a Positive, Moderate and Long-term effect on the quality of the cycling infrastructure.

The LoS rating increases from a B in the Do Minimum scenario to an A during the DoSomething scenario. This is due to the proposed improvements to the existing cycling facilities along this stretch of cycle route, in the form of segregation, improvements to cycleway widths, and junction treatment. Individually, during the DoSomething scenario, one received an A+ rating, four received A ratings, and the remaining five received B ratings, with the most substantial change from the Do Minimum scenario occurring at junction R825 Stillorgan Park Road to N11 Brewery Road, moving from B to A+.

The proposed cycling improvement along the N11 from Wyattville Junction to Cherrywood and Cherrywood to Loughlinstown shows Positive Moderate and Not Significant impact, as seen in Table 3.88.

Table 3.88: Extract from EAIR Chapter 6 (Section 2 Cycling Assessment)

Table 6.28: Section 2 Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Magnitude and type of Impact	Sensitivity	Significance of impact
N11 / R118 Grade separated Junction: Willow Avenue to R116 Cherrywood Avenue	A12850 – A13500	B	A	Low	Medium	Positive Moderate
N11: R116 Cherrywood Avenue to Loughlinstown Roundabout	A13500 – A14050	A	A	Negligible	Medium	Not Significant
Section Summary		**B**	**A**	**Low**	**Medium**	**Positive Moderate**

A detailed breakdown of the assessment along each section can be found in Appendix A6.4 (Impact Assessments) in Section A6.4.2 (Cycling Infrastructure Assessment) in Volume 4, Part 2 of 4 of this EIAR.

Two-way cycle track at Shanganagh Park and Shanganagh Cemetery – The Proposed Scheme design at the Shanganagh Castle junction is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 46 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.336.

The Proposed Scheme cycle track along Dublin Road in Shankill commences at Crinken Lane, where cycle tracks are provided in both directions. The Proposed Scheme junction layout at the proposed Shanganagh Castle Housing Development designed by others, considers the access to the future development. Toucan crossings are provided on both sides of the 3-arm junction and provision is made for the cycle track to integrate with the proposed access to the Shanganagh Castle Housing Development.

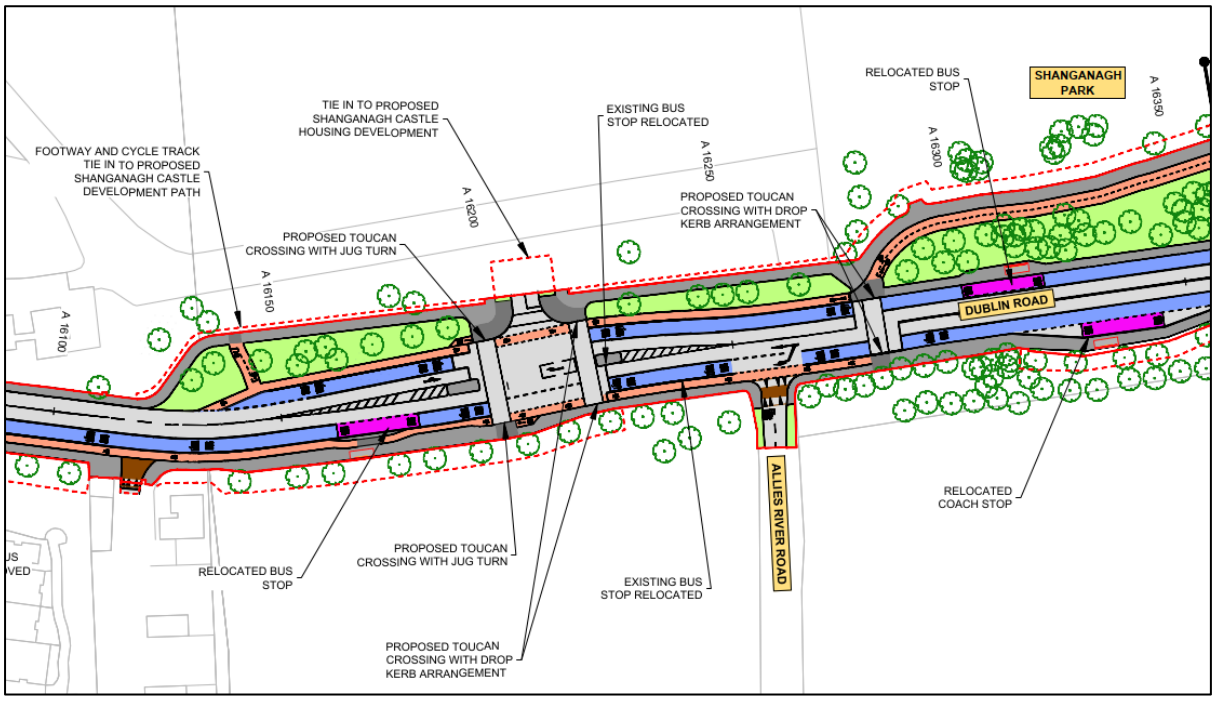


Figure 3.336: Extract from General Arrangement Drawing at Shanganagh Castle (Sheet 46)

The Proposed Scheme design at Shanganagh Park and Shanganagh Cemetery is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.337.

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two Toucan Crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line. The northbound cyclists cross the Dublin Road at the Shanganagh Cemetery where a new toucan crossing is proposed. The two-way cycle track continues through the park and cemetery. The northbound cycle track then crosses back to the west side of the road before Allies River Road where a new toucan crossing is provided. The toucan crossings allow for safe cross over for the cyclists in the other direction and have been provided at the locations of transition from two-way cycle track to one-way cycle track.

At the Dublin Road junction with Shanganagh Park/ Shanganagh Cemetery, the two-way cycle track crosses the Shanganagh Park Road and raised table with ‘Pedestrian Priority Zone’ either side is provided to facilitate uncontrolled crossing point for cyclists and traffic calming for safety.

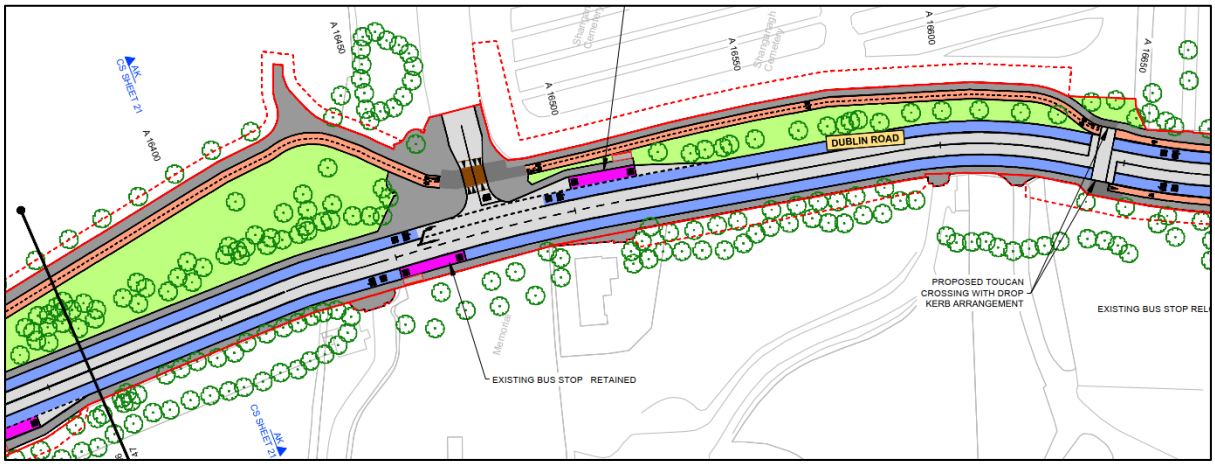


Figure 3.337: Extract from General Arrangement Drawing at Shanganagh Park/ Cemetery (Sheet 47)

Section 6.4.6.1.5.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that along Section 3 (Loughlinstown Roundabout to Bray North), demonstrates that along Section 3, the Proposed Scheme will largely result in negligible or low negative impacts along three of the four sections and a medium positive impact along one section. The significance of these impacts' ranges from moderate negative to moderate positive. Overall, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase.

In particular the cycling along the Section 3 (between Dublin Road Allies River Road to Wilford Roundabout) shows a positive moderate impact, as noted in Table 6.3.4 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, with improved LoS A from exiting LoS C demonstrating Positive Moderate impact. This improvement of the proposed 2-way cycle track, replaces the existing advisory cycle lane.

The findings of the cycling assessment fully align with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to *'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable'.*

NTA are satisfied that the Proposed Scheme cycling infrastructure is designed to provide for safe transition from one-way to two-way cycle track.

3.13.2.9 Alternate N11/M11 Interim Bus Priority Scheme

Summary of issues raised

The submission advocates the N11/M11 Bus Priority Interim Scheme (N11/M11 BPIS).

Response to issues raised

Refer to Section 3.9.3.1.3 in this report for further information on the Alternate N11/M11 Bus Priority Interim Scheme.

3.13.2.10 Option Assessment not comprehensive and Preferred Route Assessment not appropriate

Summary of issues raised

The submission noted concerns regarding the option assessment of the Proposed Scheme, commenting that many sections have not been correctly assessed, with the impacts on road safety, architectural heritage, flora and fauna, landscape and visual, CPOs, and capital cost. The submission notes that a well scoring option would occur by putting the Proposed Scheme on the motorway, reducing many impacts The submission notes the disagreement with the selection of Option 2B as the Emerging Preferred Route Option (EPR).

The submission commented that it was unsure how the Proposed Scheme could go ahead in Shankill with massive disruption to trees and other impacts and therefore the Proposed Scheme should not be progressed in Shankill due to following:

- Creating a four lane highway would encourage speeding and safety hazard
- Lack of cycle lane provision;
- Concern for the safety of pedestrians when crossing;
- Journey time saving times do not justify the Proposed Scheme;
- Impact to the economy due to CPO;
- Impact to trees, walls, village character and environment; and
- The lack of integration with the DART.

The submission goes on to state that Shankill has among the lowest level of traffic daily in places where it is proposed to impose a bus lane as part of the Proposed Scheme and hence not required.

The submission notes that a well scoring option would occur by putting the Proposed Scheme on the motorway, reducing many impacts.

Response to issues raised

Refer to response in section of this Report, as noted below.

- Refer to Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill;
- Refer to Section 3.9.3.1.4 in this report for further information on Cost Benefit Analysis;
- Refer to Section 3.9.3.2 in this report for further information on Benefits of the Scheme in Shankill;
- Refer to Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure in relation to cycling provision;
- Refer to Section 3.9.3.8 in this report for further information on the Impact on Safety (Pedestrian & Cyclist) in relation to pedestrian safety;
- Refer to Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits in relation to journey time saving;
- Refer to Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in relation to tree loss; and
- Refer to Section 3.9.3.18 in this report for further information on the Impact to Heritage & Architecture in relation to village character.

3.13.3 32 – Ciaran Cuffe MEP

Summary of Issues

This submission raised the following issues:

1) Support for the Proposed Scheme;
2) Concern on the land take and loss of trees at Patrician Villas;
3) Retaining slip lane at St Stephen's Green;
4) Leopardstown Road/ Newtownpark Avenue junction;
5) Lack of footpath along the N11 Bray Road section;
6) Improved signage for active travel modes; and
7) Minor traffic calming measures.

3.13.3.1 Support for the Proposed Scheme

Summary of issues raised

The submission raised support for the Proposed Scheme noting that if done correctly it has potential to generate a substantial modal shift towards sustainable mobility, but only if all road users are taken into account.

Response to issues raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support sustainable mobility.

3.13.3.2 Concern on the land take and loss of trees at Patrician Villas

Summary of issues raised

The submission requested that if temporary land acquisition behind Patrician Villas could be avoided by taking space from the central median, therefore preserving mature trees and biodiversity as well as retaining the view and sound insulation.

Response to issues raised

Refer to response in Section 3.4 in this report for further information on the Proposed Scheme at Patrician Villas, specifically refer to Section 3.4.3.5 with respect to tree loss and biodiversity and Section 3.4.3.7 with respect to noise and screening.

The Proposed Scheme design at Patrician Villas/ St Laurence Park is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 20 and Sheet 21 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.338 and Figure 3.339.

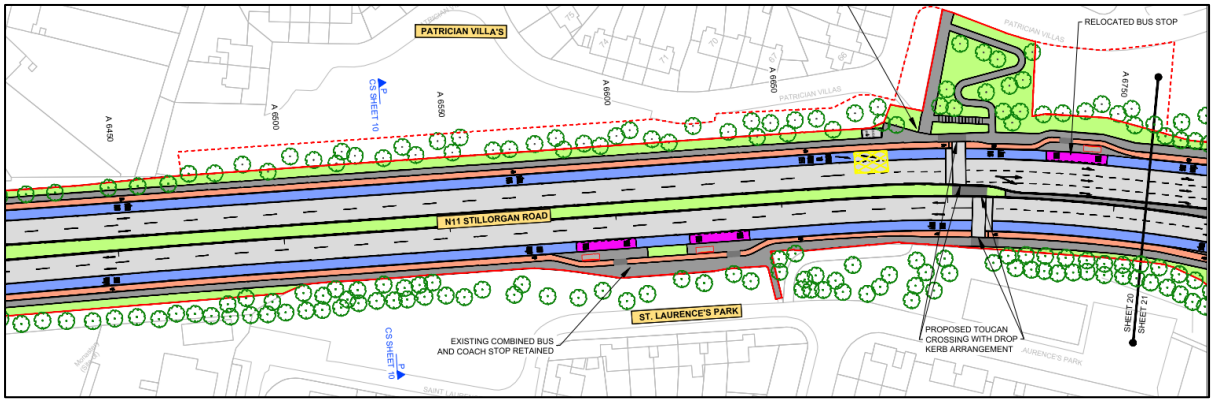


Figure 3.338: Extract from General Arrangement Drawing at Patrician Vilas (Sheet 20)

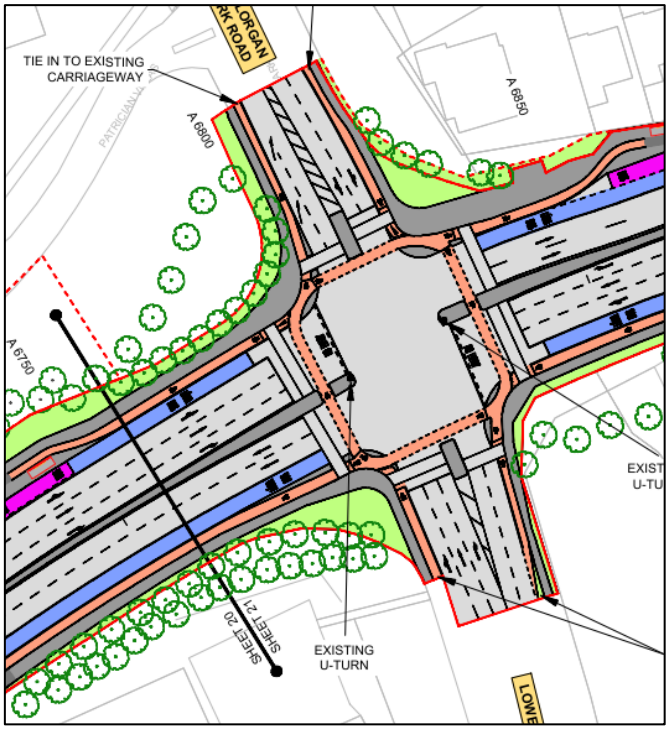


Figure 3.339: Extract from General Arrangement Drawing at Patrician Vilas (Sheet 21)

The permanent land take is required for the construction of the proposed 2m footpath along the N11 Stillorgan road (between Priory Drive to Lower Kilmacud Road Junction) and proposed pedestrian link and extension of the pedestrian underpass. The proposed land take at Patrician Vilas is shown in the

Deposit Maps, Sheet 29 and 30, in Figure 3.340 and Figure 3.341. Plot 1001(03).1f and 1001(06)1f is the permanent land take and plot 1001(04).1f and 1001(05)1f is the temporary land take.

The existing central median has been reduced to the minimum width possible considering the constraint of existing utilities ESB HV line, in order the achieve widening to provide for the desirable traffic lane, footpath and cycle track width in the northbound direction.

The temporary land take is required for the duration of the construction period to allow working space for the construction works, boundary works/ and or accommodation works. Temporary land take will be returned after construction. Temporary land take is required on the east side of the N11 Stillorgan Road at Patrican Vilas as the works are in vicinity to this location.

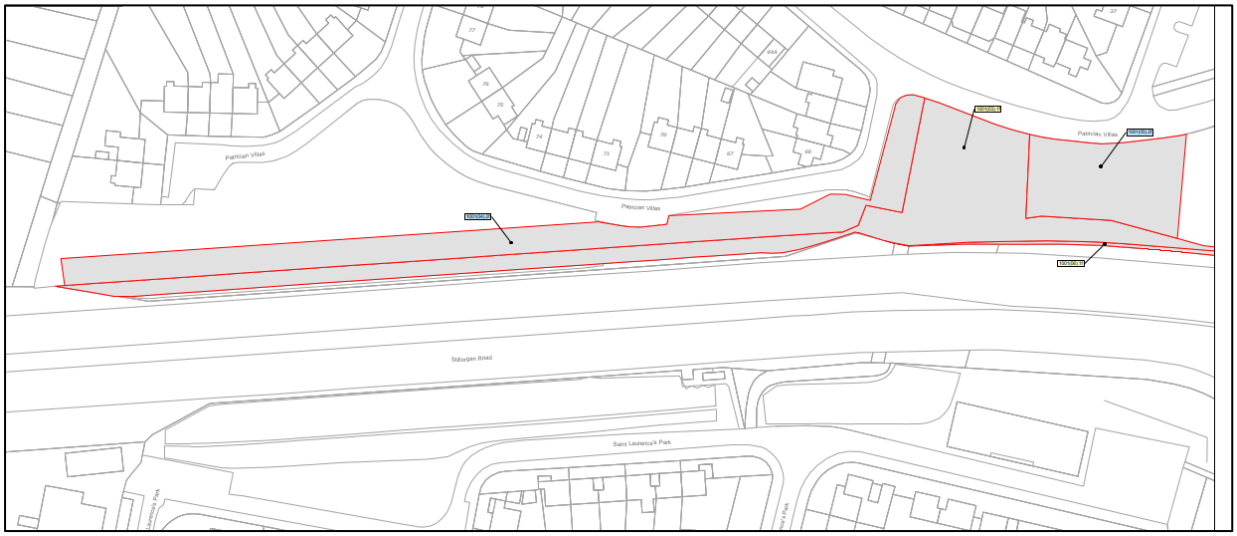


Figure 3.340: Extract from Deposit Map at Patrician Vilas (Sheet 29)

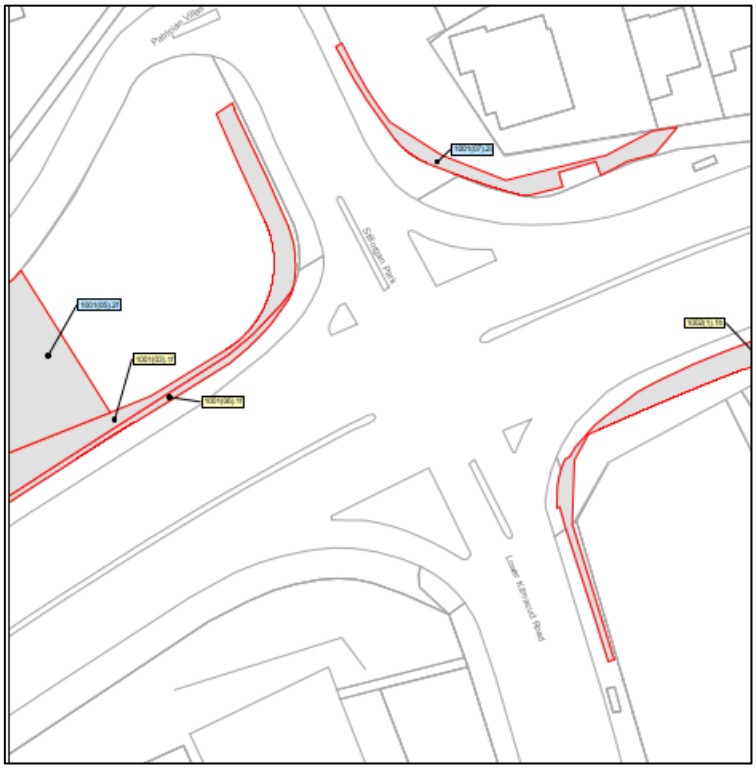


Figure 3.341: Extract from Deposit Map at Patrician Vilas (Sheet 30)

3.13.3.3 *Retaining slip lane at St Stephen's Green*

Summary of issues raised

The submission raised concerns regarding the retaining the slip lane at the junction of Stephen's Green South and East as there is a missed opportunity to improve pedestrian mobility, particularly for those using the National Concert Hall.

Response to issue raised

The Proposed Scheme at the Lesson Street Lower, Earlsfort Terrace and Hatch Street is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 01 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.342.

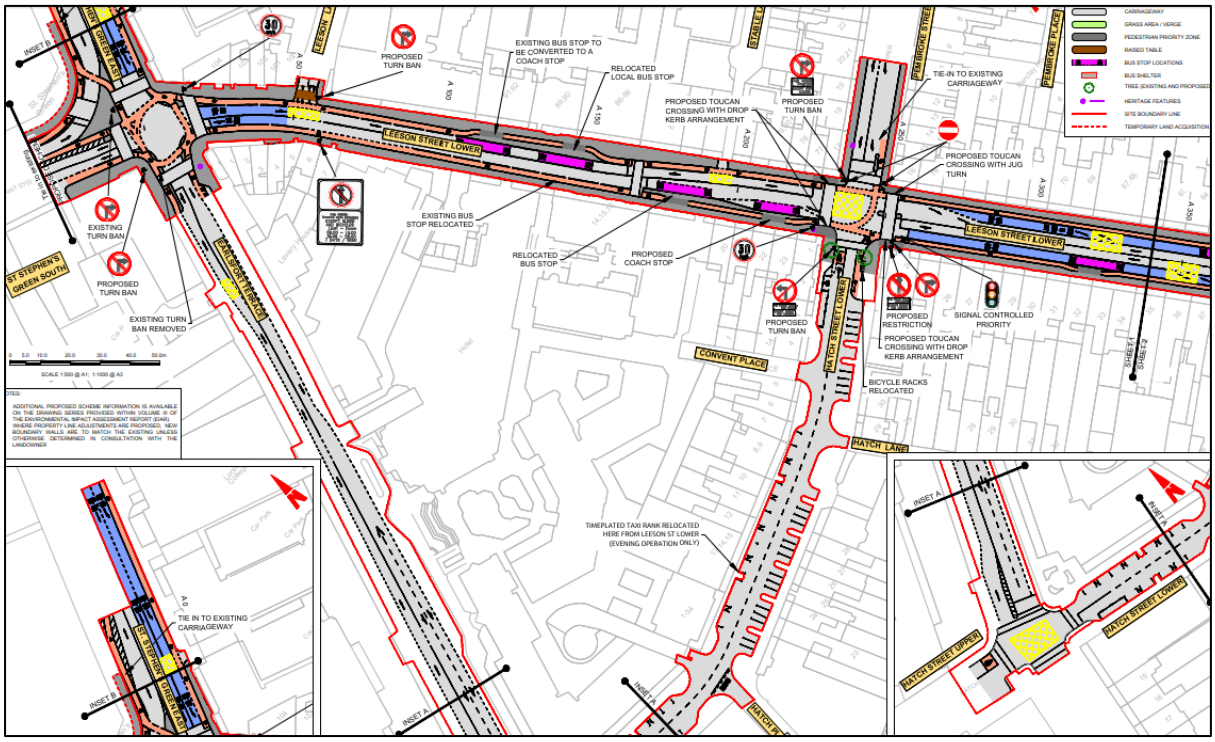


Figure 3.342: Extract from General Arrangement Drawing at Lesson Street Lower (Sheet 01)

The existing pedestrian infrastructure at St Stephen's Green and Earlsfort Terrace has been retained, including the slip lane at the junction of Stephen's Green South and East. The left turn slip lane has been retained as existing as this is to allow for left turning traffic only and there is no straight ahead traffic into Lesson Street Lower. Removing the left turn slip lane would mean adding another signal phase which would lead to potential delays at this junction.

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with existing left turning slip lane.

Section 6.4.6.1.2.1 in Chapter 6 (Traffic &Transport) Volume 2 of the EIAR, states the following pedestrian infrastructure at the St Stephen's Green junction.

'The four-arm junction R110 Saint Stephen's Green / R840 Earlsfort Terrace / R138 Saint Stephen's Green / R138 Leeson Street Lower provides signalised crossings on each arm. Two of the four-crossings are direct (south-eastern arm and south-western arm). Indirect crossings are provided on the north-eastern and north-western arms where a pedestrian refuge island is provided adjacent to the R110 Saint Stephen's Green to R138 Saint Stephen's Green slip lane. No guard rails are provided at the pedestrian refuge island;'

The assessment of the qualitative impacts on the walking infrastructure for Section 1 of the Proposed Scheme are summarised in Table 6.22, along with the accompanying sensitivity for each junction and

the resultant significance of effect. As noted in Table 6.22 the impact to pedestrian infrastructure at the St Stephen's Green Junction is '*Positive Very Significant*'.

3.13.3.4 Leopardstown Road/ Newtownpark Avenue junction

Summary of issues raised

The submission notes the interruption of the bus lane for left turns on either side of Leopardstown Road and Newtownpark Avenue is unnecessary, with three lanes for car traffic being sufficient at this location, as elsewhere.

Response to issue raised

Please refer Section 3.8 in this report for further information on the Proposed Scheme at N11 Stillorgan Road and also note below.

Each junction along the N11 has been assessed individually on case-by-case basis based on the traffic volumes and physical space available. At Newtownpark/ Leoperdstown a Type 2 Junction has been proposed as per the Preliminary Design Guidance Booklet for BusConnects in Appendix A4.1 in Volume 4, Part 1 of 4 in the EIAR, based on the left turning traffic numbers and physical space available.

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR, Page 94 - Junction Assessment notes the following:

'Bus Priority Infrastructure

The current arrangement has bus lanes extending to the stop lines on the N11 Stillorgan Road with left turn slip lanes provided on the nearside of the carriageway. This requires general motorists to navigate across the bus and cycle lane in order to turn left.

The CBC proposal is to deliver a Junction Type 2 arrangement in both directions to cater for the significant left turn movements whilst removing the cycle conflict from the layout. Bus lanes are extended to the stop line and run alongside ahead and left general motorists with relevant green extensions provided to ensure buses will clear if any left turn queuing extends to the crossover point.'

3.13.3.5 Lack of footpath along the N11 Bray Road section

Summary of issues raised

The submission suggested that footpaths not being provided along the N11 along parts of Bray Road is an error, as this area will continue to develop making pedestrian permeability more desirable and will result in a lack of suitable infrastructure.

Response to issue raised

Footpaths are not proposed as per existing infrastructure along the N11 between the Old Bray Road and Cornelscourt Shopping Centre pedestrian bridge, and between Clonkeen Road and Johnstown Road junctions and between Johnstown Road junction and the new junction at Druid's Glen Road, as alternative walking routes exist on adjacent quieter roads.

Section 3.4.1.2 in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR notes the following:

'This section of the Proposed Scheme was re-evaluated and the route options selected for the Emerging Preferred Route are still considered valid. No major changes were proposed in Section 2. However, a number of changes to cross-sections and lane provision were developed for the Preferred Route Option as outlined below:

- *Further design development to coordinate with the UCD Nova Development, the future Brewery Road Safety Improvement Scheme, and the Cherrywood SDZ Development; and*
- *Removal of the proposed footpath along the N11 between Cornelscourt and Kilbogget junction as it was considered a non-desired pedestrian link, with alternative walking routes available on adjacent quieter roads.'*

Section 4.6.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, notes the following:

'For the N11 section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *The Proposed Scheme between N11 Cornelscourt (junction with old Bray Road) to Kilbogget Junction (ch 9+800 to ch: 12+050) retains the existing pedestrian arrangement and new footpath is not proposed, as it was considered a non-desired pedestrian link based on the pedestrian movement along this stretch and is aligned with the local development plans. Alternative walking routes exist on adjacent quieter roads.'*

3.13.3.6 Improved signage for active travel modes

Summary of issues raised

The submission also requested improved signage for those using active modes to access UCD. The submissions suggests that the junction of the N11 and Wyattville Road should be made more legible for southbound cyclists.

Response to issue raised

The NTA notes the above points. Appropriate Directional Signs are provided at the UCD and appropriate signage for cycling infrastructure is provided at the Wyattville Junction.

The Proposed Scheme Traffic Signs and Road Markings design at UCD and Wyattville Junction is presented in the Traffic Signs and Road Markings Drawings which are provided as an Appendix in the 08-Traffic Signs and Road Markings Drawings Sheet 13 and Sheet 38 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.343 and Figure 3.344.

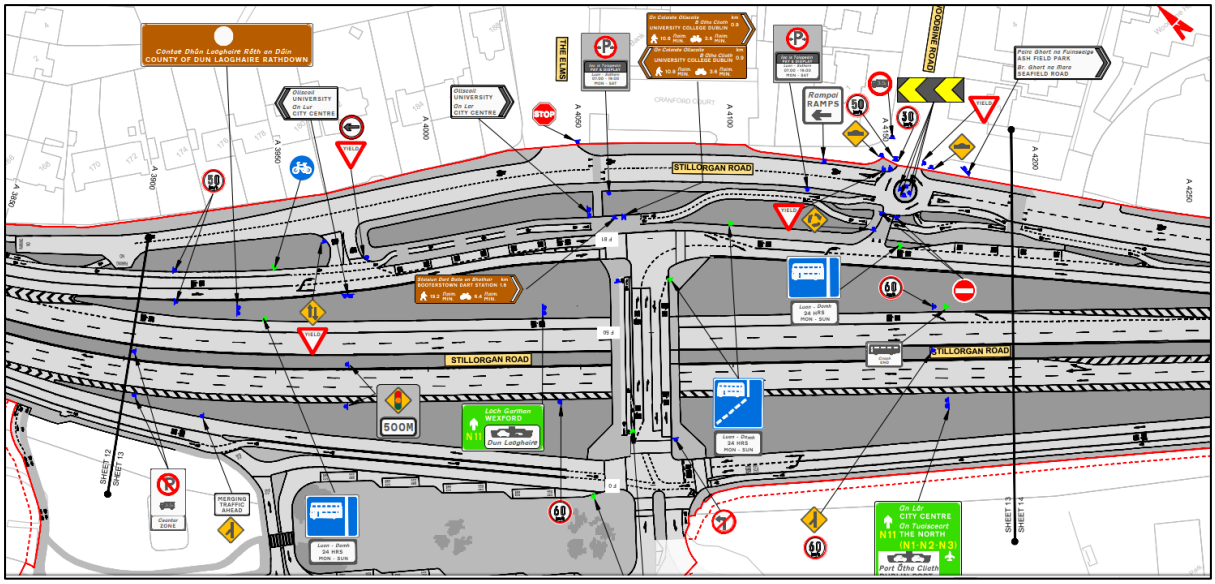


Figure 3.343: Extract from Traffic Signs and Road Marking at UCD (Sheet 13)

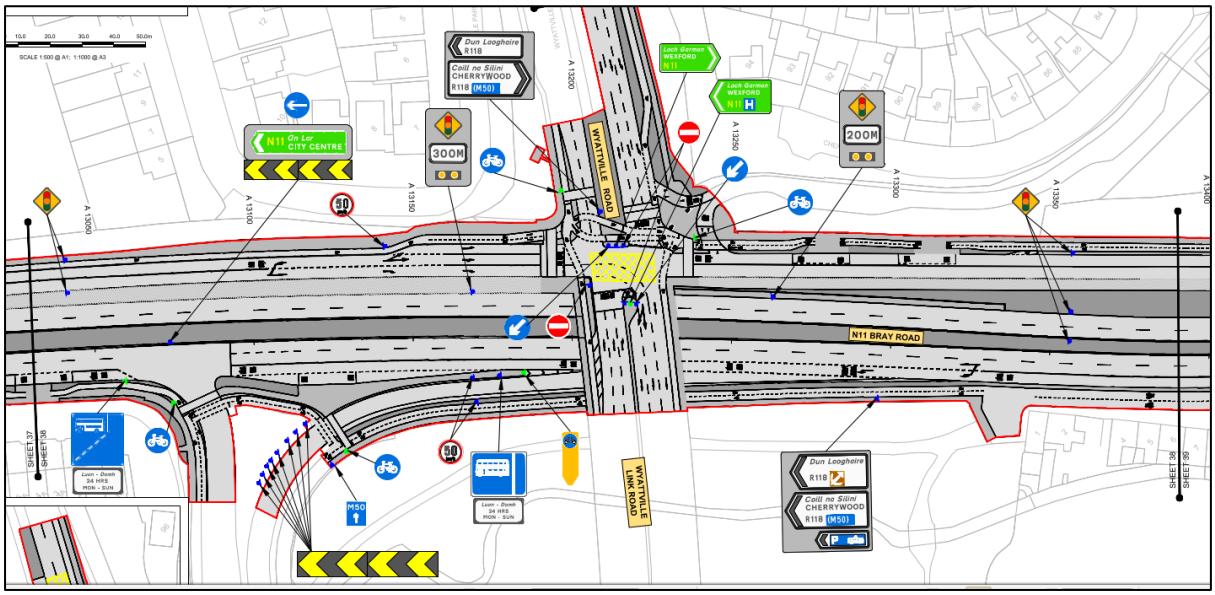


Figure 3.344: Extract from Traffic Signs and Road Marking at Wyatville Junction (Sheet 38)

3.13.3.7 Minor traffic calming measures

Summary of issues raised

Minor traffic calming measures along the N11 at points approaching pedestrian crossings would signal for drivers to slow ahead of pedestrian lights.

Response to issues raised

The Proposed Scheme is designed in line with the Proposed Scheme objective to ensure bus priority, safe infrastructure for cycling and pedestrians and that the public realm is carefully considered in the design and development of transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

There are a number of traffic calming measures that have been implemented in the Proposed Scheme that will reduce speeds including improved junction layouts with reduced corner radii, narrow carriageway lane widths, raised table crossings on side roads, proposed speed limit reductions (e.g. Shankill village). Along the N11 section, the traffic lanes have been narrowed at approach to junctions, wider refuge islands provided for pedestrian and cyclists which will promote traffic calming.

The Shankill village section of the Proposed Scheme is also covered by a proposed 30kph speed limit. In Shankill village 30kph speed limit zone, concrete setts across the carriageway are proposed to enhance the pedestrian crossing through the village environment, which will also support traffic calming.

The N11 National Road section has been designed to the relevant Standards as noted in Section 4.1 of the Preliminary Design Report, part of Supplementary Information.

'Along the N11 section of the Proposed Scheme with the proposed speed limit equal to 60km/h between Mount Merrion Avenue/N11 junction and Kill Lane/ N11 Junction in particular, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case under the DMURS Standards.

For the N11 carriageway section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case, under TII current publications.'

The Stage 1 Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with traffic calming along the route.

3.13.4 36 – Cllr. Carrie Smyth

Summary of Submission

This submission raised the following issues:

1) Support for the Proposed Scheme;
2) Removal on slip lanes along N11 and bus lane enforcement;
3) Cyclists' improvement on the N11 Loughlinstown to Cherrywood;
4) Pedestrian link at Shanganagh Vale;
5) Reduction in traffic lanes at Corke Abbey Avenue junction;
6) Signalised junction at the Dublin Road junction with Lower Dargle Road;
7) Suggestion for Protected junction at Dublin Road with Shanganagh Park/ Cemetery;
8) Removal of wall at Castlefarm to facilitate footpath;
9) Removal of Cherrington Road/ Dublin Road/ Quinn's road roundabout;
10) Removal of Dublin Road/ Shanganagh Road/ Corbawn Lane roundabout;
11) Lack of segregated cycling facilities in Shankill;
12) Journey time benefits and the impact to heritage and biodiversity and insufficient cycling facilities in Shankill; and
13) Request for Oral Hearing.

3.13.4.1 Support for the Proposed Scheme

Summary of issues raised

The submission noted support for the Scheme due to the fact bus services need to be more accessible, convenient, more frequent, and reliable to encourage people to adapt.

Response to issues raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support improvement of bus services.

3.13.4.2 Removal on slip lanes along N11 and bus lane enforcement

Summary of issues raised

The submission noted concern regarding the removal of the left filter lanes from the N11 in both directions. The submission requests to extend the right lane on the N11 for motorists wishing to turn onto Clonkeen Road, as vehicles queuing can block to lanes wishing to go straight. The submission goes on to request that the lane layout on Clonkeen Road in the easterly direction is left as per existing layout. The submission also suggests the same for the Johnstown junction.

The submission queried as the slip lane are removed could the motorists use the bus lane for turning left.

Response to issues raised

Please refer Section 3.8 in this report for further information on the Proposed Scheme at N11 Stillorgan Road and also note below.

Clonkeen Road/ N11 Junction

The N11/ Clonkeen Road junction is being upgraded as part of the Proposed Scheme which will provide connectivity from Bray to Dublin City Centre for buses, cyclists, and pedestrians. The four-arm traffic signal junction will be modified to include improved pedestrian, cycle, and bus infrastructure and removing the slip lanes.

The proposed junction design allows for a Junction Type 1 to be physically accommodated in both directions, with bus lanes extended to the stop line unhindered and dedicated traffic signal displays provided to maximise bus priority. Page 110 of the Junction Assessment presents the lane configuration and signal phasing of the Clonkeen Road/ N11 junction in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR as shown in Figure 3.345 and Figure 3.346.

N11/ Clonkeen Road junction within the Proposed Scheme has been designed taking into consideration anticipated demands and predicted operation. Staging and signal times have been proposed on the basis considering multiple factors including safety and demand.

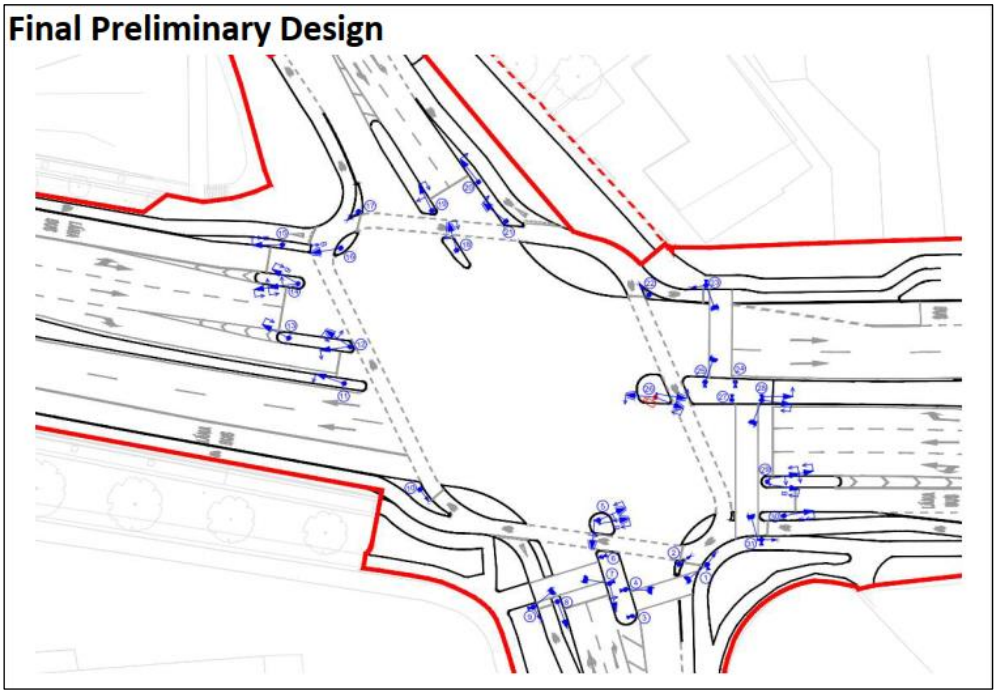


Figure 3.345: Extract from Junction Design Report of lane configuration at Clonkeen Junction (Sheet 110)

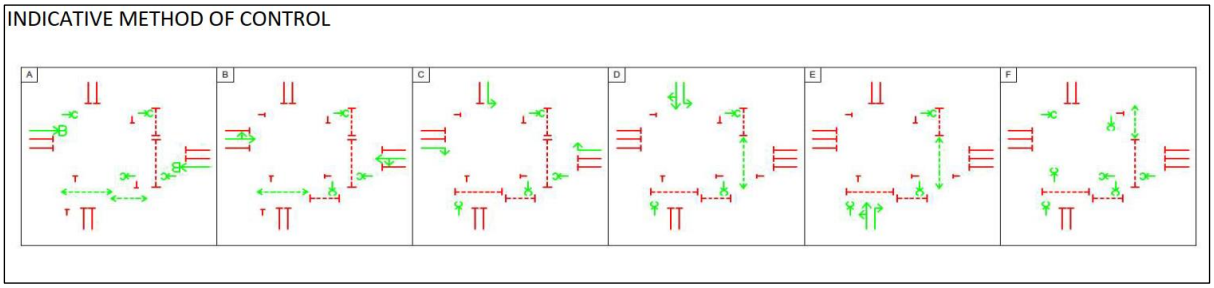


Figure 3.346: Extract from Junction Design Report of Traffic Signal Phasing at Johnstown Junction (Sheet 112)

TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at N11 Bray Road / Clonkeen Road Junction. The PRC is 44.51% during the AM Peak Hours and 39.48% during the PM Peak Hours. This suggests the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that road links that have been identified as experiencing additional traffic volumes, were assessed using a threshold impact assessment. The threshold impact assessment identified that Clonkeen Road / N11 junction will have less than a 5% increase on turning flows at junctions. This means that Clonkeen Road / N11 junction would operate well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios.

Bus lane enforcement for left turning traffic

The hours of operation of the bus gate will be subject to on-going review based on prevailing traffic conditions and the goal of achieving the Proposed Scheme objectives. The NTA and local authorities will co-operate in good faith to address any issues with the hours of operation that may arise during the lifetime of the Proposed Scheme.

Where bus gates are proposed these may not always operate on 24 hours / 7-day week basis subject to how necessary they are to ensure bus priority in certain directions at certain times. The proposed bus gate at Lesson Street will operate in mornings between 6am to 10am and in the evenings between 4pm and 8pm 7-days a week, to consider local access required for deliveries for the businesses and access to school and university and religious institutions.

Only taxis and other buses are allowed to use the bus lanes. However, taxis and other bus types wishing to turn left will need to exit the bus lane and merge with general traffic in advance of the stop line, as shown in Figure 3.347 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR.

General traffic is not allowed to use the bus lane to turn left as the left turning phase has been provided in the traffic signal staging and phasing, as detailed in the Section 7 of the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors as provided in Appendix A4.1 in Volume 4, Part 1 of 4 of the EIAR, in particular Figure 20, 21a, 21b and Figure 22, Junction Staging for Straight Ahead and Left Turning Traffic, showing the indicative traffic signal and phasing layout, as shown in Figure 3.348.

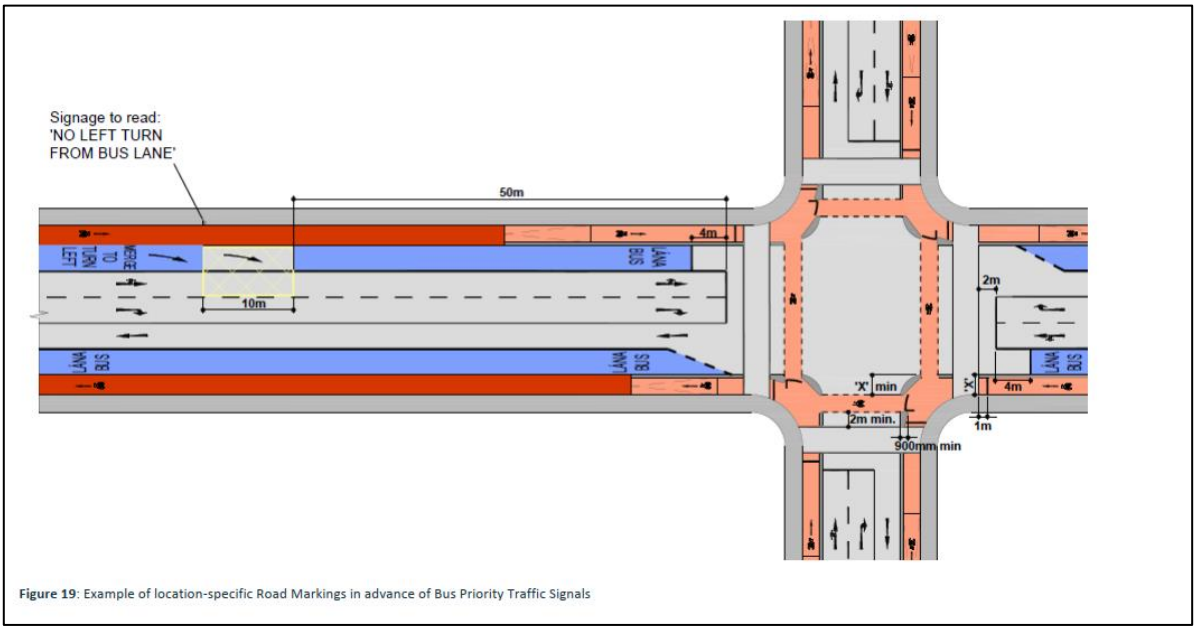


Figure 3.347: Extract from PDGB, No Left Turn from Bus Lane marking (Figure 19)

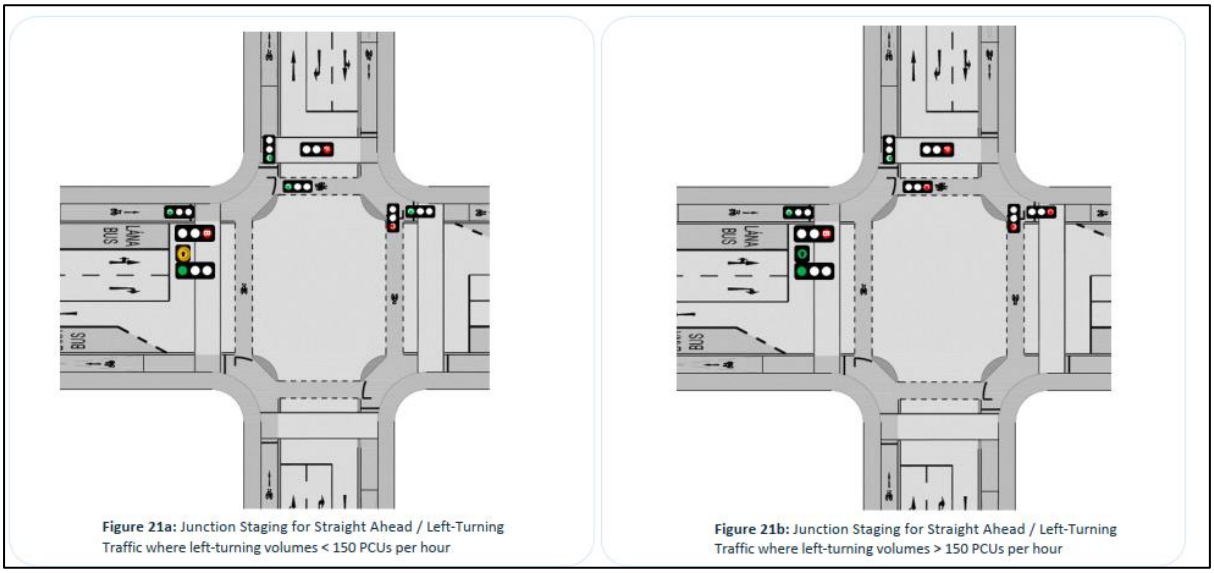


Figure 21a: Junction Staging for Straight Ahead / Left-Turning Traffic where left-turning volumes < 150 PCUs per hour

Figure 21b: Junction Staging for Straight Ahead / Left-Turning Traffic where left-turning volumes > 150 PCUs per hour

Figure 3.348: Extract from PDGB Junction Staging, Straight Ahead and Left Turning Traffic (Figure 21a and 21b)

3.13.4.3 Cyclists' improvement on the N11 Loughlinstown to Cherrywood

Summary of issues raised

The submission suggests two-way cycle lane on the west side of the N11 in the layby (Bray Road) between Loughlinstown Hospital Roundabout and two-way cycle lane north of Cherrywood Road to facilitate resident of Parc Na Silla, Rathmichael Manor and patients/staff/visitors of Loughlinstown Hospital so they have cycle facilities to get in and out of that exit/entrance of the Loughlinstown Hospital Roundabout. The submission also suggests improving pedestrian and cycling facilities at Cherrywood Road/N11 Layby Road (Bray Road) and cycle crossing on N11 at Cherrywood Road.

Response to issues raised

The Proposed Scheme has been designed to achieve the stated objectives. The EIAR as submitted has robustly addressed this matter. The key upgrades along the N11 (Mount Merrion to Loughlinstown Roundabout) includes the following, where the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- Retaining existing bus lanes;
- Retaining and improving existing pedestrian infrastructure, as appropriate;
- Retaining and improving existing pedestrian infrastructure, as appropriate;
- Retaining existing and improving pedestrian and toucan crossings, as appropriate; and
- Upgrade the existing junctions to the proposed Protected Junction layout.

Section 4.6.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, notes the following:

'For the N11 section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *Along this section N11 National Road where the Proposed Scheme makes use of the existing pedestrian and cyclists infrastructure to minimise large scale changes to the existing infrastructure, the footpath and cycle tracks have been improved at Bus stop locations considering safety or as per existing.'*

The Proposed Scheme design at the Wyattville interchange to Loughlinstown Roundabout is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General

Arrangement Drawings Sheet 38, Sheet 39 and Sheet 40 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.349, Figure 3.350, and Figure 3.351.

Section 4.11.3 and 4.11.4 of the Preliminary Design Report, part of Supplementary Information, notes that the existing footpath in the inbound direction from St Columcille's Hospital and Loughlinstown Roundabout is retained as existing. This inbound cycle track joins the local Bray Road which serves residential and mainly commercial properties and has low traffic and low vehicle speeds. This stretch of Bray Road is proposed as Quiet Street, where the cyclists will share the space with general traffic. The proposed Quiet Street, approx. over 400m, continues to serve the Cherrywood and then joins the existing two-way cycle track infrastructure at the Wyattville Junction and further connects to the N11 inbound direction. Improvements have been made to cycle track provisions at the Wyattville Road Junction.

The existing adjacent northbound Bray Road slip towards Cherrywood Road will be retained in its current two-way layout.

To facilitate local access, this cycle route is supplemented in places with bi-directional cycle track sections on one or both sides of the N11 which includes two-way cycle track from Wyattville junction to Loughlinstown Roundabout on the west-side. This is in line with retaining and improving the existing infrastructure along the N11 section.

The existing toucan crossing at the end of Wyattville junction slip road (Chainage A13450) has been improved for pedestrian and cyclists' safety, which integrates with the proposed Quiet Street treatment and local connections towards Cherrywood.

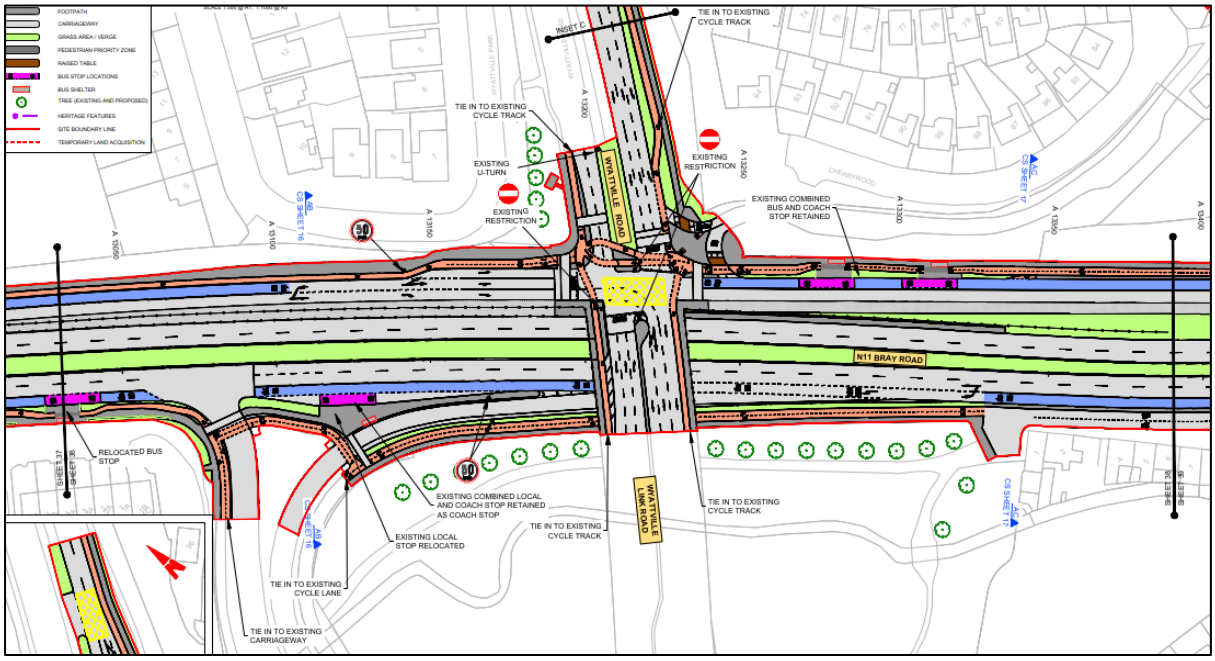


Figure 3.349: Extract from General Arrangement Drawings (Sheet 38)

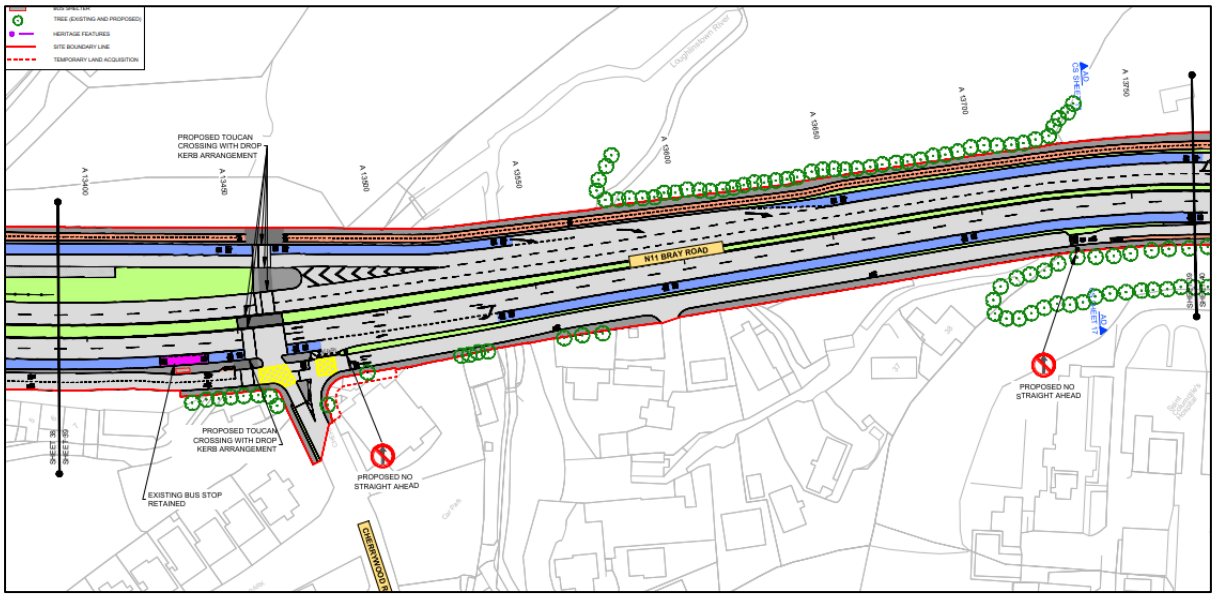


Figure 3.350: Extract from General Arrangement Drawings (Sheet 39)

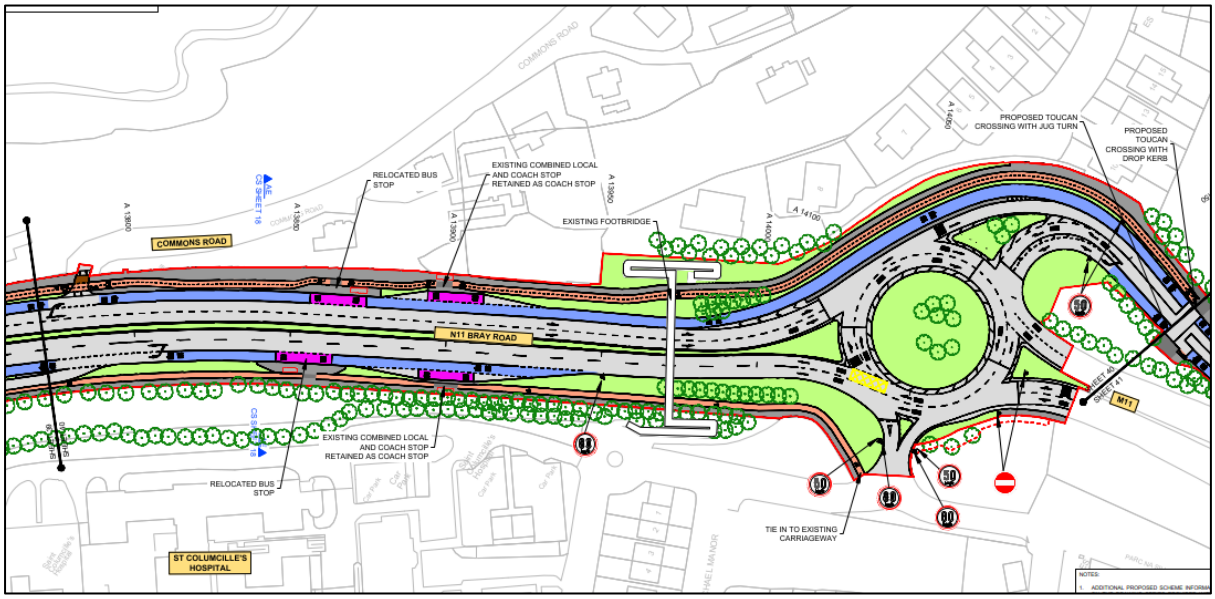


Figure 3.351: Extract from General Arrangement Drawings (Sheet 40)

Section 4.11.4 of the Preliminary Design Report, part of Supplementary Information, notes the following:

'A quiet street cycle route is proposed on the west side of the N11 commencing north of Loughlinstown roundabout (chainage A13780), the route passes residential and commercial premises along a local road with low traffic and low vehicle speeds before joining up with a dedicated section of cycle path approximately 100m south of the Wyattville Road Bridge (chainage A13310). In addition to this, local connections are provided from the scheme corridor's main cycle track to existing quiet streets at certain locations, where appropriate.'

Section 4.6.3.4 Chapter 4 (Proposed Scheme Description) Volume 2 of the EIAR, notes the Quiet Street treatment. Refer to response in Section 3.13.4.1.

Section 6.4.6.1.2.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that along Section 2 (Donnybrook to Loughlinstown Roundabout), the Proposed Scheme will have a Positive, Moderate and Long-term effect on the quality of the cycling infrastructure.

The LoS rating shown in Table 3.89 (Table 6.28) increases from a B in the Do Minimum scenario to an A during the DoSomething scenario. This is due to the proposed improvements to the existing cycling

facilities along this stretch of cycle route, in the form of segregation, improvements to cycleway widths, and junction treatment. Individually, during the DoSomething scenario, one received an A+ rating, four received A ratings, and the remaining five received B ratings, with the most substantial change from the Do Minimum scenario occurring at junction R825 Stillorgan Park Road to N11 Brewery Road, moving from B to A+.

The proposed cycling improvement along the N11 from Wyattville Junction to Cherrywood and Cherrywood to Loughlinstown shows Positive Moderate and Not Significant impact, as shown in Table 3.89.

Table 3.89: Extract from EIAR Chapter 6 (Section 2 Cycling Assessment, Table 6.28)

Table 6.28: Section 2 Cycling Impact During Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Magnitude and type of Impact	Sensitivity	Significance of impact
N11 / R118 Grade separated Junction: Willow Avenue to R116 Cherrywood Avenue	A12850 – A13500	B	A	Low	Medium	Positive Moderate
N11: R116 Cherrywood Avenue to Loughlinstown Roundabout	A13500 – A14050	A	A	Negligible	Medium	Not Significant
Section Summary		**B**	**A**	**Low**	**Medium**	**Positive Moderate**

A detailed breakdown of the assessment along each section can be found in Appendix A6.4 (Impact Assessments), in A6.4.2 (Cycling Infrastructure Assessment) in Volume 4, Part 2 of 4 of the EIAR.

NTA are satisfied that the Proposed Scheme cycle infrastructure meets the objectives.

3.13.4.4 Pedestrian link at Shanganagh Vale

Summary of issues raised

The proposed pedestrian entrance into Shanganagh Vale was closed a number of years ago due to anti-social behaviour.

Response to issues raised

As described in Section 3.7.3.2 of this report, Section 10.4.4.1.1 in Chapter 10 (Population) in Volume 2 of the EIAR considers the impact of the Operational Phase of the Proposed Scheme on community amenity. For the Cabinteely community area, in which Shanganagh Vale is located, the community amenity impact is assessed as a Negative, Not Significant and Short-Term during the first year of operation.

Refer to Section 3.4.3.8 for further information with respect to the impact of the Proposed Scheme on safety, security and anti-social behaviour.

In summary, the case studies outlined in Section 3.4.3.8 demonstrates that improved pedestrian and cycling links, such as the proposed pedestrian and cyclist link between Shanganagh Vale and the N11 Bray Road will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

As responded above and in Section 3.7 of this report (Proposed Scheme at Shanganagh Vale), the proposed pedestrian link at Shanganagh Vale is required to improve pedestrian infrastructure, improve permeability, and achieve the objectives of BusConnects which is in accordance with the various national and local policies.

3.13.4.5 Reduction in traffic lanes at Corke Abbey Avenue junction

Summary of issues raised

The submission noted concern regarding the reduction of lanes on Corke Abbey Avenue when exiting Corke Abbey / Woodbrook / Commercial Units and other residential developments from two lanes to one lane. The submission wrote that this would have huge implications on the traffic as there is no other

exit, and the junction on Dublin Road is already under huge pressure from traffic trying to get in and out of Bray. The submission continued to say that any traffic wishing to turn left into Cork Abbey Avenue from Dublin Road should be allowed to enter the bus lane to take pressure from the road.

Response to issues raised

Refer to response to Section 3.10.3.5 on the Removal of slip lane at Corke Abbey Avenue junction/ increase in Dublin Road traffic.

3.13.4.6 Signalised junction at the Dublin Road junction with Lower Dargle Road

Summary of issues raised

The submission suggests a signalised junction with pedestrian crossing at the Dublin Road junction with Lower Dargle Road at the tie-in with the Fran O'Toole Bridge.

Response to issues raised

Refer to response in Section 3.11.3.7 in this report for further information on the Proposed Scheme at Castle Street, Bray.

3.13.4.7 Suggestion for Protected junction at Dublin Road with Shanganagh Park/ Cemetery

Summary of issues raised

The submission suggests signalised junction on Dublin Road at junction with Shanganagh Cemetery / Park Access Road with Dutch cycling intersection and junction with Shanganagh Park / Shanganagh Cemetery.

The submission also suggests improving lighting on the two-way cycle track that runs within the Shanganagh Park.

Response to issues raised

The Proposed Scheme design at Shanganagh Park and Shanganagh Cemetery is presented in the General Arrangement Drawings which are provided as an Appendix in the 02-General Arrangement Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.352.

At Shanganagh Park and Shanganagh Cemetery, the northbound and southbound cycle track are proposed to be diverted into the park, alongside the southbound footpath, and behind green space and existing trees to the eastern side of the carriageway between two Toucan Crossings, with a newly proposed cemetery boundary wall set back to enable the retention of the roadside tree line. The northbound cyclists cross the Dublin Road at the Shanganagh Cemetery where a new toucan crossing is proposed. The two-way cycle track continues through the park and cemetery. The northbound cycle track then crosses back to the west side of the road before Allies River Road where a new toucan crossing is provided.

At the Dublin Road junction with Shanganagh Park/ Shanganagh Cemetery, the two-way cycle track crosses the Shanganagh Park Road and raised table with *'Pedestrian Priority Zone'* either side is provided to facilitate uncontrolled crossing point for cyclists and traffic calming for safety.

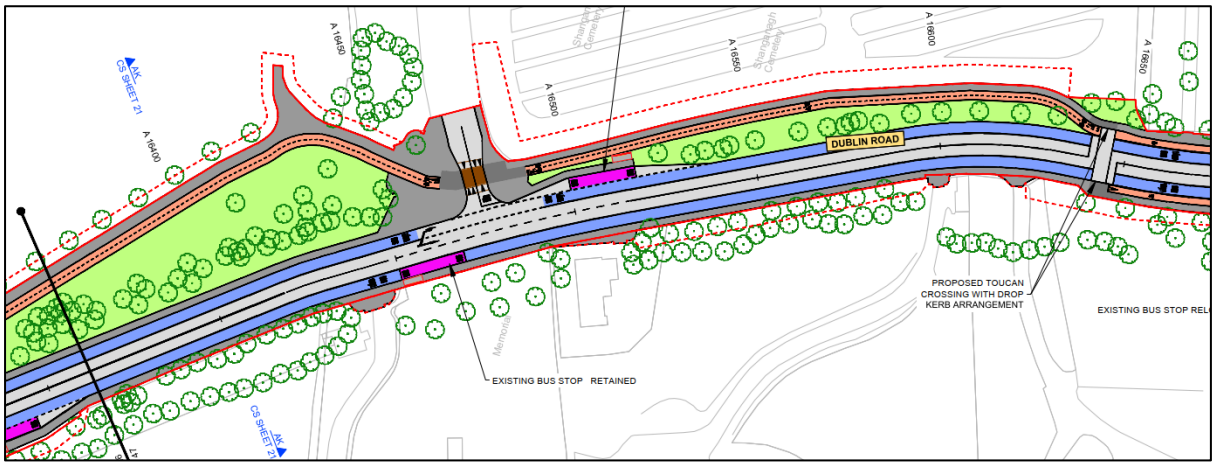


Figure 3.352: Extract from General Arrangement Drawing at Shanganagh Park/ Cemetery (Sheet 47)

Section 6.4.6.1.5.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that along Section 3 (Loughlinstown Roundabout to Bray North), the Proposed Scheme will largely result in negligible or low negative impacts along three of the four sections and a medium positive impact along one section. The significance of these impacts' ranges from moderate negative to moderate positive. Overall, it is anticipated that there will be Not Significant impacts to the quality of the cycling infrastructure along Section 3 of the Proposed Scheme during the Operational Phase.

In particular the cycling along the Section 3 (between Dublin Road Allies River Road to Wilford Roundabout) shows a positive moderate impact, as noted in Table 6.3.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, with improved LoS A from exiting LoS C demonstrating Positive Moderate impact. This improvement of the proposed 2-way cycle track, replaces the existing advisory cycle lane.

The findings of the cycling assessment fully align with the objective of the CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme, to *'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable'.*

NTA is satisfied the Proposed Scheme design at the location of Shanganagh Park meet the objectives and there is no requirement for a Protected Junction at this locations.

Appropriate lighting will be provided along the two-way cycle track and footpath that runs through the Shanganagh Park and Shanganagh Cemetery. The Proposed Scheme design at Shanganagh Park and Shanganagh Cemetery is presented in the Street Lighting Drawings which are provided as an Appendix in the 09-Street Lighting Drawings Sheet 47 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.353.

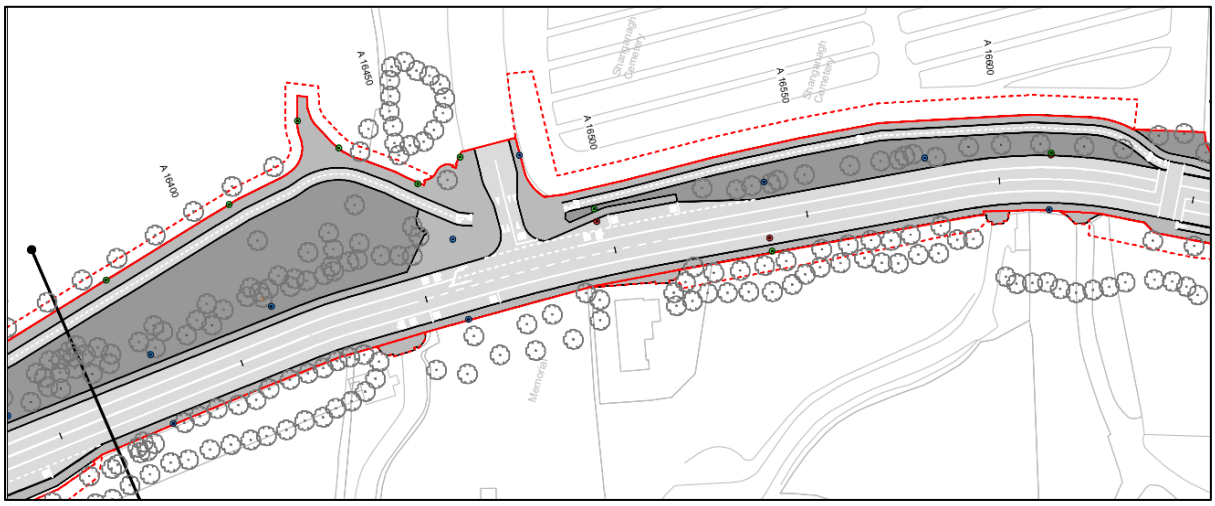


Figure 3.353: Extract from Street Lighting Drawing at Shanganagh Park/ Cemetery (Sheet 47)

3.13.4.8 *Removal of wall at Castlefarm to facilitate footpath*

Summary of issues raised

The submission raised concern on the removal of the very old wall and providing a footpath on to the green area in Castle Farm may encourage anti-social behaviour and concern on removing part of the green area in Castle Farm. The submission notes that the area could be of archaeology interest.

Response to issues raised

The Proposed Scheme design at Castle Farm is presented in the Landscaping General Arrangement Drawings which is provided as an Appendix in the 05-Landscaping General Arrangement Drawings Sheet 45 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.354.

The southbound footpath is diverted through the open green area at Castle Farm residential estate. As noted in the Landscape drawings, *'the existing wall adjacent wall to the carriageway will be removed and reinstated as a low wall to the back of the realigned footway. The realigned footpath will retain the prominent trees'*, thus maintaining the existing screening. Also, '*new ground cover planting to ensure visibility between the realigned footway and carriageway'*. Total 5 no new additional trees will be planted. Appropriate lighting will be provided in this section of the diverted footpath.

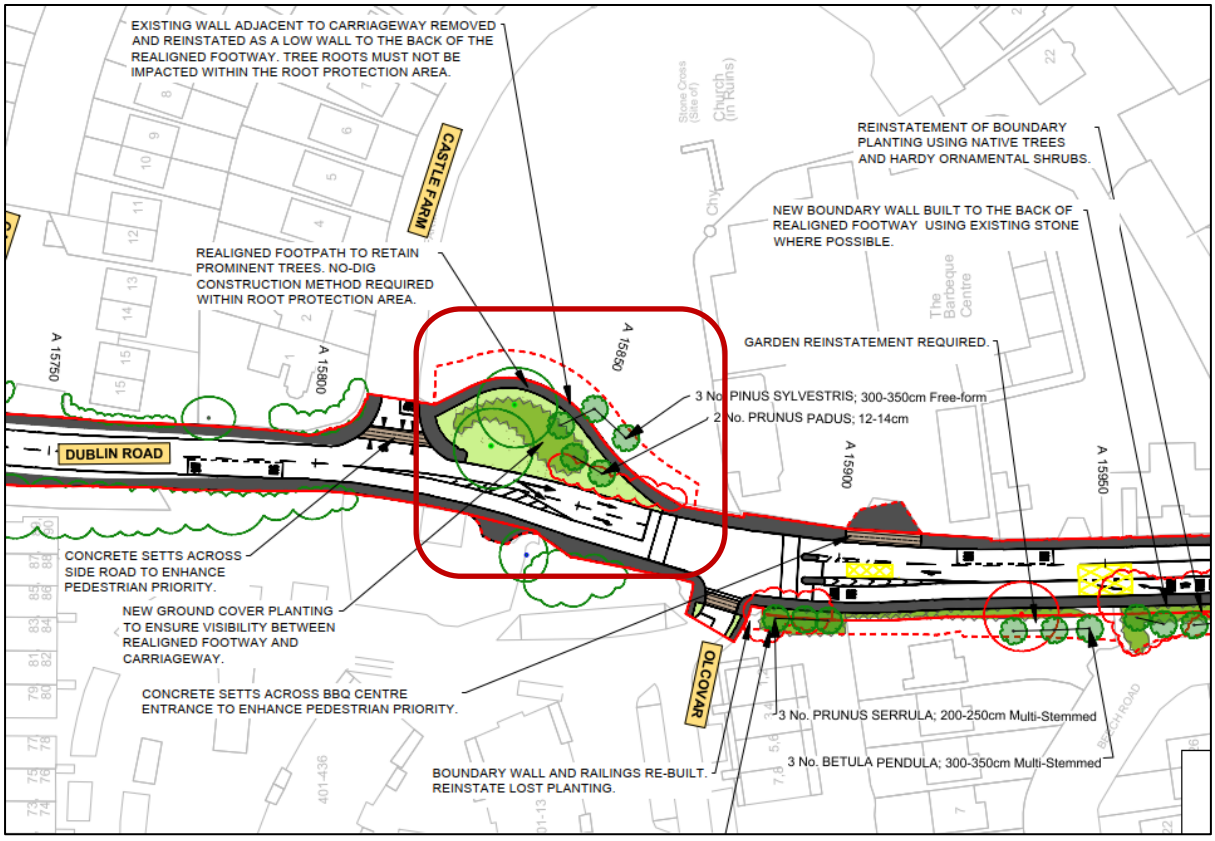


Figure 3.354: Extract from Landscaping Drawing at Castle Farm (Sheet 45)

Section 17.5.2.1.11 in Chapter 17 (Landscape and Visual) in Volume 2 of the EIAR, notes the following:

'17.5.2.1.11 Photomontage View 13: Dublin Road at Castle Farm

View 13: Existing

Figure 17.2.13.1 shows the existing view from Dublin Road at Castle Farm, looking north-east. The view is focused on the tall rubble masonry wall to the boundary of open space at Castle Farm residential area. There are two prominent mature trees and a tall hedge within the open space which are visible over the wall.

View 13: As Proposed

Figure 17.2.13.2 shows the proposed view from Dublin Road at Castle Farm, looking north-east. The primary change to the view is the removal of the boundary wall, the provision of a new footpath within the open space bordered with a low natural stone wall. The two mature trees are retained and new trees and ground cover planting is provided within the open space. The character of the view becomes more open and the visual amenity is improved.'

The Proposed Scheme photomontage at Castle Farm is shown in Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR, see also Figure 17.2 (Photomontage – View 13) in Volume 3, Part 3 of 3, and shown in Figure 3.355.

Figure 3.355: Extract from Chapter 17 (Landscape (Townscape) & Visual) (Figure 17.2)

Loss of community green space – Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the visual impact of the Proposed Scheme during both the Construction and Operational Phases. With respect to Section 3 (Loughlinstown Roundabout to Bray North) of the Proposed Scheme, Section 17.4.4.1.3 describes the impact on townscape and streetscape character, stating the following:

'The baseline townscape is of very high sensitivity and operation of the Proposed Scheme will involve very substantial changes along this section, with widening of the road corridor, permanent acquisition from 23 residential properties as well from Rathmichael parish National School, St. Anne's Church, and Shanganagh Park and Cemetery, with resultant setback of boundaries and continuing effects from loss of mature trees / plantings removed during the Construction Phase. However, there will be provision of substantial replacement planting to consolidate the boundaries and woodland edges throughout this section. Screening planting will be restored to the boundaries of all impacted residential properties. Over the long-term there will be a reduction of the negative effects associated with removal of trees and other vegetation.'

It goes on to rate the impact significance as follows:

'The Operational Phase will not alter the existing townscape character but will substantially alter the local streetscape amenity across much of this section of the Proposed Scheme. The magnitude of change in the baseline environment will be very high.

The potential townscape / streetscape effect of the Operational Phase on this section is assessed to be Negative, Very Significant and Short-Term, becoming Negative, Moderate and Long-Term.'

Section 17.4.4.2.5 describes the impact of the Proposed Scheme on amenity designations, stating the following:

'There will also be changes to open spaces at Greygates, Fosterbrook, Merrion Grove, Patrician Villas, Lower Kilmacud Road, Grange Apartments, South Park, Belmont Green, Westminster Junction, Beechpark Road, Shanganagh Vale, Wyattville Road, Seaview Park, Kentfield Park, Rathmichael Lawns, Dublin Road (south of Loughlinstown Roundabout), Woodbank, grounds of St. Anne's Church,

*Cherrington Drive, **Castle Farm** and outside Woodbrook College. Replacement trees are to be provided to these open spaces wherever feasible*.'

It goes on to rate the impact during the Operational Phase as '*Negative, Significant and Short-Term, becoming Neutral, Moderate and Long-Term'* as the Proposed Scheme becomes established within the area.

Chapter 10 (Population) in Volume 2 of the EIAR describes the assessment of impact on community amenity and community land take during both the Construction and Operational Phases of the Proposed Scheme. Castle Farm is located within the Shankill community area for the purposes of the assessment. Section 10.4.4.1.1 describes the Operational Phase community amenity impact for the Shankill community area as Negative, Not Significant and Short-Term. Section 10.4.4.1.2.1 describes the community land take impact stating the following:

'Community facilities that are expected to have Negative, Moderate, Long-Term impacts include UCD in Donnybrook, Woodbrook College, North Wicklow Educate Together and St. John of God Carmona Services in Little Bray, and Rathmichael National School, St. Anne's Church and Resource Centre, green space at Castle Farm, and Shanganagh Park and Cemetery in Shankill.'

Anti-social behaviour and vandalism – Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 of the EIAR, assesses the Economic Impact of the Core Bus Corridors, which includes consideration of the impact of transport infrastructure on criminal activity. The conclusion reached on Page 25 on the topic of social cohesion is that '*the new infrastructure improvements should have a direct and immediate impact on crime along the corridors. It will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a direct deterrent to criminal activity and result in a reduction in crime. This in turn has been shown to encourage people onto the streets into the evening which will also support the night time economy in community centres*.'

Section 5 of Appendix A10.2 also notes the following:

'Good infrastructure has also been shown to have a positive impact on levels of crime, particularly low level crimes such as theft and vandalism. There is evidence from a wide range of studies that redesigned public realm, especially those which are better lit and more visible, see significant reductions in the level of crime.

A UK study found that a set of public realm investments in Stroud Town Centre16, led to burglaries dropping from 51 to 25 incidents per year and shop thefts dropping by a quarter. These public realm investments included new signage, efforts to promote increased activity within the town centre and good quality street lighting. The same study also found that a redesign of Mowbray park in Sunderland led to a reduction in incidents of anti-social behaviour from 30- 50 per month to c.10 per month.'

The NTA document: Permeability in Existing Urban Areas Best Practice Guide 2015, supports this assessment. This policy guidance states that '*a higher number of pedestrians and cyclists in housing estates and neighbourhood centres also changes the perception of a place in terms of safety. Passive supervision, the mere presence of more people, makes the place safer. By maintaining or creating links for pedestrians and cyclists, this enhanced safety can be provided*'. The document goes on to state that '*If people have a higher tendency to walk and cycle around their neighbourhood, they are more likely to meet each other. Often it is these meetings which give a sense of community more than formal arrangements and a greater sense of community is often cited as a key requirement in addressing many anti-social behaviour problems in Irish urban areas*.'

This Best Practice Guide also includes a case study from Dargle Wood, Knocklyon which is relevant to the new link to Patrician Villas. The case study notes that proposals for the permeability link at Knocklyon through Dargle Wood open space '*generated considerable concern in the immediately adjacent area, mainly with regard to the risk of increased anti-social behaviour, increased litter and increased pedestrian and cyclist traffic through the open space where there was no existing east-west route*.'

The Best Practice Guide also includes following text provided by a local resident and member of the Residents Association Committee when discussing views amongst residents before implementation of the Dargle Wood Scheme: '*This green space has a long history of antisocial behaviour… drugs, alcohol*

abuse, loitering motorbiking etc. Residents thought that making the area more accessible and providing public lighting would worsen these problems and they opposed the project on these grounds.'

The following text is provided by the same local resident, indicating how residents' views have changed as a result of the modified scheme. '*Residents' fears and concerns of a worsening antisocial behaviour situation has not materialised to date and the amended project carried out has so far brought improvements that can be built upon...the putting in place of the review process post project (evaluation) has also helped to assuage residents' concerns in the event that adjustments may be required.'*

In summary, the case study demonstrates that improved pedestrian and cycling links, such as the proposed footpath through Castle Farm, will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

As responded above, the diverted footpath through the Castle Farm green area is required to improve pedestrian infrastructure and achieve the objectives of BusConnects which is in accordance with the various national and local policies.

Archaeological Interest – There are a number of known archaeological features within the green space at Castle Farm. Chapter 15 (Archaeological and Cultural Heritage) in Volume 2 of the EIAR assesses the impacts of the Proposed Scheme on archaeology. Appendix A15.1 (Inventory of Archaeological and Cultural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR includes an entry on those features in Castle Farm in Section 1.2.3.

Section 15.4.3.3.1.2 in Chapter 15 (Archaeological & Cultural Heritage) in Volume 2 of the EIAR describes the potential impact on recorded archaeological sites in the section between Loughlinstown Roundabout and Bray North during the Construction Phase. The assessment states:

'*In Shanganagh townland the Proposed Scheme runs through the designated ZAP for Kiltuck Church (RMP DU026-054, Figure 15.1 Sheet 23 of 26 in Volume 3 of this EIAR). Early ecclesiastical sites can be quite large and can contain numerous archaeological sites and features extending quite a distance from any upstanding remains such as a church. These can comprise of burials, structures, enclosures and associated settlement activity. There is a potential that archaeological features or deposits may survive below ground beneath the road surface and in the greenspace associated with Castle Farm Estate where a footpath is proposed. Groundbreaking works at these locations will impact on any features that may survive below ground. The RMP site has a medium sensitivity value and the magnitude of impact is medium, and as the potential includes the discovery of human remains therefore the potential impact is Negative, Significant, Permanent*.'

Figure 15.1 (Sheet 23) in Volume 3, Part 3 of 3 of the EIAR shows the recorded monuments within Castle Farm as shown in Figure 3.356.

Figure 3.356: Extract from Figure 15.1 (Sheet 23)

Section 15.5.1.5.1 in Chapter 15 (Archaeological and Cultural Heritage) in Volume 2 of the EIAR describes the proposed mitigation measures to reduce the potential impact on the archaeological features at this location as follows:

'*Archaeological monitoring (as defined in Section 15.5.1.1) under licence will take place, where any preparatory ground-breaking or ground reduction works are required (as defined in Section 15.4.1), at the following location:*

- *At the site of Kiltuck Church (RMP DU026-054) in Shanganagh.*

In this area there is a possibility to disturb intact archaeological layers and material. Licensed archaeological excavation, in full or in part, of any identified archaeological remains (preservation by record) or preservation in situ will be undertaken.'

Following the implementation of the above mitigation and monitoring measures, there is no significant impact anticipated.

In addition to the assessment on archaeology within Chapter 15 (Archaeological and Cultural Heritage) in Volume 2 of the EIAR, the impact on architectural heritage has also been assessed in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. Chapter 16 includes an assessment of the impacts on features such as walls and buildings with architectural heritage importance. As there is no specific architectural heritage designation for the wall at Castle Farm, it has been given a reference number of CBC0013BTH043 for the assessment. Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4, Part 3 of 4 of the EIAR includes an entry for the Castle Farm wall in Section 7, as shown in Figure 3.357.

Identification No.	CBC0013BTH043
Location	Boundary Wall To Kiltuc Church Dublin Road Shankill
Legal Status	Protected as it is in the curtilage of Kiltuc Church (RMP DU026-054001) and is within The RMP constraint zone and the old demesne wall of Shanganagh Castle (RMP DU026-120, DLR RPS 1845, 2089, NIAH 60260146, 60260148, NIAH 2556).
Date of Construction	The church is referred to in a papal bull of 1179. The castle is 15th century. The wall is probably later and is clearly indicated along with Kiltuck Church and Shanganagh Castle on Taylor's Map of 1816 but not on Roques 1760 map
Original Use	Boundary Wall
Description	Old coursed rubble walling, granite and limestone, associated with Kiltuck Church and Shanganagh Castle. Some alteration to the boundary has occurred as a result of the housing estate
Significance Rating	Regional
Categories of Special Interest	Historical, Architectural, Archaeological, Technical
Sensitivity	Medium
Sources	IAA 2020a, Archiseek 2020a, Lewis, 1837, Ball 1903, Joyce 1913, Price 1942, Hone Craig and Fewer 2002, Turner 1983, Corlett 1999, Pearson 1998, Galavan 2017, Daly et al.1998,Rocque, 1760, Taylor 1816, Duncan 1821, OSI 1837 to 1843, OSI 1908 to 1911, OSI 1940 to 1944, Field Survey
Photographs	

Figure 3.357: Extract from Appendix A16.2 (Inventory of Architectural Heritage Sites)

Section 16.5.1.1 in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the potential impact and proposed mitigation for the impact on the wall at Castle Farm as follows:

'*The proposed land take on the east side of the Dublin Road at Castle Farm will directly impact on an old granite and limestone rubble boundary wall (CBC0013BTH043), necessitating its removal. Part of this wall has been previously rebuilt, specifically the northern portion and gate pier but the southern part is older and relates to Kiltuc Church (RMP DU026-054001) and the old demesne wall of Shanganagh Castle (RMP DU026-120, DLR RPS 1845, 2089, NIAH 60260146, 60260148, NIAH 2556). The predicted pre-mitigation Construction Phase impact is Direct, Negative, Moderate and Permanent. Mitigation includes recording the existing fabric in position prior to the works, labelling the affected masonry and fabric. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee any labelling, taking-down and reinstatement of the affected masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. With mitigation, the impact magnitude is reduced from Medium to Low. The predicted post mitigation impact is Direct, Negative, Slight and Long-Term*.'

As outlined above and in the EIAR, there will potentially be impacts on the known archaeological and architectural features at Castle Farm, however these will be mitigated through the measures described above in Chapter 15 and Chapter 16, as well as listed in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and included in Table 5.2 in Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR.

3.13.4.9 Removal of Cherrington Road/ Dublin Road/ Quinn's road roundabout

Summary of issues raised

Removal of roundabout at Cherrington Road/Dublin Road/Quinn's Road will impact the traffic on Shankill Village.

Response to issues raised

Refer to Section 3.9.3.4 on Upgrade Roundabouts to Signalised Junction and Signal Control Priority and Section 3.9.3.4.4 on Signal Controlled Priority (SCP) through Shankill including Signalisation of Dublin Road / Quinn's Road / Cherrington Drive Junction.

3.13.4.10 Removal of Dublin Road/ Shanganagh Road/ Corbawn Lane roundabout

Summary of issues raised

Removal of roundabout at Corbawn Lane/Dublin Road/Shanganagh Road will impact the traffic on Shankill Village.

Response to issues raised

Refer to Section 3.9.3.4 on Upgrade Roundabouts to Signalised Junction and Signal Control Priority and Section 3.9.3.4.3 on Signalisation of Dublin Road / Shanganagh Road / Corbawn Lane Junction (St Anne's Roundabout).

3.13.4.11 Journey time benefits and the impact to heritage and biodiversity and insufficient cycling facilities in Shankill

Summary of issues raised

The submission raised concern regarding the impact to heritage and biodiversity between Wilford and Loughlinstown Roundabouts, commenting that the small gain in bus journey times is not worth the destruction of Shankill.

The submission raised concerns with the insufficient cycle facilities within the Shankill area. The submission noted that there were no segregated cycling facilities through Shankill Village between Shanganagh Park (south of Shankill Village) and Loughlinstown Hospital Roundabout and overall Shankill has insufficient cycling facilities.

Response to issue raised

Refer to response in section of this report, as noted below.

- Refer to Section 3.9.3.1.2 in this report for further information on the Consideration of Alternatives and Options Assessment in Shankill;
- Refer to Section 3.9.3.2 in this report for further information on Benefits of the Scheme;
- Refer to Section 3.9.3.3 in this report for further information on the Impact to Bus Services & Journey Time Benefits in relation to journey time saving;
- Refer to Section 3.9.3.7 in this report for further information on the Impact on Cycle Infrastructure in relation to cycling provision;
- Refer to Section 3.9.3.8 in this report for further information on the Impact on Safety (Pedestrian & Cyclist) in relation to pedestrian safety;
- Refer to Section 3.9.3.11 in this report for further information on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape) in relation to tree loss; and
- Refer to Section 3.9.3.18 in this report for further information on the Impact to Heritage & Architecture in relation to village character.

3.13.4.12 Request for Oral Hearing

Summary of issues raised

The submission requests an Oral Hearing, specifically due to the proposals in Shankill that could lead to the disruption of heritage and biodiversity in Shankill.

Response to issue raised

The NTA notes the request for an Oral Hearing. An Bord Pleanála has the discretion to decide whether an Oral Hearing will be held in respect of this application.

3.13.5 39 – Cllr. Michael D. Clark and Others

Summary of Submission

This submission raised the following issues:

1) Support for the Proposed Scheme;
2) Benefits of the Proposed Scheme;
3) Replacement of roundabouts with signalised junctions;
4) Positioning of bus stops on Shanganagh Road;
5) Removal of traffic lane at Corke Abbey Avenue junction;
6) Removal of slip lanes along the N11;
7) Closure of Hill lane on N11;
8) N11 Commons Road suggest two-way;
9) Recent upgrades to the N11 pavement;
10) Proposed pedestrian access to South Park; and
11) Impact to trees at Seaview Park, Dublin Road.

3.13.5.1 Support for the Proposed Scheme

Summary of issues raised

The submission supports the retention and redesign at N11 White's Cross/ Newtown Park Avenue left turn slip lane, requesting these are implemented at other locations across the Scheme. Also, welcomes the continued left turn from the N11/Commons Road.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support the redesign along the N11 junctions, the continued left turn from the N11/ Commons Road to the N11.

3.13.5.2 Benefits of the Proposed Scheme

Summary of issues raised

The submission raised concern with the cost benefit of the Proposed Scheme, and if the significant investment of public funds is required as a result of minor public transport time improvements, in particular due to many of the N11 junctions having recently been upgraded.

Response to issue raised

Refer to response in Section 3.9.3.1 on the Need for the Proposed Scheme.

Refer to response in Section 3.11.4.3 on Benefits of Proposed Scheme.

Also, refer to response for section 3.13.5.10 below in relation to the Recent upgrades to the N11 pavement and also note below.

The BusConnects Dublin Preliminary Business Case prepared by NTA was approved by the NTA Board for submission to the Department of Transport (DoT) and onwards submission to the Department of Public Expenditure and Reform (DPER) for review. Further to DoT and DPER review (including independent review by JASPERS and the Major Projects Advisory Group (MPAG)) elements of the PBC around inflation and costs were updated to inform the Government decision.

In March 2022, the Government granted Approval in Principle to the NTA to enable the submission of statutory consent applications for the Core Bus Corridor elements of the programme to An Bord Pleanála (Decision Gate 1) and to commence the tender process the for the Next Generation Ticketing element of the programme (Decision Gate 2). This Preliminary Business Case reflects the document as considered by Government with a Cover Note which sets out the revisions to inflation assumptions and costs arising from the consideration of the PBC from Government.

https://www.nationaltransport.ie/planning-and-investment/transport-investment/projects/busconnects/busconnects-dublin-preliminary-business-case/

3.13.5.3 Replacement of roundabouts with signalised junctions

Summary of issues raised

The submission raised concern on replacement of roundabouts to signalised junction:

- Wilford Roundabout;
- Quinn Road/ Cherrington Drive, Dublin Road; and,
- Dublin Road/ Corbawan Lane/ Shanganagh Road.

The submission raised concerns regarding the replacement of the Wilford Roundabout, as the proposed signalised junction will likely result in significant traffic congestion in the area and further contribute to the build-up of evening peak hour traffic near the N11/M11 junction and surrounding area. The submission requested that the removal of the roundabout is rejected and the junction be upgraded in line with the proposal for the Loughlinstown Roundabout.

The submission also raised concern relating to the removal of the roundabout at Dublin Road, Quinn's Road, and Cherrington Road, due to concerns that this will increase traffic congestion with the wider Shankill area. The submission requests that the proposed changes at this location are rejected.

Response to issues raised

Refer to response to sections noted below:

- Section 3.9.3.4.1 on Upgrade of Existing Roundabouts to Signalised Junctions;
- Section 3.9.3.4.3 on Signalisation of Dublin Road / Shanganagh Road / Corbawn Lane Junction (St Anne's Roundabout);
- Section 3.9.3.4.4 on Signal Controlled Priority (SCP) through Shankill including Signalisation of Dublin Road / Quinn's Road / Cherrington Drive Junction; and
- Section 3.9.3.4.4 on SCP and Signalisation at Wilford Roundabout.

3.13.5.4 Positioning of bus stops on Shanganagh Road

Summary of issues raised

The submission noted concerns regarding the bus stops on Shanganagh Road, commenting that they are too close together and will cause unnecessary disruption in addition to the removal of the Corbawn Roundabout.

Response to issues raised

As noted in Section 4.6.4.5 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR:

'*To improve the efficiency of the bus service along the Proposed Scheme the positions and number of bus stops have been reviewed as part of a bus stop assessment.*

- *The criteria for consideration when locating a bus stop are as follows:*
- *Driver and waiting passengers are clearly visible to each other;*

- *Location close to key facilities;*
- *Location close to main junctions without affecting road safety or junction operation;*
- *Location to minimise walking distance between interchange stops;*
- *Where there is space for a bus shelter;*
- *Location in pairs, 'tail to tail' on opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footway width.*

For the Core Bus Corridor Infrastructure Works it is proposed that bus stops should be preferably spaced approximately 400m apart on typical suburban sections on route, reducing to approximately 250m in urban centres. It is important that bus stops are not located too far from pedestrian crossings as pedestrians will tend to take the quickest route, which may be hazardous. Locations with no or indirect pedestrian crossings should be avoided.'

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken, Appendix H (Bus Stop Review Report) and as set out in Bus Stop Review Analysis in Appendix H.2 (using the methodology as set out in Appendix H.1) of the Preliminary Design Report provided as Supplementary Information. This exercise was carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate to rationalise these stops in line with best practice criteria mentioned above. Section 2.4 of the Bus Stop Review states the methodology in detail and the catchment maps.

Existing bus stop at Shanganagh Road has been retained at its current location.

3.13.5.5 Removal of traffic lane at Corke Abbey Avenue junction

Summary of issues raised

The submission raised concerns regarding the removal of the left turning lane into Corke Abbey, with a request it should be retained, as it will increase traffic congestion in the area.

Response to issues raised

Refer to response to Section 3.10.3.5 on the Removal of slip lane at Corke Abbey Avenue junction/ increase in Dublin Road traffic.

3.13.5.6 Removal of slip lanes along the N11

Summary of issues raised

The submission comments that the blanket removal of the left turn slip lanes is excessive and unnecessary and there is no clear rationale between retaining and removing these. Concern was raised regarding the left turning lane removal at the following locations:

- N11/Mount Merrion Avenue,
- N11/Booterstown Avenue,
- N11/Kill Lane,
- N11/Clonkeen Road,
- N11/Johnstown Road,
- N11/Stillorgan Park,
- N11/ Johnstown

This is due to creating a one lane carriageway at these locations, with tight turning circles which create dangers to public safety and excessive traffic congestion. The submission requests that the proposals are rejected or redesigned at these locations as at White's Cross / Newtownpark Avenue.

Response to issues raised

Please refer to the response under Section 3.8 on Proposed Scheme at N11 Stillorgan Road and also note below.

Each junction along the N11 has been assessed individually on case-by-case basis based on the traffic volumes and physical space available. At Newtownpark / Leoperdstown Junction Type 2 Junction as have proposed as per the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (NTA 2021), based on the left turning traffic numbers and physical space available.

Page 94 of the Junction Assessment presented in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

'Bus Priority Infrastructure

The current arrangement has bus lanes extending to the stop lines on the N11 Stillorgan Road with left turn slip lanes provided on the nearside of the carriageway. This requires general motorists to navigate across the bus and cycle lane in order to turn left.

The CBC proposal is to deliver a Junction Type 2 arrangement in both directions to cater for the significant left turn movements whilst removing the cycle conflict from the layout. Bus lanes are extended to the stop line and run alongside ahead and left general motorists with relevant green extensions provided to ensure buses will clear if any left turn queuing extends to the crossover point.'

3.13.5.7 Closure of Hill Lane on N11

Summary of issues raised

The submission opposes to the closure of the N11 Hill Road left turn junction as this will increase pressure on the N11/Stillorgan Park Road junction resulting in unnecessary delays to traffic.

Response to issues raised

The Proposed Scheme at the Hill Road junction and Stillorgan is shown in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 21 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.358.

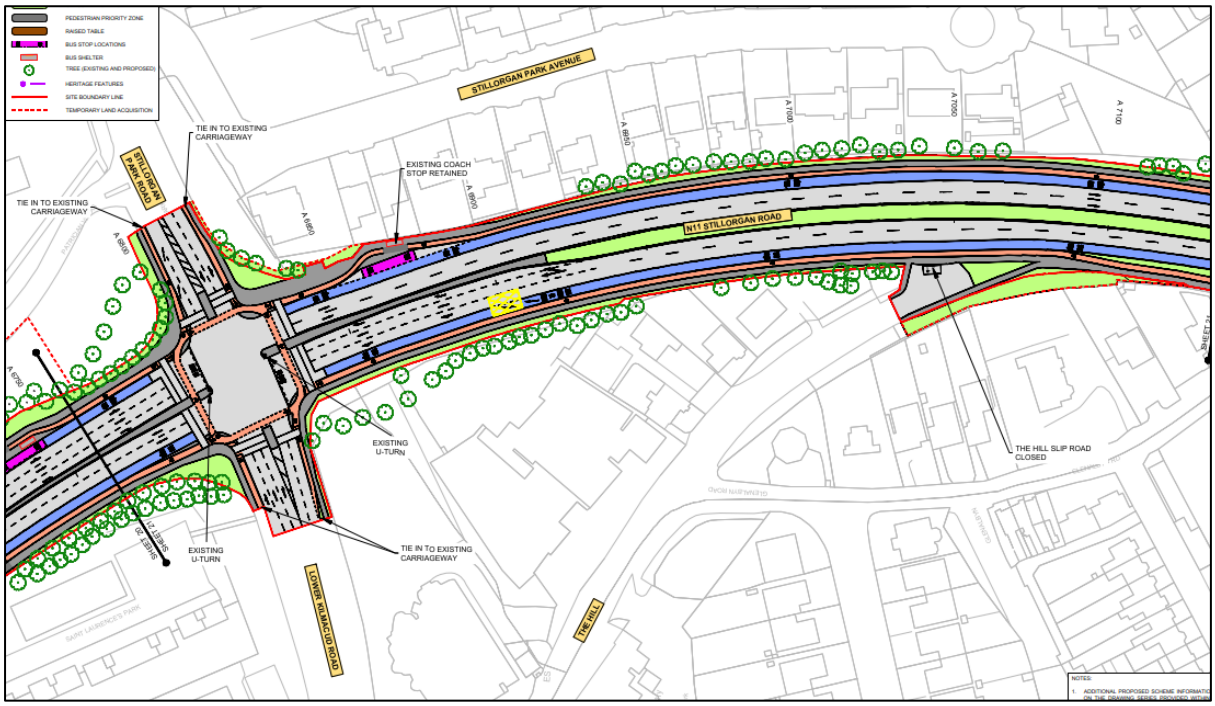


Figure 3.358: Extract from General Arrangement Drawings at Hill Road junction (Sheet 24)

The slip road from the Stillorgan Road on to The Hill at Stillorgan is proposed to be closed. Existing vehicular access (excluding pedal cycle and other bicycles) is to be restricted as part of the Proposed Scheme works. General traffic will instead use the junction of Stillorgan Park Road, Lower Kilmacud Road and the N11 to access The Hill.

The N11 Stillorgan Road / Lower Kilmacud Road junction is being upgraded as part of the NTA Dublin Bus Connects scheme. The four-arm traffic signal junction will be modified to include improved pedestrian, cycle, and bus infrastructure. The closure of left turn slip lane from N11 Stillorgan Road onto The Hill allows continuous bus and cycle provision along N11 Stillorgan Road eliminating conflicts between vehicles and active travel users and enhancing road safety.

Although this may increase traffic at N11 Stillorgan Road / Lower Kilmacud Road Junction, analysis from TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR shows a positive practical reserve capacity (PRC) at N11 Stillorgan Road / Lower Kilmacud Road Junction. The PRC is 4.6% during the AM Peak Hours and 4.1% during the PM Peak Hours. This suggests the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

3.13.5.8 N11 Commons Road suggest two-way

Summary of issues raised

The submission welcomes the continued left turn from the N11 / Commons Road, two-way access to the N11 should be investigated here to ease pressure on the Shanganagh Road / Corbawn Lane / Dublin Road Junction / Roundabout and Shankill Village.

Response to issues raised

The Proposed Scheme at the N11/ Commons is shown in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 40 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.359.

The N11/ Commons Road is retained as one-way allowing left-tuning to the N11 Bray Road.

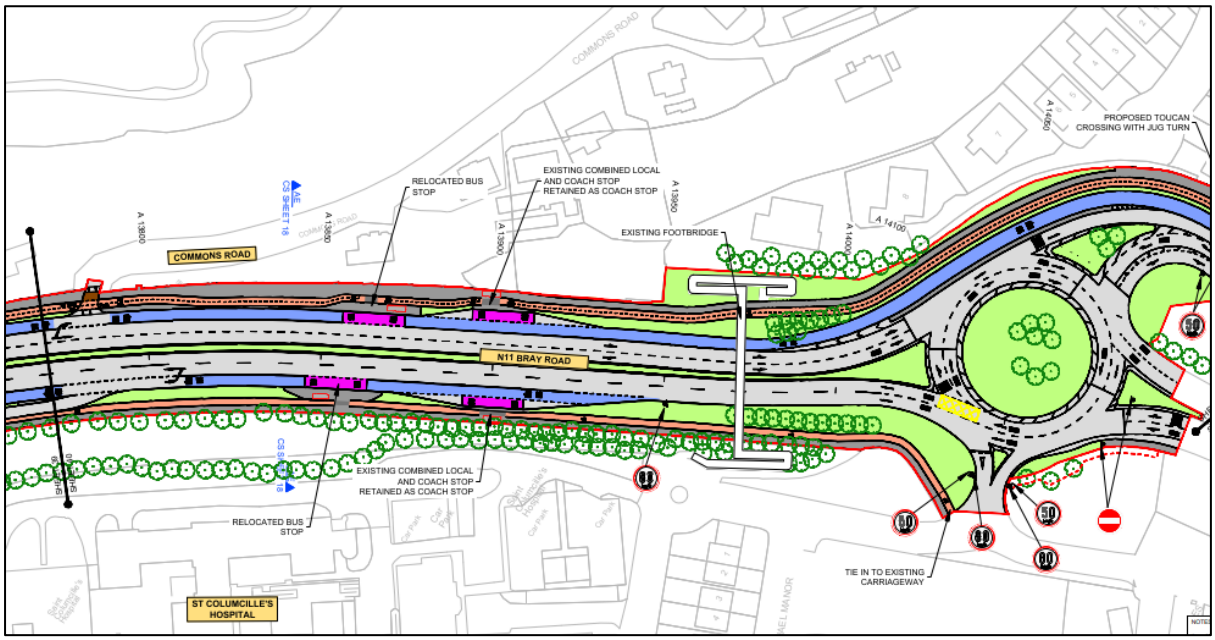


Figure 3.359: Extract from General Arrangement Drawings at Hill Road junction (Sheet 40)

The Dublin Road / Shanganagh Road / Corbawn Lane junction is being upgraded as part of the NTA Dublin Bus Connects scheme which will provide connectivity from Bray to Dublin City Centre for all users.

There is no requirement to ease pressure at Dublin Road / Shanganagh Road / Corbawn Lane junction as analysis from TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR which shows a positive practical reserve capacity (PRC) at Dublin Road / Shanganagh Road / Corbawn Lane junction. The PRC is -4.3% during the AM Peak Hours and -2.7% during the PM Peak Hours. Although this is slightly over capacity in the AM and PM Peak Hour, this suggests that the junction will operate efficiently within capacity and traffic build up will be minimum following the introduction of the Proposed Scheme.

Allowing two-way access at the at N11 / Commons Road junction would have several negative impacts on the scheme. It would require an additional signalised junction along the N11 which would stop the current free flow of traffic, thus adding additional delay to the network which otherwise would not exist. Furthermore, increasing turning movements would increase conflicts between general traffic and bus, cycles and pedestrians thus reducing the operational safety and efficiency of the bus, cycle, and pedestrian routes. As a result, it is important to retain one-way access at N11 / Commons Road junction to maintain network reliability for all users.

3.13.5.9 Loss of trees along N11, Stillorgan

Summary of issues raised

The submission notes concern on the loss of mature trees along N11/Stillorgan Road as these trees are an important screen from noise from the N11 in addition to being a local habitat.

Response to issues raised

With respect to the tree losses, please refer to Section 3.2.3.1 of this report for a description of the tree losses and landscaping mitigation measures proposed, noting that as per Section 5 of Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR:

'Tree removals and pruning have been limited to that which is necessary and unavoidable to allow the development proposal to be implemented, with consideration given to species attributes, the tolerance of individual trees to disturbance, and to the presence of surrounding trees and features of the site which may have an influence on retained trees.'

With respect to noise and the impact of the loss of trees, Chapter 9 (Noise and Vibration) in Volume 2 of the EIAR assesses the impact of noise and vibration at noise sensitive receptors along the Proposed

Scheme as a result of the Construction and Operation of the Proposed Scheme. It should be noted that vegetation is not generally relied upon for noise screening. From a noise point of view, due to the porous nature of vegetation, they provide a minimal level of noise screening.

As part of the baseline noise surveys undertaken, there were nine attended noise monitoring locations within Section 2 (Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout) of the Proposed Scheme (Reference Number CBC0013ANML002 to CBC0013ANML010) as shown in Figure 9.2 (Sheet 2-10) in Volume 3, Part 3 of 3 of the EIAR. Section 9.3.2.2 describes the noise monitoring results in this section as '*dominated by road traffic noise from R138 Stillorgan Road and N11 Stillorgan Road / Bray Road, in addition to traffic along the surrounding road network and a small contribution from localised urban sources e.g. pedestrian movements*'. Figures 9.4 and 9.5 map the potential impact significance of traffic noise in the Opening Year (2028) and the Design Year (2043) respectively, with the modelling for the Opening Year giving an impact significance rating of Imperceptible / Positive along the N11. The modelled impact showed no change in the Design Year modelling a generally Imperceptible / Positive impact along the N11. Section 9.4.4.1.1.6 states the following with respect to the potential for further reductions in traffic noise than the assessment has shown as a result of the transition to electric vehicles in the future:

'*Notwithstanding, it is likely that a further reduction in overall noise level will occur along the Proposed Scheme due to the transition towards a full EV and HEV bus fleet. This reduction will occur irrespective of the Proposed Scheme. An overall reduction in engine noise from buses will occur at junctions, roundabouts, and bus stops. The calculated traffic noise level assuming ICEs for all fleet is therefore considered a robust analysis and to be worst-case*.'

With respect to mitigation Chapter 9 (Noise & Vibration) states in Section 9.5.2.1 that:

'The impact assessment has determined that there are no calculated long-term significant direct or indirect traffic noise impacts across the study area for the Proposed Scheme. The range of noise level changes and overall noise levels calculated do not require any specific noise mitigation measures to be incorporated into the Proposed Scheme.'

Section 9.6.2 states:

'Once operational, there will be a Positive to Neutral direct impact along the Proposed Scheme due to a reduction in traffic volumes during both the Opening Year (2028) and the Design Year (2043).'

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on the habitats *'(mixed) broadleaved woodland, scattered trees and parkland, treelines, immature woodland and wet willow-alder-ash woodland'* the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively following the implementation of the mitigation measures described in Section 12.5 of the Chapter 12, and replicated in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR and Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 of the EIAR.

3.13.5.10 Recent upgrades to the N11 pavement

Summary of issues raised

Many junctions along the N11 have been recently upgraded and N11 recently resurfaced. These proposals represent an excessive and unnecessary use of public funds for negligible improvement to public transport.

Response to issues raised

The NTA confirms its awareness of the N11 Pavement Renewal Scheme and have co-ordinated the potential interface with the Proposed Scheme, however, this scheme does not have a significant interface with the Proposed Scheme.

A number of infrastructure projects are planned within the vicinity of the Proposed Scheme which will interface with the proposals and the proposed design takes them into consideration. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of

BusConnects with other infrastructure projects and Section 4.6.6.3 states the following planning application, in relation to the N11 Pavement Renewal Scheme:

- *'N11 Pavement Renewal Scheme: The Proposed Scheme has been coordinated with TII N11 Pavement renewal scheme. N11 Pavement renewal scheme is due for completion in 2023 with three years construction 2021-2023 split under three Lots. The scheme will upgrade the entire N11 section to bring it to standard, fixing repairs and defects;'*

The Proposed Scheme has been designed to achieve the stated objectives. The EIAR as submitted has robustly addressed this matter. The key upgrades along the N11 (Mount Merrion to Loughlinstown Roundabout) includes the following, where the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- Retaining existing bus lanes;
- Retaining and improving existing pedestrian infrastructure, as appropriate;
- Retaining and improving existing pedestrian infrastructure, as appropriate;
- Retaining existing pedestrian and toucan crossings, as appropriate; and
- Upgrade the existing junctions to the proposed Protected Junction layout.

Section 4.6.1 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, notes the following:

'Along the N11 section of the Proposed Scheme with the proposed speed limit equal to 60km/h between Mount Merrion Avenue/N11 junction and Kill Lane/ N11 Junction in particular, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *Along this section of the N11 National Road the Proposed Scheme makes use of the existing pedestrian and cyclists infrastructure, and the footpath and cycle tracks have been improved where practical. The Proposed Scheme provides for new footpath link along the section of the N11 between the junction with Priority Drive and Hill Road.*
- *Along this section of the N11 National Road where the Proposed Scheme makes use of the existing bus and general traffic infrastructure, the preferred width of traffic lanes adopted is 3.5m or as per existing lane width.*

For the N11 section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *Along this section N11 National Road where the Proposed Scheme makes use of the existing pedestrian and cyclists infrastructure to minimise large scale changes to the existing infrastructure, the footpath and cycle tracks have been improved at Bus stop locations considering safety or as per existing;*
- *The Proposed Scheme between N11 Cornelscourt (junction with old Bray Road) to Kilbogget Junction (ch 9+800 to ch: 12+050) retains the existing pedestrian arrangement and new footpath is not proposed, as it was considered a non-desired pedestrian link based on the pedestrian movement along this stretch and is aligned with the local development plans. Alternative walking routes exist on adjacent quieter roads.*
- *Along this section N11 National Road where the Proposed Scheme makes use of the existing bus and general traffic infrastructure, the preferred width of traffic lanes adopted is 3.5m.*

Where the existing road geometry does not meet the design standards, this has been highlighted each section of the Proposed Scheme in Section 4.5.

The existing junctions along the N11 section have been designed to provide safety for pedestrian and cyclists, while giving priority to buses and coaches. The existing left turn slip lanes have been removed and junctions have been design as Protected Junctions layout.'

Also, refer to response in Section 3.9.3.1 on the Need for the Proposed Scheme.

3.13.5.11 Proposed pedestrian access to South Park

Summary of issues raised

The submission requests the existing entrance to South Park at Cornelscourt is retained, rather than the addition of a new entrance to the estate and residents of South Park.

Response to issue raised

Please refer to the response under Section 3.6 on Proposed Scheme at South Park.

3.13.5.12 Impact to trees at Seaview Park, Dublin Road

Summary of issues raised

The submission highlighted concerns regarding the loss of mature trees along Dublin Road at Seaview Park due to their importance to screening noise and creating local habitat. There is further concern that the proposal is not detailed and therefore it is requested that further information should be provided in relation to tree removal and that the trees should be retained.

Response to issues raised

Refer to response Section 3.9.3.11 on the Impact to the Environment (Trees, Biodiversity, Climate, Air Quality, Noise and Landscape), and in particular to Seaview Park refer to response in Section 3.9.3.11.1 on Seaview Park.

3.13.6 58 – Development Applications Unit

3.13.6.1 Overview of Submission

The submission raised the following issues:

1) Archaeology and Cultural Heritage; and

2) Nature Conservation – specifically regarding bat activity and trees containing potential roost features (PRF), and vegetation impacts near Loughlinstown Roundabout and Stonebridge Road

3.13.6.2 Response to issues Raised

1) Archaeology and Cultural Heritage

The submission by DAU states that '*The Department has reviewed the EIAR and is broadly in agreement with the findings in relation to Archaeology and Cultural Heritage as set out therein*'. It then proposes a set of conditions to be attached to any consent granted for the Proposed Development, which include mitigation measures, appointment of a Project Archaeologist to oversee and advise, requirements for the contents of the Construction Environmental Management Plan, and provision of a final archaeological report to the Planning Authority and Department describing the results of all archaeological monitoring, archaeological excavation / investigative works etc.

The NTA welcomes the engagement of the Department in relation to the important matters of archaeology and cultural heritage. The NTA has extensively considered the potential of the Proposed Scheme to impact on archaeology and has outlined a number of mitigation measures which addresses these risks in the EIAR. The NTA acknowledges the comments raised by the DAU, all of which are addressed in Chapter 15 (Archaeological & Cultural Heritage) in Volume 2 of the EIAR, including appropriate mitigation measures as noted by the DAU.

The Construction Environmental Management Plan (CEMP) has been prepared for the Proposed Scheme and is included as Appendix A5.1 (CEMP) in Volume 4, Part 1 pf 4 of the EIAR. The CEMP will be updated by the NTA prior to finalising the Construction Contract documents for tender, to include any

additional measures required pursuant to conditions attached to An Bord Pleanála's decision. The CEMP comprises the construction mitigation measures, which are set out in the EIAR and NIS.

All the measures set out in this CEMP will be implemented in full by the appointed contractor and its finalisation will not affect the robustness and adequacy of the information presented and relied upon in the EIAR and NIS.

Table 5.2 (refer to entries relating to Chapters 15 and Chapter 16 within the table) list out the locations of all archaeological and cultural heritage constraints which require monitoring, along with proposed actions associated with each location.

The NTA note the proposed condition to appoint a Project Archaeologist and confirm that Section 15.5.1.1 in Chapter 15 (Archaeological and Cultural Heritage) in Volume 2 of the EIAR sets out that:

'*The NTA will procure the services of a suitably qualified archaeologist as part of its Employer's Representative team administering and monitoring the works.*

The appointed contractor will make provision for archaeological monitoring to be carried out under licence to the DHLGH and the NMI, and will ensure the full recognition of, and the proper excavation and recording of, all archaeological soils, features, finds and deposits which may be disturbed below the ground surface. All archaeological issues will have to be resolved to the satisfaction of the DHLGH and the NMI.'

With regard to the request for a final archaeological report to be provided to the Planning Authority and the Department, it is the intention of the NTA that liaison continues with the relevant bodies including the Department of Housing, Local Government and Heritage and the Archaeology Section of the relevant local authorities in advance of, and during, the subsequent construction stage of the Proposed Scheme.

This engagement will continue to take their requirements into consideration, where aligned with and consistent with the EIAR.

Nature Conservation – Tree Loss

The DAU have made a number of observations relating to potential effects on flora and fauna and approaches to be taken to minimise adverse effects.

The first topic in the submission is in respect of bats and trees with PRFs. The submission summarises the EIAR findings with respect to bats and the identification of 19 trees with PRFs potentially requiring removal in order to construct the Proposed Scheme and describes some of the mitigation measures described in the EIAR as follows:

'*In the EIAR it is states that before the commencement of works on the bus corridor it is intended to carry out a pre-construction survey of the PRF trees to be removed, as well as to check other trees to be felled for PRFs which may have developed since they were originally surveyed. If bats are then found to be present in any of the PRFs, derogation licences will be applied for to remove the relevant PRF trees*.'

The submission goes on to state that '*the Department considers that in order that the Board can be assured prior to granting permission for the proposed development that it will not have any significant adverse effects on bat species, the National Transport Authority (NTA) should be requested to submit to the Board as Further Information a licence issued by the National Parks and Wildlife Service (NPWS) of this Department on behalf of the Minister to derogate from the Habitats Directive to fell the 19 PRF trees proposed to be removed*.'

Chapter 12 (Biodiversity) in Volume 2 of the EIAR describes the assessment of trees containing potential roost features (PRF). Section 12.2.3.5.3 describes the surveys undertaken in order to identify potential bat roosts as follows:

'*Trees located within the footprint of the Proposed Scheme were assessed for their potential to support roosting bats (i.e., Potential Roost Features (PRFs)) as part of the multidisciplinary walkover surveys carried out between June and August 2018, August 2020, March 2022 and March 2023 to capture design changes and confirm the condition of the identified PRFs.*

A number of trees located along the Proposed Scheme were examined from ground level for the potential to support roosting bats. They were assessed based on the presence of features commonly used by bats. Examples of such features include:

- *Natural holes;*
- *Cracks/splits in major limbs;*
- *Loose bark; and*
- *Hollows/cavities*.'

Section 12.3.8.1.7 further describes the surveys and how they were undertaken as follows, '*Each tree, or grouping of homogenous trees, was classified with regard to their potential to support roosting bats after Collins (2016). Trees with negligible suitability for roosting bats are not described or mapped as they are assessed as not having potential to support roosting bats*'. Table 12.8 in the chapter lists all PRF trees recorded within the footprint of the Proposed Scheme, describes what PRF features they contain and whether it is proposed to retain or remove them. All PRF trees are also mapped in Figure 12.7.2 in Volume 3 of the EIAR. As stated, 19 trees out of 30 have been identified as likely requiring removal to facilitate the construction of the Proposed Scheme (one in UCD and 18 in Shankill). A note under Table 12.8 states, '*A description of each different type of PRF, as referred to in the above table is described in 'Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Bat Tree Habitat Key' (Andrews (2018)*'.

Section 12.4.3.4.1.1 describes the impact assessment as a result of roost loss on the Proposed Scheme, stating the following:

'*There are no confirmed bat roosts located within the footprint of the Proposed Scheme. Several trees which have been identified as being suitable to support roosting bats will be lost as a result of the Proposed Scheme. Refer to Section 12.3.8.1.7 and Figure 12.7.2 for descriptions and their locations. The Proposed Scheme will not result in the loss of any known breeding / resting sites for any bat species, however, it will result in the removal of 19 potential roost sites in the form of the above mentioned PRF trees. Therefore, in the absence of mitigation, there is potential for the felling of these trees to result in direct harm and pose a mortality risk to bats, should bats be present in the trees at the time of felling. This could result in a significant negative effect on the conservation status of bats at the local geographic level*.'

Section 12.5.1.4.1.2 describes the mitigation with respect to roost loss, which includes pre-construction surveys and PRF re-appraisal. The NTA notes the DAU's recommendation that a derogation licence should be obtained in advance of a grant of planning permission for the 19 PRF trees. The NTA is currently in the process of applying for a derogation licence to undertake the construction work and felling of those 19 identified PRF trees.

With respect to the removal of these and other large trees in the Shankill area, the submission goes on to mention their importance for breeding birds also and calls on the Board to '*carefully review the need to remove them in order to facilitate the laying out of the proposed bus corridor and associated cycle lanes*'.

Comprehensive route selection and preliminary design work has been carried out to date to design the Proposed Scheme as presented in the application before the Board. This work has included a great deal of design refinement, particularly through the Shankill area in order to minimise impacts as far as possible while still meeting the scheme objectives. This design development process is described in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR. Section 3.4.1.3 describes the design updates made for the draft Preferred Route Option for the scheme section through Shankill. With respect to the section between Crinken Lane and Wilford Roundabout (Section 3.4.1.3.1) the chapter states:

'*Further development was undertaken following completion of additional topographical surveys and responses to public consultation submissions which outlined concerns about impacts on roadside trees and heritage walls. Signal controlled bus priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees by locally shortening bus lane extents and widening on the east side, which was further developed for the Preferred Route Option…*

Sections of cycle tracks and / or footpaths have been brought behind the roadside treeline where suitable between Quinn's Road and Wilford Junction, to maintain roadside tree canopy. To optimise the protection of the roadside trees in front of Shanganagh Cemetery and Shanganagh Park, a section of the southbound cycle track has been routed behind the roadside trees at Shanganagh Cemetery, and Shanganagh Park.'

Section 3.4.2.3 describes further refinements that were made following consultation on the draft Preferred Route Option in Section 3 (Loughlinstown Roundabout to Bray North (Wilford Roundabout)) of the Proposed Scheme, including:

- '*From the Dublin Road / Stonebridge Road Junction north to the Loughlinstown Roundabout, the necessary widening is entirely to the west of the carriageway to minimise impact to properties and trees.*
- *At Shanganagh Park and Cemetery, the design was further developed to move both northbound and southbound cycle track into the Shanganagh Park and along the Shanganagh Cemetery boundary along with the southbound footpath, which allowed protection of the roadside trees in front of Shanganagh Park and Shanganagh Cemetery.*'
- *Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to near Woodbrook College to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here. In this section widening has been provided in the east side*.
- *Inclusion and further development of new junctions at proposed and approved housing development sites south of Shankill at Shanganagh Castle and Woodbrook Strategic Housing Development.*'

Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR describes the comprehensive tree survey undertaken in order to assess the impacts of the Proposed Scheme and provides a detailed overview of the proposed tree losses in order to facilitate the construction of the Proposed Scheme. Table 2 of Appendix A17.1 summarising the total removals is provided below. As shown below, the majority of trees / hedges to be removed have been assessed as Category C trees which are of low arboricultural quality. Of these proposed removals, Appendix A17.1 also states that:

'*A total of 41 trees are recommended for removal and replacement irrespective of the proposed development, due to severe physiological or structural decline that means they cannot realistically be retained in the context of current land use for longer than 10 years, or due to a high likelihood of failure that poses an unacceptable risk to persons to property*.'

Table 2. Summary of tree removals by quality.

	Category A	Category B	Category C	Total
Trees	29	121	209	**359**
Groups	1	14	26	**41**
Hedges	0	0	10	**10**
Total	**30**	**135**	**245**	**410**

The Landscape General Arrangement Drawings which are provided as an Appendix in the 05-Landscaping General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 in Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme. These proposed quantities to be planted are:

- 551 trees;

- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;
- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of the Proposed Scheme. Section 17.5 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below.

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.*

Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.

The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.'

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect specifically to the impacts on the habitats *'(mixed) broadleaved woodland', 'scattered trees and parkland', 'treelines', 'immature woodland' and 'wet willow-alder-ash woodland'* the Chapter states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively. With specific reference to the local breeding bird population, the Chapter states in Section 12.4.3.5.1.1 that:

'*None of the habitat areas to be lost are unique to the locality and, either individually or collectively, are not likely to support a significant proportion, or the only population, of any given breeding bird species locally. Although a temporary decline in overall breeding bird abundance could potentially occur at a very local level (i.e., the footprint of the Proposed Scheme), this is unlikely to affect the local range of the breeding bird species present nor is it likely to affect the ability of these breeding bird populations to maintain their local populations in the long-term*.'

The chapter goes on to describe mitigation to reduce the impacts on the local breeding bird population where habitat loss cannot be avoided in Section 12.5.1.5.1, including the following measures:

'*Where possible, habitats of importance to breeding birds such as scattered trees and parkland, treeline and hedgerow habitat types, which lie within the footprint, or along the boundary of the Proposed Scheme, that are not directly impacted will be retained. These areas will be protected for the duration of construction works and fenced off at an appropriate distance*.

Planting of treeline, hedgerow and grassland habitats within the Proposed Scheme footprint will be carried out by the appointed contractor, as detailed in the landscape drawings.

Where practical, vegetation (e.g., hedgerows, trees, scrub, bankside vegetation and grassland) will not be removed, between the 01 March and the 31 August, to avoid direct impacts on nesting birds.

Where the construction programme does not allow this seasonal restriction to be observed, then these areas will be inspected by a suitably qualified ecologist as engaged by the appointed contractor, for the presence of breeding birds prior to clearance.

Areas found not to contain nests will be cleared within three days of the nest survey, otherwise repeat surveys will be required. Vegetation clearance will not commence where nests are present, works will

resume when birds have fledged and nests are no longer in use, or an agreement is reached with the NPWS.'

Nature Conservation – Vegetation Impacts (Loughlinstown and Stonebridge Road)

The submission also highlights two important areas of vegetation which require protection from impact, namely the partially wooded bank below St. Columcille's Hospital which has been managed by DLRCC for 15 years to conserve the orchids and other calcicole plants within it, and an area on Stonebridge Road containing knapweed on the opposite side of the overbridge over the Shankill Bypass between the Falls Road junction and the entrance to Little Grange house.

The submission recommends that:

'*On account of the high botanical and biodiversity value of the banks under Loughlinstown hospital and beside Stonebridge road outlined above, the Department recommends that a condition should be attached to any permission eventually granted for the proposed Bray-Dublin Bus Connects scheme that reference shall be made in the Construction Environmental Management Plan (CEMP) to be prepared for this project to the existence of these botanical significant sites, and that provision is made so that management and staff working on the scheme are made aware of the importance of avoiding any interference with or damage to them*'.

The NTA notes this proposed condition and the value of these areas. Both areas fall outside of both the permanent and temporary red lines and therefore will not be impacted by the construction of the Proposed Scheme. All construction works including activities such as spoil storage will occur within the red line boundary as shown in the drawings which accompany the application documentation.

The wooded bank in Loughlinstown is presented in Sheet 40 of the Landscaping General Arrangement Drawings which are drawing set 05-Landscaping General Arrangement Drawings (accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.360. It lies wholly outside the red line and additionally is behind a low wall which is being retained in situ and which separates it from the Proposed Scheme, making 'collateral damage' unlikely. As shown in Figure 3.361 there is no proposed vegetation clearance within that bank.

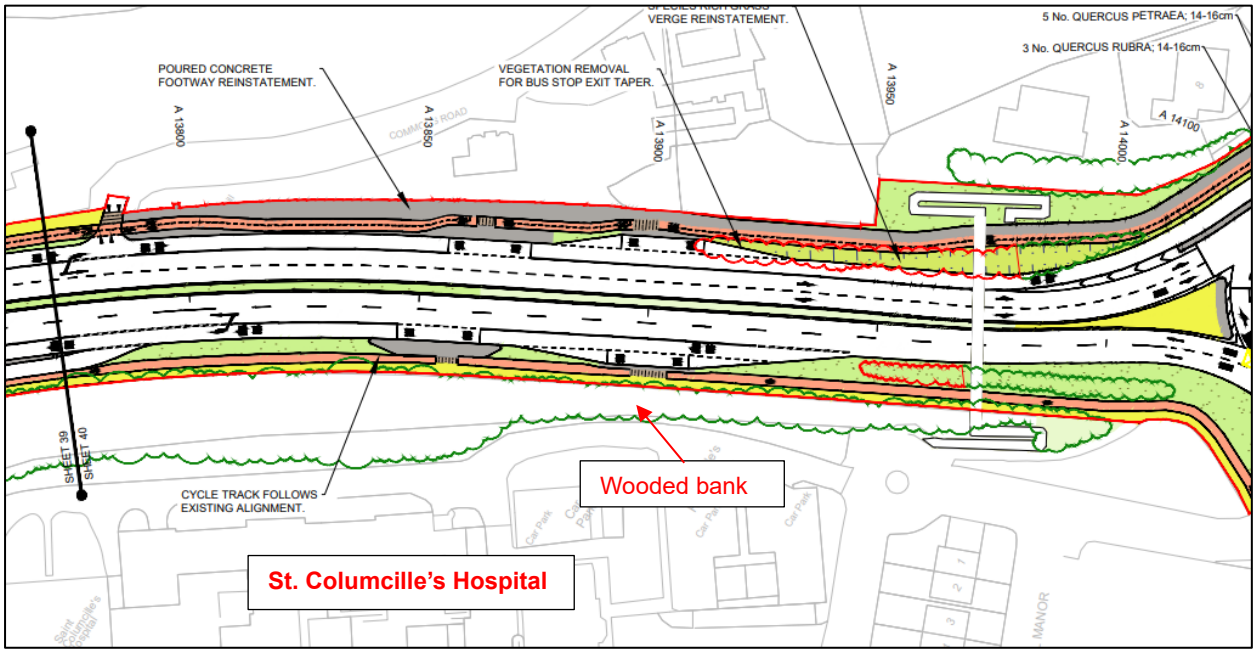


Figure 3.360: Extract from Landscape General Arrangement Drawings (Sheet 40) showing no proposed vegetation removal on the bank

The extent of the Proposed Scheme on Stonebridge Road is presented in Sheet 53 of the Landscaping General Arrangement Drawings which are drawing set 05-Landscaping General Arrangement Drawings (accompanying Chapter 4) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.361. As shown, the area between the Falls Road junction and the house which has been highlighted in the submission is well outside the Proposed Scheme extents, being approximately 100m from the Proposed Scheme, on the opposite side of the M11 Motorway. The area described in the submission is mainly located just

outside the map extents shown below. There will be no reason for any construction activity to occur in the vicinity of the area referenced in the submission, including provision of access to the construction works on Stonebridge Road as the proposed access route for construction vehicles would be via the R837 Dublin Road.

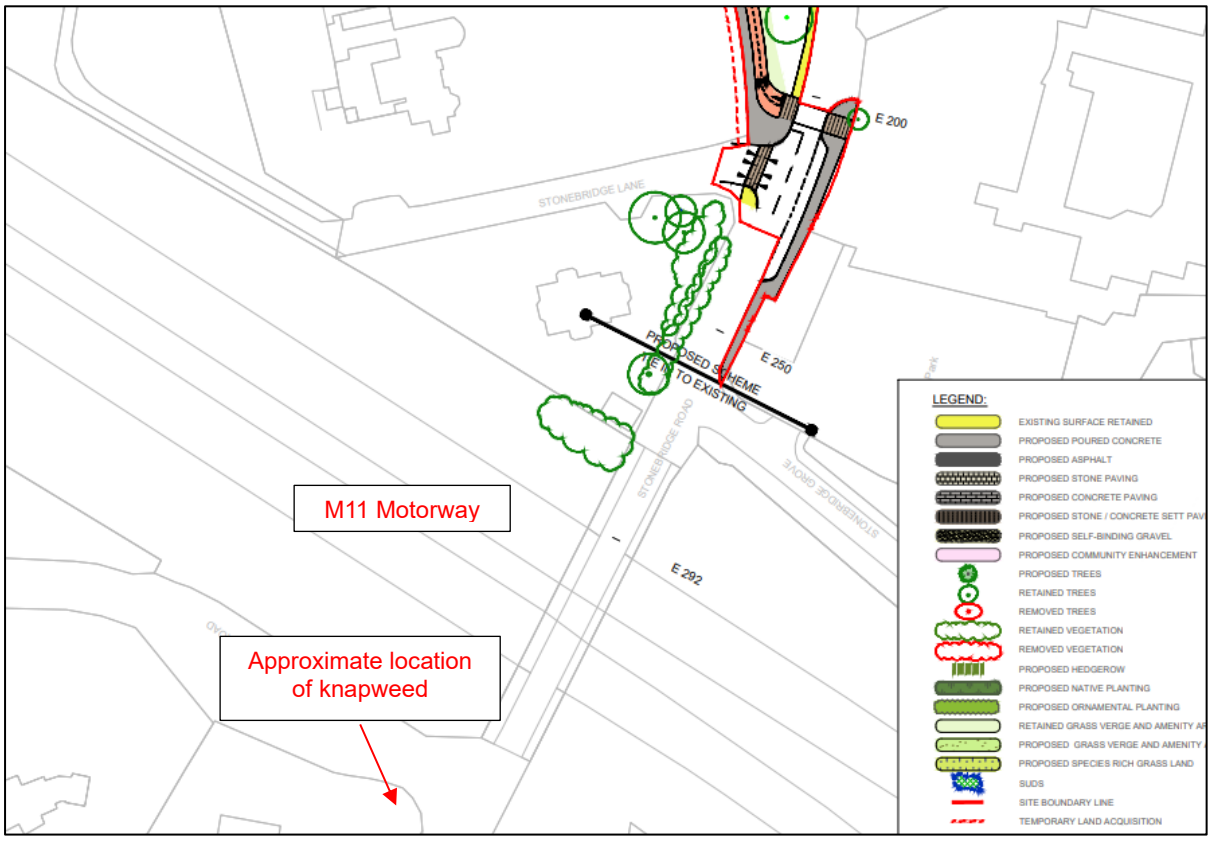


Figure 3.361: Extract of Landscape General Arrangement drawings (Sheet 53) showing the approximate location described in the submission

Appendix A5.1 (Construction Environmental Management Plan) in Volume 4, Part 1 of 4 in the EIAR compiles all of the required mitigation as described in the EIAR (Table 5.2) and NIS (Table 5.3). There are a number of mitigation measures around vegetation clearance and vegetation retention and protection in Table 5.2 in the CEMP including Mitigation Number BD2 from Chapter 12 (Biodiversity) which states:

'*Where practicable, areas of vegetation including habitats of Local Importance (Higher Value), (i.e. mixed broadleaved woodland (WD1), scattered trees and parkland (WD5), hedgerow (WL1), treeline (WL2) and immature woodland (WS2) habitat types), which lie within the footprint, or along the boundary of the Proposed Scheme, will be retained.*

The areas of vegetation to be retained are shown on the Landscaping General Arrangement drawings (BCIDB-JACENV_LA-0013_XX_00-DR-LL-9001) in Volume 3 of the EIAR.

These areas will be protected by the appointed contractor for the duration of construction works and fenced off at an appropriate distance.'

Additionally, there are a number of mitigation measures with respect to vegetation clearance and protection in Table 5.2 in the CEMP from Chapter 17 (Landscape (Townscape) & Visual) including Mitigation Number LV1 which states that '*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project-specific arboricultural methodology for such works, which will be prepared / approved by a professional qualified arborist. For details of trees to be retained refer to the Tree Protection Plans which are contained within the Arboricultural Impact Assessment (Appendix A17.1 in Volume 4 of the EIAR)*'.

It is the intention of the NTA that liaison continues with the relevant bodies including the Department of Housing, Local Government and Heritage and the biodiversity department of the relevant local authorities in advance of, and during, the subsequent Construction Phase of the Proposed Scheme. This engagement will continue to take their requirements into consideration, where aligned with and consistent with the EIAR.

3.13.7 63 - Dublin City Council

3.13.7.1 Overview of Submission

Structure of Response to Submission

Dublin City Council's (DCC) submission comprises 62 pages and is sectionalised numerically. For ease of reference the DCC section numbering and sub-section numbering conventions have been retained throughout the NTA's response as set out in the following paragraphs.

The NTA's response to the submission is set out as follows:

A. Role of NTA & Liaison

B. DCC's Support for the Scheme

C. Certain Observations Raised/Clarification Sought by DCC

C1 – Response to Section 2.1 Relevant Planning History

C2 – Response to Section 2.2 Policy Context

C3 – Response to Section 2.3 Planning Assessment

C3 – Response to Section 2.4 Departmental Reports, including reference to the Appendix

C5 – Response to Section 2.5 Conclusion

C6 – Response to Appendix to DCC Submission

3.13.7.2 Response to the issues raised

A - Role of the National Transport Authority (NTA) and Liaison with Dublin City Council (DCC)

For context, Section 1.4 (Role of the National Transport Authority) in Chapter 1 (Introduction) in Volume 2 of the EIAR states:

'The NTA is responsible for the development and implementation of strategies to provide high quality, accessible and sustainable transport across Ireland. The NTA has a number of statutory functions including the following which are relevant to the Proposed Scheme:

- *Develop an integrated, accessible public transport network;*
- *Provide bus infrastructure and fleet and cycling facilities and schemes; and*
- *Invest in all public transport infrastructure.*

Specifically, under Section 44(1) of the 2008 Act (as amended), in relation to public transport infrastructure in the GDA, the Authority shall have the following functions:

(a) to secure the provision of, or to provide, public transport infrastructure;

(b) to enter into agreements with other persons in order to secure the provision of such public transport infrastructure, whether by means of a concession, joint venture, public private partnership or any other means; and,

(c) to acquire and facilitate the development of land adjacent to any public transport infrastructure where such acquisition and development contribute to the economic viability of the said

infrastructure whether by agreement or by means of a compulsory purchase order made by the Authority in accordance with Part XIV of the Act of 2000.

The Board of the NTA, at its meeting on 18 October 2019, considered whether the function of providing the public transport infrastructure comprising of the CBC Infrastructure Works should be performed by the NTA itself under the provisions of Section 44(2)(b) of the 2008 Act. Following consideration, the Board of the NTA decided that the functions in relation to securing the provision of public transport infrastructure falling within Section 44(2)(a) of the 2008 Act (as amended) in relation to the CBC Infrastructure Works, should be performed by the NTA.

The NTA established a dedicated BusConnects Infrastructure team to advance the planning and construction of the CBC Infrastructure Works, including technical and communications resources and external service providers procured in the planning and design of the 12 Proposed Schemes.'

In early 2019, as indicated by Dublin City Council (DCC) in its submission, a multi-disciplinary corporate team (the DCC BusConnects Liaison Office) was established to provide a liaison role with the NTA. The purpose of this team/office is to effectively manage the communications and act as the primary conduit for information exchange between DCC and the NTA in relation to the BusConnects Programme.

As DCC states in its submission, this dedicated DCC BusConnects Liaison Office has facilitated the exchange of information and engagement with other departments and sections within DCC regarding the design of the Proposed Scheme.

The NTA is grateful for the positive and constructive liaison that has occurred with the DCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DCC regarding the progression of the Proposed Scheme.

B - Support for the Scheme

In its submission, DCC confirmed its support for the Proposed Scheme, and stated in their conclusion on page 49 of the submission:

'The proposed Bray to City Centre Core Bus Corridor Scheme is supported and welcomed by Dublin City Council as it will ensure the delivery of a number of key policies and objectives of the Dublin City Development Plan 2022-2028.'

DCC further confirmed (at Page 49 of its submission) that the development of the Proposed Scheme will provide an upgraded and expanded bus network and quality of service together with better quality cycling and pedestrian facilities and DCC acknowledged that these improvements will make it easier for people to access and use public transport. It also acknowledged that the Proposed Scheme will, in turn, promote modal shift from the private car to more sustainable forms of transport including walking, cycling and public transport, ultimately contributing to the creation of a greener and more sustainable city.

In relation to planning policy, the NTA welcomes the acknowledgement by DCC (at Page 10 of its submission) that, in terms of Regional Policy, the Proposed Scheme is supported by the Regional Spatial and Economic Strategy (RSES) and that DCC is of the view that the Proposed Scheme will contribute to, and support, continued improved integration of transport with land use planning and the delivery of improved high-capacity Core Bus Corridors will enable and support the delivery of both residential and economic development opportunities, facilitating the sustainable growth of Dublin City and its metropolitan area, not only seeking an improved and enhanced bus network but also places cycling at the core of its transport objectives.

In relation to the Dublin City Development Plan 2022-2028, the DCC submission (Page 7 and Page 8 confirms that the development plan '*recognises the need for an efficient, integrated, and coherent transport network as a critical component of the Development Plan's Core Strategy*'. It goes on to state: *'[t]he City Council supports the improvement of public transport and cycling which will allow for higher density development, thereby creating a more sustainable interaction between land-use and transport*.'

In relation to the EIAR, DCC states on Page 11 that:

'*A comprehensive EIAR is provided with the application examining the project under all relevant impacts and finds generally that the development would not adversely impact on existing environmental amenities*'. It goes on to state that '*the content [of the EIAR] points generally to the development having negligible impact on the existing environment'.*

On Page 11, in relation to the Natura Impact Statement (NIS), DCC comments that the NIS '*A screening report has been prepared by the applicant which concludes that, having regard to the nature of the project and its potential relationship with all European sites within the zone of influence, and their conservation objectives, it is the professional opinion of the authors of this report that the application for approval for the proposed scheme does require a Stage Two Appropriate Assessment in respect of the 17 European sites (five SACs and 12 SPAs) and consequently the preparation of a Nature Impact Statement (NIS). The Assessment of the Nature Impact Statement is a matter for the Board, as the competent authority.'*

In relation to zoning (Page 11), DCC states that the Proposed Scheme is overall considered to be compatible and consistent for zoning objectives for the area, including zones Z1, Z2, Z3, Z4, Z5, Z6, Z9, and Z15.

In relation to amenities, DCC states that it is *'satisfied that the elements of the proposed development which fall within the Council boundary would not have any excessive or undue impact on the amenities of the area'*, further stating that *'Once complete the proposed scheme will create attractive, functional and accessible places for people alongside the core bus and cycle facilities which will enhance the amenities of the area.'*

In relation to strategic observations, DCC states on Page 12 that:

'*The Bray to City Centre Core Bus Corridor scheme is fundamental to achieving the strategic objectives envisaged in the Dublin City Development Plan 2022-2028, pertaining to: compact and sustainable urban growth; sustainable mobility and permeability; and placemaking, while significantly contributing towards climate action. In general, the proposed scheme is supported by the high level policies in place in the current Dublin City Development Plan 2022-2028.'*

The Environment and Transport Department goes on to state on Page 12 that:

'*The Department is generally supportive of the improvements to bus and cycling infrastructure proposed in the overall context of encouraging a shift to sustainable mobility. In this regard the proposal generally aligns with the policies expressed in the Dublin City current and draft Development Plans*.' And continues to state '*Dublin City Council is obligated to consider the Proposed Scheme in the context of the vision and range of policies set out in the current and draft development plans with a view to safeguarding the city as a place in which to live, work, visit and do business.'*

On Page 13, the Traffic Division shows its support for integrated sustainable transport proposals, with the Roads Division specifically stating on page 14 that BusConnects proposes substantial improvement to bus and cycling infrastructure. In fact DCC goes on to state:

'The Traffic Section is supportive of the integrated sustainable transport proposals and recognises the significant improvements that they will bring in terms of safe cycling measures and in enabling an efficient public transportation service along these routes.'

The general response on Page 29 of the Conservation Section states that '*a thorough study of the receiving environment has been carried out. The EIAR package includes a suite of architectural heritage reports that document the subject area in detail'*. The response goes on to state that '*The record is comprehensive and accurately describes the quality and status of the heritage structures*'.

On Page 35 of the DCC submission, the City Architects Division welcomed in principle the objectives of the Proposed Scheme to support integrated sustainable transport use through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures. It goes on to state that the Proposed Scheme will facilitate the modal shift from car dependency through the provision of walking, cycle, and bus infrastructure enhancements thereby contributing to an efficient, integrated transport system and facilitating a shift to a low carbon and climate resilient City.

C - Certain Observations Raised / Clarification Sought by DCC

While, as is evidenced from the DCC submission itself, and from the extracts from the DCC submission as outlined above, DCC is supportive of the Proposed Scheme and its improvements to public transport and the shift to sustainable mobility, DCC has raised certain queries and observations that the NTA has now considered and responds to below.

These queries and observations are enclosed in Section 2.0 of the DCC submission, (entitled '*Description of the Proposed Development*'). The queries and observations are included under a number of sub-headings and for ease of reference the DCC sub-section numbering convention has been retained throughout the following paragraphs.

Section 2.1 Relevant Planning History

C1 - Response to Section 2.1

Section 2.1 of DCC's submission, lists five planning applications along, and adjacent to, the Proposed Scheme. The NTA notes that two of the five planning applications listed are identified in Appendix A2.1 (Planning Report), Sub Appendix 2 (Planning History) in Volume 4, Part 1 of 4 of the EIAR which describes the list as:

'*An overview of planning applications for the period 2011- May 2023 within the red line boundary of the Proposed Scheme. The information was gathered using the Dublin City Council, Dún Laoghaire-Rathdown County Council and Wicklow County Council online planning history search tools and whilst they do provide a good indication of the recent planning history within the red line boundary of the Proposed Scheme it cannot be guaranteed that every application has been captured as part of this process*'.

These two planning applications are as follows:

- *'3301/20 - Permission granted for a mixed-use development including 100 residential units at Donnybrook Road (former Kiely's Public House), Donnybrook'.*
- *'SHD0012/20- (ABP-307267-20) - 1, 3, 5, 7, 9, 11 Eglinton Road, Donnybrook – Permission granted for demolition of 6 no. houses and ancillary structures on site, and the construction of a residential development of two connected apartment blocks of 148 no. apartments, rising in height from 3 storeys to 12 storeys over basement'*: This planning application is included within the Planning History list, recorded there as Planning Reference 3047/18.

The only other proposed development in DCC's list which is within or immediately adject to the red line boundary of the Proposed Scheme is '*LRD6003/22 - a c.4.155 ha site which previously formed part of the overall RTE Campus at Montrose, Donnybrook, Dublin 4 - Permission granted a Large-scale Residential Development of 688 no. apartments comprising of 272 no. Build to Sell units and 416 no. Build to Rent units*'. This was omitted from the Planning History due to the fact that at the time of compilation of the list the original permission for the development at this site had been quashed by Order of the High Court and it was not subsequently identified when the list was reviewed and updated prior to submission, despite its status as being subject to an appeal at that stage. It should be noted though that in addition to the Planning Report, the EIAR also includes a cumulative impact assessment which assesses the potential for impacts between the Proposed Scheme and other planned projects or developments in the area. Chapter 21 (Cumulative Impacts & Environmental Interactions) in Volume 2 of the EIAR describes the impact assessment. This planning application is assessed in the cumulative assessment (refer to Appendix A21.1 (Record of Stages 1 & 2 of Cumulative Effects Assessment (Longlist to Shortlist)) and Appendix A21.2 (Stage 4 Specialist Assessments) in Volume 4, Part 4 of 4 of the EIAR). It should also be noted that the design took account of the major developments which had been proposed adjacent to the Proposed Scheme during the design development process. The infrastructure projects which were included are outlined in Section 4.6.6.3 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, with the RTÉ Campus development included in the list of projects. Therefore, despite its omission from the Planning History list, it has been accounted for in the design and assessments for the Proposed Scheme.

With respect to the remaining proposed developments, they are located some distance from the Proposed Scheme's red line boundary and are therefore not included on the Planning History list, however the list of other planned projects and developments included in the cumulative assessment

captured developments from a much broader study area than the Planning Report list. Section 21.2.2.3 describes the *'Zone of Influence'* for each environmental topic, with those zones encompassing larger areas than the red line boundary.

The NTA confirms its awareness of the remaining two planning permissions, however, both developments were deemed outside of the immediate scheme extents and do not have a significant interface with the Proposed Scheme. The remaining applications listed in DCC's submission are as follows:

- '*SHD0008/20 - (ABP307197-20) - 36,38, 40 Herbert Park & 10 Pembroke Place – Permission granted for an apartment building of 4, 6, 8 and 12-storeys, over a basement (3 split levels)*': This development was omitted from the EIAR in error. A review of this planning application has now been undertaken and no significant residual cumulative impacts have been identified in cumulation with the Proposed Scheme
- '*SHD0010/20 - (ABP310299/21)- Maxol Filling Station, Beach Road, Dublin 4 – Permission granted for the demolition and removal of all existing buildings and associated structures above and below ground and the construction of a 6-storey apartment accommodating 112 No. apartments*': This planning application is assessed in the cumulative assessment (refer to Appendix A21.1 (Record of Stages 1 & 2 of Cumulative Effects Assessment (Longlist to Shortlist)) in Volume 4, Part 4 of 4 of the EIAR where it was not assessed as having the potential for significant cumulative effects and was therefore not brought forward to the shortlist for further assessment.

It should be noted that from a Traffic / Transportation, Air, Noise, etc. perspective, individual developments are generally not utilised in the assessment processes and, instead, general growth and major infrastructural development are appropriately considered and evaluated. The planning data which underpins the traffic modelling for the Proposed Scheme has been derived from the National Development Forecasting Model which accounts for the growth in population and employment across the GDA at an aggregate level for the assessment years 2028 and 2043. This growth is informed by regional growth projections and local development planning data.

Section 2.2 Policy Context

C2 - Response to Section 2.2

The NTA acknowledges the commentary in Section 2.2 of the DCC Submission in relation to Policy Context and notes that it generally aligns with the policy context set out within the application documents namely Appendix A2.1 (Planning Report) in Volume 4, Part 1 of 4 of the EIAR, both with respect to the Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly (RSES) 2019-2031 (covered in Section 3.6.4 of the Planning Report), and the Dublin City Development Plan 2022-2028 (covered in Section 3.7.1 of the Planning Report).

The DCC submission lists a number of policies and objectives which are of relevance to the Proposed Scheme from the Dublin City Development Plan 2022-2028. The relevance of all of these policies is acknowledged by the NTA and have all been discussed within the Planning Report in Table 3.11 and / or in Sub Appendix 1 (Local Policy), Table 1.1.

Section 2.3 Planning Assessment

C3 - Response to Section 2.3

2.3.1. Planning Policy

Response to Section 2.3.1

Note this has been responded to in Section 2.2 above.

2.3.2. Environmental Impact Assessment Report (EIAR)

Response to Section 2.3.2

In relation to the EIAR, DCC states (at Page 11 of its submission) that '[a] *comprehensive EIAR is provided with the application documents examining the project under all relevant impacts and finds*

generally that the development would not adversely impact on existing environmental amenities' and they go on to say, also on Page 11, that *'As An Bord Pleanala is the competent authority with regard to the acceptability or otherwise of the EIAR, it is not the role of Dublin City Council to comment on the acceptability or not of the EIAR and its findings but the content points generally to the development having negligible impact on the existing environment.'*

The NTA notes DCC's comments. An EIAR has been prepared for the Proposed Scheme and are included within the planning documentation.

2.3.3. Natura 2000

Response to Section 2.3.3

In relation to the Natura Impact Statement (NIS), DCC (at Page 10 of its submission) observes that '*a screening report has been prepared by the applicant which concludes that, having regard to the nature of the project and its potential relationship with all European sites within the zone of influence, and their conservation objectives, it is the professional opinion of the authors of this report that the application for approval for the proposed scheme does require a Stage Two Appropriate Assessment in respect of the 17 European sites (five SACs and 12 SPAs) and consequently the preparation of a Nature Impact Statement (NIS).'*

At the end DCC note that '*the Assessment of the Nature Impact Statement is a matter for the Board, as the competent authority.'*

The NTA notes DCC's comments. An AA Screening Report and an NIS were prepared for the Proposed Scheme and are included within the planning documentation as standalone documents.

The NTA would also like to note that the North-West Irish Sea candidate Special Protection Area (cSPA, site code 004236) has recently been announced. Whilst it was announced after submission of the current planning application, it nonetheless adjoins existing SPAs from along the eastern seaboard, the majority of which e.g. South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA, Rockabill SPA are included within the assessment for the Proposed Scheme. While the bulk of the listed SCIs for the cSPA are largely coastal, a number can venture inland. However, their inclusion as part of the Appropriate Assessment would not alter the outcome of the assessment presented in respect of the Proposed Scheme, as the SCI's and potential impacts from within the vicinity of the Proposed Scheme have effectively been captured in the NIS submitted in support of the planning application.

The NTA also note that the Minister of Housing, Local Government and Heritage recently on 22 March 2024 announced the inclusion of a fifth Qualifying Interest (QI), the Harbour porpoise *Phocoena phocoena* for the Lambay Island Special Area of Conservation (SAC) (site code 00204)[2]. Whilst this amendment to the QIs for the Lambay Island SAC was announced after the submission of the application for approval for the Bray to City Centre Core Bus Corridor Scheme, the NTA can confirm that Harbour porpoise have already been considered in respect of Rockabill to Dalkey Island SAC (for which it was already a QI species) and is included within the assessment contained in the Natura Impact Assessment (NIS) which formed part of the scheme application for approval submitted to An Bord Pleanála .

The potential for impact on Harbour porpoise has therefore been captured in the assessment presented in the NIS (refer to Section 5 and Section 7 of the NIS) submitted in support of the application for approval pursuant to Section 51 of the Roads Act 1993 (as amended) and there is no impact.

The NTA confirm that the addition of Harbour porpoise as a QI for Lambay Island SAC does not alter any of the conclusions reached in the NIS for the Bray to City Centre Core Bus Corridor Scheme and that the Proposed Scheme will not have an adverse impact on the integrity of Lambay Island SAC by reference to this additional QI.

[2] NPWS Amendment notification – AN00204.pdf. Available at https://www.npws.ie/sites/default/files/protected-sites/amendment_notifications/AN000204.pdf

2.3.4. Zoning and other designation

Response to Section 2.3.4

In relation to zoning, the NTA notes that DCC sets out the view on Page 10 and Page 11 of its submission that, overall, the Proposed Scheme is compatible and consistent with the zoning objectives for the area, being a public service installation.

Section 2.4 Departmental Reports (including reference to the Appendix)

C4 - Response to Section 2.4

The NTA responses to Departmental Reports are set out in the following sections including reference, as appropriate, to the submission's Appendix: '*Departmental Recommendations/Conditions*'. The NTA is grateful for the positive and constructive liaison that has occurred with the DCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with the other Departments and Sections within DCC regarding the progression of the Proposed Scheme.

2.4.1. Strategic Observation from the Forward Planning Department of Dublin City Council

Response to Section 2.4.1

DCC notes that the Proposed Scheme is fundamental to achieving the strategic objectives envisaged in the Dublin City Development Plan 2022-2028, pertaining to: compact and sustainable urban growth; sustainable mobility and permeability; and placemaking, while significantly contributing towards climate action.

However, they note the provision of greening or green infrastructure on the route appears to be limited and it would be worth pursuing whether additional green spaces could be provided, for example at Donnybrook, Leeson Street Upper, Stillorgan Road etc. There would also appear to be a loss of significant trees along the route in places as well e.g. Sussex Road.

Consequently, the DCC confirms that '*the proposed scheme is supported by the high level policies in place in the current Dublin City Development Plan 2022-2028.'*

The NTA note this comment and also welcomes DCC support for the Proposed Scheme in line with the DCC Development Plan 2022-2028. In general, the EIAR addresses landscape and biodiversity within Chapter 17 Landscape (Townscape) and Visual) and Chapter 12 (Biodiversity).

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the Proposed Scheme. Section 4.6.12 describes the approach to the design with respect to landscape and urban realm. Specifically with respect to the softscape design, Section 4.6.12.3 states the following:

'*Soft landscape design proposals include the following components that provide mitigation for loss of trees, ecological benefits and visual enhancements to the urban realm:*

- *New tree planting;*
- *Native hedgerows;*
- *Native planting;*
- *Ornamental planting;*
- *Amenity grass areas; and*
- *Species-rich grasslands.*

Attenuation ponds and SuDS treatments are proposed throughout the length of the route. Tree loss is kept at a minimum in areas where these drainage and SuDS treatments have been provided and mitigation planting has been considered where tree losses do occur. Where required and is feasible, multiple tree pits are to be integrated and linked together as SuDS system.'

'*The planting strategy has been developed to meet the needs of the Dublin City Tree Strategy (DCC 2015a) and the Dublin City Biodiversity Action Plan (DCC 2015b) as follows:*

- *Where possible the initial conservation of existing biodiversity has been considered;*
- *Opportunities have been identified to enhance biodiversity through green infrastructure;*
- *Promote the role of street trees planting consistent with the recommendations of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 (Dún Laoghaire-Rathdown County Council 2022) and Dublin City Tree Strategy (DCC 2015a); and*
- *Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit.'*

Chapter 12 (Biodiversity) in Volume 2 of the EIAR assesses the impact of habitat loss across the Proposed Scheme. With respect to the impacts on habitats, and states that there are no significant residual effects anticipated during either the Construction or Operational Phase as summarised in Table 12.21 and Table 12.22 respectively.

Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR describes the comprehensive tree survey undertaken in order to assess the impacts of the Proposed Scheme and provides a detailed overview of the proposed tree losses in order to facilitate the construction of the Proposed Scheme. Table 2 of Appendix A17.1 summarising the total removals is provided below. As shown below, the majority of trees / hedges to be removed have been assessed as Category C which are of low arboricultural quality. Of these proposed removals, Appendix A17.1 also states that:

'*A total of 41 trees are recommended for removal and replacement irrespective of the proposed development, due to severe physiological or structural decline that means they cannot realistically be retained in the context of current land use for longer than 10 years, or due to a high likelihood of failure that poses an unacceptable risk to persons to property*'.

Table 2. Summary of tree removals by quality.

	Category A	Category B	Category C	Total
Trees	29	121	209	**359**
Groups	1	14	26	**41**
Hedges	0	0	10	**10**
Total	**30**	**135**	**245**	**410**

The Landscaping General Arrangement Drawings which are provided as an Appendix in the 05-Landscaping General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement Drawings. These proposed quantities to be planted are:

- 551 trees;
- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;
- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact on trees and vegetation along the Proposed Scheme during both the Construction and Operational Phases of

the Proposed Scheme. Section 17.5 outlines the mitigation required in order to reduce the impacts as far as reasonably practicable. With respect to trees and vegetation, the mitigation is restated below.

'*Trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 Trees in relation to in relation to design, demolition and construction - Recommendations (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist.*

Wherever practicable, trees and vegetation will be retained within the Proposed Scheme. Trees and vegetation identified for removal will be removed in accordance with BS 3998:2010 Tree Work – Recommendations (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist.

The Arboricultural Assessment prepared for the Proposed Scheme will be fully updated by the appointed contractor at the end of the Construction Phase and made available, with any recommendations for ongoing monitoring of retained trees during the Operational Phase.'

As summarised in Table 17.9 the Construction Phase impact on trees and vegetation is predicted to be '*Negative, Very Significant, Short-Term*'. As summarised in Table 17.10 in Chapter 17 (Landscape (Townscape) & Visual), following the establishment of the proposed landscape measures (15 years post-construction), the impact on trees and vegetation will have reduced to '*Negative, Moderate / Significant, Long-Term*'.

The NTA notes also notes the comment on the planting at central median and verge and other locations. Section 4.6.12 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the landscape and urban realm design approach and principles. Section 4.6.12.5.2 describes central median planting, stating:

'*Central median planting varies depending on the context of the landscape character and road. Dual carriageways or wide roads to the edge of settlements are more likely to have wider central medians where tree planting and grass verges can be found. A combination of tree and shrub or species-rich grassland is possible to create a formalised corridor of planting within a wide section of road*'.

The landscaping design is based on a landscape and character analysis undertaken, as described in Section 4.6.12.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, stating the following:

'*The landscape and urban realm proposals are derived from analysis of the existing urban realm, including existing character, any heritage features, existing boundaries, existing vegetation and tree planting, and existing materials. For each section of the route, the design took a broad overview of typical dwelling age and style, extents of vegetation and tree cover. The predominant mixes of paving types, appearance of lighting features, fencing, walls, and street furniture was considered. The purpose of this analysis was to assess the existing character of the area and how the Proposed Scheme may alter this. The outcome of the analysis allowed the designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route. Where possible, a SuDS approach has been taken to assist with drainage along the route*.'

The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board DCC's comments as the NTA carried out extensive liaison with DCC through the design development process. The NTA will however continue the positive and constructive liaison with DCC throughout the detailed design and construction process.

2.4.2 Environment and Transportation Department Comments

Response to Section 2.4.2.1 General Comments

The Environmental and Transportation Department of DCC set out (at Page 11 of its submission) states that: '*The Department is generally supportive of the improvements to bus and cycling infrastructure proposed in the overall context of encouraging a shift to sustainable mobility. In this regard the proposal generally aligns with the policies expressed in the Dublin City current and draft Development Plans*'.

DCC states further that: '*[t]he commitment by the NTA within the BusConnects project to increase the level of priority afforded to the bus service is very much welcomed. The introduction of, for the most part, separated and segregated cycle ways is again welcomed'*.

Dublin City Council goes on to state that this will provide better and safer cycling environment and help the bus maintain a steady speed and achieve its journey times.

Response to Section 2.4.2.1 Traffic Division Comments (including reference to the Appendix)

On the top of Page 13 of its submission, DCC states

'The Traffic Department is supportive of the integrated sustainable transport proposals and recognises the significant improvements that they will bring in terms of safe cycling measures and in enabling an efficient public transportation service along these routes.'

The Department acknowledges that the modelling work, which was carried out on the corridor of the real-life operation of a full corridor management system using an adaptive traffic control system, allows for a firm basis for how the corridor can be evaluated and to determine its benefits. As set out in the Main Chapters of the EIAR in Volume 2 with Section 6.4.6.2.5.3 in Chapter 6 (Traffic & Transport) showing that the Proposed Scheme will '*reduce total bus journey times along the Proposed Scheme by up to 13% in 2028 and 2043. Based on the AM and PM peak hours alone, this equates to c10 hours of savings in 2028 and 2043 combined across all buses when compared to the Do Minimum. On an annual basis this equates to over 7,500 hours of bus vehicle savings in 2028 and 7,800 hours in 2043, when considering weekday peak periods only'.*

Similarly, bus network resilience is a key performance criteria as set out in the Main Chapters of the EIAR in Volume 2 with Section 6.4.6.3.7.2 in Chapter 6 (Traffic & Transport) showing that the Proposed Scheme was tested with an additional 10 buses per hour (from 28 to 38) at the busiest section. As can be seen from Table 6.48 and Diagram 6.25 of the above referenced Chapter (Figure 2.3 and Figure 2.4), the results indicate that a high level of journey time reliability is maintained in the Do Something scenarios, compared to severely impacted in the Do Minimum. This highlights the benefit that the Proposed Scheme infrastructure improvements can have on protecting bus journey time reliability and consistency, as passenger demand continues to grow into the future.

The approach to incorporating the SCATS (Sydney Coordinated Adaptive Traffic System) bus priority measures is set out in Section 4.11 and Section 12.5.3 of the Preliminary Design Report, provided in the Supplementary Information. Through the very positive and constructive liaison with the DCC BusConnects Liaison Office throughout the design and planning process, DCC's Traffic Department is confirming that DCC will utilise its adaptive traffic control system SCATS to undertake the required traffic management on the corridor to enable the public transport corridor to perform as per the requirements.

Because of the use of a real-world system which has multiple inputs from the Bus AVL system, cycle, and pedestrian detection as well as vehicle actuated sensors, the signals will be running multiple sets of timings across the day rather than a fixed set of timings and the use of this technology will facilitate improved corridor operation. This digital infrastructure along with the proposed civil infrastructure combine for the Proposed Scheme to meet its objectives.

NTA notes that DCC's Traffic Department recognise that the '*NTA is taking over the role of the Road Authority for the purposes of obtaining planning permission for the corridors and that the subsequent construction of the corridors will be undertaken directly by the NTA via their contractors*'.

On Page 13 DCC notes that:

'The design of this scheme in the Dublin City Council area is difficult and complex and has called for multiple interventions along the road network in order to achieve its objectives. The use of bus priority signals, turn bans, bus gates and other interventions are all intended to alter the current traffic situation along the route and ensure that Public Transport walking and cycling can be prioritised over the private car' and further states that '*It should be noted that this corridor needs to be considered as a whole and that the various different measures to prioritise public transport walking and cycling, need to be implemented in as full a manner as possible to avoid 'watering down' the benefits of this scheme by making localised changes to the design*.'

The NTA notes the additional comments from the Traffic Division (Department) which include the following:

'Because of the nature of the turn bans, bus gates and the use of signal-controlled priority the deployment of Camera based bus lane enforcement will need to have been rolled out on this corridor before the full benefit of the scheme in terms of bus journey reliability can be achieved.'

The implementation of signal priority junctions along the corridor provides more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions. Signal priority junctions offer active control at intersections and therefore help to reduce congestion.

Section 6.4.6.2.5.2 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR gives an overview of how the Proposed Scheme will impact on bus journey times and reliability along the corridor. The significance of impact on bus users of the Proposed Scheme has been appraised using a qualitative assessment, taking the changes in journey time and journey reliability metrics presented above into consideration. The Proposed Scheme is considered to deliver a '*Positive, Significant and Long-term impac*t' overall.

The NTA acknowledges the comments raised in relation to a request for camera enforcement at bus lanes, bus priority signals, bus gates, and turning restrictions. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána, the NTA is separately exploring proposals and methods for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

The NTA notes the additional comments from the Traffic Division (Department) provided in the Appendix. The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Traffic Division additional comments provided in the Appendix as these matters were the subject of extensive liaison throughout the design development process including consideration of the traffic management equipment that is necessary for the safe and efficient operation of this Public Transport corridor, and including all traffic signal equipment, and the relevant DCC specification. NTA is aware of, and acknowledges, the important role of the relevant DCC maintenance contractor, and their continued role on both the existing and new traffic signals.

Response to Section 2.4.2.3 Roads Division Comments (including reference to the Appendix)

On the top of Page 14 of its submission, DCC states

'The Roads Department is generally supportive of the scheme and its intention to improve bus and cycling provision.'

Movement Hierarchy

In regard to Movement Hierarchy, the Proposed Scheme pedestrian-movement initiatives are following best-practice and are enhancing the facilities for pedestrians / users with disabilities. As referenced in Section 3.2.3 of Appendix A6.1(Traffic Impact Assessment Report) in Volume 4, Part 1 of 2 of the EIAR, the recently published National Investment Framework for Transport in Ireland (NIFTI) sets out a hierarchy of travel modes to be accommodated and encouraged when investments and other interventions are made. Sustainable modes, starting with active travel (walking, wheeling, and cycling) and then public transport, will be encouraged over less sustainable modes such as the private car. This aligns with the core objectives of the Proposed Scheme. Section 3.2.3 refers to the Draft National Investment Framework for Transport in Ireland (NIFTI) (2021), however, this policy was finalised and published on 21 December 2021. It is therefore clarified that this reference should be to the final National Investment Framework for Transport in Ireland (NIFTI) (2021).

As set out in the Main Chapters in Volume 2 of the EIAR, Diagram 6.1 and Diagram 6.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, '*People Movement*' is a key design philosophy that underpins the objectives of the Proposed Scheme. As such, a multifaceted approach has been undertaken to assess the people movement throughout the Proposed Scheme. Section 3.2.5 of the Traffic Impact Assessment Report and Section 5.4.4.2 and TIA Sub Appendix 2 - Junction Design Report

Volume 4 Appendices Part 1 of 4 of the EIAR demonstrate that each junction along the Proposed Scheme has been designed to be consistent with the National Cycle Policy Framework to accommodate a minimum 10% cycle mode share in terms of people movement capacity at each junction. This assessment also quantifies the theoretical people movement capacity by walking, bus, and car at each junction.

Section 6.4.6.2.2.1, Diagram 6.6 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, conveys the positive impact that the Proposed Scheme has on modal share in the direct study area as a result of its implementation, using the weighted average number of people moved by each mode (Car, Bus, Active Modes). The NTA Eastern Regional Model (ERM) and Local Area Model (LAM) modelling indicates a corridor level reduction of 49% in the number of people travelling by car, an increase of 40% in the number of people travelling by bus and an increase of 108% in people walking or cycling along the Proposed Scheme during the 2028 AM Peak Hour.

Similarly, Section 6.4.6.2.2.3, Diagram 6.8 indicates a *'reduction of 47% in the number of people travelling by car, an increase of 60% in the number of people travelling by bus and an increase in 211% in the number of people walking or cycling along the Proposed Scheme during the 2043 AM Peak Hour assessment'*.

Ensuring Pedestrian Priority

With regard to ensuring Pedestrian Priority, additional physical interventions along the Proposed Scheme, such as enhanced / additional pedestrian crossings, raised table side entry treatments, and enhanced cycling infrastructure, have been assessed in the Appendices in Volume 4, Part 1 of 2 of the EIAR, Chapter 6 (Traffic & Transport) Appendix 4 and summarised in Section 8 of the Traffic Impact Assessment Report and Section 6.4.6.1.7.1 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. These interventions, which form part of the Proposed Scheme, further enhance the movement hierarchy emphasis in line with the Proposed Scheme Objectives.

The Proposed Scheme will increase the number of controlled pedestrian crossings from 119 in the Do Minimum to 176 in the Do Something scenario, equating to a 45% increase. Additionally, there will be an increase in the number of raised table crossings on side roads from 13 in the Do Minimum to 80 in the Do Something scenario, equating to a 515% increase. It is further noted that the Proposed Scheme proposes to increase footpath widths at critical locations with high pedestrian demand, such as within Donnybrook Village, Lesson Street and Morehampton. The NTA welcomes DCC's comments in relation to the importance of considering the pedestrian/cyclist interaction at bus stops and notes that Chapter 4 (Proposed Scheme Description), Appendix A4.1 (Preliminary Design Guidance Booklet (PDGB)) in Volume 4, Part 1 of 4 for Section 11, sets out the key measures to address the concerns raised in relation to vulnerable users at these locations which is further elaborated in Section 4.14 of the Preliminary Design Report in the Supplementary Information. These details were developed as a result of direct consultation between the NTA and representative mobility groups.

These measures will reduce the potential for conflict between pedestrians, cyclists and stopping buses by deflecting cyclists behind the bus stop, thus creating an island area for boarding and alighting passengers. On approach to the bus stop island the cycle track is intentionally narrowed with yellow bar markings also used to promote a low-speed single file cycling arrangement on approach to the bus stop. Similarly, a 1 in 1.5 typical cycle track deflection is implemented on the approach to the island to reduce speeds for cyclists on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area. At these locations a '*nested Pelican*' sequence similar to what has been provided on the Grand Canal Cycle Route will be introduced so that visually impaired or partially sighted pedestrians may call for a fixed green signal when necessary and the cycle signal will change to red. Where the pedestrian call button has not been actuated the cyclists will be given a flashing amber signal to enforce the requirement to give way to passing pedestrians. A 1:20 ramp is provided on the cycle track to raise the cycle track to the level of the footpath/island area onto a wide crossing. Suitable tactile paving is also provided at the crossing point in addition to a series of LED warning studs provided at the crossing location which are actuated by bus detector loops in the bus lane. The exit taper for the bus stop has been nominated at 1:3 to provide for a gradual transition to the cycle track.

Similarly, Section 6 of the PDGB sets out the key design measures considered for on street parking interactions. Where parallel parking spaces are provided alongside a cycle track, a buffer must be

provided to allow space for opening car doors. This buffer should be a minimum of 0.75m in width. (The buffer strip may encroach into the cycle track with localised narrowing where space is confined subject to a minimum 1.5m clear width). Examples where buffer strips have been included in the Proposed Scheme are provided on the General Arrangement Plans including the following locations:

- Chainage B200 – outbound on street taxi parking on Sussex Road;
- Chainage A1500 – inbound on street loading bay on Morehampton Road;
- Chainage A1980 – inbound on street loading bay on Morehampton Road;
- Chainage A2050 – revised inbound parking arrangement on Donnybrook Road; and
- Chainage A2050 – revised outbound parking arrangement on Donnybrook Road.

Awareness, Education and Behavioural Change Programme

The NTA notes DCC's request for an Awareness, Education and Behavioural Change Programme in the context of the Proposed Scheme. The aim and objectives of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor as per Chapter 1 (Introduction) in Volume 2 of the EIAR, Section 1.2 (Aim and Objectives).

The aim and objectives are not unique to the CBC Infrastructure Works and many Active Travel projects are currently progressing similar infrastructure upgrades across most, if not all, local authority jurisdictions.

The need for a communications programme related to sustainable transport promotion is outside the scope of a singular project and would, instead, be likely to have a national or regional focus. It can be noted that the Draft Greater Dublin Area Transport Strategy 2022-2042, referenced in Section 2.3.4.3 in Chapter 2 (Need for Proposed Scheme) in Volume 2 of the EIAR sets out behavioural change measures that are intended to be implemented across the GDA, including sustainable transport initiatives, residential travel planning and the expansion of Smarter Travel Workplaces and Campuses Programme plus the Green Schools Programme. These commitments reflect measures already contained in the current Transport Strategy for the Greater Dublin Area 2016 – 2035 and in other national policies. The NTA anticipates undertaking these measures, in co-operation with DCC, and other local authorities, which will deliver the awareness, education and behavioural change programme suggested by DCC.

Impact on Loading and Servicing

The NTA notes DCC's comments in relation to Impact on Loading and Servicing and the challenge to balance a wide range of competing demands with public transport, pedestrians, cyclists, the private car, and the functional and servicing needs of the city economy whilst ensuring the city remains a vibrant, attractive and accessible area for all.

This challenge directly correlates to the Proposed Scheme objectives as set out in Section 1.2 in Chapter 1 (Introduction) in Volume 2 of the EIAR. The 15-Minute City policy QHSN10 set out in Chapter 5 (Construction) in Volume 2 of the EIAR of the forthcoming Draft Dublin City Development Plan 2022-2028 is also supported by the Proposed Scheme objectives. Movement of people is a core design philosophy of the Proposed Scheme as described in the Main Chapters in Volume 4 of the EIAR, Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, which is centred around positioning active modes and public transport at the top of the modal hierarchy, in line with the principles of the National Investment Framework for Transport in Ireland (NIFTI). Improvements to the urban realm, pedestrian and cycle infrastructure between urban centres and neighbourhoods along Proposed Scheme including Donnybrook, Stillorgan, Bray, Dublin Road, and Castle Street benefit from the 15-Minute City principles.

The assessment of impacts on loading and parking for the Proposed Scheme is set out in Chapter 6 (Traffic & Transport), Appendix A6.1 (Transport Impact Assessment) in Volume 4, Part 1 of 4 of the EIAR and summarized in Chapter 4 (Proposed Scheme Description) and Chapter 10 (Population).

Section 6.4.6.1.7.4 summarizes the changes to the parking and loading provisions as a result of the Proposed Scheme. This will result in impacts on commercial and residential parking in this area which are reported in the above referenced section as follows:

'Total parking provision will be reduced by 209 spaces along the Proposed Scheme, which equates to a 11% reduction approximately.

Aspects of the Proposed Scheme and network proposals are expected to mitigate the reduction in parking by reducing reliance on private cars due to availability of an improved bus network with journey reliability, by availability of improved cycling infrastructure, and by continued and managed use of private off-street parking.

Similarly, many properties along the Proposed Scheme have driveways, and residents should be encouraged to utilise their available off-road space for parking (rather than seek to park on-street).

Improved compliance with parking and loading bay regulations, and management of loading activities will also assist in offsetting the reduction in on-street parking spaces. It is concluded that the overall impact of loss of parking space on these streets is limited and will be largely offset by the cumulative effect of mitigations.'

As set out in the Traffic Impact Assessment Report under Sections 6.4.6.1.1.4, 6.4.6.1.2.4, 6.4.6.1.3.4, 6.4.6.1.4.4, 6.4.6.1.5.4, 6.4.6.1.6.4, the Proposed Scheme will formalise the parking arrangements to improve facilities for pedestrians and cyclists. Given the availability of equivalent types of parking along adjacent streets within 200– 250m of the Proposed Scheme (and typically within under 100m), the overall impact of this loss of parking is considered to have a '*Negative, Slight, and Long-term'* effect. This low effect is considered acceptable in the context of the aim of the Proposed Scheme, to provide enhanced walking, cycling and bus infrastructure on this key access corridor.

It is noted that following a detailed assessment as set out in the Parking and Loading Report contained in Appendix G of the Preliminary Design Report included in the Supplementary Information, that parking and loading facilities, including disabled parking bays, have been retained in critical areas, such as at the Lesson Street, Morehampton Road, Donnybrook Road, St Anne Church, Dublin Road Bray. It is further noted that increased provision of cycle parking is proposed as part of the Proposed Scheme. A large number of these proposed cycle parking facilities have been located close to urban villages and areas of commercial activity such as Leeson Street Lower and Stillorgan Road (UCD Interchange).

Similarly, Appendix A10.2 (The Economic Impact of the Core Bus Corridors) in Volume 4, Part 3 of 4 of the EIAR identifies improved commercial opportunities once the new infrastructure is in place with increased walking and cycling and the evidence shows that any loss of business through less customers arriving by car is more than compensated for by increased numbers of customers arriving by more sustainable modes of transport.

Through the very positive and constructive liaison relationship with the DCC BusConnects Liaison Office throughout the design and planning process there has been consultation with the DCC Roads Department in regard to necessary changes to the Pay and Display parking and associated infrastructure to ensure adequate set down/loading for potentially impacted commercial units. As set out above, the design process has balanced the competing needs to achieve the Proposed Scheme objectives. The Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Roads Department inputs regarding Pay and Display parking and associated infrastructure for set down/loading for potentially impacted commercial units as these matters were the subject of extensive liaison throughout the design development process.

Specific Comments

General Arrangement Sheet 1 and 2

- It is noted that substantial kerbside space currently dedicated to taxis is being reallocated. However, it is not clear what arrangements are proposed for taxis that can currently use kerb side space between 20:00 and 06:00.

- Cycle path runs through centre of pedestrian space bisecting footpath, narrowing available footpath space, and obstructing desire lines to premises including Catholic University School and bus stops.

NTA Response

The proposed design on Lesson Street is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 01 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.362.

As noted on the drawing, it is proposed to relocate the Lesson Street taxi rank to Hatch Street Lower for evening operations only.

On Lesson Street the existing kerb line has been retained and existing footpath width has been maintained at the back of the proposed cycle track and building line in both inbound and outbound direction. The existing footpath width at the Catholic University School is retained as part of the proposed design and cycle track and bus stop are built out from the existing carriageway space.

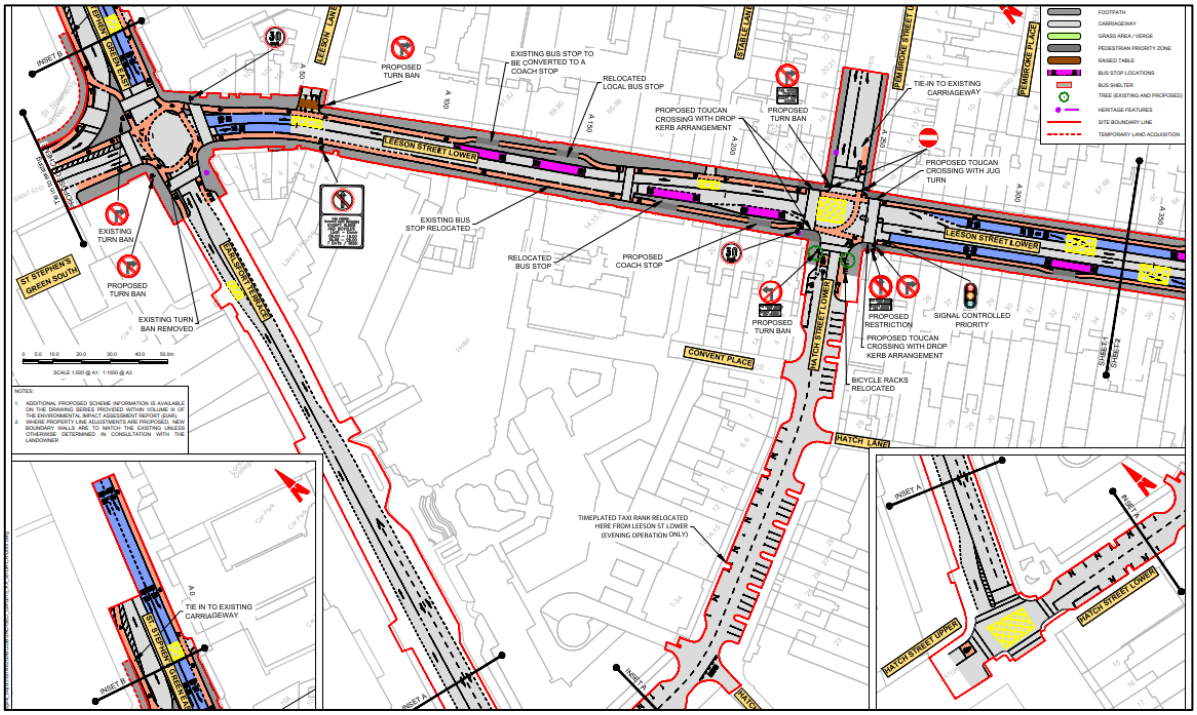


Figure 3.362: Extract from General Drawing Arrangement at Leeson Street Lower (Sheet 01)

General Arrangement Sheet 3

- Cycle path runs through centre of pedestrian space bisecting footpath, narrowing available footpath space, and obstructing desire lines to premises (including hotel) and to bus stops.
- Substantially reduced taxi rank on Sussex Road and substantially reduced coach parking on Sussex Road.

NTA Response

The proposed design along Lesson Street Upper and Sussex Road is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 03 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.363.

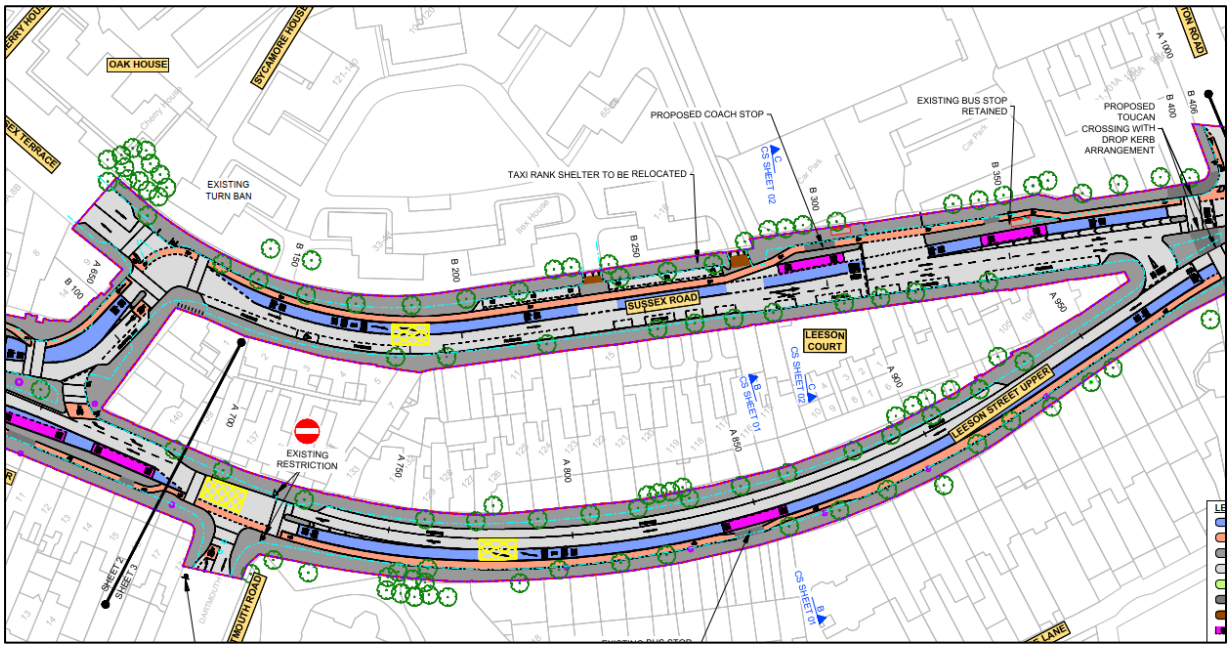


Figure 3.363: Extract from General Drawing Arrangement at Leeson Street Lower (Sheet 03)

On Lesson Street Upper and Sussex Road the existing kerb line has been retained where feasible and existing footpath width or minimum 2m unobstructed footpath widths width has been maintained at the back of the cycle track and building line in both inbound and outbound direction.

The assessment of impacts on loading and parking for the Proposed Scheme is set out in Chapter 6 (Traffic &Transport) in Volume 2 of the EIAR, Appendix A6.1 (Traffic Impact Assessment) in Volume 4, Part 1 of 4 and summarized in Chapter 4 (Proposed Scheme Description) and Chapter 10 (Population).

Section 6.4.6.1.2.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR summarises the changes to the parking and loading provisions as a result of the Proposed Scheme. This will result in impacts on commercial and residential parking in this area which are reported in the above referenced section.

Section 6.4.6.1.2.4 states:

'*There are currently 13 taxi parking spaces located on R138 Sussex Road southbound carriageway. It is proposed to remove four taxi parking spaces at this location to facilitate the provision of a coach stop. Given the retention of nine of the 13 taxi parking spaces, this loss of four spaces is considered to have a Negative, Slight and Long-term impact'.*

A detailed assessment is set out in Appendix G (Parking Survey Report) of the Preliminary Design Report included in the Supplementary Information.

General Arrangement Sheet 3, 4, 5 and 6

- New tree planting should ensure minimum 2m unobstructed footpath widths and should take cognisance of sightlines. Narrow footpaths are noted.

NTA Response

Existing kerb line has been retained where feasible and existing footpath width or minimum 2m unobstructed footpath widths width has been maintained at the back of the cycle track and building line in both inbound and outbound direction. Where new trees are proposed, the detailed design of tree pits and tree surrounds will need to ensure the required footpath widths and protection of surfaces and utilities from root damage is considered.

General Arrangement Sheet 7

- Safety concerns with location and design of proposed accessible parking space at shops with cycle lane immediately to the side and rear.

- The existing layout of car park located east of The Crescent in front of shops is considered preferable from a design and safety point of view. The revised layout may result in reversing onto the public road and cycleway and may result in loading on the cycle lane or carriageway.

NTA Response

The proposed design at Donnybrook Village is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 07 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.364.

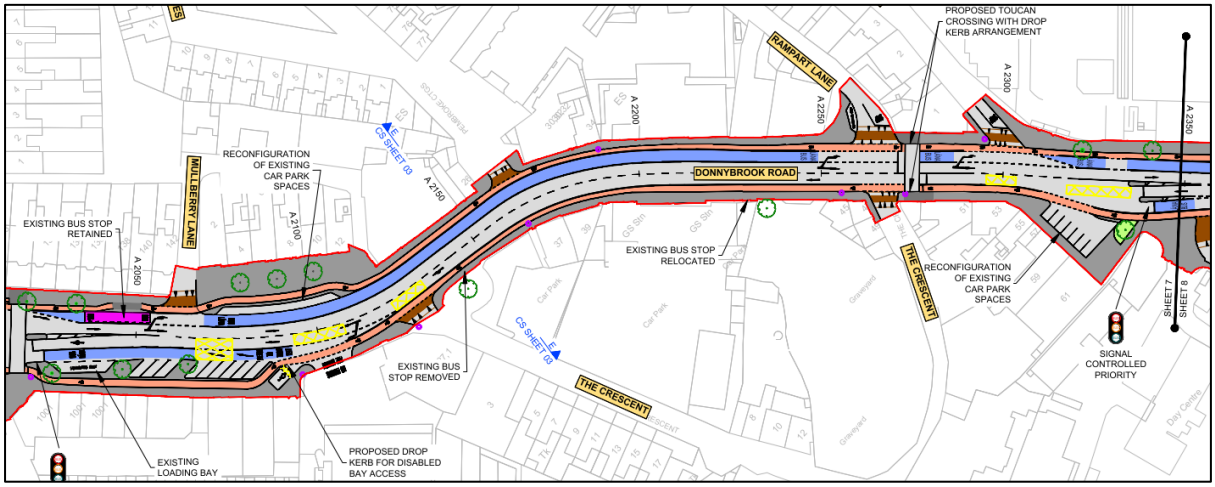


Figure 3.364: Extract from General Arrangement Drawing at Donnybrook Road (Sheet 07)

Parking and loading bays have been design as per the Section 6 in Appendix A4.1 (Preliminary Design Guide Booklet) in Volume 4, Part 1 of 4 in the EIAR. As noted below, standard parking pay widths are provided and where parallel parking are provided alongside a cycle track, a buffer strip is provided to allow for space for opening of cars.

Section 6.1 states:

'The desirable minimum width of parallel parking spaces is to be 2.1m. Where wheelchair accessible parking bays are proposed, these should be a minimum of 3.6m in width and 7m in length with the appropriate dropped kerb and tactile paving in accordance with the requirements of the Building Regulations TGD Part M. Where parallel parking spaces are provided alongside a cycle track, a buffer must be provided to allow space for opening car doors. This buffer should be a minimum of 0.75m in width. (The buffer strip may encroach into the cycle track with localised narrowing where space is confined subject to a minimum 1.5m clear width).'

Appendix M2 (Stage 1 Road Safety Audit) is provided as of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any residual problems or concerns associated with the parking layout at the Crescent and outside the shops opposite Mulberry Lane.

General Arrangement Sheet 8

- Planning permission granted by An Bord Pleanala under PL29S.310204 (DCC Ref:2244/21) at the 'Circle K' site, junction of Donnybrook Road and Brookvale Road. The implementation of the Bray Scheme at this location will result in the removal of the entire public footpath along the site's frontage onto Donnybrook Road.

NTA Response

The Proposed Scheme design at Circle K, Donnybrook site is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.365.

BusConnects standard cross-section is provided at this location, which includes a bus lane, traffic lane, cycle track and footpath in both directions. The standard cross-section provided is the optimum CBC

cross-section which meets the CBC Design Guidelines Objectives in accordance with Section 2 (Figure 1) in Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR.

The Proposed Scheme typical cross-section at this location is shown in the Typical Cross Section Drawings which is provided as an Appendix in the 04-Typical Cross Sections Sheet 04 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.366.

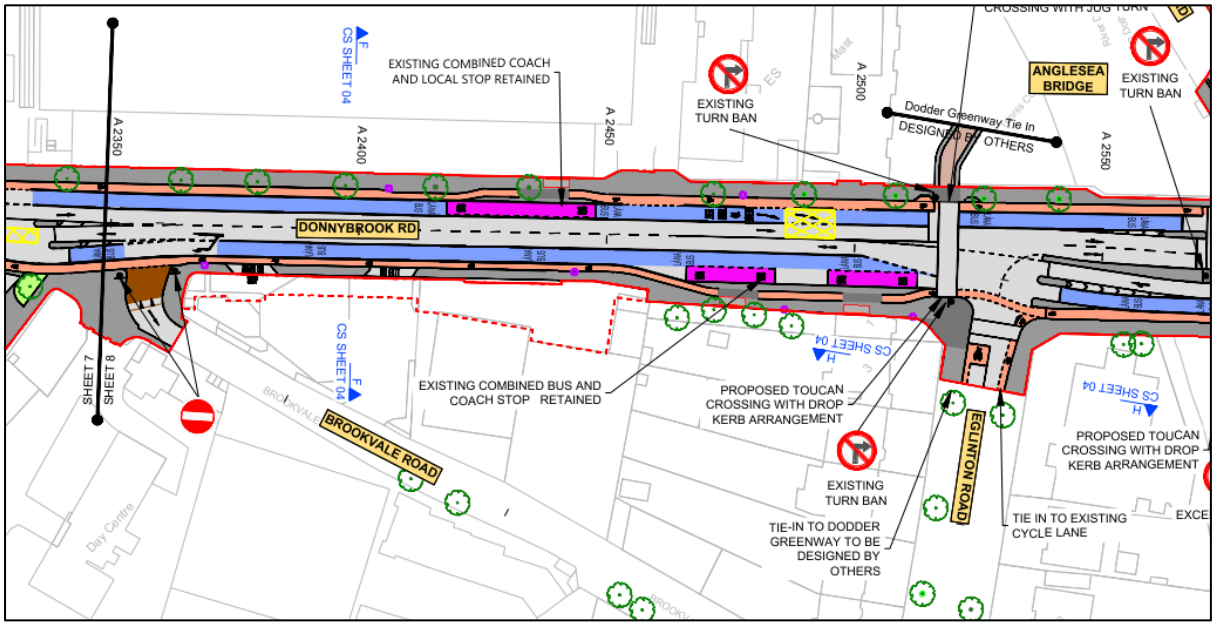


Figure 3.365: Extract from General Arrangement Drawing at Circle K Donnybrook (Sheet 08)

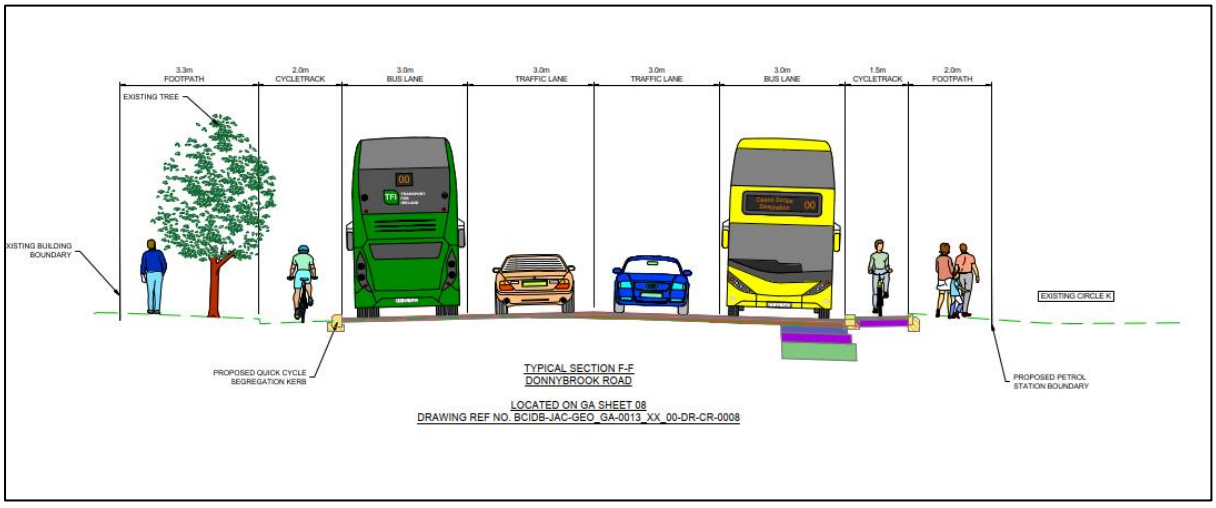


Figure 3.366: Extract from Typical Cross-Section Drawing (Sheet 04)

NTA is aware of the ABP Planning permission at the Circle K site, at the junction of Donnybrook Road and Brookvale Road. The Proposed Scheme design has been co-ordinated with the proposed development and proposed development will not prejudice the delivery of the Proposed Scheme.

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR provides a description of integration of BusConnects with other infrastructure projects and Section 4.6.63 states the following:

'Development at Circle K site, Donnybrook Road and Brookvale Road: Planning proposals have been submitted for the development of a twelve-storey over basement building (with retail and café / restaurant use at ground floor level and 'Build to Rent' residential use at 1st to 11th floor levels. The proposals include a building overhang detail which would extend over the proposed BusConnects public footway. Following DCC's refusal of the planning application, an application has been made to An Bord Pleanála.'

General Arrangement Sheet 9

- Area to east of Donnybrook Close looks congested with bus stops, cycle lane and existing planting resulting in reduced/narrowed space for pedestrians.

NTA Response

The proposed design at Donnybrook Close is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 09 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.367.

Existing kerb line has been retained where feasible and existing footpath width or minimum 2m unobstructed footpath widths width has been maintained back of the cycle track and building line in both inbound and outbound direction. Existing green strips have been maintained where feasible.

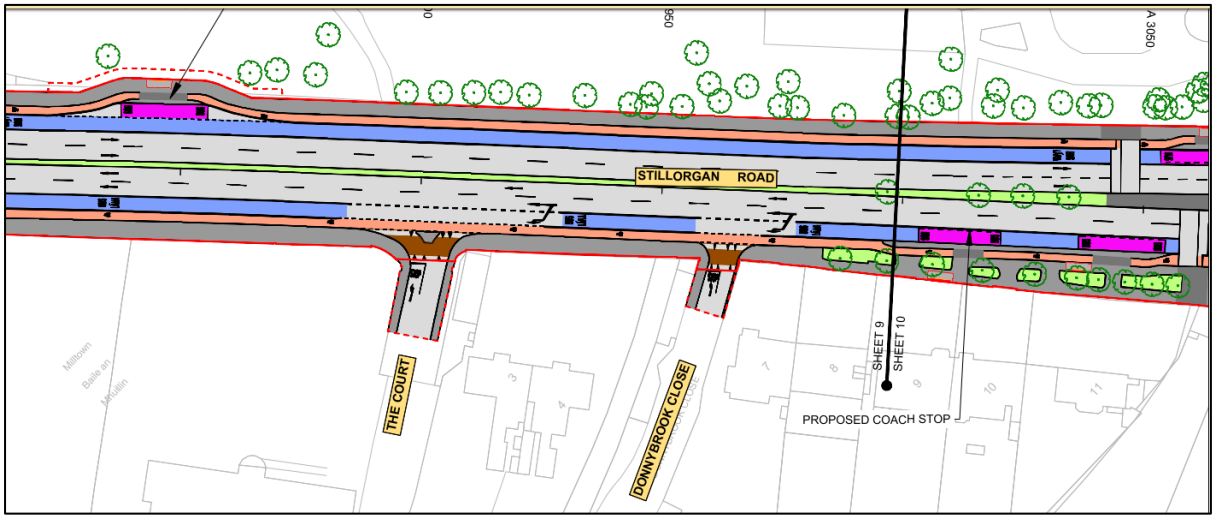


Figure 3.367: Extract from General Arrangement Drawing at Donnybrook Close (Sheet 09)

General Arrangement Sheet 10

- Provision of an extensive set down area for the Teresian School is considered undesirable and contrary to DCC and NTA policies to promote sustainable travel to schools. Consideration should be given to alternative layout to include widening of footpaths at this location.

NTA Response

The proposed design at the location of the Teresian School maintains existing road cross-section and retains the set-down area for the school. This is consistent based on the consideration of the design Standards and consultation with the stakeholders to provide for a safe design while meeting the objectives of BusConnects. The design maintains existing footpath width behind the grass strips and provides for a standard cycle track width. A buffer strip of 0.75m is provided between the cycle track and the parking area for safety.

Appendix M2 (Stage 1 Road Safety Audit) is provided as of the Preliminary Design Report included as part of the Supplementary Information. The report does not identify any issues related with the layout and set-down area.

General Arrangement Sheet 11

- The proposed retention of the vehicular/entrance at 118 Stillorgan Road (R138) for pedestrians and cyclists only should include alterations to the site boundary to reduce the width of the entrance at this location to prohibit use of it by vehicles.

NTA Response

NTA notes the comment. It was determined that the most appropriate arrangement for access/egress to the property at 118 Stillorgan Road was to retain the access/egress on the corner of the junction for pedestrians and cyclists only and that all vehicular access/egress to/from 118 Stillorgan Road would

make use of the existing vehicular access to the property off Nutley Lane, which will remain unaffected by the Proposed Scheme.

A thin strip of land at the existing access/egress has been included in the temporary land take to allow for accommodation works and restriction to private rights has been noted in the Deposit Map and CPO Schedule, supplied in the Compulsory Purchase Order Information and as shown in Figure 3.368 and Figure 3.369.

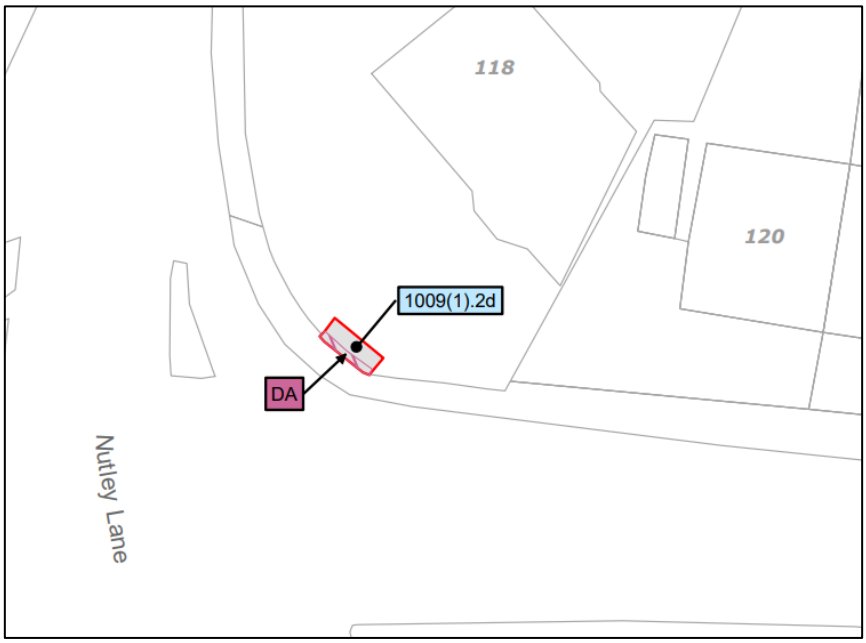


Figure 3.368: Extract from the Deposit Map

SCHEDULE
PART IV (SECTION B)
Description of private rights to be restricted or otherwise interfered with

Reference	Description	Owners or Reputed Owners of the Right to be Restricted or Otherwise Interfered With
DA	All private rights of vehicular traffic (except pedal cycle and other bicycles) within the area shaded pink and labelled 'DA' on the deposit map reference 0013-DM-0034 associated with plot reference 1009(1).2d as described in Part II of the Schedule.	Mr. David Doran, St. Aubyns, Shanganagh Road, Killiney, Co. Dublin, A96 VX52 Ms. Rhoda Draper, Rostellan, 118 Stillorgan Road, Dublin 4, D04CC01

Figure 3.369: Extract from the CPO Schedule

There are a number of areas along the extents of the Proposed Scheme that will result in the requirement for accommodation works. Liaison has taken place with landowners to understand existing property/land usage and potential impacts at affected sites. Careful consideration has been given to urban realm improvement opportunities where appropriate. Detailed accommodation works proposals will be discussed and agreed with each individually affected landowner.

Response to Section 2.4.2.4 Active Travel Division Comments (including reference to the Appendix)

On the top of Page 17 of its submission, DCC states:

'The Active Travel Programme Office (AcTPrO) welcomes the submission of the Bray to City Centre BusConnects Scheme, hereby referred to as The Scheme' and goes on to say in Page 19 that;

'The Scheme seeks to enhance the potential for cycling by providing safe infrastructure, segregated from general traffic wherever practicable. This Is welcomed by AcTPrO.'

DCC acknowledge that the Proposed Scheme interacts with six active travel projects being delivered by AcTPrO. In some cases, these interactions have been acknowledged within the Proposed Scheme's General Arrangement Drawings whilst for others where Interactions have not been identified, the Proposed Scheme proposes to tie-in to existing carriageways.

NTA acknowledges DCC's the specific observations as noted below.

1. City Quay to Harcourt St (project code: DCC/22/0024) and Stephen's Green to Thomas Street (DCC/21/0018) interface with The Scheme at the junction of St. Stephen's Green East, St. Stephen's Green South, Earlsfort Terrace and Leeson Street Lower. It is noted that The Scheme's supporting general arrangement drawings (sheet 01 of 54) identify a tie-in to existing carriageways at St Stephen's Green East and a tie-in to proposed project at St. Stephen's Green South.

2. Fitzwilliam Street Cycle Route (DCC/17/0008) interacts with The Scheme at the junction of Fitzwilliam Place and Adelaide Road. It is noted that this interaction has been identified on The Scheme's supporting general arrangement drawings (sheet 02 of 54).

3. Kilmainham to Ballsbridge South City Loop (DCC/22/0022) is proposed to interact with The Scheme along Leeson Street Upper, from Appian Way (inclusive) to Wellington Place (inclusive). It is noted that The Scheme's supporting general arrangement drawings (sheet 04 of 54) identify a tie-in to existing carriageways at both locations.

4. Dodder River Greenway (DCC/12/0035) interfaces with The Scheme opposite the junction of Donnybrook Road and Eglinton Road. It is noted that this interaction has been identified on The Scheme's supporting general arrangement drawings (sheet 08 of 54).

5. Donnybrook to UCD (DCC/22/0023) interacts with The Scheme at Greenfield Park. It is noted that The Scheme's supporting general arrangement drawings (sheet 11 of 54) identify a tie-in to the existing carriageway at this location.

Response to DCC's specific comments

Comment 1:

Regarding the interaction of the Scheme and DCC/17/0008, it is noted that Dublin City Council has already layout for the junction of Fitzwilliam Place, Leeson Street Lower and Adelaide Road as part of the Active Travel Network. It is recommended that the final details at this location be agreed with Dublin City Council.

NTA Response:

The proposed design on Lesson Street and co-ordinated tie-in with the Fitzwilliam Place Cycle Scheme is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 02 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.370 below.

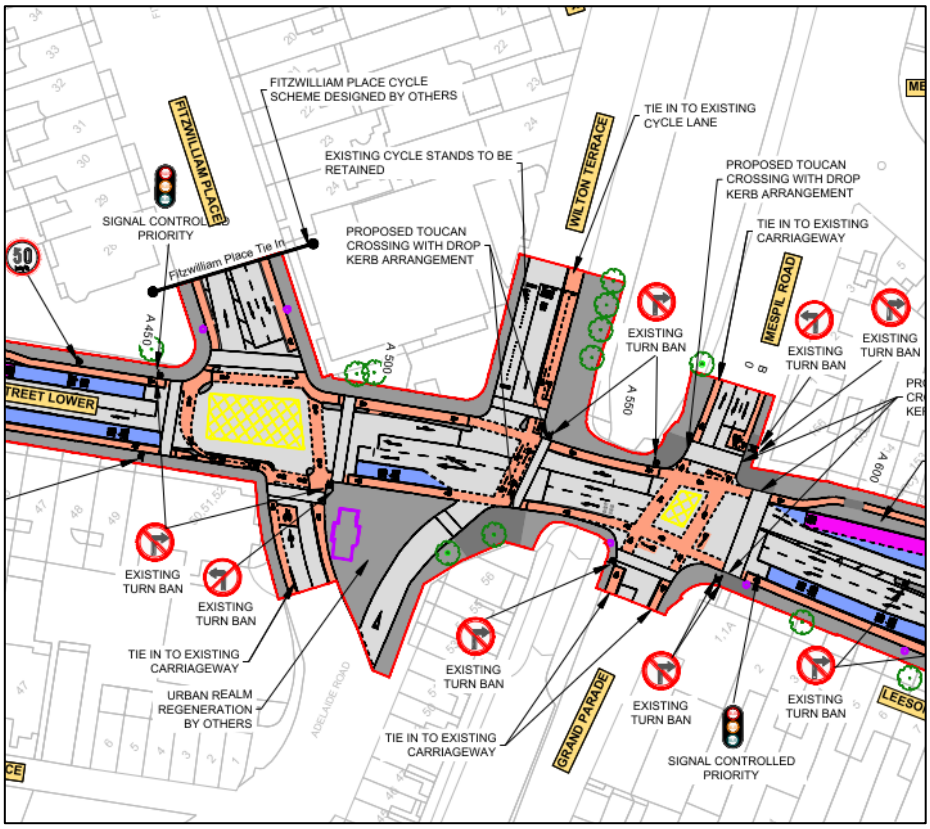


Figure 3.370: Extract from General Arrangement Drawing at Leeson Street Lower (Sheet 02)

The NTA is grateful for the positive and constructive liaison that has occurred with the DCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DCC regarding the progression of the Proposed Scheme. The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of the Council and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DCC and the NTA.

Comment 2:

Regarding the interaction of the Proposed Scheme and AcTPrO projects DCC/21/0018, DCC/22/0022 and DCC/22/0023, it is noted that Dublin City Council may propose changes to the existing carriageways as part of the design of respective active travel projects. Where the Scheme proposes a tie in to an existing carriageway, AcTPrO requests that provisions are made to ensure that alterations can be made within The Scheme's redline boundary up to any proposed pedestrian crossings adjacent to the core bus corridor (i.e. on roads adjacent to the core bus corridor that exist both within The Scheme's redline boundary and on Dublin City Council's Active Travel Network). This will ensure that opportunities to improve active travel facilities connectivity to the Busconnects project are maximised and Dublin City Council is not restricted in its ability to deliver Active Travel Projects within the vicinity of the Proposed Scheme.

<u>NTA response:</u>

NTA note the above and acknowledge awareness of the AcTPrO projects DCC/21/0018, DCC/22/0022 and DCC/22/0023.

The NTA is grateful for the positive and constructive liaison that has occurred with the DCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DCC regarding the progression of the

Proposed Scheme. The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of the Council and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DCC and the NTA.

Comment 3:

Regarding the interaction of The Scheme and DCC/12/0035 Dodder Greenway, AcTPrO requests that further consideration is given to the design of cycling facilities at the junction of Donnybrook Road and Eglinton Road. Whilst the design includes a holding location for cyclists intending to use the pedestrian crossing to move from Donnybrook Road (southbound) to Eglinton Terrace, there does not appear to be a similar holding location for cyclists intending to use the toucan crossing in the opposite direction.

NTA Response:

The proposed design at Donnybrook Road junction with Eglinton Road and co-ordinated tie-in with the Dodder Greenway Scheme is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 08 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.371 below.

Toucan crossing with dropped kerb arrangement is provided at the opposite side of the Dodder Greenway tie-in, in accordance with Section 7.5 of Appendix A4.1 (Preliminary Design Guide Booklet) in Volume 4, Part 1 of 4 of the EIAR. The pedestrian priority zone provided at this side allows for the cyclists while giving priority to the pedestrian.

An extract from Section 7.5, Figure 29 is shown in Figure 3.372.

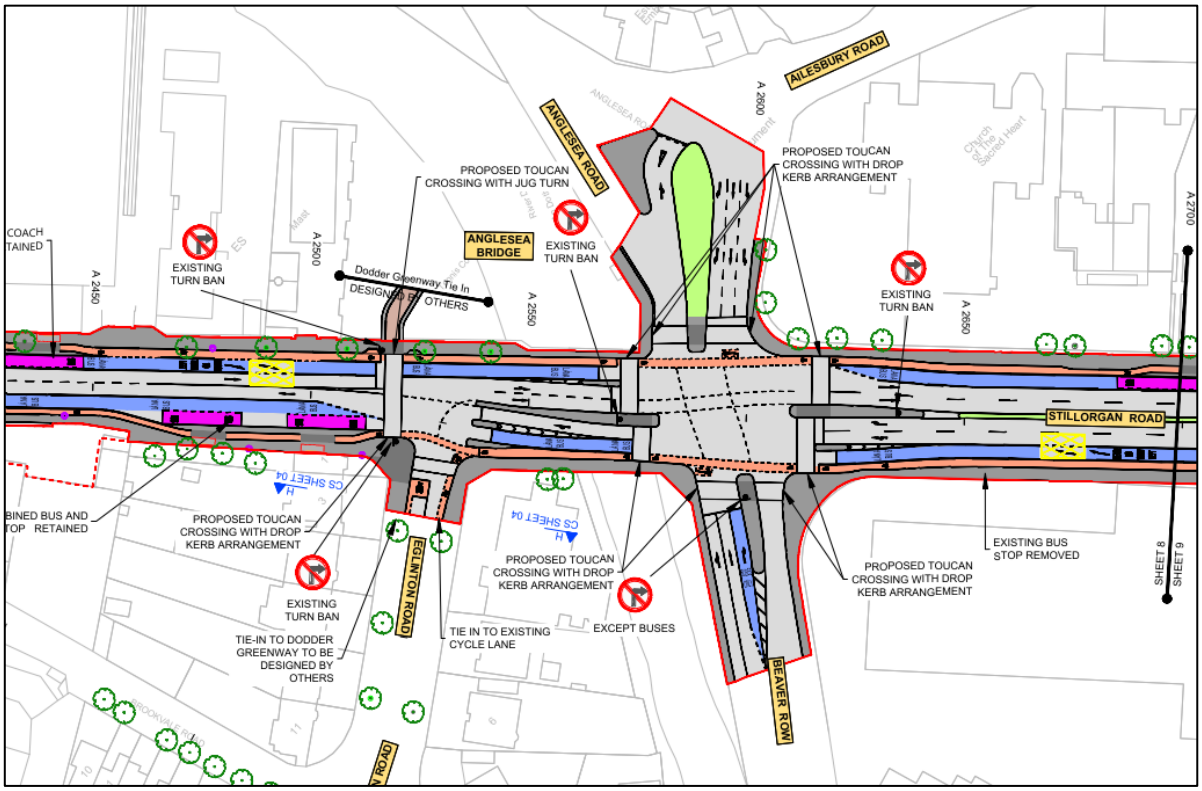


Figure 3.371: Extract from General Arrangement Drawing (Sheet 08)

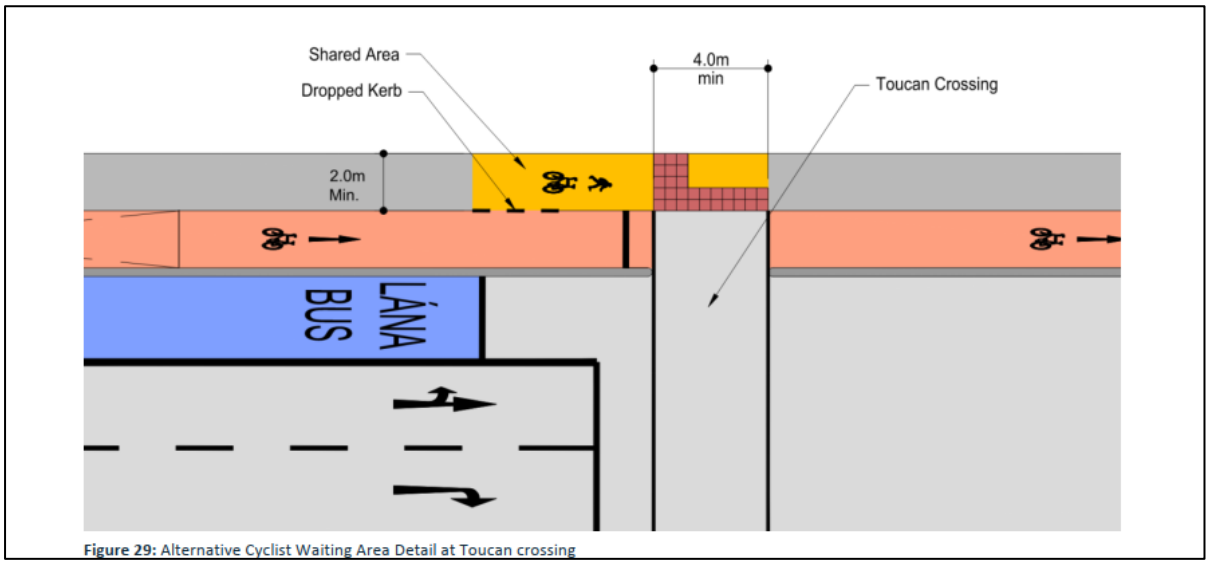


Figure 3.372: Extract from Preliminary Design Guidance Booklet (Figure 29)

Comment 4:

AcTPrO also requests clarity on the proposed 'reduced width segregated cycle tracks' from Mulberry Lane to Rampart Lane, as per the Proposed Scheme's non-technical summary.

NTA Response:

The Proposed Scheme design between Mullberry Lane and Rampart Lane is presented in the General Arrangement Drawings which is provided as an Appendix in the 02-General Arrangement Drawings Sheet 07 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.373 below.

The proposed design at this location is constraint tight section running along Donnybrook Village with built up infrastructure on both sides of the carriageway. The proposed design has been optimised to provide priority for pedestrians with appropriate footpath width and for cyclists while achieving the bus priority. The proposed design provides for cycle track in both directions with reduced width of 1.5m as per the Section 5.3 of Appendix A4.1 (Preliminary Design Guidance Booklet) in Volume 4, Part 1 of 4 of the EIAR.

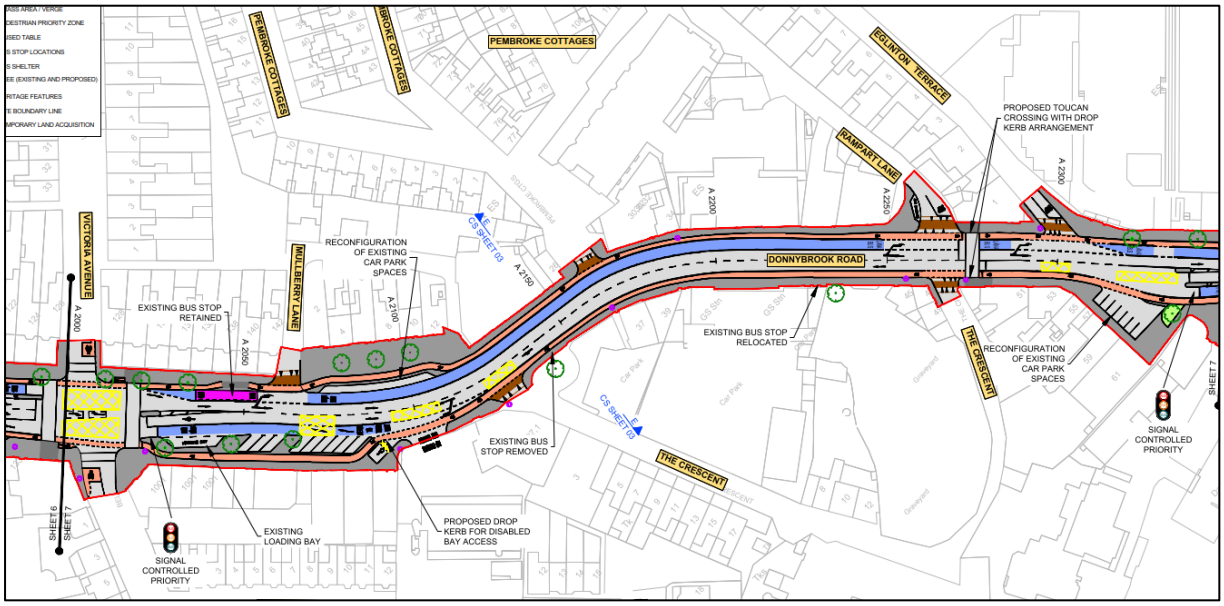


Figure 3.373: Extract from General Drawing Arrangement at Donnybrook Road (Sheet 07)

Table 4.3 (see Table 3.90 below) in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR notes the reduced cross-section on the Donnybrook section of the Proposed Scheme.

Table 3.90: Extract from Chapter 4 of the EIAR (Table 4.3)

Table 4.3: Reduced Standard Cross Sections on Section 1 of the Proposed Scheme

Location	Design Element	DMURS	Design	Justification
B10 – B75	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m – 1.75m	Cycle track narrows to between 1.5m – 1.75m over a length of 60m behind combined bus and coach stop to reduce cyclist speed.
A535 – A560	Footpath (northbound)	2.0m	1.5m	Footpath narrows locally to 1.5m at pinch point on Leeson Street canal bridge. Ties in to existing.
A640 – A690	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 40m behind bus stop and coach stop to reduce cyclist speed.
A1015 – A1050	Cycle Track (southbound)	2.0m	1.5m	Cycle track narrows locally to 1.5m over a length of 10m to tie into existing kerbs and avoid impacting trees.
A1615 – A1690	Cycle track (both directions)	2.0m	Varies Approx. 1.5m – 2m	Cycle track narrows locally to 1.8m over a length of 30m southbound to tie into existing kerbs, and narrows locally to 1.5m over a length of 40m northbound on approach to and behind combined bus stop to reduce cyclist speed.
A1730 – A1790	Cycle track (both directions)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 60m northbound and southbound to tie into existing kerbs.
A1790 – A1840	Footpath (northbound)	2.0m	1.8m	Footpath narrows to 1.8m over a length of 50m due to space constraints.
A1790 – A1910	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 150m to tie into existing kerbs.
A1910 – A2000	Cycle track (both directions)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 40m southbound to tie into existing kerbs, and narrows to 1.5m over a length of 90m northbound on the approach to and behind combined bus stop to reduce cyclist speed.
A2025 – A2045	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 20m due to space constraints.
A2115 – A2250	Cycle track (both directions)	2.0m	Varies Approx. 1.3m – 1.75m	Cycle track narrows to 1.5m over a length of 135m southbound and 60m northbound to tie into existing kerbs. Cycle track narrows at pinch points to between 1.3 – 1.5m width.
A2115 – A2310	Footpath (both directions)	2.0m	Approx. 1.5m	Various pinch point locations along Donnybrook Road.
~~A2310 – A2360~~	~~Cycle Track (southbound)~~	~~2.0m~~	~~1.5m~~	~~Cycle Track narrows locally to avoid impacting existing tree.~~
A2360 – A2460	Cycle Track (northbound)	2.0m	1.5m	Cycle Track narrows locally to provide full width footpath.
A2520 – A2580	Cycle Track (northbound)	2.0m	1.7m	Cycle Track tapers from full width to reduced width through junction.

Response to Section 2.4.2.5 Environmental Protection Division Comments

Through the very positive and constructive liaison relationship with the DCC BusConnects Liaison Office throughout the design and planning process there has been consultation with the DCC Environmental Protection Division in regard to the need for Sustainable Environmental Infrastructure as part of the development of the Proposed Scheme.

The NTA has, in consultation with DCC, followed the principles of integrating Sustainable Urban Drainage Systems with all other environmental aspects of the Proposed Scheme using best practice solutions appropriate to the Proposed Scheme. This has included consideration of a softer engineered approach as applicable to manage surface water at source as a greener, more environmentally effective approach for managing storm water. In Chapter 13 (Water) in Volume 2 of the EIAR, Section 13.4.1.1 outlines the key design principles for the proposed surface water management design for the scheme.

DCC raised a number of comments on the drainage design as follows:

- DCC stated that the legend should match the symbols in the Proposed Surface Water Drainage drawings, i.e. the symbol for discharge location is a blackened triangle in the legend but is a red circled D In the design drawings.

The Proposed Surface Water Drainage Drawings which are provided as an Appendix in the 11-Proposed Surface Water Drainage Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shows the discharge location in red circled D. The Proposed Scheme design and the EIAR has been carried out on the basis of design intent i.e. the outfalls shown in red and circled D and the NTA are therefore satisfied that this does not change the findings and conclusion in the impact assessments.

- DCC stated that at Chainage A3100 - 3200 in the Proposed Surface Water Drainage drawings, the additional impermeable area has no treatment or storage detailed in the drawings and have requested the treatment volume and the attenuation strategy for that location.

This catchment at Chainage A3100 – 3200 is only adding a very minor impermeable area of 23m^2, which is considered sufficiently small to mitigate the need for additional attenuation measures here. NTA are therefore satisfied that this does not change the design, findings, and conclusion in the impact assessments.

- DCC stated that at Chainage A3450 in the Proposed Surface Water Drainage drawings, Bio retention areas should be employed where possible and practicable to improve the runoff and overall water quality.

The road layout at Chainage A3450 has been designed to ensure the impermeable area is less than the new permeable green area. On this basis, no new drainage measures are proposed here. Bio retention areas, or nature-based solutions generally have been proposed throughout the scheme as much as feasible to provide attenuation and improve water quality.

The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Drainage comments provided in the Appendix as these matters were the subject of extensive liaison throughout the design development process. The NTA will however continue the very positive and constructive liaison with DCC throughout the detailed design and construction process.

Conditions / Recommendations

In regard to the Recommendations / Conditions of the Environmental Protection Division set out in the Appendix, NTA is satisfied as set out above that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Environmental Protection Division inputs regarding criteria and processes as these matters were the subject of extensive liaison throughout the design development process.

These points can be grouped under three general headings, which are responded to below:

Sustainable Drainage and Permeability

The drainage design is based on a number of general principles, which are set out in Appendix K (Drainage Design Basis Document) as part of the Preliminary Design Report in the Supplementary Information. A SuDS drainage design has been developed as a first preference and in accordance with the SuDS Management Train described in the CIRIA SuDS manual (CIRIA 2015). The CIRIA SuDS Manual recommends that when considering SuDS solutions, the preferred approach is a hierarchy whereby runoff using source control solutions (e.g. pervious surfacing) are considered first. Where source control is not possible or cannot fully address an increase in runoff from a development, residual flows are then managed using site controls (e.g. bioretention / infiltration basins). If this is not practical or residual flows remain above existing runoff rates, regional controls (e.g., oversized pipes) are used. SuDS provide the dual benefits of controlling flow and treating water quality.

In areas where the catchment is proposed to remain unchanged as no additional impermeable areas are proposed, the design consists of relocating existing gullies (where possible) to new locations.

The details of drainage measures proposed for each catchment and subsequently each water body are provided in Table 13.12 in Chapter 13 (Water) in Volume 2 of the EIAR. It is noted that no new outfalls are proposed as part of the Proposed Scheme.

Drainage Details

A number of comments refer to the proposed drainage details included in Appendix K (Drainage Design Basis Document) as part of the Preliminary Design Report in the Supplementary Information which is noted in Section 4.6.15.4 in Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR as one of the relevant guidance documents for drainage design. In this regard it is noted that the Proposed Scheme, and indeed the BusConnects Dublin Infrastructure Works as a whole, interacts with numerous local authorities, who may have differing requirements in relation to drainage details.

The BusConnects Core Bus Corridor Drainage Design Basis' document includes options for consideration that have been developed with regard to the necessary standards and good industry practice. The NTA will continue to liaise closely with Dublin City Council Environmental Protection Department.

Flood Risk

The flood risk associated with the Proposed Scheme is dealt with within Appendix A13.2 (Site Specific Flood Risk Assessment) in Volume 4, Part 3 of 4 of the EIAR. The FRA has been prepared in accordance with the Department of the Environment, Heritage, and Local Government (DEHLG) and the Office of Public Works (OPW) Planning System and Flood Risk Management - Guidelines for Planning Authorities (hereafter referred to as the FRM Guidelines) (DEHLG and OPW 2009). The Flood Risk Assessment covers three stages of a Site Specific Flood Risk Assessment (Identification of flood risk, initial flood risk assessment and detailed assessment supported by CFRAM hydraulic modelling). The Flood Risk Assessment also includes the 'Development Management Justification Test' (Box 5.1 of the 2009 Planning System Flood Risk Management Guidelines) and concludes that the development satisfies the requirements of the Development Management JT (Justification Test). Refer to Section 2.3 of the Flood Risk Assessment Report.

In relation to pluvial flood risk, it should be noted that all the proposed networks have been modelled independently of their length. The proposed networks are attenuated to existing runoff rates before discharging to the existing network. Where possible, SuDS and Green Infrastructure measures have been incorporated, preference has been given to nature-based SuDS solutions (tree pits/rain gardens interlinked by filter drains) however the following two constraints were experienced in the design.

Where the SuDS solution will not provide sufficient storage to attenuate the discharge down to the allowable discharge rates, oversized pipes will be used to augment the storage capacity of the SuDS solutions.

Where there is no space available in the public realm to accommodate a SuDS solution due to the presence of existing underground utilities, the solution will be to utilise oversized pipes.

It is not feasible to provide a separate surface water network in areas where there is no space for it due to the presence of existing underground utilities.

Response to Section 2.4.2.6 Water Framework Directive

This section summarises the observations set out in Section 2.4.2.6 and the NTA responses.

The submission disagrees with the evaluation of the sensitivity of identified Water Framework Directive (WFD) receptors in Section 13.2.4.2 in Chapter 13 (Water) in Volume 2 of the EIAR for the River Dodder. The submission expresses the view that the WFD should take precedence over National Roads Authority and UK Environmental Agency criteria. It requests that an evidence-based assessment of the impact of the Proposed Scheme on the water quality status of both rivers within the curtilage of the proposed project, including both ecological and chemical status.

Section 13.1 states that:

'*An assessment of Proposed Scheme's compliance with the requirements of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (hereafter referred to as the Water Framework Directive (WFD)) is provided in Appendix A13.1 Water Framework Directive (WFD) Assessment in Volume 4 of this EIAR; the status of WFD water bodies and protected areas within the Study Area are provided in Section 13.3 and a summary of the conclusions of the WFD assessment is provided in Section 13.6.3*'.

Section 13.2.2 details the relevant guidelines, policy, and legislation and the WFD is listed as the first item in Section 13.2.2.1. In the final paragraph of Section 13.2.2.1, it is stated that:

'*In the absence of WFD assessment guidance specific to Ireland, the assessment has been carried out using the United Kingdom (UK) Environment Agency's Water Framework Directive Assessment: Estuarine and Coastal waters (updated 2017) (Environment Agency 2016). No specific guidance exists for freshwater water bodies, however this guidance was used as the basis of the UK Planning Inspectorate (PINS) Advice Note Eighteen: The Water Framework Directive (PINS 2017) in which it sets*

out the stages of an assessment. On this basis it is considered appropriate to use for the assessment of the Proposed Scheme'.

Appendix A13.1 (Water Framework Directive Assessment) in Volume 4, Part 3 of 4 of the EIAR documents that the design of the Proposed Scheme has taken account of the primary requirements of the WFD to protect and improve water quality in all waters, including surface waters. These contiguous waterbodies are protected waterbodies under Article 4 of the Water Framework Directive. To support the achievement of the legislative obligations the Proposed Scheme is designed to ensure no deterioration of the status of any waterbody to which it is contiguous with downstream and will not jeopardise the attainment of good ecological and good surface water chemical status. The assessment has been produced in support of the application using publicly available data. It is an assessment in its own right, independent of the EIAR but using the same scheme detail and data, in addition to that which is WFD specific.

In Section 13.3.9.2 in Chapter 13 (Water) in Volume 2 of the EIAR, the Dodder was assigned high sensitivity, stating:

'*In terms of assigning sensitivity, a moderate WFD status would normally result in a Medium to High Status, however there is an indirect connection to South Dublin Bay SAC via the Liffey Estuary and this leads to it being confirmed as High sensitivity. The presence of salmonid species also supports this (if the water body was designated as a salmonid river it would be Very High sensitivity'*.

An interpretation of the likely effects of the Proposed Scheme with regard to WFD compliance is included in the impact assessment section of Chapter 13 (Water) in Section 13.6.3 and Table 13.19 and details the compliance of the Proposed Scheme with the environmental objectives of the WFD.

For chemical status, the evidence-based compliance assessment in Appendix A13.1 concludes that during the Construction Phase there is potential for accidental release of chemicals which are on the Environmental Quality Standards Directive (EQSD) list (for example, hydrocarbons); however, with the implementation of control and mitigation measures outlined in the Surface Water Management Plan (SWMP) (in Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4, Part 1 of 4 of the EIAR) there will be no significant impacts. No substances on the EQSD list will be released during operation (Table A13.7 in Appendix A13.1). Further, it has been concluded that the study area is known to contain sources of known pressures including urban wastewater treatment plants (UWWTPs), storm water overflows (SWOs) and combined sewer overflows (CSOs). The Proposed Scheme does not include any new discharge points and will not impact the flow or volume of current surface water drainage. The CEMP (Appendix A5.1) which includes an SWMP will also be implemented to mitigate potential impacts in relation to surface water contamination.

The evidence-based compliance assessment in Appendix A13.1 also describes the assessment for ecology (habitats and fish) which were assessed in line with all relevant guidance, as outlined in Tables A13.5 and A13.6. Risks to ecology under WFD include loss of habitat, loss of protected species and prey species. The assessment concludes that the potential for these impacts will not be significant. Section A13.5.2.1 states that:

'*WFD assessment primarily considers the operation of a scheme. However, for biological elements, potential construction impacts are often considered as they have the potential for long-term change if a potential impact is considered to be significant. Therefore, it is important to also note here that a Construction Environmental Management Plan (CEMP) (refer to Appendix A5.1 in Volume 4 of the EIAR) and the Surface Water Management Plan (SWMP) contained within the CEMP will be implemented for construction management and sediment control measures respectively*'.

The evidence-based compliance assessment in Appendix A13.1 records that for fish, the risks to the receptor are due to noise from construction and operation, the potential release of suspended sediment concentrations and the creation of plumes as a result, and contaminated surface water runoff. Section A13.5.2.2 states that:

'*Chapter 9 (Noise & Vibration) in Volume 2 of this EIAR has determined that, with the incorporation of the various mitigation measures outlined in that Chapter, there are no significant residual noise or vibration impacts during construction or operation. As above, a CEMP and SWMP (refer to Appendix A5.1 in Volume 4 of this EIAR) will be implemented, to reduce any risk of suspended solid release. In the unlikely event of an accidental spillage, the emergency response plan will be activated, and on-site*

spill kits utilised. Furthermore, no instream works are proposed as part of this Proposed Scheme. The Proposed Scheme does not propose to increase the current flow or volume of surface water runoff.

The evidence-based assessment completed in Appendix A13.1 (and summarised in Chapter 13 (Water)) comprises an appropriately-scoped and comprehensive evaluation of the Proposed Scheme with regard to the WFD, and it concludes that the Proposed Scheme is consistent with the objectives of the WFD.

Response to Section 2.4.2.7 Flood Prevention

DCC raised a number of specific comments on flood prevention in this section of their submission as follows:

1) DCC stated that the FRA should reference the current DCC development plan, not the previous one.

We note the comment in relation to reference to the current DCC Development Plan. NTA satisfied that this does not change the design, findings and conclusion in the impact assessments presented in EIAR.

2) DCC stated that any new drainage to rivers should be protected by flap valves.

The details of drainage measures proposed for each catchment and subsequently each water body are provided in Table 13.12 in Chapter 13 (Water) in Volume 2 of the EIAR. It is noted that no new outfalls are proposed as part of the Proposed Scheme.

3) DCC stated that at detailed design stage the following items should be provided and agreed on:

    a. More detailed cross sections for crossings of the River Dodder should be within the FRA.

    b. A plan for dealing with local pluvial flooded areas where flood depths on the carriageway are predicted to be above 300mm.

    c. A Climate Change Flood Adaptation Plan for river crossings

The Flood risk associated with the Proposed Scheme is dealt with within the Flood Risk Assessment included in EIAR Volume 4 Appendices Part 2 of 2, Appendix A13.2. The FRA has been prepared in accordance with the Department of the Environment, Heritage and Local Government (DEHLG) and the Office of Public Works (OPW) Planning System and Flood Risk Management - Guidelines for Planning Authorities (hereafter referred to as the FRM Guidelines) (DEHLG and OPW 2009). The Flood Risk Assessment covers three stages of a Site-Specific Flood Risk Assessment (Identification of flood risk, initial flood risk assessment and detailed assessment supported by CFRAM hydraulic modelling). The Flood Risk Assessment also includes the 'Development Management Justification Test' (box 5.1 of the 2009 Planning System Flood Risk Management Guidelines), and concludes that the development satisfies the requirements of the Development Management JT (Justification Test). Refer to Section 2.3 of the Flood Risk Assessment report.

The NTA is grateful for the positive and constructive liaison that has occurred with the DCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DCC regarding the progression of the Proposed Scheme. The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of the Council and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DCC and the NTA. During the detailed design, the NTA will implement the three points raised above, such as providing cross sections of the River Dodder, plans to deal with local flooding on the carriageway, and a Climate Change Flood Adaptation Plan for river crossings.

Response to Section 2.4.3 Archaeological Section Comments

This section summarises the observations set out in Section 2.4.3 (including reference to the Appendix) and NTA responses.

NTA acknowledge that DCC's Archaeology Section states that the EIAR chapter (Chapter 15 (Archaeological & Cultural Heritage) in Volume 2) provides a desk study of published and unpublished documentary and cartographic sources, supported by a field study. This section describes the findings of the archaeological assessment in the EIAR and the proposed mitigation measures assessment of the Proposed Scheme.

The NTA notes all the recommendations set out in the DCC Report Appendix from the Archaeology Section, including that the NTA appoint a Project Archaeologist to oversee the delivery of the archaeological strategy. In Chapter 15 of the EIAR, Section 15.5.1.1 it states that:

> '*The NTA will procure the services of a suitably-qualified archaeologist as part of its Employer's Representative team administering and monitoring the works.*
>
> *The appointed contractor will make provision for archaeological monitoring to be carried out under licence to the DHLGH and the NMI, and will ensure the full recognition of, and the proper excavation and recording of, all archaeological soils, features, finds and deposits which may be disturbed below the ground surface.*'

The Archaeology Section also recommends that the primary archaeological paper archive for all excavations be prepared and deposited with the Dublin City Archaeological Archives within a timeframe to be agreed with the planning authority. The NTA will liaise with DCC in regard to archival processes.

Response to Section 2.4.4 Conservation Section Comments

This section summarises the observations set out in Section 2.4.4 (including reference to the Appendix) and NTA responses.

NTA acknowledges that DCC's Conservation Department welcomes the comprehensive assessment on Architectural Heritage (Chapter 16 (Architectural Heritage) in EIAR Volume 2 and Appendices A16.1 to A16.3 in EIAR Volume 4 Part 3 of 4) submitted as part of the EIAR, and that DCC notes the comprehensive assessment of the impact of the Proposed Scheme on the architectural heritage, streetscape and urban environment generally and welcomes the proposed mitigation measures across the scheme.

DCC states that the following policies and provisions in particular should be taken into account in the consideration of all proposed routes and their impacts on the architectural and built heritage of the city:

4) DCC Development Plan 2022-2028, Chapter 11, specifically Policies BHA2, BHA7, BHA9, BHA10, BHA15, BHA16, BHA18, BHA24 and BHA26; and

5) Dublin City Tree Strategy 2016-2020.

Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR considers relevant policies and provisions of the DCC Development Plan 2022-2028 as listed in Section 16.2.4. In terms of the specific policies a number of them are referenced in Chapter 16 of the EIAR as follows:

6) Policy BHA2 is referenced in Section 16.3.1.3;

7) Policy BHA7 is referenced in Section 16.3.1.4.2;

8) Policies BHA9 and BHA10 are referenced in Section 16.3.1.5;

9) Policy BHA15 is referenced in Section 16.3.1.9;

10) Policy BHA16 is referenced in Section 16.3.1.8;

11) Policy BHA18 is referenced in Section 16.3.1.10; and

12) Policy BHA26 is referenced in Sections 16.3.1.2 and 16.3.1.8.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR considers relevant DCC policies and plans, including the Dublin City Tree Strategy 2016-2022 as listed in Section 17.2.2 of the Chapter.

DCC also states that the applicant should comply with the following guidelines:

13) Architectural Heritage Protection Guidelines for Planning Authorities (2011); and

14) Department of Culture, Heritage and the Gaeltacht – Technical Advice Series (i.e. 'Paving – the conservation of historic ground surfaces' and 'Iron – the repair of wrought and cast ironwork').

Both of the above named guidelines are referenced in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. For instance, in Section 16.5 (Mitigation and Monitoring Measures), it is acknowledged that Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of 4 of the EIAR, has been prepared in accordance with the above two sets of guidelines.

The NTA acknowledge the comments raised by the Conservation Section and are satisfied that they are addressed as set out in the EIAR as follows.

Protected Structures and their Settings

The NTA notes that DCC made specific reference to a number of protected structures in their submission. Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the potential impacts on Protected Structures within the study area (50m in all directions from the Proposed Scheme boundary). Architectural heritage features within that study area, including Protected Structures, are described in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4 of the EIAR, and are all mapped in Figure 16.1 in Volume 3 of the EIAR. Chapter 16, Section 16.4.3.1 describes the potential impacts on Protected Structures during the Construction Phase. There is only one feature on the DCC Record of Protected Structures which have been assessed as being directly impacted during the Construction Phase (Errol House RPS 7846 – described in Section 16.4.3.5 on Designed Landscapes) which will experience a potential Direct, Negative, Not Significant and Temporary impact as a result of impact on the boundary wall (which is already a replacement wall from when the N11 was widened), while Section 16.4.3.1 of the Chapter states that 326 Protected Structures will experience an Indirect, Negative, Moderate, Temporary impact during the Construction Phase across the whole Proposed Scheme, which would include those listed DCC Protected Structures located within the study area.

Section 16.4.4.1 describes the potential impacts on Protected Structures during the Operational Phase. There are no direct impacts identified on any DCC Protected Structure, however there are a number that have been assessed as having a potential Indirect, Negative, Slight, Long-Term impact on St. Stephen's Green and on Leeson Street Upper due to proposed cantilever signal poles in those locations, and 40 Morehampton Road due to a proposed bus shelter.

DCC state that all Protected Structures in close proximity to construction works be protected and works be supervised by a conservation professional. Section 16.5.1.1 (Mitigation and Monitoring Measures) of Chapter 16 (Architectural Heritage) states the following requirement for works in the vicinity of Protected Structures:

> '*The mitigation is for recording, protection and monitoring prior to, and for the duration of the Construction Phase. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR*'.

NIAH Structures and their Settings

The NTA notes that DCC made specific reference to a number of NIAH Structures in their submission. Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR describes the potential impacts on NIAH Structures within the study area (50m in all directions from the Proposed Scheme boundary). Architectural heritage features within that study area, including NIAH Structures, are described in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4 of the EIAR, and are all mapped in Figure 16.1 in Volume 3 of the EIAR. Chapter 16, Section 16.4.3.4 describes the potential impacts on NIAH Structures during the Construction Phase. There are no features on the list of NIAH Structures within DCC's functional area which have been assessed as being directly impacted during

the Construction Phase. With respect to the Former Waterworks building (NIAH 50110481) as raised in the DCC Submission, the assessment found there will be a potential Indirect, Negative, Moderate and Temporary impact on that feature due to the proposed paving works on Leeson Street, which will reduce to an Indirect, Negative, Slight and Temporary impact following mitigation measures as outlined in Section 16.5.1.4 and as stated within the DCC Submission. There are no NIAH structures assessed as being impacted during the Operational Phase as described in Section 16.4.4.

With respect to the proposed bus stop at Thornfield on the Stillorgan Road (Reference CBC0013BTH105, NIAH Garden Survey Reference 2425), the potential Construction Phase impact on this feature is described in Section 16.4.3.5 as Indirect, Negative, Slight and Temporary, while the potential Operational Phase impact (described in Section 16.4.4.2) has been identified as Indirect, Negative, Not Significant and Long-Term due to the potential visual impact of a proposed bus shelter in front of the feature. The mitigation proposed in Section 16.5 of Chapter 16 aligns with the mitigation as described in DCC's submission to manage and reduce the impact on that feature.

Architectural Conservation Areas

The NTA notes that DCC made specific reference to the Belmont Avenue and Mount Eden Road Architectural Conservation Area (ACA) in their submission. This ACA was assessed in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR and included in Appendix A16.2 (Inventory of Architectural Heritage Sites) in Volume 4 Part 3 of 4, as well as being mapped in Figure 16.1 (Sheet 3 of 26) in Volume 3 of the EIAR. Section 16.4.3.2 of Chapter 16 describes the potential Construction Phase impact as Indirect, Negative, Moderate and Temporary, while the mitigation measures described in Section 16.5.1.2 will reduce the predicted impact to Indirect, Negative, Slight and Temporary. The mitigation measures described in the EIAR align with the mitigation requested in the DCC submission.

Red Hatch Conservation Areas, Z2 and Z8 Zonings

The NTA notes that DCC made specific reference to a number of these Conservation Areas in their submission. Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR lists all Conservation Areas within the study area in Table 16.8. The four Conservation Areas listed in Table 16.8 matches the list in DCC's submission. With respect to the Leeson Street Lower, Grand Canal and Dodder River Conservation Areas, the NTA notes that DCC's submission agrees with the level of impact identified within the EIAR.

With respect to the St Stephen's Green Conservation Area, potential impacts on St Stephen's Green have been assessed in both Chapter 16 and Chapter 15 (Archaeological & Cultural Heritage) in Volume 2 of the EIAR. Given its designation as a National Monument, the impact on the park is largely assessed within Chapter 15 (Archaeological & Cultural Heritage), where Section 15.4.3.1.1.1 assesses the potential Construction Phase impact as being Negative, Significant and Temporary given the minor works to the path outside the park boundary and construction of new signal poles and cycle tracks, which will have a temporary impact on the setting of the site. Section 15.5.1 describes the proposed mitigation measures, which are in agreement with the DCC measures as described in their submission. Chapter 15 (Archaeological & Cultural Heritage), Section 15.5.1.3.1.1 describes the post-mitigation impact on St. Stephen's Green as being Positive, Moderate and Long-Term due to the minor public realm improvements in the vicinity of the entrance. Chapter 16 (Architectural Heritage) assesses specific impacts on aspects of the park, namely the impact on it as a Protected Structure, with the Operational Phase assessment identifying a potential Indirect, Negative, Slight and Long-Term impact as a result of the visual impact of a new proposed cantilever signal pole at the junction of St. Stephen's Green East and Leeson Street Lower (as described in 16.4.4.1).

With respect specifically to the interaction with the Z2 and Z8 zonings, the NTA notes the zoned areas as listed in DCC's submission. Chapter 16 (Architectural Heritage) describes and quotes the relevant policies within the DCC Development Plan which have informed the assessment, specifically under Section 16.3.1.5 of Chapter 16 (Architectural Heritage) where Policy BHA9 is described, '*To protect the special interest and character of all Dublin's Conservation Areas – identified under Z8 and Z2 zoning objectives and denoted by red line conservation hatching on the zoning maps…*'. Appendix A2.1 (Planning Report) also describes and maps all of the zoning with which the Proposed Scheme interacts, including Z2 and Z8.

Industrial Heritage Sites

The NTA notes the list of industrial heritage structures within the DCC Submission. All of those DCIHR features listed in the DCC submission which are within the 50m study area are assessed in either Chapter 15 (Archaeological & Cultural Heritage) or Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR, and are included in the inventories in Appendix A15.1 and A16.2 in Volume 4 Part 3 of 4 of the EIAR. They are also mapped (as relevant) in Figure 15.1 in Volume 3 of the EIAR. It should be noted that the engine house on the Stillorgan Road (DCIHR 22_04_012) is located outside the study area of the Proposed Scheme and has therefore not been included within either assessment given that the feature is located too far from the Proposed Scheme to have the potential for significant impacts.

Potential Impacts on Historic Paving and Kerbing, Historic Street Furniture and Lamp Standards and Other Features

In regard to historic paving and kerbing, historic street furniture and lamp standards and other features, NTA recognises the importance of protecting historic street surfaces, street furniture and other historical features and note that mitigation measures have been considered in Section 16.5.1 of Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR as set out below:

'*Proposed mitigation measures for architectural heritage features are outlined in this Section and detailed in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. The methodology has been prepared in accordance with the Department of Arts, Heritage and the Gaeltacht (DAHG) Architectural Heritage Protection: Guidelines for Planning Authorities (DAHG 2011a) and Paving: the conservation of historic ground surfaces (McLoughlin 2017).*'

- With respect to lamp posts and tram standards, the NTA notes the summary of potential impacts within the DCC submission, which aligns with the assessment as described within Chapter 16 (Architectural Heritage) of the EIAR, Section 16.4.3.7.2 which states that '*Nineteen lamp posts of Regional Importance and Medium Sensitivity will be directly impacted during the Construction Phase, where it is proposed that they will be moved to accommodate urban realm improvements, road realignments and cycle lanes...There is the potential for loss or damage to the lamp posts during their removal, transportation, storage, and reinstatement. The magnitude of impact is High. The potential Construction Phase impact will be Direct, Negative, Significant and Temporary*'. Section 16.5.1.7.2 of Chapter 16 (Architectural Heritage) describes the proposed mitigation measures, which is in alignment with the mitigation measures outlined in the DCC submission.

- With respect to the two milestones described in the DCC submissions, these are assessed within Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR under Section 16.4.3.7.3, where it states that the potential impact on both milestones, '*will include changes in the vicinity of the street furniture, which will carry a potential risk of damage during the Construction Phase. The magnitude of impact is Medium. The potential Construction Phase impact will be Indirect, Negative, Moderate and Temporary*'. Section 16.5.1.7.3 describes the mitigation measures as follows:

  '*Mitigation consists of the recording, protection and monitoring prior to and during the Construction Phase. Recording, overseeing of protective measures and monitoring is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor and in accordance with the methodology provided in Appendix A.16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of the EIAR, reducing the magnitude of the risk from Medium to Low. The predicted post-mitigation Construction Phase impact is Indirect, Negative, Slight and Temporary.*'

  The NTA notes that this is in alignment with the mitigation measures described in DCC's submission.

- With respect to historic paving, surface finishes and other street furniture, the NTA notes DCC's summary of the impact assessment, which aligns with the assessment described in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. The NTA also acknowledges the mitigation measures described in the DCC submission and note that they align with those described in Section 16.5.1.7.4 of Chapter 16 (Architectural Heritage).

Boundary Treatments

The NTA notes the comments from DCC's Conservation Section regarding the removal and reinstatement of boundary walls, railings, entrance gates and hedgerows as well as garden plantings and features. Chapter 5 (Construction) in Volume 2 of the EIAR describes the proposals for land acquisition and boundary treatments in Section 5.5.2.1 as follows:

> '*Any lands acquired temporarily to facilitate construction work will be returned to landowners on completion of the works. Existing boundary walls or fencing being relocated will be constructed to match the existing conditions, unless otherwise agreed. The removal of trees, vegetation, lawns, paving etc. will be minimised in so far as practicable.*'

Heritage walls and boundary features will be deconstructed and reinstated in accordance with Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of 4 of the EIAR. This

With specific reference to Mount Errol (RPS 7846), Section 16.4.3.5 of Chapter 16 (Architectural Heritage) states that:

> '*The proposed land take to accommodate a bus stop on the Stillorgan Road will impact on part of the boundary wall to Mount Errol House, Stillorgan Road (DCC RPS 7846) necessitating its removal and reinstatement. The boundary wall is however a replacement wall, probably constructed when the N11 was widened rather than the original demesne wall. The wall will be repositioned as a result of a proposed land take. The magnitude of impact is Negligible. The potential Construction Phase impact will be Direct, Negative, Not Significant and Temporary.*'

The NTA note the mitigation outlined in DCC's submission, and recognises that it is in alignment with the mitigation as outlined in Section 16.5 of Chapter 16 (Architectural Heritage) and Appendix A16.3.

Cycle Lanes

DCC noted that the Conservation Section request that where cycleways are located in close proximity to Protected Structures and within Architectural Conservation areas generally, that an alternative high quality cycle lane surface is provided in-lieu of red tarmacadam.

The NTA notes this comment. As outlined above, the use of red coloured asphalt, or red coloured epoxy resin has been specified for all cycle tracks across the BusConnects Infrastructure Works to ensure legibility and conspicuity of the proposed cycle tracks and to ensure safety for vulnerable road users.

New Traffic Semaphore & Signage

DCC notes that careful consideration should be given to the siting of associated utilities and traffic management signage in relation to Protected Structures and Conservation Area, historic paving and historic street furniture. DCC noted that signage should be kept to the necessary minimum. DCC's conservation section recommended that consideration is given to the rationalisation of all signage across the BusConnects routes to reduce visual clutter.

The NTA notes this comment. Significant efforts have been made during the design process to minimise above-ground utility infrastructure where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable.

New Traffic Signalling Poles

DCC recommend that cantilevered signal poles be omitted and alternative solutions sought where they are proposed in the vicinity of Protected Structures, namely at the junctions of St. Stephen's Green East and Leeson Street Lower, Leeson Street Upper and Grand Parade, and the junction with Appian Way.

The NTA notes this comment. As set out in Section 12.9.1 of the Preliminary Design Report provided as part of the Supplementary Information, '*All traffic signal equipment is designed in accordance with Chapter 9 (Traffic Signals) of the TSM* [Traffic Signs Manual]. *Traffic signal modelling, including LinSig models, determines the phasing and staging of the traffic signals which determines the design and positioning of the traffic signal heads. The TSM clearly defines the requirements and positioning of traffic signal heads, detection equipment, and associated traffic signal poles*'.

Section 12.9.1.2 specifically on the subject of cantilever signal poles states:

> '*Cantilever poles will be installed on multi-lane approaches where there is a potential for a high sided vehicle, including buses, to block the clear visibility of the primary traffic signal of vehicles in the outer lanes. They will also be installed at locations where a median island is not available to mount a second primary, required to control separate streams on a particular arm of a junction.*
>
> *Cantilever poles may also be used to provide a mounting structure for secondary signals, where a median is not available and a position on opposing primary pole is outside the required line of sight.*'

Significant efforts have been made during the design process to minimise cantilever traffic signal poles where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable. The NTA recognises the importance of the rationalisation of street furniture across the Proposed Scheme to reduce visual clutter and of particular importance in relation to the siting of associated utilities and traffic management signage in the vicinity of Protected Structures and Conservation Areas, historic paving and historic street furniture.

Proposed Bus Stops

DCC makes a number of comments regarding bus stops / shelters and Protected Structures, and in particular requests the omission of bus shelters at 40 Morehampton Road, 92 Morehampton Road and 117 Morehampton Road.

The installation of bus shelters has been considered in the architectural assessment in Chapter 16 (Architectural Heritage). A comprehensive review of existing bus stops along the route of the Proposed Scheme has been carried out and is documented in Appendix H of the Preliminary Design Report contained in the Supplementary Information. Refer to Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR (Section 4.5) on the location of bus stops.

Section 4.13.6 of the Preliminary Design Report, included in the Supplementary Information outlines the requirement for Bus Shelters as part of the Proposed Scheme as follows:

> '*Bus shelters provide an important function in design of bus stops. The shelter will offer protection for people from poor weather, with lighting to help them feel more secure. Seating is provided to assist ambulant disabled and older passengers and accompanied with Real Time Passenger Information (RTPI) signage to provide information on the bus services.*'

Furthermore, Appendix H of the PDR includes detail of design of Bus Stops and Shelters. The optimum configuration that provides maximum comfort and protection from the elements to the travelling public is the 3-Bay Reliance 'mark' configuration with full width roof. This shelter is a relatively new arrangement which has been developed by JCDecaux in conjunction with the NTA. The shelter consists mainly of a stainless-steel structure with toughened safety glass and extruded aluminium roof beams. Appendix H states:

> '*The BusConnects Design Guide suggests that an Island Bus Stop (Figure 34) is the preferred bus stop option to be used as standard on the CBC project where space constraints allow. The minimum footpath width within which an island bus stop can be implemented is 5.4m (1.8m footpath + 1.2m cycle track + 2.4m island with shelter). This option assumes a shelter with half bay end panels. Should full panels (as seen on Figure 2.8) be required the width requirement will increase to approximately 6.3m.*'

Figure 3.374 provides an example image of the preferred full end panel shelter arrangement.

Figure 3.374: Standard 3 Bay Reliance Mark Shelter with Full Width Advertising Panel (Source: PDG)

For locations where space is constrained an option consisting of a shared bus stop landing zone can be considered. This option is indicated in Figure 3.376 and should only be considered on a case-by case basis to ensure suitability with particular attention paid to the volume of cyclists and volumes of boarding and alighting passengers. Using the narrowest non-standard bus shelter this would require a minimum width of approximately 4.0m (1.9m footpath with shelter + 1.2m cycle track + 0.75m island).

Figure 3.375 and Figure 3.376 show examples of these alternative designs.

Figure 3.375: Example of a 3-Bay Reliance Cantilever Shelter with a Narrow Roof Configuration With and With Half End Panels (Source: PDG)

Figure 3.376: Example of a 3-Bay Reliance Cantilever Shelter with a Narrow Roof Configuration With and Without Half End Panels (Source: PDG)

The provision of bus shelters in proximity to buildings of architectural significance, has been assessed in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. It notes the following with respect to protected structures (Section 16.4.4.1):

> '*Bus shelters are proposed on the north side of Morehampton Road at 40 Morehampton Road (DCC RPS 5318) which is of Medium sensitivity. There is currently a fingerpost bus stop at number 36. The Magnitude of impact will be Low. The potential Operational Phase impact of the bus shelters on the Protected Structures and the streetscape is Indirect, Negative, Slight and Long-Term.*'

It notes the following with respect to Other Structures (Section 16.4.4.3):

> '*Bus shelters are proposed at 92 Morehampton Road (CBC0013BTH141) and on the southside in front of 117 Morehampton Road (CBC0013BTH134) which are of Medium Sensitivity. There are currently fingerpost bus stops at 92 and 115 Morehampton Road. The bus shelters will have a negative visual impact on the buildings and the streetscape during the Operational Phase, the magnitude of which is Low. The potential Operational Phase impact is Indirect, Negative, Slight and Long-Term.*'

Significant Trees

The NTA notes the comments made by DCC with respect to the loss of the four significant trees in the vicinity of 86-94 Leeson Street Upper.

Chapter 17 (Landscape (Townscape) and Visual) in Volume 2 of the EIAR, documents the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme. The impacted trees are presented in the Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) and further described in Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4, Part 4 of 4 of the EIAR.

Despite the best efforts to protect trees, especially trees of a mature and significant stature there will be inevitable impacts on local trees. The Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. The specific area referenced in the DCC submission is shown on Sheet 04. As per the Tree Schedule in Appendix A17.1 (Arboricultural Impact Assessment), the removals at that location are as follows:

- Lime trees (Tree Numbers T1115 – T117) which have been assessed as Category B1 mature trees (moderate value and conservation, mainly of arboricultural value); and
- London plane tree (Tree Number T1118) which has also been assessed as a Category B1 mature tree (moderate value and conservation, mainly of arboricultural value).

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR assesses the impact as a result of the removal of trees and vegetation on the streetscape, with the Construction Phase impact across the Proposed Scheme assessed as Negative, Very Significant, Short-Term (Section 17.4.3.2.9 and Table 17.7). The chapter also assesses the general impact of construction on the streetscape per scheme section (Section 17.4.3.1), with the potential impact on the Leeson Street to Donnybrook (Anglesea Road Junction) section including '*direct impact on existing street tree planting along sections of Leeson Street Upper, Morehampton Road and in Donnybrook Village, including loss of seven large mature street trees*' with the potential impact for this section described as Negative, Moderate / Significant and Temporary / Short-Term.

The Chapter assesses the residual impact of tree and vegetation loss at 15 years post-construction in order to allow for the establishment of the proposed landscaping measures, with the residual Operational Phase impact reducing to Negative, Moderate / Significant, Long-Term over time (Table 17.12). As with the Construction Phase assessment, the chapter also assesses the general impact of the completed scheme on the streetscape per scheme section (Section 17.4.4.1), with the potential Operational Phase impact on the Leeson Street to Donnybrook (Anglesea Road Junction) section including '*continuing negative effects from loss of seven large mature street trees at Leeson Street Upper and Morehampton Road which are to be removed during the Construction Phase. Several replacement trees are proposed within this section which will reduce the negative effects over the long-term as they mature*' with the potential impact for this section described as Negative, Moderate and Short-Term, becoming Positive, Slight / Moderate and Long-Term as the landscaping and other changes become established within the streetscape.

As stated in the Preliminary Design Report, new street trees are proposed where footways are wide enough and below-ground services allow.

Response to Section 2.4.5 City Architects Division Comments

The City Architects Department welcomed the Proposed Scheme to support integrated sustainable transport use through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures. It went on to state that the Proposed Scheme will facilitate the modal shift from car dependency through the provision of walking, cycle, and bus infrastructure enhancements thereby contributing to an efficient, integrated transport system and facilitating a shift to a low carbon and climate resilient City. This Department also noted that proposals for public realm upgrades, including widened footpaths, high quality hard and soft landscaping contribute towards a safer, more attractive environment for pedestrians are included, and that the Proposed Scheme has been developed having regard to relevant accessibility guidance and universal design principles so as to provide access for all users.

The DCC submission states on pages 36-37 the applicant is to confirm that all works must comply with Part IV of the Planning Development Act 2000, citing S.52 (1) and guidelines published thereunder in 2004.

Section 16.2.4 of Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR states that:

> '*In light of the legislative protection afforded to the architectural and landscape heritage resource this study considers the various categories of special interest and significance as defined by the statutory architectural heritage guidelines. The architectural heritage assessment is guided by the provisions of the relevant statutory instruments and relevant guidelines for the protection of the architectural heritage including:*
>
> - *Department of Arts, Heritage and the Gaeltacht (DAHG) Architectural Heritage Protection: Guidelines for Planning Authorities (DAHG 2011a)*'.

Note that the Guidelines were published in 2004 and were then updated in 2011.

The DCC submission notes previous commentary provided by the City Architects Division as listed on Page 37 of the submission.

The City Architects Department goes on to provide commentary on a number of specific elements, as listed below.

Footpath Widths & Alignment

The DCC submission notes on pages 37-38 that the provision of footpaths designed to a minimum width may not be sufficient in areas of high pedestrian traffic, specifically the west side of Morehampton Road in front of commercial units no. 75 to 105 and the east and west side of Donnybrook Road. It also notes the need to account for congregation of passengers waiting at bus stops and pedestrians travelling along the footpath.

Section 4.6.2.1 of the EIAR Chapter 4 (Proposed Scheme Description) states:

> '*The desirable minimum width for a footpath is 2.0m. This width should be increased in areas catering for significant pedestrian volumes where space permits. DMURS (Government of Ireland 2013) defines the absolute minimum footpath width for road sections as 1.8m based on the width required for two wheelchairs to pass each other. Building for Everyone: A Universal Design Approach (NDA 2020), defines acceptable minimum footpath widths at specific pinch points as being 1.2m wide over a two-metre length of path.*
>
> *In line with the Road User Hierarchy designated within DMURS, at pinch points the width of the general traffic lane should be reduced first, then the width of the cycle track should be reduced before the width of the footpath is reduced, where practicable.*
>
> *Throughout the Proposed Scheme, footpath widths of two metres or wider have been proposed, however where this has not been achieved, deviations from standard have been required as outlined in Section 4.5.*'

Table 4.3 (see Table 3.91 below) in Chapter 4 (Proposed Scheme Description) lists all areas where reduced widths are required in the section of the Proposed Scheme between Leeson Street and Donnybrook (Anglesea Road Junction), with the areas listed in the DCC submission included.

Table 3.91: Extract from Chapter 4 (Proposed Scheme Description) (Page 6)

Table 4.3: Reduced Standard Cross Sections on Section 1 of the Proposed Scheme

Location	Design Element	DMURS	Design	Justification
B10 – B75	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m – 1.75m	Cycle track narrows to between 1.5m – 1.75m over a length of 60m behind combined bus and coach stop to reduce cyclist speed.
A535 – A560	Footpath (northbound)	2.0m	1.5m	Footpath narrows locally to 1.5m at pinch point on Leeson Street canal bridge. Ties in to existing.
A640 – A690	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 40m behind bus stop and coach stop to reduce cyclist speed.
A1015 – A1050	Cycle Track (southbound)	2.0m	1.5m	Cycle track narrows locally to 1.5m over a length of 10m to tie into existing kerbs and avoid impacting trees.
A1615 – A1690	Cycle track (both directions)	2.0m	Varies Approx. 1.5m – 2m	Cycle track narrows locally to 1.8m over a length of 30m southbound to tie into existing kerbs, and narrows locally to 1.5m over a length of 40m northbound on approach to and behind combined bus stop to reduce cyclist speed.
A1730 – A1790	Cycle track (both directions)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 60m northbound and southbound to tie into existing kerbs.
A1790 – A1840	Footpath (northbound)	2.0m	1.8m	Footpath narrows to 1.8m over a length of 50m due to space constraints.
A1790 – A1910	Cycle Track (southbound)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 150m to tie into existing kerbs.
A1910 – A2000	Cycle track (both directions)	2.0m	Varies Approx. 1.5m	Cycle track narrows to 1.5m over a length of 40m southbound to tie into existing kerbs, and narrows to 1.5m over a length of 90m northbound on the approach to and behind combined bus stop to reduce cyclist speed.
A2025 – A2045	Cycle Track (northbound)	2.0m	1.5m	Cycle track narrows to 1.5m over a length of 20m due to space constraints.
A2115 – A2250	Cycle track (both directions)	2.0m	Varies Approx. 1.3m – 1.75m	Cycle track narrows to 1.5m over a length of 135m southbound and 60m northbound to tie into existing kerbs. Cycle track narrows at pinch points to between 1.3 – 1.5m width.
A2115 – A2310	Footpath (both directions)	2.0m	Approx. 1.5m	Various pinch point locations along Donnybrook Road.
A2310 – A2360	Cycle Track (southbound)	2.0m	1.5m	Cycle Track narrows locally to avoid impacting existing tree.
A2360 – A2460	Cycle Track (northbound)	2.0m	1.5m	Cycle Track narrows locally to provide full width footpath.
A2520 – A2580	Cycle Track (northbound)	2.0m	1.7m	Cycle Track tapers from full width to reduced width through junction.
A2520 – A2580	Footpath (southbound)	2.0m	1.5m	Footpath narrows to 1.5m to tie into existing bridge boundary, to match existing.
A2630 – A2650	Cycle Track (northbound)	2.0m	1.6m	Cycle Track narrows locally at pinch point.

As described in Table 4.3, limited narrowing of the footpaths has been required in locations where there are space constraints or pinch points.

The DCC submission includes a condition stating that confirmation should be provided that pedestrian traffic counts have been undertaken. Pedestrian and cycle counts were undertaken at all Junction Turning Count sites to inform the micro-simulation modelling which informed the design of the Proposed Scheme (as described in Appendix A6.2 (Transport Modelling Report) in Volume 4 Part 2 of 4 of the EIAR). Refer to TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR where pedestrian counts are included for each junction.

Local Public Realm Improvement Schemes

DCC noted that the Proposed Scheme Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR includes a plan drawing of proposed public realm improvements at the following locations:

- Leeson Street to Eustace Bridge (Images 4.1, 4.2 and 4.3 in Chapter 4); and
- Leeson Street Upper to Wellington Place (Images 4.4, 4.5, 4.6, 4.7, 4.8 and 4.9 in Chapter 4).

The DCC submission asserts that the information provided is insufficient to facilitate proper assessment of the proposals and additional information is required including visualisations of the proposals.

The NTA notes this comment. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, Section 4.6.12 describes how the landscape and urban realm proposals are derived from analysis of the existing urban realm which allowed the designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of paving materials, extended planting, decluttering of streetscape and general placemaking along the route.

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, Section 4.5.1.8 also provides a description of the proposals at each location to accompany each image as listed in the DCC submission. For example, the description of the Leeson Street Lower to Eustace Bridge (Section 4.5.1.8.1) in Chapter 4 (Proposed Scheme Description) is:

> '*The aim is to provide an upgraded and consistent urban realm quality along this section. At the northern end of Leeson Street Lower a new combined coach and local southbound bus stop is proposed. The new kerb alignment results in a resurfaced section of footpath. It is proposed to retain the existing kerb line and footways elsewhere along this section. Where the kerb line is to be moved granite kerbs would be retained and reused where possible. High quality concrete paving is proposed to enhance footways. Priority crossing with concrete setts is proposed to enhance pedestrian priority. The street is to be de-cluttered where possible.*
>
> *The aim is to provide an upgraded and consistent urban realm quality along this section. At the northern end of Leeson Street Lower a new combined coach and local southbound bus stop is proposed. The new kerb alignment results in a resurfaced section of footpath. It is proposed to retain the existing kerb line and footways elsewhere along this section. Where the kerb line is to be moved granite kerbs would be retained and reused where possible. High quality concrete paving is proposed to enhance footways. Priority crossing with concrete setts is proposed to enhance pedestrian priority. The street is to be de-cluttered where possible.*'

The rest of the images and areas listed in the DCC submission are similarly described in Sections 4.5.1.8.2, 4.5.1.8.3, 4.5.1.8.4, 4.5.1.8.5 and 4.5.1.8.6 of Chapter 4 (Proposed Scheme Description). It should also be noted that Image 4.2 provides a plan view of the Leeson Street Upper / Sussex Road area, while Image 4.3 provides a visualisation of the same location near Sussex Terrace.

In addition the Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) Sheets 01-07 of 54 provide comprehensive details of the landscaping proposals at the listed locations, including proposed trees and planting, and proposed paving and other details as applicable to each location. In addition, the key landscape measures proposed in each geographic section of the Proposed Scheme is set out in Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR in Section 17.4.

Figure 17.2 in Volume 3 of the EIAR provides 25 photomontages along the Proposed Scheme, with three of these within the areas highlighted in the submission, namely View 24b on Donnybrook Road, and Views 25 and 28 on Morehampton Road.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR provides details of how the potential landscape (townscape) and visual impacts associated with changes to the physical layout of the street, alteration of views and the visual character and changes to the urban realm have been assessed, and confirms that the assessment has been carried out according to best practice and guidelines relating to landscape (townscape) and visual assessment, and in the context of similar large-scale infrastructural projects. The various sections of Chapter 17 (Landscape (Townscape) & Visual) provide comprehensive details of the assessment of the landscape (townscape) and visual impacts.

Land Acquisition by NTA & Taking in Charge

DCC note on page 38 of their submission:

> '*Where it is proposed to CPO or acquire lands as part of the Proposed Scheme, confirmation is ought as to whether ownership of these lands will be transferred to the relevant local authority or will these lands be retained by the NTA but taken in charge by the relevant local authority for maintenance purposes*.'

Under the provisions of the relevant legislation, the NTA has exercised certain powers under Section 44(2)(b) of the 2008 Act to the effect that the functions in relation to securing the provision of public

transport infrastructure falling within Section 44(2)(a) of the 2008 Act (as amended) in relation to the CBC Infrastructure Works, should be performed by the NTA. Those functions include the design and construction of the Proposed Scheme and, effectively, the NTA becomes the road authority in respect of the exercise of those functions.

Under the relevant legislation, upon the completion of the construction of the Proposed Scheme the NTA automatically ceases to be the road authority and the status of DCC as the relevant road authority is automatically restored – it does not require the operation of the conventional 'taking-in-charge' arrangements provided for elsewhere in legislation. Accordingly, the legislative provisions appropriately govern the arrangements for the NTA to commence the construction of the Proposed Scheme, subject to the necessary planning and environmental consents, and govern the restoration of the road authority function to the relevant local authority, in this case being Dublin City Council. Consequently all CPO lands acquired by NTA for purposes of the Proposed Scheme will be transferred to the relevant local authority.

Bus Shelter Design

DCC notes on Page 39 of their submission that there are two discrepancies between the photomontages (Figure 17.2 in Volume 3 of the EIAR) and the General Arrangement Drawings in Volume 3 of the EIAR (drawing set 02 accompanying EIAR Chapter 4), both photomontages (View 24b and View 28) showing a bus shelter where none is proposed in the General Arrangement drawings.

The two photomontages (View 24b and View 28) Figure 17.2 Volume 3 Chapter 17 (Landscape (Townscape) & Visual) of the EIAR shows bus shelter at the location of the two bus stops and whereas the design intent at these two locations is shared bus stop with no bus shelters at View 24b and no proposed bus stop with shelter at View 28, as shown in the General Arrangement drawings 02 Volume 3 Chapter 4 of the EIAR and presented in the Table 4.5 Chapter 4 (Proposed Scheme Description) Volume 2 of the EIAR. The information in the two photomontages however is not replicated in other Figures or text and the impact assessments presented in the EIAR have been completed based on the totality of the information available on the design intent and all Figures in Volume 3 of the EIAR and the Scheme Description in Chapter 4 (Proposed Scheme Description) of Volume 2, which includes Table 4.5 identifying bus stop location and bus shelters.

Further supplementary information is provided in Section 4.13.6 and Table 4.13 of the Preliminary Design Report which states;

> *'Bus shelters have not been provided on few bus stops along Lesson Street Lower, Lesson Street Upper and Morehampton Road, as tabulated in Table 4-13 ; as these shelters will have significant and long term visual impact on the buildings and protected structures and the streetscape during the Operational phase due to their location. There are currently fingerpost bus stops and will be replaced with the latest TFI posts and flags.'*

The NTA is therefore satisfied that this does not change the findings and conclusions of the impact assessments.

DCC also notes on Page 39 of their submission, the following with respect to bus shelter design:

> '*Bus shelters impact on the width of footpaths and should only be proposed where there is sufficient space to physically accommodate them and passengers congregating in their vicinity. It is unclear if there is sufficient width to the footpaths in some locations where bus shelters are proposed e.g. 40 Morehampton Road (Sheet 05).*
>
> *Where bus shelters are proposed their locations must have regard to existing building entrances.*
>
> *Where bus shelters are proposed and space exists on the bus island the bus shelters should be located on these islands rather than on the footpath where the width is already constrained by the design of the bus stop, for example 40Morehampton Road (Sheet 05).*
>
> *Bus shelter locations are indicated on the drawing but information on their proposed design, size and type is not provided.*'

The NTA notes these comments. Section 4.13.6 of the Preliminary Design Report, included in the Supplementary Information outlines the requirement for Bus Shelters as part of the Proposed Scheme as follows:

> '*Bus shelters provide an important function in design of bus stops. The shelter will offer protection for people from poor weather, with lighting to help them feel more secure. Seating is provided to assist ambulant disabled and older passengers and accompanied with Real Time Passenger Information (RTPI) signage to provide information on the bus services. The locations of the bus shelters have been presented on the GEO_GA General Arrangement drawing series in Appendix B. The optimum configuration that provides maximum comfort and protection from the elements to the traveling public is the 3-Bay Reliance 'mark' configuration with full width roof. This shelter is a relatively new arrangement which has been developed by JCDecaux in conjunction with the NTA. The shelter consists mainly of a stainless-steel structure with toughened safety glass and extruded aluminium roof beams.*'

Figure 3.377 provides an example image of the preferred full end panel shelter arrangement.

Figure 3.377: Standard 3 Bay Reliance Mark Shelter with Full Width Advertising Panel (Source: PDG)

Section 4.13.6 of the Preliminary Design Report goes on to state that, '*The desirable minimum footpath/island widths required to accommodate the full end-panel shelter is 3.3m with an absolute minimum width of 3m to facilitate a min. 1.2m clearance at the end-panel for pedestrians*'.

Section 4.13.6 of the Preliminary Design Report continues, describing alternative arrangements for more constrained areas as follows, '*The cantilever shelter using full width roof and half end-panel arrangement provides a second alternative solution for bus shelters in constrained footpath locations…Advertising panels in this arrangement are normally located on the back façade of the shelter compared to the full end-panel arrangement. The desirable minimum footpath/island widths required to accommodate the full end-panel shelter is 2.75m with an absolute minimum width of 2.4m to facilitate a min. 1.2m clearance at the end-panels for pedestrians*'.

Figure 3.378 provides an example of this type of shelter.

Figure 3.378: Example of a 3-Bay Reliance Cantilever Shelter with Full Width Roof and Half End Panels (Source: JCDecaux)

Section 4.13.6 also describes two additional alternative bus shelter design options for constrained locations as follows:

> '*Two alternative narrow roof shelter configurations are also available which offer reduced protection against the elements compared to the full width roof arrangements. These shelter configurations are not preferred but do provide an alternative solution for particularly constrained locations where cycle track narrowing to minimum 1m width has already been considered and 2.4m widths cannot be achieved to facilitate the full width roof with half end-panel shelter or for locations where the surrounding environment may offer protection against the elements…The desirable minimum footpath widths for the narrow roof configuration are 2.75m (with end-panel) and 2.1m (no end-panel). The absolute minimum footpath widths for these shelters are 2.4m (with end-panel) and 1.8m (no end-panel) to allow for boarding and alighting passengers in consideration of wheelchair, pram, luggage, and other such similar spatial requirements.*'

Figure 3.379 shows examples of these alternative designs.

Figure 3.379: Example of a 3-Bay Reliance Cantilever Shelter with a Narrow Roof Configuration With and Without Half End Panels (Source: PDG)

With specific reference to the proposed bus shelter at 40 Morehampton Road, it is proposed to have a shared landing bus stop at this location due to space constraints not allowing for an island bus stop. Section 4.13.3 of the Preliminary Design Report describes shared landing area bus stops as follows:

> '*Where space constraints do not allow for an island bus stop, an option consisting of a shared bus stop landing zone will be considered…The use of corduroy tactile paving on the cycle track is additional in this arrangement to help facilitate awareness and reduce speeds in lieu of the 1:1.5 deflection provision for the island bus stop. The cycle track will also be narrowed when level with the footpath and tactile paving provided to prevent pedestrian/cyclist conflict. Shared landing area bus stops were required in a number of locations along the CBC route due to localised space constraints.*'

The DCC submission also comments on the impact of bus shelters in the vicinity of buildings of architectural importance and in Conservation Areas and states that such proposals should be considered carefully, with bus stops only rather than bus shelters being preferable at these locations. The submission goes on to say that in the interest of visual amenity and having regard to protected structures and their settings that advertisements should not be permitted on bus shelters in Architectural Conservation Areas, Conservation Areas, Residential Neighbourhoods (Conservations Areas) or Special Planning Control Schemes.

Section 4.13.6 of the Preliminary Design Report states that, '*Bus shelters have not been provided on few bus stops along Leeson Street Lower, Lesson Street Upper and Morehampton Road, as tabulated in Table 4-13 ; as these shelters will have significant and long term visual impact on the buildings and protected structures and the streetscape during the Operational phase due to their location. There are currently fingerpost bus stops and will be replaced with the latest TFI posts and flags.*'

The provision of bus shelters in proximity to buildings of architectural significance, has been assessed in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. It notes the following with respect to protected structures (Section 16.4.4.1):

> '*Bus shelters are proposed on the north side of Morehampton Road at 40 Morehampton Road (DCC RPS 5318) which is of Medium sensitivity. There is currently a fingerpost bus stop at number 36. The Magnitude of impact will be Low. The potential Operational Phase impact of the bus shelters on the Protected Structures and the streetscape is Indirect, Negative, Slight and Long-Term.*'

It notes the following with respect to Other Structures (Section 16.4.4.3):

> '*Bus shelters are proposed at 92 Morehampton Road (CBC0013BTH141) and on the southside in front of 117 Morehampton Road (CBC0013BTH134) which are of Medium Sensitivity. There are currently fingerpost bus stops at 92 and 115 Morehampton Road. The bus shelters will have a negative visual impact on the buildings and the streetscape during the Operational Phase, the magnitude of which is Low. The potential Operational Phase impact is Indirect, Negative, Slight and Long-Term.*'

Siting of Utility Cabinets and Above-Ground Utility Infrastructure

DCC noted that the siting of utility cabinets, poles and other above-ground utility infrastructure may have significant impacts on the space, visual impact and quality of the public realm. Adding this has been a significant problem on previous transport infrastructure projects.

The NTA notes this comment. Significant efforts have been made during the design process to minimise above-ground utility infrastructure where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable.

On-Street Parking

DCC noted that the roll-out of electric charging points for electric vehicles is required if national carbon emission plans are to be met and requested that the NTA engage with electrical charging operators to co-ordinate the roll out of electrical charging points to on-street parking areas as part of the works along the route of the Proposed Scheme.

The NTA notes this comment. The provision of vehicle charging points is not in the remit of the NTA. However, the NTA is responsible for the upgrade of the public transport bus fleet and as noted in Section 9.4.4.1.1.4 of Chapter 9 (Noise & Vibration) of Volume 2 of the EIAR:

'*The NTA forecast for the year 2028 is for 94% of the city bus fleet to be electric vehicles (EVs) or hybrid electric vehicles (HEVs). For the Design Year (2043), the city bus fleet is forecast to be 100% electric.*'

Palette of Materials

DCC noted that the Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4 (Proposed Scheme Description)) appear to indicate that all the existing hard landscape surfaces along the Proposed Scheme are to be replaced with new as the symbol in the legend for 'Existing Surfaces Retained' is only present in small areas on the proposed drawings, adding that the replacement of all existing hard landscape surfaces with new may not be required, nor may it be financially feasible or sustainable.

The NTA notes this comment. Section 7 of the Preliminary Design Report describes the approach to the pavement design, including a description of the visual survey undertaken in order to inform the preliminary pavement design. Section 4.6.10 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR summarises the information in the Preliminary Design Report, where Section 4.6.10.1 states:

> '*The Proposed Scheme pavement design will include new pavement, pavement strengthening or rehabilitation works where the existing pavement will be disturbed by construction works, as indicated in the Pavement Treatment Plans (BCIDB-JAC-PAV_PV-0013_XX_00-DR-CR-9001) included in Volume 3 of this EIAR. Special attention to addressing problems associated with wheel-track rutting and ensuring that ponding will not arise at bus-stops and pedestrian / cycle crossings will be a key focus.*
>
> *The prevailing principle being followed by the Proposed Scheme pavement design is the provision of a high-quality pavement construction. Therefore, the Proposed Scheme pavement must provide sufficient durability, longevity, and strength, to be able to withstand repetitive wheel track loading on a frequent basis. The pavement design strategy includes for minimising ongoing maintenance requirements along the route to minimise impact on continuity of bus service operations.*'

On the topic of the pavement rehabilitation strategy Section 4.6.10.3 of Chapter 4 (Proposed Scheme Description) states that '*At Specimen Design stage, different pavement strategies will be developed for:*

- *Areas to be widened or fully reconstructed; and*
- *Areas to be rehabilitated (do minimum, intermediary strategies, fully reconstruct).*'

It goes on to state that '*Additional testing requirements in line with AM-PAV-06050 will be specified for the appointed contractor to complete the Detailed Pavement Design*'.

Section 11.3 of the Preliminary Design Report in the Supplementary Information notes the following regarding prevention and minimisation of waste:

> '*The principles of prevention and minimisation will be further considered in detailed design/construction stages through value engineering, substitution or reused of materials, and effective methods or control systems (e.g. just in time deliveries/ effective spoil management) so that waste production is minimised.*'

Palette of Street Furniture

DCC noted that a full palette of street furniture is required, and seek confirmation as to whether an identical palette is to be used for the proposed scheme across all local authority areas or whether each local authority (and perhaps specific urban villages) will have a specific palette. It is further requested that confirmation be provided on whether there will be uniformity in the palette of street furniture across all BusConnects Core Bus Corridor Schemes.

The NTA notes this comment. Sections 16.4.3.8 and 16.4.4.4 of Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR includes details of the impacts, in the Construction Phase and Operational Phase

respectively, on existing street furniture of heritage value due to the Proposed Scheme, including post boxes, lamp posts and statuary and other street furniture. The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC City Architects Division comments as these matters were the subject of extensive liaison throughout the design development process.

NTA will however continue the very positive and constructive liaison with DCC throughout the procurement and construction process including in relation to consideration of new street furniture.

Boundary Treatments

DCC noted that where property boundaries are to be relocated to facilitate land acquisition, the fabric of existing boundaries should be assessed for their architectural conservation value and cultural value. DCC notes that this assessment should consider whether the fabric, which may include railings, walls etc. is suitable for repair and reuse for sustainability reasons in the new boundaries rather than replaced with new.

The NTA notes this comment. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, Section 4.6.18.1 notes the following:

> '*There are a number of areas along the extents of the route where the Proposed Scheme will result in the requirement for accommodation works and boundary treatments. Specific accommodation works are considered on a case-by-case basis.*
>
> *To maintain the character and setting of the Proposed Scheme, the approach to undertaking the new boundary treatment works along the corridor is replacement on a 'like for like' basis in terms of material selection and general aesthetics, unless a section of street can benefit from urban improvement appropriate to the area*.'

As stated in Section 16.1 of Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR, the impacts on boundary treatments have been assessed as part of the Architectural Heritage assessment, with appropriate mitigation measures outlined where necessary.

The potential impact on the boundaries associated with structures of architectural heritage importance is addressed in Chapter 16 (Section 16.4), in Volume 2 of the EIAR. Mitigation measures for impacts of boundaries is set out in Section 16.5.1.1 which notes:

> '*…Mitigation will include recording of the feature by an appropriate architectural heritage specialist engaged by the appointed contractor, prior to of the Construction Phase, in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of this EIAR. A similar boundary treatment will be reinstated on the new alignment*'.

Section 3 of Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of 4 of the EIAR outlines the required measures for the proper management of such boundary treatments, and describes the measures to be adhered to when relocating different types of boundary and associated features including rubble boundary walls, coursed boundary walls, brick boundary walls, plinths and railings, gate piers and gates and railings.

Per Cent for Art Strategy

DCC noted that (on page 41 of their submission) '*It is not clear where the Percent for Art Strategy is to be incorporated into this project*'.

The NTA will continue the very positive and constructive liaison with DCC City Architects Division throughout the procurement and construction process including consideration of the provision of potential items of public art where appropriate.

Concrete and Painted Medians

DCC notes on page 41 of their submission that areas of concrete medians should be reviewed to provide additional greening where possible, listing the junction of Burlington Road and Leeson Street Upper, and the junction of Waterloo Road and Morehampton Road as examples. It also highlights the median along Sussex Road and asks for it to be reviewed to provide additional greening between

Sussex Terrace and Burlington Road, suggesting that the median space be removed if possible and the space reallocated to the adjacent footpaths.

The NTA notes these comments. Section 4.6.12 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the landscape and urban realm design approach and principles. Section 4.6.12.5.2 describes central median planting, stating:

> '*Central median planting varies depending on the context of the landscape character and road. Dual carriageways or wide roads to the edge of settlements are more likely to have wider central medians where tree planting and grass verges can be found. A combination of tree and shrub or species-rich grassland is possible to create a formalised corridor of planting within a wide section of road*'.

The landscaping design is based on a landscape and character analysis undertaken, as described in Section 4.6.12.1 of Chapter 4 (Proposed Scheme Description), stating the following:

> '*The landscape and urban realm proposals are derived from analysis of the existing urban realm, including existing character, any heritage features, existing boundaries, existing vegetation and tree planting, and existing materials. For each section of the route, the design took a broad overview of typical dwelling age and style, extents of vegetation and tree cover. The predominant mixes of paving types, appearance of lighting features, fencing, walls, and street furniture was considered. The purpose of this analysis was to assess the existing character of the area and how the Proposed Scheme may alter this. The outcome of the analysis allowed the designers to consider appropriate enhancement opportunities along the route. The enhancement opportunities include key nodal locations which focus on locally upgrading the quality of the paving materials, extending planting, decluttering of streetscape and general placemaking along the route. Where possible, a SuDS approach has been taken to assist with drainage along the route*.'

The NTA have liaised with DCC throughout the development of the Proposed Scheme design and will continue that constructive liaison as the detailed landscape design is progressed.

Traffic Signal and Signage Poles

DCC noted on Page 42 of their submission that the number of poles at each junction that are required to provide enhanced public lighting and traffic signals for pedestrians, cyclists, buses and other vehicles needs to be rationalised to the minimum number of required poles.

The NTA notes this comment. Significant efforts have been made during the design process to minimise above-ground utility infrastructure where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable.

DCC go on to state that the photomontages provided for the scheme do not show the full number of proposed traffic signal poles at junctions, pointing to View 25 Proposed in Figure 7.2 in Volume 3 of the EIAR as an example of this.

The photomontages are interpretations of the 2D design of the Proposed Scheme incorporating design information from a number of 2D design drawings of the proposals including the General Arrangement drawings, the Landscaping General Arrangement drawings, the Traffic Signs and Road Markings drawings, the Street Lighting Drawings, and the Junction Systems Design drawings (all accompanying Chapter 4 in Volume 3 of the EIAR). Every effort has been made during the compilation and review of the photomontages to ensure that they are an accurate reflection of the proposals at the locations shown. Any omission of signal poles or heads is not intentional, and information on the 2D maps and drawings of the design are accurate. The impact assessments presented in the EIAR have been completed based on the totality of the information available on the design. The NTA is therefore satisfied that the information presented in the photomontages does not change the findings and conclusions of the impact assessments under the EIAR documents.

Gantry Signage – Traffic Signals

DCC asserted that there is a discrepancy in the documents submitted in relation to Chapter 4 (Proposed Scheme Description), Section 4.6.10 (Other Street Infrastructure) and Section 4.6.9.1.2 (Gantry Signage) where it states that 'No new gantry signage is included in the proposed Scheme', adding, it is

considered that gantry signage is not suitable in low speed residential areas such as Donnybrook Village and Leeson Street, and particularly Conservation Areas (Leeson Street Lower & St. Stephen's Green) due to their high visual impact. The submission notes some locations where gantry signage is indicated in the Proposed Scheme, including:

- St Stephen's Green East & Leeson Street Lower, Sheet 08 of the Junction System Design drawings (drawing set 10 accompanying EIAR Chapter 4) in Volume 3 of the EIAR;
- Leeson Street Upper & Grand Parade, Sheet 11 of the Junction System Design drawings (drawing set 10 accompanying EIAR Chapter 4) in Volume 3 of the EIAR;
- Morehampton Road & Bloomfield Avenue, Sheet 18 of the Junction System Design drawings (drawing set 10 accompanying EIAR Chapter 4) in Volume 3 of the EIAR; and
- Morehampton Road & Herbert Park, Sheet 19 of the Junction System Design drawings (drawing set 10 accompanying EIAR Chapter 4) in Volume 3 of the EIAR.

The NTA notes this comment. Section 4.6.9.1.2 of Chapter 4 (Proposed Scheme Description) is correct to state that '*No gantry signage exists along the route, and the Proposed Scheme has no requirement for any new gantry signage*'. There are however existing cantilever traffic signal poles, with some new cantilever signal poles proposed as part of the Proposed Scheme where necessary.

As set out in Section 12.9.1 of the Preliminary Design Report provided as part of the Supplementary Information, '*All traffic signal equipment is designed in accordance with Chapter 9 (Traffic Signals) of the TSM* [Traffic Signs Manual]. *Traffic signal modelling, including LinSig models, determines the phasing and staging of the traffic signals which determines the design and positioning of the traffic signal heads. The TSM clearly defines the requirements and positioning of traffic signal heads, detection equipment, and associated traffic signal poles*'.

Section 12.9.1.2 specifically on the subject of cantilever signal poles states:

> '*Cantilever poles will be installed on multi-lane approaches where there is a potential for a high sided vehicle, including buses, to block the clear visibility of the primary traffic signal of vehicles in the outer lanes. They will also be installed at locations where a median island is not available to mount a second primary, required to control separate streams on a particular arm of a junction.*
>
> *Cantilever poles may also be used to provide a mounting structure for secondary signals, where a median is not available and a position on opposing primary pole is outside the required line of sight.*'

Significant efforts have been made during the design process to minimise cantilever traffic signal poles where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable. The NTA recognises the importance of the rationalisation of street furniture across the Proposed Scheme to reduce visual clutter and of particular importance in relation to the siting of associated utilities and traffic management signage in the vicinity of Protected Structures and Conservation Areas, historic paving and historic street furniture.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR sets out the visual impact assessment of the Proposed Scheme. Section 17.4.4 of Chapter 17 states: '*The Operational Phase of the Proposed Scheme will give rise to townscape streetscape and visual effects through the following:*

- *Alterations in the physical and visual character of the corridor of the existing road / street;*
- *Changes in traffic, pedestrian and cycle movements;*
- *Modification of areas of private property / gardens / boundaries; and*
- *Adjustments to other areas / boundaries.*

These effects may be temporary, short-term, medium-term, long-term or permanent.

While alterations in the road corridor and changes in traffic, pedestrian and cycle movements are features of the Proposed Scheme, it is not anticipated these aspects in themselves will give rise to

significant landscape, townscape or visual effects. Changes in road corridors, including in traffic signalisation, signage, and in carriageway allocation and traffic movements are a common and regular aspect of active road and traffic management for urban roads and streets. Therefore, such changes may also be considered as part and parcel of any urban streetscape environment.'

The visual impact assessment of the Proposed Scheme does not identify any location specific adverse visual impact associated with the provision of cantilever traffic signal poles.

DCC go on to state that the photomontages provided for the scheme do not show the full extent of proposed gantry traffic signals and traffic signal poles at junctions, pointing to View 25 Proposed in Figure 7.2 in Volume 3 of the EIAR as an example of this.

As outlined previously, the photomontages are interpretations of the 2D design of the Proposed Scheme incorporating design information from a number of 2D design drawings of the proposals including the General Arrangement drawings, the Landscaping General Arrangement drawings, the Traffic Signs and Road Markings drawings, the Street Lighting Drawings, and the Junction Systems Design drawings (all accompanying Chapter 4 (Proposed Scheme Description) in Volume 3 of the EIAR). Every effort has been made during the compilation and review of the photomontages to ensure that they are an accurate reflection of the proposals at the locations shown. Any omission of signal poles or heads is not intentional, and information on the 2D maps and drawings of the design are accurate. The impact assessments presented in the EIAR have been completed based on the totality of the information available on the design. The NTA is therefore satisfied that the information presented in the photomontages does not change the findings and conclusions of the impact assessments under the EIAR documents.

Water Drinking Fountains

The DCC submission describes a recently adopted new policy to provide public drinking water fountains across the city, which could potentially be included in the Proposed Scheme.

The NTA can liaise further with DCC on this matter to explore the possibility of inclusion of public drinking water fountains in the Proposed Scheme where appropriate.

Village Signage

DCC noted that existing 'Welcome to Village xxx' signage should be retained as part of the Proposed Scheme. It specifically highlights the 'Welcome to Donnybrook' sign at the junction of Morehampton Road and Wellington Place. DCC also state that the Proposed Scheme represents an opportunity to implement co-ordinated village signage city-wide.

The NTA notes these comments. It is the intention of the Proposed Scheme to retain all such signage.

NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC City Architects Division comments as these matters were the subject of extensive liaison throughout the design development process. NTA will however continue the very positive and constructive liaison with DCC throughout the procurement and construction process.

Response to Section 2.4.6 City Parks, Biodiversity and Landscape Division Comments

The NTA notes the general comments numbered 1 to 8 in the DCC submission with respect to the tree planting and landscape measures, and liaison with DCC on same. The specific comments included in the DCC submission on the Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4 (Proposed Scheme Description)) are responded to individually below.

- DCC states that all paving works on Sheet 01 should use granite surfaces and kerbing to DCC standards to reflect the quality of the St Stephen's Green and Leeson Street environment.

  The NTA notes this comment.

- DCC states that the drawings inaccurately omit existing trees on Hatch Street Lower, and states that no tree removals are permitted at this location.

The route along Hatch Street Lower will require minimal changes or works, requiring only minor changes to road markings and signage in order to facilitate the diversion of inbound traffic due to the proposed bus gate on Leeson Street. There will therefore be no trees removed as part of the Proposed Scheme on Hatch Street Lower.

- DCC states that tree pit surface amendments on Sheet 03 are to be forwarded to DCC Park Services for review. They also note that any proposals should avoid creating trip hazards.

  The Preliminary Design Report included in the supplementary information submitted to An Bord Pleanála describes the landscape and urban realm proposals in more detail. With respect to tree pit enhancements it states that these '*will be undertaken, using materials such as self-binding gravel. Consideration has also been given to the construction of new tree pits to include in-ground root protection systems to improve both the vitality of the trees and the life span of the pavements*'. Enhancements to existing tree surrounds will be site specific and considered further as part of detailed design.

  Section 4.5.1.8.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the landscape and urban realm proposals from Leeson Street Upper to Wellington Place, stating that '*Existing tree surrounds would be widened and surfaced with self-binding gravel*'. The NTA will continue the positive and constructive liaison with DCC on such design details throughout the detailed design and construction process.

- DCC states that proposed new trees at Wellington Place junction on Sheet 04 shall be of large canopy species to compensate for tree loss on Leeson Street Upper.

  NTA notes this comment and will continue the constructive liaison with DCC throughout the detailed design and construction process. Section 4.5.1.8.3 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the proposed intervention at this location stating that '*A new local intervention is proposed at the junction of Wellington Place to enhance the local character and contribute to the wider ecological value of the area in relation to Morehampton Road Wildlife Sanctuary.*'

- DCC states that the proposed removal of two younger trees on Morehampton Road on Sheet 05 require justification as they are positioned away from the kerb-line and other similar positioned trees have been retained.

  A comprehensive arboricultural survey was completed in order to inform the landscaping design and the environmental impact assessment of the Proposed Scheme. Appendix A17.1 (Arboricultural Impact Assessment) in Volume 4 Part 4 of the EIAR describes and maps the findings of the survey and the likely tree impacts of the Proposed Scheme. The survey and assessment was undertaken by a qualified arboricultural specialist who recorded and assessed the quality and condition of each tree along the route of the Proposed Scheme and identified all trees which would be directly impacted by the construction of the Proposed Scheme.

  The two trees identified in the DCC submission are recorded in the Tree Schedule in Appendix A17.1 as Tree Number T1099 (a semi-mature lime tree in 'fair' condition, categorised as B1 which means it is of moderate value and conservation, with its value being mainly arboricultural) and Tree Number T1631 (a semi-mature horse chestnut tree in 'fair' condition, categorised as C1 which means it is of low value and conservation, with its value being mainly arboricultural).

  Each tree was assessed by the arboricultural specialist against the proposed design and they identified the likely need to remove these trees due to construction of the cycle track in that location. Where retention is proposed in other locations that appear similar, this is based on the expert judgement of the arboricultural specialist. The Arboricultural Impact Assessment states the following:

  '*Tree removals and pruning have been limited to that which is necessary and unavoidable to allow the development proposal to be implemented, with consideration given to species attributes, the tolerance of individual trees to disturbance, and to the presence of surrounding trees and features of the site which may have an influence on retained trees*.'

- DCC asks for clarification if compensatory tree planting can occur in the area shown in Sheet 06 to compensate for nearby mature tree removals.

The area covered by Sheet 06 is relatively constrained with intermittent footpath and cycle track narrowing due to these space constraints. Additional street trees in this area would potentially add additional constraints to footpaths and cycle tracks. As stated in the Preliminary Design Report, new street trees are proposed where footways are wide enough and below-ground services allow. The NTA is satisfied that the proposed landscape plan as submitted to An Bord Pleanála represents the optimum design at this location, however the NTA will continue their constructive liaison with DCC throughout the detailed design process of the Proposed Scheme at this location.

- DCC states that the public realm enhancements at Donnybrook Road on Sheet 07 are supported by DCC and further details will be required including tree planting details to DCC Park Services. DCC also notes that surfacing should deploy granite stone at this location.

  The NTA notes this comment.

- DCC's submission also include a number of requested amendments to the landscape design in specific areas as follows:

  - On Sheet 02 existing grass verge shall be retained to root protection areas for existing canal-side trees at Wilton Terrace and the hard surfacing proposed will be omitted;
  - Potential to plant a replacement tree at the street entrance to St. Margarets / Brookvale Road should be reviewed on Sheet 07/08, to compensate for the proposed existing tree removal;
  - Potential to green median strips at the Anglesea Bridge junction on Sheet 08 should be reviewed; and
  - Potential for further compensatory tree planting along road verges and median strips on Sheets 11 and 12 should be reviewed due to proposed tree removals in those areas.

  The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board DCC's comments as the NTA carried out extensive liaison with DCC through the design development process. The NTA will however continue the positive and constructive liaison with DCC throughout the detailed design and construction process.

C5 – Response to Section 2.5 Conclusion

DCC is supportive of the Proposed Scheme and stated in their conclusion on page 49 of the submission:

'The proposed Bray to City Centre Core Bus Corridor Scheme is supported and welcomed by Dublin City Council as it will ensure the delivery of a number of key policies and objectives of the Dublin City Development Plan 2022-2028. The development of the Core Bus Corridor Scheme will provide an upgraded and expanded bus network and quality of service together with better quality cycling and pedestrian facilities. These improvements will make it easier for people to access and use public transport. In turn, this will promote modal shift from the private car to more sustainable forms of transport including walking, cycling and public transport, ultimately contributing to the creation of a greener and more sustainable city.'

DCC further confirmed (at page 49 of its submission) that '*with regard to compliance with European, national and local policies and requirements, it is considered that An Bord Pleanála is the competent planning authority, however, Dublin City Council is satisfied that the application generally is consistent with, and supported by, the statutory Dublin City Development 2022-2028.'*

However, DCC note the following:

'In the event that An Bord Pleanala is satisfied that the proposed development should be approved, the Planning Authority requests that the scheme be approved subject to conditions to ensure that the development is carried out in accordance with the proper planning and sustainable development of the area and suggested conditions are included in Appendix 1 attached to this report.'

C6 – Response to Appendix to DCC Submission

DCC have set out at the start of their appendix a number of suggested conditions.

Proposed Condition 1

The first recommended condition requested by DCC states: That a comprehensive agreement is put in place between DCC and the NTA regarding how the corridor is to be handed over to the NTA and its contractors, what pre-inspection and recording of the corridor is necessary and how the corridor is to be maintained during construction activities and by whom. The agreement shall also address the handback process, the treatment of all relevant records treated and how the corridor is to be accepted back by DCC following construction.

NTA response:

Under the provisions of the relevant legislation, the NTA has exercised certain powers under Section 44(2)(b) of the 2008 Act to the effect that the functions in relation to securing the provision of public transport infrastructure falling within Section 44(2)(a) of the 2008 Act (as amended) in relation to the CBC Infrastructure Works, should be performed by the NTA. Those functions include the design and construction of the Proposed Scheme and, effectively, the NTA becomes the road authority in respect of the exercise of those functions.

Under the relevant legislation, upon the completion of the construction of the Proposed Scheme the NTA automatically ceases to be the road authority and the status of DCC as the relevant road authority is automatically restored – it does not require the operation of the conventional 'taking-incharge' arrangements provided for elsewhere in legislation. Accordingly, the legislative provisions appropriately govern the arrangements for the NTA to commence the construction of the Proposed Scheme, subject to the necessary planning and environmental consents, and govern the restoration of the road authority function to the relevant local authority, in this case being Dublin City Council.

Notwithstanding the above, the NTA intends to continue the close liaison with DCC that has been in place during the planning and design stage of the Proposed Scheme, during and throughout the subsequent construction stage. This will include engaging and collaborating on the construction arrangements, the road maintenance arrangements during construction and the standard to which the Proposed Scheme will be completed prior to transfer back to DCC, together with record retention, all in full accordance with the EIAR. Given the legislative framework that is in place, these are matters that can, and will, be successfully addressed between DCC and the NTA, in the absence of any approval condition.

Proposed Condition 2

The second recommended condition requested by DCC states:

Following handback, a separate agreement shall be put in place between DCC and the NTA regarding the costs of maintenance of the corridor as a high-quality public transport corridor with agreed levels of performance and how the performance of the public transport corridor is not eroded in the future.

NTA response:

This proposed condition seeks the enactment of an agreement between DCC and the NTA, subsequent to the completion of the construction of the Proposed Scheme, addressing issues related to maintenance costs.

The Proposed Scheme upon its completion reverts to the status of a public road under the management of the relevant local authority, in this case Dublin City Council. The funding of costs associated with the maintenance of public roads can involve a number of parties depending on the status of the road – for instance, in the case of a national road Transport Infrastructure Ireland would have an involvement. As the Proposed Scheme does not encompass any section of national road, its components constitute regional and/or local roads only. Funding of regional and local roads fall under the ambit of the relevant local authority and the Department of Transport.

The Exchequer does not currently provide the NTA with funds for dispersal to local authorities for maintenance activities and the NTA does not have a role in overseeing or organising general public road maintenance activities. However, the NTA does retain responsibility for bus fleet, bus stops and

bus shelters, and maintenance of these elements falls within its remit.

The NTA agrees with the objective stated in the draft condition, namely, to ensure 'maintenance of the corridor as a high-quality public transport corridor with agreed levels of performance'. To achieve that objective, the NTA anticipates continuing its collaboration with DCC to ensure the delivery of an appropriate maintenance regime. As part of this collaboration, the NTA will support the provision of the necessary funding by the relevant parties to ensure that the benefits of the Proposed Scheme are not inappropriately eroded. These are matters that can be successfully addressed between DCC and the NTA, in the absence of any approval condition.

Proposed Condition 3

The third recommended condition requested by DCC states:

All relevant DCC departments involved with the development of the Scheme shall be consulted during the detailed design development process for the Scheme and the NTA shall incorporate the requirements of the DCC departments into the final detailed design of the Scheme.

NTA response:

The NTA acknowledges the close liaison with DCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within the Council. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of the Council and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between DCC and the NTA, in the absence of any approval condition.

Traffic Division

The Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Traffic Division comments provided in the Appendix regarding consideration of the traffic management equipment that is necessary for the safe and efficient operation of this Public Transport corridor, and including all traffic signal equipment, and the relevant DCC specification. NTA is aware of, and acknowledges, the important role of the relevant DCC maintenance contractor, and their continued role on both the existing and new traffic signals. These matters were the subject of extensive liaison throughout the design development process.

Roads Division

In regard to the Recommendations/Conditions of the Environmental Protection Division set out in the Appendix NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Roads Division inputs as these matters were the subject of extensive liaison throughout the design development process.

Public Lighting Department

The Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Public Lighting Department inputs regarding the required light level design and the relevant EN certification as these matters were the subject of extensive liaison throughout the design development process.

Environmental Protection Division

In regard to the Recommendations/Conditions of the Environmental Protection Division set out in the Appendix NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Environmental Protection Division inputs regarding criteria and processes as these matters were the subject of extensive liaison throughout the design development process. Conditions requested have been addressed in this report subsequently.

Air and Noise Pollution Control Unit

EIAR Volume 2 Main Chapters, Chapter 7 (Air Quality) and Chapter 9 (Noise and Vibration), both contain an assessment of the potential air and noise impacts which could arise from the construction of the Proposed Scheme (the construction strategy is set out in EIAR Volume 2 Main Chapters, Chapter 5 Construction). Chapters 7 (Air Quality) and 9 (Noise and Vibration) also contain comprehensive suite of measures to mitigate the potential air and noise impacts which could arise from the construction of the Proposed Scheme. These mitigation measures broadly align with the 'good practice' measures set out in the DCC Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition. These mitigation measures are also contained within the Construction Environmental Management Plan in EIAR Volume 4 Appendices Part 1 of 2 Appendix A5.1.

Archaeology Department

The NTA notes the recommendation set out in the Appendix by the Archaeology Department and has set out in the EIAR the intention to appoint a Project Archaeologist.

With regard to the depositing of an archaeological paper archive, the NTA will liaise with DCC in regard to archival processes.

Conservation Department

In regard to the recommended measures relating to Conservation Issues in the Appendix, the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Conservation Department comments and recommendations as these matters were the subject of extensive liaison throughout the design development process. These issues are addressed within the planning application documents as follows:

The proposed approach to safeguarding architectural interest of affected Architectural Heritage across the Proposed Scheme is covered in EIAR Volume 2 Main Chapters, Chapter 16 (Architectural Heritage), Section 16.5.

Best conservation practice, specifications, and method statements for the careful and sensitive relocation and reinstatement of historic fabric is addressed in EIAR Volume 2 Main Chapters, Chapter 16 (Architectural Heritage), Section 16.5 in Volume 2 of the EIAR.

1) The proposed engagement of an architectural heritage specialist and the duties is addressed in Section 16.5 in Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR.
2) The NTA will continue to engage with the relevant local authority departments in accordance with the relevant guidelines, policy and legislation outlined in 16.2.4 Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR.
3) Best conservation practice and the Architectural Heritage Protection Guidelines for Planning Authorities (2011) and the Advice Series issued by the Department of Housing, Local Government and Heritage are referenced in 16.2.4 Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR.
4) The proposed protection measures for all existing original architectural heritage features in the vicinity of the works are outlined in Section 16.5 Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR.
5) The requirement of the appointed contractor relating to the Architectural Heritage is outlined Section 16.5 Chapter 16(Architectural Heritage) in Volume 2 of the EIAR.

City Architects Department

The NTA notes the general comments on the Proposed Scheme in the recommendations in the Appendix. NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC City Architects Department comments as these matters were the subject of extensive liaison throughout the design development process.

Parks, Biodiversity and Landscape Division

The NTA notes the general comments on the Proposed Scheme in the recommendations in the Appendix. NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Parks, Biodiversity and Landscape Division comments

as these matters were the subject of extensive liaison throughout the design development process.

3.13.8 64 - Dublin Commuter Coalition

3.13.8.1 Overview of Submission

This submission raised the following issues:

1) Bus Lane Enforcement;
2) Bus Lane Hours;
3) Bus Stop Design;
4) Junction Design;
5) Pedestrian Crossings;
6) Shared Space;
7) Bike parking;
8) UCD Bus Interchange; and
9) Cycling Improvements in Shankill.

3.13.8.2 Response to Issues Raised

Bus Lane Enforcement

Summary of issues raised

The submission has outlined its views in relation to the importance of enforcement for lawful use of bus lanes such that the benefits of the Proposed Scheme will be realised by passengers.

Response to issue raised

The NTA acknowledges the comments raised in relation to a request for camera enforcement at bus lanes, bus priority signals, bus gates, and turning restrictions. Whilst enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána, the NTA is separately exploring proposals and methods for bus lane enforcement as set out under Measure INT20 – Enforcement of Road Traffic Laws of the Greater Dublin Area Transport Strategy 2022-2042. Notwithstanding this, specific measures have been considered in the development of the Proposed Scheme that will help deter inappropriate and unlawful use of bus lanes including advanced bus signal detection systems which will activate green signals at traffic lights for authorised vehicles only.

Bus Lane Hours

Summary of issues raised

The submission highlights the need for all bus lanes to operate on 24 hours / 7-day week basis.

Response to issue raised

The NTA agrees with the necessity of full-time bus lane operational hours, and this will be applied along the length of the Proposed Scheme, as well as generally throughout the BusConnects CBC network. However, where bus gates are proposed these may not always operate on 24 hours / 7-day week basis subject to how necessary they are to ensure bus priority in certain directions at certain times. For example, the proposed southbound bus gate on Leeson Street Lower in the Proposed Scheme will operate between 06:00-10:00 and 16:00-20:00, and the proposed northbound bus gate on Leeson Street Lower in the Proposed Scheme is in permanent operation.

Bus Stop Design

Summary of issues raised

The submission raises concerns about the proposed bus stop designs and the width of bus stop islands that are proposed which may lead to pedestrian and cyclist conflicts. It lists numerous locations where narrow bus stop islands are proposed and seeks the provision of larger full-sized bus stop islands.

Response to issue raised

The NTA welcomes Dublin Commuter Coalition's comments in relation to the importance of considering the pedestrian/cyclist interaction at bus stops. Section 11 of Appendix A4.1 (PDGB) in Volume 4 Part 1 of 4 of the EIAR sets out the key measures to address the concerns raised in relation to vulnerable users at these locations which is further elaborated in Section 4.14 of the Preliminary Design Report in the Supplementary Information. These details have evolved because of direct consultation between the NTA and representative mobility groups, accessibility audits and road safety audits which have been carried out during the development of the Proposed Scheme.

As described in Section 11.1 Island Bus Stop of the PDGB, these types are the preferred bus stop option to be used as standard on the Proposed Scheme where space constraints allow. Island bus stops reduce the potential for conflict between pedestrians, cyclists and stopping buses by deflecting cyclists behind the bus stop, thus creating an island area for boarding and alighting passengers. On approach to the bus stop island the cycle track is intentionally narrowed, with yellow bar markings also used to promote a low-speed single file cycling arrangement on approach to the bus stop. Similarly, a horizontal cycle track deflection is proposed on the approach to the island to reduce cyclists' speed on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area.

Where space constraints do not allow for an island bus stop, Section 11.2 Shared Bus Stop Landing Zone of the PDGB provides an option consisting of a shared bus stop landing zone that may be considered. This proposed arrangement will remove the conflict between cyclists and stopping buses by ramping cyclists up to the footpath level where they continue through the stop, but cyclists will be required to give way to pedestrians crossing the cycle track.

Section 11.2 goes on to explain that to address the pedestrian/cyclist conflict, which would apply to wheelchair users also, the cycle track should be narrowed on approach to the bus stop and yellow bar markings should be provided to alert cyclists to the potential conflict ahead. In addition to this, at the bus stop, the cycle track should be deflected to provide a 1.0m wide boarding/alighting zone for bus passengers, including wheelchair users. Also, appropriate tactile kerbing should be provided to ensure that visually impaired users are aware of crossing areas.

Section 4.13.2 Preliminary Design Report in the Supplementary Information outlines the location where island bus stops are proposed. Section 4.13.3 of the same document outlines the locations where shared landing area bus stops are proposed. In most cases the shared landing zone is proposed at minor stops with low usage, or where alighting occurs more than boarding, which shortens the time duration of activity at the stop and where there will be few passengers waiting and less need for a generous waiting area.

Junction Design

Summary of issues raised

The submission states that the junction design in the Proposed Scheme does not follow international best practice in junction design and is widely regarded as unsafe. The submission requests that the NTA use protected junction TL501 of the NTA's own Cycle Design Manual (Dutch-style junctions) throughout the project.

Response to issue raised

Principles of Protected Junction Design for BusConnects

With regards to the point raised about junctions being challenging for cyclists and going against NTA Cycling Design Manual, it is important to note that no two junctions are the same. Junctions on the

Proposed Scheme have broadly been categorised into 4 types of junctions as set out in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out in TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR.

The junction types set out in the PDGB directly align to the Proposed Scheme core aim and objectives. One of the core aims of the Proposed Scheme is to:

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

The proposed scale of the BusConnects CBC Infrastructure Works will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. With proposals of this scale, it is critical that the overall design approach matches the stated ambition and can achieve a longevity that such investment deserves. With this in mind, the NTA set about developing 'Design Principles' for the project. These principles would complement existing documents and standards such as the National Cycle Manual and DMURS. The PDGB was developed to outline the agreed design principles and to enable consistency of design.

Documents such as the National Cycle Manual and DMURS continue to serve the engineering and development industry well and over the past 7-10 years and have played an important role in allowing Ireland to follow international best practice. The PDGB, like all guidance documents, was developed to be cognisant of the everchanging nature of society, including commuting patterns and behaviours.

To acknowledge the expected increase in cycling numbers and to set about achieving the necessary 'step change' to cater for this increase, international best practice from countries which have already experienced this transition successfully was consulted. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.

The Netherlands has one of the highest rates of bicycle use in the world, provides the widest range of cycling know-how and is famous worldwide for its cycling infrastructure. The 'Ontwerpwijzer Fietsverkeer' (Dutch Cycle Design Guide) was used during the development of the PDGB. Of particular interest to the NTA, was how the design of junctions could be improved to offer better protection to cyclists.

The typical protected junction layout, as shown in Figure 3.380 below, offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right-turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

- Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;
- Raised and protected cycle track approaching junction;
- Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;
- Improved right-turning safety; and
- Improved sight lines for left turning traffic.

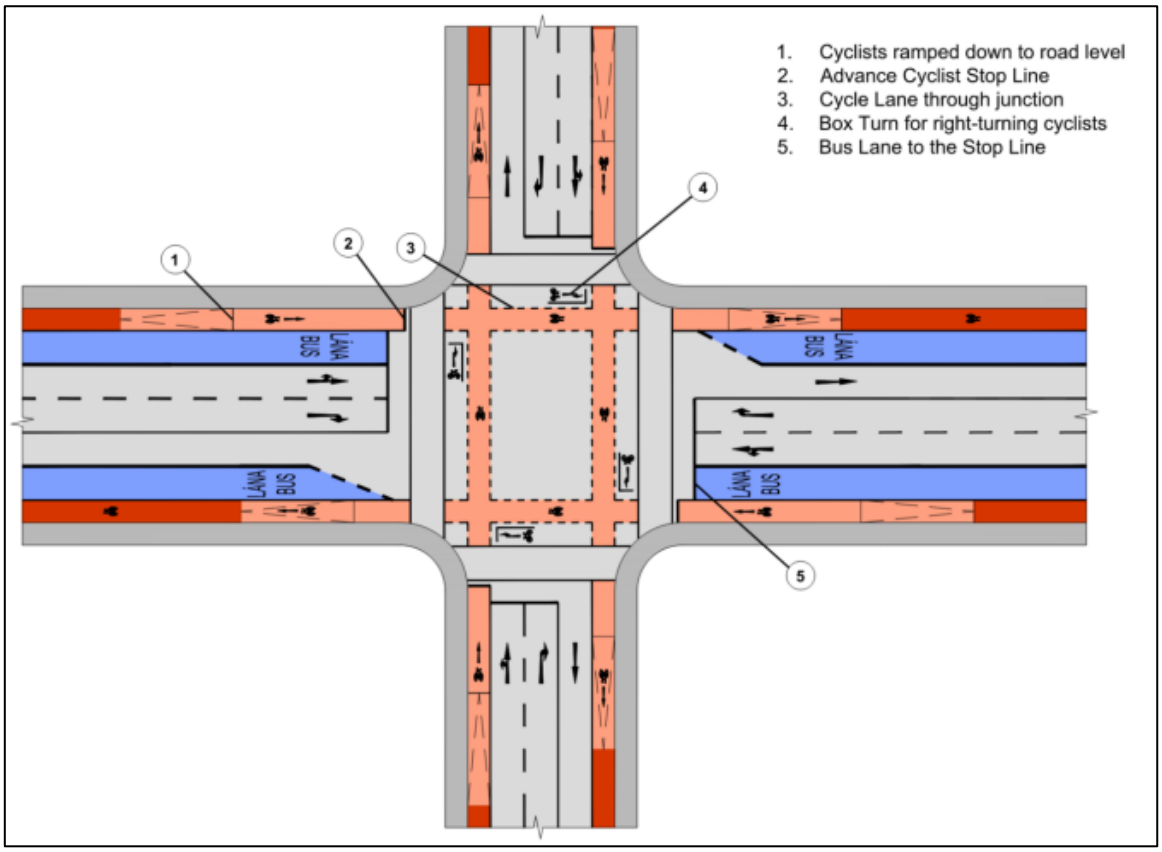


Figure 3.380: Typical Junction Layout from BusConnects Design Guidance Booklet (Image 16 from PDG)

Pedestrian-cyclist conflict

Spatial constraints are an important factor in determining any junction design. This is especially the case in urban settings. Where possible, the protected junction has been proposed to be retrofitted into all existing junctions, taking into consideration the best practice from international settings including the Netherlands. The NTA notes the Dublin Commuter Coalition has set out their preference for the 'Dutch style' junction type as described within the submission. There are, however, legislative, behavioural, and other practical considerations that need to be taken into account when looking at these international examples. Consideration for all of these elements has led to the development of the four junction types described in the PDGB.

An important consideration during the development of the PDGB was implementation of measures to mitigate pedestrian-cyclist conflict. The 'Dutch-style' junction described in the submission is typical of many junctions in the Netherlands and it allows for a potential un-signalised conflict between pedestrians and cyclists, which depends on a level of courtesy to ensure that collisions are avoided.

Following discussions with Irish disability groups, the issue of this potential conflict was raised as a significant concern along the core bus corridors for the visually impaired and for the mobility impaired, based on their members' experiences. Pedestrians are the most vulnerable of road users, and the addition of disability exacerbates this vulnerability. The four junction types within the PDGB have specifically been set out to mitigate these potential conflicts insofar is reasonably practicable.

Similarly, the layout of the 'Dutch style' junctions described in the submission can result in a reduced level of service for pedestrians. The layout of these junctions requires a multi-movement, sometimes multi-directional, non-continuous crossings for pedestrians required with at least 3 crossing movements (2 x cycle track crossing, 1x carriageway) to cross a side road of a typical junction. The intermediate landing area for pedestrians between the cycle track and carriageway requires a suitably sized holding area for pedestrians to wait before crossing the road, this can require a significant space for urban locations. Junction types 1-3 in the PDGB aim to consolidate and segregate/confine this waiting area to within the footpath, thus creating a more legible and functional use of the available space for all users with direct crossing facilities that align to the principles of DMURS.

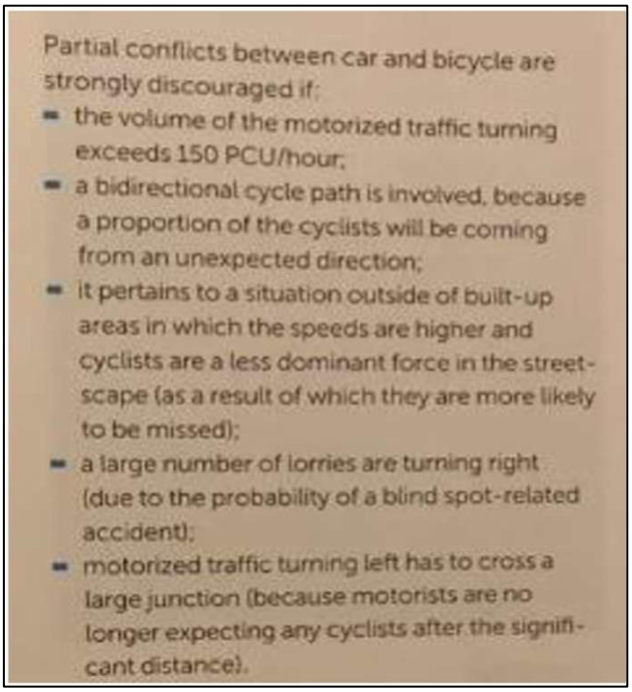
It is for these reasons that the layout of the 'Dutch style' junctions described in the submission have not been adopted for junctions on the Proposed Scheme.

Use of traffic signals to yield to cyclists

The concept of allowing both cyclists and general traffic to proceed together in the same direction is not uncommon and the same traffic signals arrangement also caters for left-turning traffic. In the Netherlands, there are scenarios where the equivalent right-turn movement can be green whilst cyclists are also green. There is, however, an additional requirement to yield to cyclists in this Dutch scenario, see Figure 3.381 below.

Figure 3.381: Example from the Netherlands of traffic signals + give way signage controlling turning traffic and cyclists (Source: Dutch Design Guide Ontwerpwijzer Fietsverkeer)

The arrangement depicted above from the Netherlands is beneficial for cyclists in that it minimises delay time but should be subject to design thresholds such as heavy turning volumes, HGV movements (difficulty with blind spots), high speed environments etc. which have been considered during the design of junctions as part of the Proposed Scheme. The PDGB also includes guidance on appropriate signage to be provided to reinforce the requirement for motorists to yield to straight ahead traffic in such locations.


Partial conflicts between car and bicycle are strongly discouraged if:

- the volume of the motorized traffic turning exceeds 150 PCU/hour;
- a bidirectional cycle path is involved, because a proportion of the cyclists will be coming from an unexpected direction;
- it pertains to a situation outside of built-up areas in which the speeds are higher and cyclists are a less dominant force in the street-scape (as a result of which they are more likely to be missed);
- a large number of lorries are turning right (due to the probability of a blind spot-related accident);
- motorized traffic turning left has to cross a large junction (because motorists are no longer expecting any cyclists after the signifi-cant distance).

Figure 3.382: Extract from Dutch Design Guide Ontwerpwijzer Fietsverkeer

Dutch authorities have a suite of solutions for different scenarios – no one solution works everywhere. For junctions to operate safely and effectively, it is critical that the control of all movements is

considered. All road users can have their own traffic signals at junctions (pedestrians, cyclists, buses, vehicles). To achieve optimum operational efficiency including the efficient movement of cyclists, it is also possible for some movements to occur safely at the same time. To assist with these design decisions, thresholds for turning movements have been used. Chapter 6 (Page 153) of the Dutch Design Guide Ontwerpwijzer Fietsverkeer discourages partial conflicts between cyclists and vehicles if the volume of turning vehicular traffic exceeds 150 PCUs per hour. See the above extract from Ontwerpwijzer Fietsverkeer which identifies the above threshold in Figure 3.382 above.

To put the above turning thresholds into context, 150 PCUs per hour equates to approximately 5 cars on average turning per 120 second cycle, or between 3 and 4 cars turning on average per 90 second cycle. The Proposed Scheme also provides other measures such as kerb segregation, advanced position cycle stops lines and early starts for cyclists which will further segregate and reduce the number of interactions between cyclists and vehicles. All these elements form the basis of a typical junction design and operation, thus no one element of a junction design should be considered in isolation.

52 of the 54 key junctions on the Proposed Scheme have implemented this approach to achieve optimum operational effectiveness including the efficient movement of cyclists. Introducing separate signal phases will increase delay for cyclists at junctions Introducing separate signal phases will increase delay for cyclists at junctions. This arrangement will promote the sustainable mode hierarchy for cyclists at junctions by providing priority to ahead cyclists over left turning vehicles. At each of these junctions the left turning vehicle traffic volumes in these locations are estimated to be less than the 150PCU threshold and similarly low HGV volumes are estimated in line with the principles established by international guidance. The Proposed Scheme has also been subject to Road Safety Audits at different stages that have informed the design development of the Proposed Scheme. Separately, the NTA, DLRCC, WCC and Dublin City Council will continue to promote the already established driver awareness campaign that seeks to promote driver awareness in line with the Road Safety Authority rules of the road as noted below.

'When turning left, or right, all drivers must watch out for cyclists going ahead or turning. When making a turn, watch out for cyclists in front of you or coming up on your left or right. Do not overtake a cyclist as you approach a junction if you are turning left or right, as the cyclist may be continuing straight ahead.'

Pedestrian Crossings

Summary of issues raised

The submission has queried the design rationale for providing two-stage crossings as part of the Proposed Scheme. It also queries the absence of pedestrian crossings on one arm for few junctions.

Response to issues raised

Where practicable, DMURS recommends that designers provide pedestrian crossings that allow pedestrians to cross the street in a single, direct movement. To facilitate road users who cannot cross in a reasonable time, the desirable maximum crossing length without providing a refuge island is 19m. This is applicable at stand-alone pedestrian crossings as well as at junctions.

Refuge islands should be a minimum width of 3m. larger refuge islands should be considered by designers in locations where the balance of place and movement is weighted towards vehicle movements, such as areas where the speed limit is 60kph or greater, in suburban areas or where there is an increased pedestrian safety risk due to particular traffic movements. Straight crossings can be provided through refuge islands only where the island is 4m wide or more. Islands less than 4m in width should provide for staggered crossings.

Where space allows, crossing lengths can be minimised by accommodating a suitable landing area for pedestrians between the road carriageway and cycle track, with the cycle track crossing controlled by mini-zebra markings. This reduced pedestrian crossing distance will have the added benefit of improving overall junction performance due to reduced intergreen times.

Along the Proposed Scheme, pedestrian crossings varying from 2.4m in width have been incorporated throughout the design. Larger pedestrian crossings widths have been allocated in areas that are expected to accommodate a high number of non-motorised users.

At signalised junctions and standalone pedestrian crossings, the footway is to be ramped down to carriageway level to facilitate pedestrians who require an unobstructed crossing. At minor junctions, raised table are provided at the mouth of each pedestrian crossing and is to be designed in accordance with standards. Audio units are to be provided on each traffic signal push button.

Formal crossing points are to be provided on the upstream side of bus stop islands, consisting of an on-demand signalised pedestrian crossing with appropriate tactile paving, push buttons and LED warning studs. A secondary informal crossing should be provided on the desire line on the downstream side of the island.

The Proposed Scheme will provide major improvements at almost all of the large number of junctions along the scheme, where pedestrian crossing distances will be shortened through removal of left-turn slip lanes and tightening of corners. Multi-stage pedestrian crossings will be simplified to single stage crossings at as many junctions as possible.

There are examples of two-stage pedestrian crossings proposed as part of this scheme, example Waterloo junction as shown in Figure 3.383 below. These crossings increase the time required for pedestrians to navigate junctions and crossings. Section 4.4.3 Junction Design of the Design Manual for Urban Roads and Streets states that '*designers should omit staggered crossings in favour of direct/single phase crossings*' and Section 4.3.2 Pedestrian Crossings states that '*designers should allow pedestrians to cross the street in a single, direct movement*' and that '*where staggered/staged crossings currently exist they should be removed as part of any major upgrade works*'.

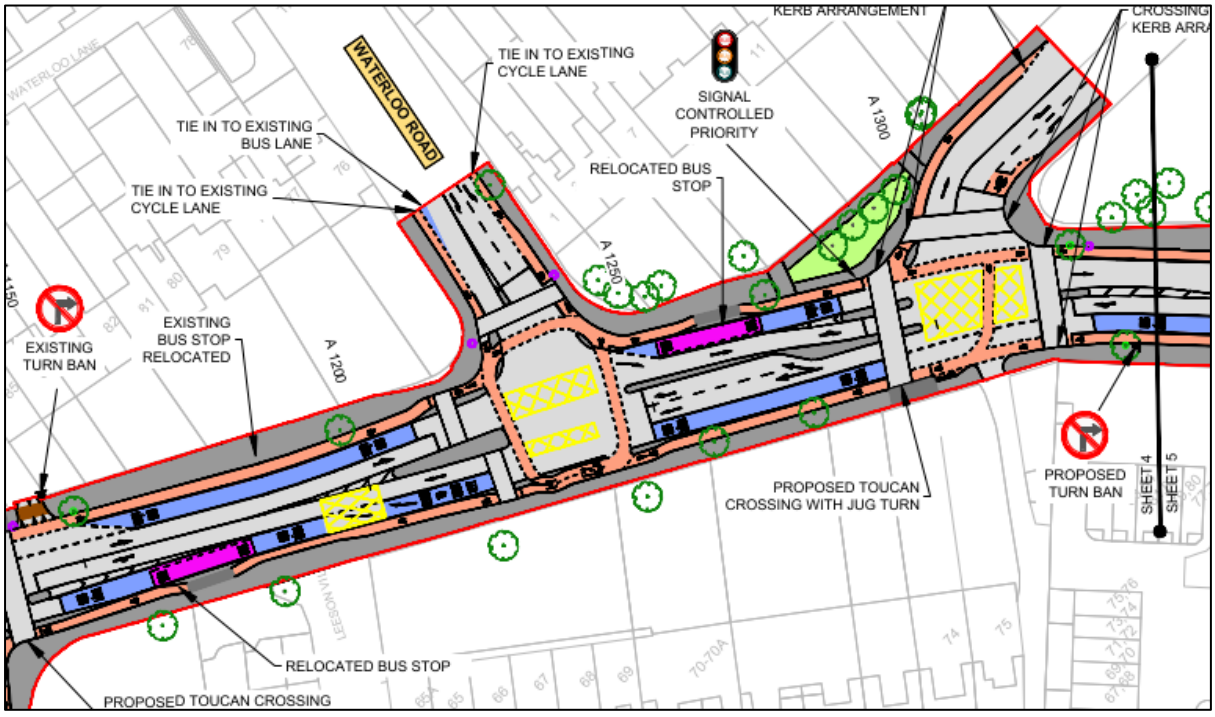


Figure 3.383: Extract from Chapter 4 EIAR General Drawing Arrangement of two-stage pedestrian crossing at Waterloo Road/Leeson Street Junction (Sheet 04)

For those junctions at which pedestrian crossings are not proposed at all of the arms, there are other existing crossing within close proximity. In these small minority of junctions within the Proposed Scheme the numbers of pedestrians are very low in general, mainly due to limited active frontage at that location, along Waterloo Road for example. The existing traffic signal staging has been retained at these junctions where the volumes of traffic are quite high, and the main road pedestrian signal runs in tandem with the right turn signal into the side road. For overall capacity reasons, and to enable inclusion of suitable priority for buses and cyclists, it was decided not to expand the provisions for pedestrians in the absence of a clear need and justification at these junctions.

Due to constraints at the following locations, two-stage pedestrian crossings are included, although it is noted that this does not align with the Design Manual for Urban Roads and Streets (DMURS):

- Leeson Street/St Stephen's Green junction

- Leeson Street Upper/Sussex Road - north and south junctions
- Waterloo Road/Leeson Street junction
- Anglesea Road/Stillorgan Road junction
- RTÉ/Teresian School crossing
- Airfield Park/RTÉ/Stillorgan Road junction
- Nutley Lane/Stillorgan Road junction
- Foster's Avenue/Stillorgan Road junction
- The Rise/Stillorgan Road junction
- Booterstown Avenue/Stiliorgan Road junction
- Mount Merrion Avenue/Stillorgan Road junction
- Old Dublin Road/Stillorgan Road junction
- Patrician Villas/St Laurence's Park crossing
- Stillorgan Park Road/Stillorgan Road junction
- Glenalbyn Road bus stop crossing
- N31/Farmleigh Avenue/Stiliorgan Road junction
- Galloping Green/Belmont Terrace crossing
- Newtownpark Avenue/Leopardstown Road/Stillorgan
- Knocksinna crossing
- Springfield Park/Stillorgan Road junction
- Kill Lane/Stillorgan Road junction
- Westminster Road/Stillorgan Road junction
- Old Bray Road/Stillorgan Road junction
- Clonkeen Road/Stillorgan Road junction
- Johnstown Road/Bray Road junction
- Shrewsbury House crossing
- Orchard Square/Bray Road junction
- Garrison Mews/Bray Road junction
- Wyattville Road crossing
- Cherrywood Road crossing
- M11 J5/Dublin Road junction

Furthermore, some three and four-way junctions are missing pedestrian crossings entirely on one or more arms. These missing crossings mean a pedestrian may need to wait for three lights — or more in the case of two-stage crossings — just to cross the street and continue their journey. Section 4.4.3 Junction Design of DMURS states that '*designers should provide crossings on all arms of a junction*' and Section 4.3.2 Pedestrian Crossings states '*designers should provide pedestrian crossing facilities at junctions and on each arm of the junction'.*

Due to constraints at the following locations, it is noted that these junctions do not align with the DMURS:

- Leeson Street Upper/Sussex Road - north and south junctions
- Burlington Road/Leeson Street Upper junction
- Waterloo Road/Leeson Street junction
- Foster's Avenue/Stillorgan Road junction
- The Rise/Stillorgan Road junction
- Booterstown Avenue/Stiilorgan Road junction
- Mount Merrion Avenue/Stillorgan Road junction
- Trees Road Lower/Stillorgan Road junction
- Old Dublin Road/Stillorgan Road junction
- Springfield Park/Stillorgan Road junction
- Kill Lane/Stillorgan Road
- Bray Road/Stillorgan Road junction
- Clonkeen Road/Stillorgan Road junction
- Johnstown Road/Stillorgan Road junction
- Orchard Square/Bray Road junction
- Lower Road/Dublin Road junction
- M11 J5/Dublin Road junction

Shared Space

Summary of issues raised

The submission notes that the Proposed Scheme includes for the provision of shared space for pedestrians and cyclists at a number of junctions and asserts that this is an unsuitable arrangement for busy urban junctions. The submission requests that pedestrians and cyclists be segregated at all junctions for the safety and comfort of everyone.

Response to issue raised

The National Cycle Manual, which was current at the time of design, notes that where practicable, the segregation of pedestrians and cyclists is desirable, and shared facilities should not be considered as a first option. This superseded National Cycle Manual recognises that in some cases, shared facilities are appropriate. The design of the Proposed Scheme has been undertaken such that pedestrians and cyclists are segregated wherever practicable and shared spaces are only used in specifically constrained locations, typically at junctions where there is insufficient space to provide a protected junction thereby requiring cyclists to make turning movements via toucan crossings.

Provision of signage and road markings will encourage cyclists to carefully negotiate these areas such that safety of pedestrians is not compromised.

The Proposed Scheme design at Adelaide Road / Leeson Street Junction from the General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR can be seen in Figure 3.384.

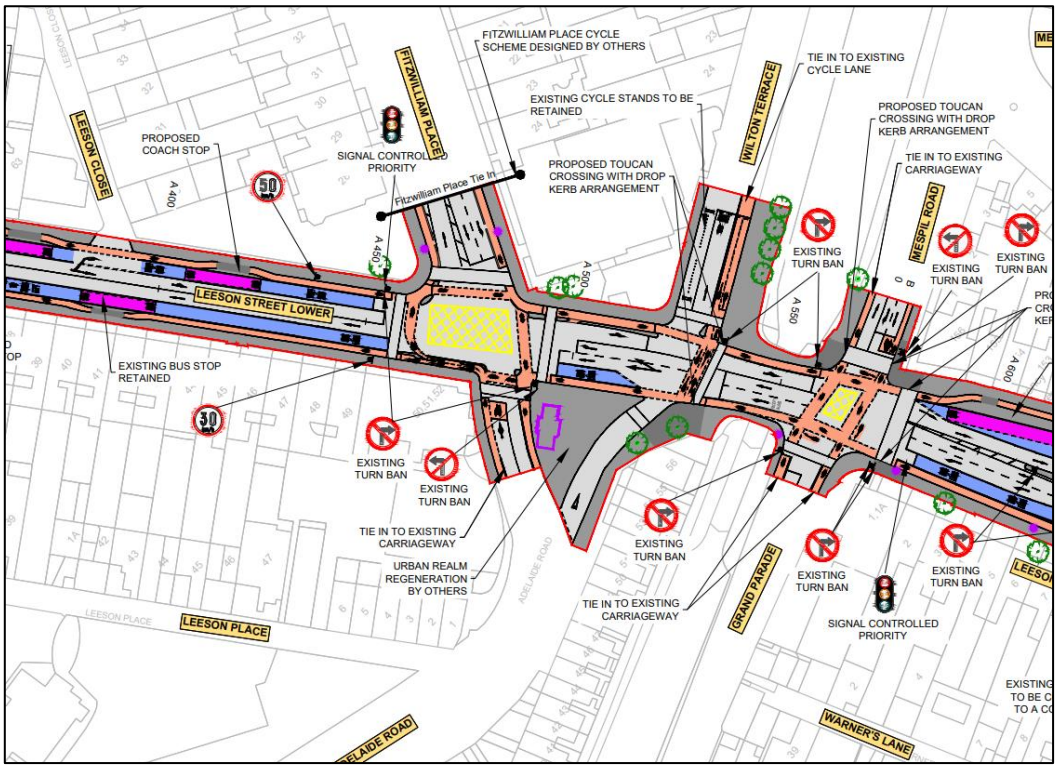


Figure 3.384: Extract from Chapter 4 EIAR General Arrangement Drawing of shared bicycle/pedestrian space at Adelaide Road/Leeson Street Junction (Sheet 02)

There are junctions where the use of shared space pavement is provided where turning movements or yield areas are created for cyclists who are forced into the same spaces as pedestrians. This is sub-standard given the wider scope of the Core Bus Corridor project and the potential influence it can have on the overall modal split within the Metropolitan area.

List of shared space:

- Adelaide Road/Leeson Street junction;
- Belfield Overpass;
- Dublin Road/Shanganagh Road junction; and
- Few Toucan Crossings with drop kerb arrangements

Bike Parking

Summary of issues raised

The submission notes the Proposed Scheme does not state where bike parking will be located, nor does it appear in the general arrangement drawings. The submission suggests that to encourage a significant modal shift for walking and cycling, that in addition to the proposed cycle infrastructure, it is important to provide for the best quality bicycle cycle parking facilities at bus stops and public transport interchanges.

The submission recommends that conditions be set to provide for additional identified areas of dedicated cycle parking and inclusion of stands and storage locations which complement the provided cycle lanes and interface with public transport stops and interchanges.

Response to issue raised

As noted in Section 4.6.3 of Chapter 6 of Volume 2 of the EIAR, bike racks will generally be provided, where practicable, at Bus Stops and key additional locations as noted in the Landscaping General Arrangement drawings in Volume 3 of this EIAR and in accordance with the cycle parking provision shown in the bus stop arrangements shown in Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) for BusConnects Core Bus Corridors of Volume 4 Part 1 of 4 of the EIAR.

UCD Bus Interchange

Summary of issues raised

The submission notes that there is a lack of full segregation between buses and cyclists at the UCD Bus Interchange.

Response to issue raised

The General Arrangement Drawing shows proposed cycle track and proposed toucan crossing with drop kerb arrangement. Toucan crossings offer safe and segregated crossings for pedestrians and cyclists at the UCD Bus Interchange.

The Proposed Scheme design at UCD Bus Interchange from the General Arrangement Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR can be seen in Figure 3.385 below.

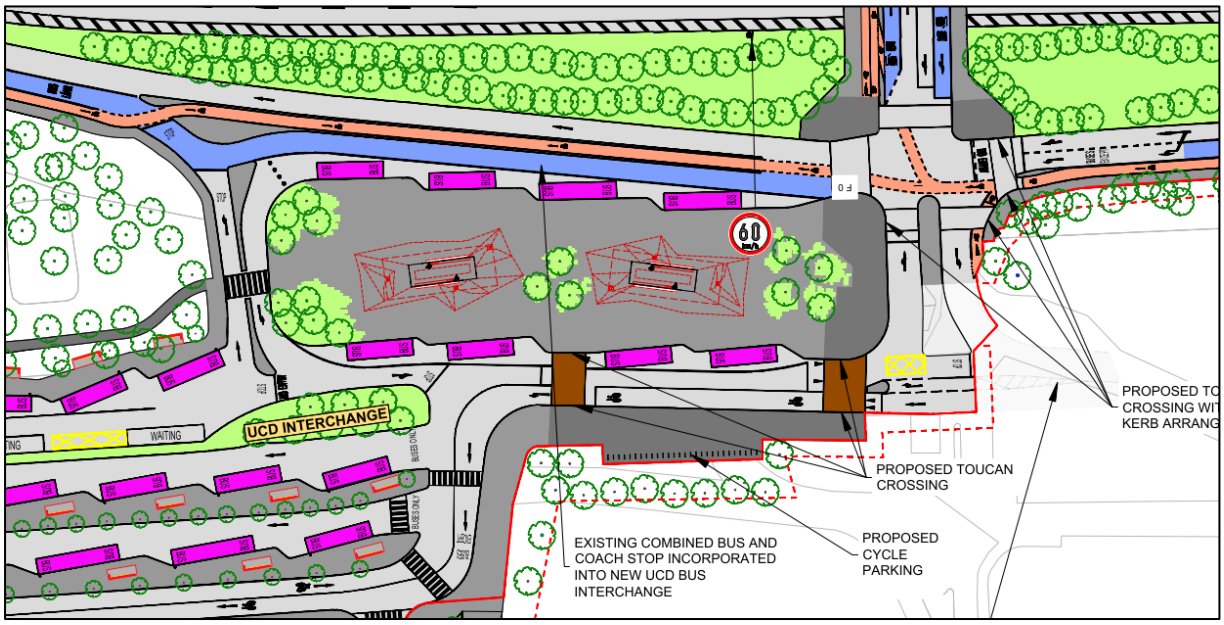


Figure 3.385: Extract from Chapter 4 EIAR General Arrangement Drawing at UCD Bus Interchange (Sheet 13)

Figure 3.385 above shows that cycle track is segregated from the bus lane through kerb separation along the Northbound slip lane at UCD Bus Interchange. At the junction the cyclists will ramp down and the segregation will recommence after the Toucan crossing.

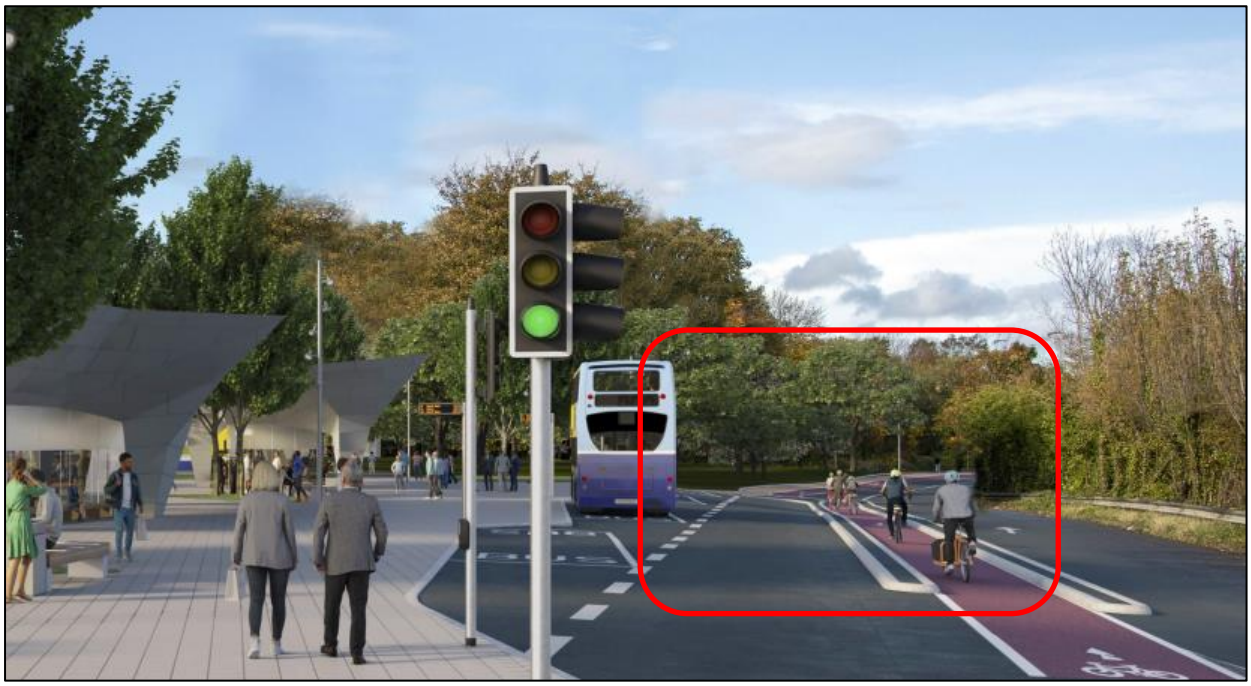


Figure 3.386:Extract from Photomontages at UCD (Figure 17.2) (Sheet 49)

Figure 3.386 above shows that Photomontages (Sheet 49) includes a physical segregation present between cyclists and traffic.

Cycling Improvements in Shankill

Summary of issues raised

The submission notes that the Proposed Scheme fails to provide improvement for cycling in Shankill Village.

Response to issue raised

Refer to response in Section 3.9.3.7 on Impact on Cycle Infrastructure.

3.13.9 65 - Dún Laoghaire-Rathdown County Council

3.13.9.1 Overview of Submission

Structure of Submission

Dún Laoghaire-Rathdown County Council's (DLRCC) submission comprises 70 pages and is sectionalised numerically. For ease of reference, the DLR section numbering and sub-section numbering conventions have been retained throughout the NTA's response as set out in the following paragraphs. The NTA's response to the submission is set out as follows:

Section 1 – Introduction and Planning Policy

Section 2 – Traffic and Active Travel Recommendations

Section 3 – Landscape, Biodiversity, Heritage and Architectural Conservation Recommendations

Section 4 – Drainage, Road Maintenance, Public Lighting and Pollution Control Recommendations

Section 5 – Compulsory Purchase Order

The submission also includes Appendix 1, 2 and 3

Appendix 1 – Report on Landscape and Arboriculture

Appendix 2 – Biodiversity Officer Response

Appendix 3 – Property Management Department Comments

3.13.9.2 Response to Issues Raised

Section 1 – Introduction and Planning Policy

DLRCC declare their support for the Proposed Scheme at the outset of the submission, stating that the BusConnects Core Bus Corridor Infrastructure projects present a major opportunity for transformative improvements for both cycling and public transport infrastructure within DLRCC and the wider Dublin area. The submission also sets out the DLRCC County Development Plan 2022-2028, Woodbrook-Shanganagh Local Area Plan 2017-2028 and Stillorgan Local Area Plan 2018-2024 and objectives which support the Proposed Scheme.

DLRCC believes that their recommendation in submission will add value and help maximise the move to sustainable travel. The submission outlines how modal shift is essential to the creation of a compact, connected and climate resilient County and the provision of enhanced public transport and cycling facilities will greatly assist with hastening the change.

DLRCC note that the policies and objectives of the DLRCC County Development Plan 2022 -2028, are considered, weighed up and balanced in the Board's assessment.

DLRCC's support for the scheme is noted and welcomed by the NTA. The NTA acknowledges DLRCC's request that their recommendations be considered, and this is discussed further in the following sections.

The NTA acknowledges the commentary in Section 1 in relation to Planning Policy context and notes that BusConnects generally aligns with the policy context set out within the application documents namely EIAR Volume 2 Chapter 2 (Need of the Scheme) and Volume 4 Appendices Part 1 of 2, 01. A2.1 Report Planning Report for the Proposed Scheme.

Section 2 - Traffic and Active Travel Recommendations

Overview of submission – General Comments

The submission notes:

'*The Board is requested to*:

- *ensure that all bus stops are adequately set back from junctions to avoid buses potentially backing up and blocking traffic and to also ensure that visibility of junction traffic signal heads for oncoming traffic is not impeded.*
- *ensure that adequate stacking space for cyclists is provided, especially at protected junctions, to accommodate cyclists waiting to cross the road and to take into account the anticipated increase in cycle traffic over the years ahead*.'

DLRCC note that cycle times have been extended to 120 secs *'to maximise the throughput of people through the junction*' but contend that increasing the cycle time increases the throughput of cars only and that peds, cyclists and buses do not benefit from longer cycle time.

DLRCC note that at some junctions, 'there are separate stages for each mode (presumably for safety reasons)'. Currently cyclists have more green time than would be proposed as a result.

DLRCC concerned about cyclist compliance is low with phasing where straight through cyclists are on red while straight through car are on green.

DLRCC understands that a trial of similar junction layouts and signal phasing has been carried out in the Dublin City Council area, but at a junction with low cyclist traffic volumes, and other trials are being considered. DLRCC suggest that Results of Dublin City Council trials should be used to decide final detailed design of protected junctions.

DLRCC note that the NTA has published an updated version of the Cycle Design Manual, which we understand will be subject to ongoing review.

DLRCC request a condition for a trial junction with significant car and cyclist traffic and that final detail

design and traffic signal phasing is agreed with DLRCC, which should allow sufficient flexibility for the results of any such trials and/ or updates to the National Cycle Design Manual.

Side Roads:

DLRCC query the uncontrolled side road detail. In the interest of pedestrian and cyclist safety, DLRCC has a requirement, where feasible, for the provision of continuous pedestrian and cycle facilities across side roads

DLRCC requests a condition requiring prior engagement and agreement with DLRCC regarding the final design of the pedestrian and cycle facilities at junctions with side roads in order to ensure an approach which is consistent with the requirements of the Council and the latest version of the Cycle Design Manual.

Response to submission – General Comments

Set back of bus stops from junctions

Appendix H to the Preliminary Design Report in the Supplementary Information includes the Bus Stop Review Report for the Proposed Scheme, which outlines the approach taken to rationalise bus stop quantity, location and spacing along the Proposed Scheme corridor.

Appendix A within the Bus Stop Review Report presents the more general Bus Stop Review Methodology Report. This report outlines the basic criteria for consideration when locating a bus stop along the Proposed Scheme:

- Driver and waiting passengers are clearly visible to each other;
- Located close to key local facilities;
- Located close to main junctions without affecting road safety or junction operation;
- Located to minimise walking distance between interchange stops;
- Where there is space for a bus shelter;
- Located in pairs, ‘Tail to tail’ on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footway width

The above criteria have been adopted on the Proposed Scheme as much as practicable. Some bus stops have been retained in the existing location or close to it (for example, CH A400 inbound, CHA1400 inbound, CH A6850 outbound, CH A 7675 outbound, CH A 7575 inbound, CH A 17700 inbound). In general, where bus stop locations are being amended, the new bus stop has been located on the downstream side of a junction as outlined in Section 5 of Appendix H Bus Stop Review Report. This avoids stationary buses impacting on visibility of approaching vehicles (for example, blocking junction signal heads). It also avoids stationary buses at bus stops impacting on the progression of general traffic through the junction, if the bus stop were located on the upstream side of a junction. In the case of the Proposed Scheme, most bus stops are located within a dedicated bus lane, therefore avoiding any impact on the progression general traffic. Examples these are at CH 3275 outbound, CH A 5250 outbound, A5600 outbound, A9600 outbound, for example.

There are some bus stops that have been retained at or very close to their current location, and in doing so, contradict the aforementioned advice in relation to locating bus stops. For example:

- CH A 350 Outbound – bus stop retained in current location on Lesson Street Lower on the approach to the Fitzwilliam junction. Locating this bus stop on the downstream side of the junction is constraint with space as the route crosses the Grand Canal.
- CH A3450 Outbound – bus stop retained in current location on Stillorgan Road on approach to the RTE junction. Relocating the bus stop on the downstream side of the junction is constraint with the existing foot over bridge and also the existing location is desired line for pedestrian in particular due to the location of the Teresian School and the proposed development land North of RTE. A Toucan crossing is proposed.
- CH A10650 lutbound – bus stop retained in current location on Stillorgan Road on approach to the Clonkeen Road junction. Relocating the bus stop on the downstream side of the junction is constraint with the existing foot over bridge and the relocated location provides better connectivity with Toucan crossing.

- also, an existing inbound bus stop on the downstream side of the Grey Gates junction on Stillorgan Road is proposed to be relocated to CH A 5250 on the upstream side of the junction due to the following:
    - Available space to locate both a local bus stop and a private coach (layby) bus stop;
    - Accommodate the BusConnects standard cross-section and left turn lane downstream of the junction;
    - Existing pedestrian crossing and desire line is on the south-eastern arm of the junction, connecting the Colaiste Eoin School with the residential catchment around Grey gates.
- also, an existing outbound bus stop on the downstream side of the Lower Kilmacud Road junction on Stillorgan Road is proposed to be relocated to CH A 6750 on the upstream side of the junction due to the following:
    - Available space to locate an island local bus stop;
    - Co-ordinated with the Stillorgan Movement and pedestrian design line to improve permeability and connectivity between Patrican Vilas and Stillorgan;
    - Hence, a new Toucan crossing is proposed at the relocated bus stop.

Adequate stacking space for cyclists

The junction types set out in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR directly align to the Proposed Scheme core aim and objectives. One of the core aims of the Proposed Scheme is to:

'Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.'

The proposed scale of the BusConnects CBC Infrastructure Works will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.

The Netherlands has one of the highest rates of bicycle use in the world, provides the widest range of cycling know-how and is famous worldwide for its cycling infrastructure. The 'Ontwerpwijzer Fietsverkeer' (Dutch Cycle Design Guide) was used during the development of the PDGB. Of particular interest to the PDGB team, was how the design of junctions could be improved to offer better protection to cyclists.

The typical protected junction layout in Figure 3.387 below offers significant safety improvements compared to the traditional junction layout. The deflection of the cycle track at the junction allows the protection kerb (Note 4) to be positioned on the corner of the junction. In urban locations subject to spatial constraints, the protection kerb provides a tighter turning radius for vehicles and will force the left-turning motorist to reduce speed before making the tighter turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane. Right turning cyclists will navigate the cycle lane on the junction and turn right (in a controlled manner) after it crosses the side arm. Other benefits to this junction design include:

1) Traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict;

2) Raised and protected cycle track approaching junction;

3) Reduced risk of side-swipe due to the removal of cyclist-vehicle conflict at weaving and merging lanes on all approaches;

4) Improved right-turning safety; and

5) Improved sight lines for left turning traffic.

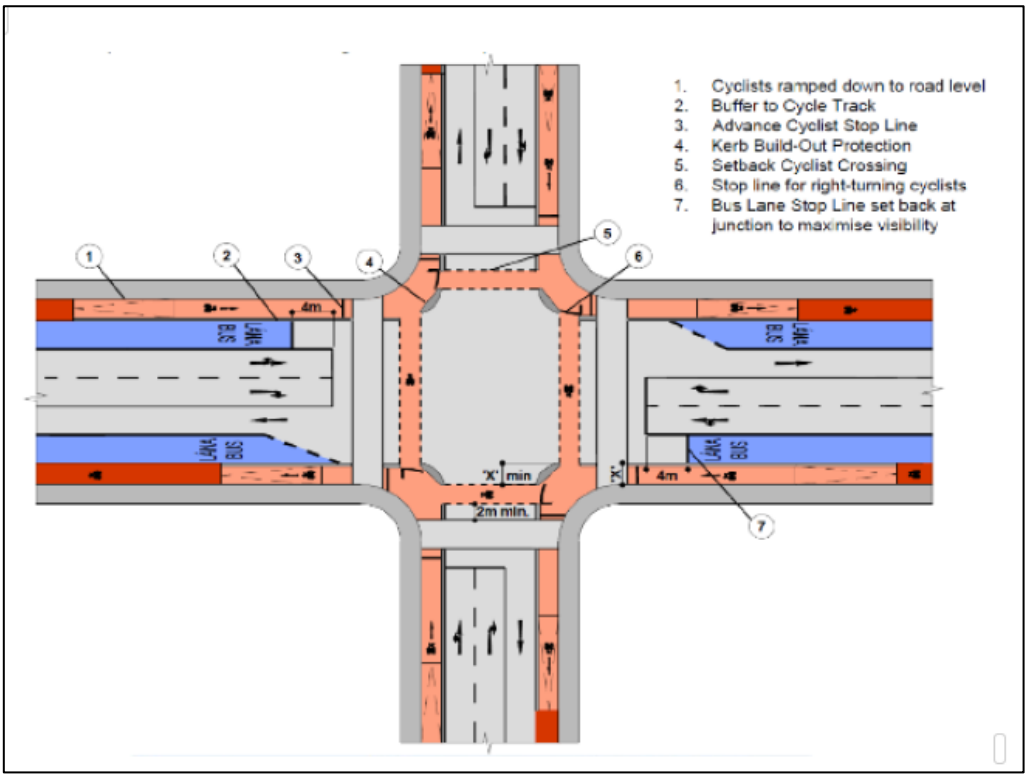


Figure 3.387: Typical Junction Layout from BusConnects Design Guidance Booklet (Image 16 from PDG)

In constrained urban locations, the space available at junctions for the introduction of the projected junction design principles will be restricted, and so will be the ability to provide more than the standard cycle track width on approaches to junctions. Stacking space will benefit from the following:

- Advance cycle stop line on approaches to junctions ahead of the general traffic and bus lane stop lines to maximise stacking space and also maximise visibility of cyclists ahead of general traffic and buses;
- Phasing and staging of the proposed traffic signals whereby left turning cyclists can proceed even when straight ahead cyclists are on red. This will minimise the quantum of cyclists stacking at a stop line;
- Early start signal for cyclists to allow cyclist to proceed before vehicles get green;
- A secondary stop line and stacking room behind the kerb build-outs provided for right-turning cyclists making a hook-turn;
- Unimpeded cycle track provision on approaches to junctions, whereby the Proposed Scheme provides 100% coverage of segregated raised-adjacent cycle track.

120 Second Cycle Time

For the purposes of the Traffic assessment as part of Chapter 6 (Traffic & Transport) of the EIAR, a 120 second cycle time (for a cycle of all of the traffic light stages at a junction) was applied across all junctions within Dún Laoghaire-Rathdown County Council. It is expected, however, that in practice, the corridor will operate on an adaptive basis, permitting reduced cycle times when traffic volumes drop momentarily (preventing any lost green time) and permitting priority to be applied to different modes including, for example, hurry calls for buses. Whilst pedestrians and cyclists benefit from shorter cycle time, on balance, considering the overall demand of each mode within a cycle, the 120 second cycle time caters best for overall People Movement, as prescribed in Section 6.1.1.1 of Chapter 6 (Traffic & Transport) of the EIAR.

Currently cyclists have more green time than would be proposed

DLRCC contend that, due to separate stages being proposed for each mode at some junctions, cyclists have more green time currently than would be proposed.

Whether cyclists run with straight ahead traffic or whether they run on their own depends on the junction

type. No two junctions are the same. Junctions on the Proposed Scheme have broadly been categorised into 4 types of junction as set out in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out at each location in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR and summarised in Table 4.6, Table 4.11, Table 4.18 and Table 4.23 in Chapter 4 (Proposed Scheme Description) of the EIAR. A more detailed description of the Junction types on the Proposed Scheme is provided in Sections 5.3.3.1, 5.3.3.2, 5.3.3.3 and 5.3.3.4 of the Preliminary Design Report with a detailed summary of the junction types along the Proposed Scheme also provided in Table 5-1, Table 5-2, and Table 5-3 of the Preliminary Design Report. It should be noted that only junction Types 1, 2 and 3 are proposed for the Proposed Scheme, i.e Junction Type 4 is not proposed.

Each junction within the Proposed Scheme has been designed taking into consideration anticipated demands and predicted operation. Staging and signal times have been proposed on a case-by-case (junction-by-junction) basis considering multiple factors including safety and demand.

Concerns about cyclist compliance and compliance with the latest update of the National Cycle Manual

The Proposed Scheme and the proposed scale of the BusConnects CBC Infrastructure Works overall will be transformational for cycling in Dublin, delivering a large number of the primary cycling routes identified in the Greater Dublin Area Cycle Network plan. With proposals of this scale, it is critical that the overall design approach matches the stated ambition and can achieve a longevity that such investment deserves. In the case of the Proposed Scheme, the percentage of fully segregated cyclist facilities across the entire corridor will increase from 47% to 91% as indicated in Table 4.1 of Chapter 4 (Proposed Scheme Description) of the EIAR.

A Level of Service (LoS) assessment was undertaken using an adapted version of the NTA's National Cycle Manual Quality of Service (QoS) Evaluation criteria. The results of the Cycling Qualitative Assessment on Section 1 of the Proposed Scheme (between Lesson Street to Donnybrook) in Table 6.23 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of C ratings. During the Do Something scenario, the LoS consists predominantly of the higher of B ratings. Given the quality of the existing cycling infrastructure along the Proposed Scheme, the improvements will have a Positive, Moderate and Long-term effect on the Proposed Scheme between between Donnybrook to Loughlinstown Roundabout.

A Level of Service (LoS) assessment was undertaken using an adapted version of the NTA's National Cycle Manual Quality of Service (QoS) Evaluation criteria. The results of the Cycling Qualitative Assessment on Section 2 of the Proposed Scheme (between Donnybrook to Loughlinstown Roundabout) in Table 6.28 of Chapter 6 (Traffic & Transport) of the EIAR, demonstrate that the LoS during the Do Minimum scenario consists of B ratings. During the Do Something scenario, the LoS consists predominantly of the higher of A+ ratings. Given the quality of the existing cycling infrastructure along the Proposed Scheme, the improvements will have a Positive, Moderate and Long-term effect on the Proposed Scheme between Donnybrook to Loughlinstown Roundabout.

Table 6.43 and Table 6.50 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR outline the AM and PM peak hour trips expected by mode in the 2028 traffic model. Cycling is projected to increase its modal share from 1% to 4% during the AM peak hour and from 1% to 4% during the PM peak hour. In absolute numbers, this equates to an increase from 30 trips to 120 trips during the AM peak hour (400% increase) and an increase from 30 trips to 140 trips during the PM peak hour (367% increase).

As for all road users, it will not be practicable to ensure that all future cyclists on the Proposed Scheme will comply with all traffic management measures, however, when one considers the significant increase in cyclist numbers projected, those prepared to not comply with the traffic management measures is expected to be a low percentage of the overall quantum of cyclists and that the consistency across the over BusConnects Infrastructure programme will ensure that cyclists adapt to the design principles outlined in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR.

NTA is aware of the recent update to the National Cycle Manual September 2023. BusConnects Infrastructure programme will ensure that cyclists adapt to the design principles outlined in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR.

Section 4.4 Chapter 4 (Proposed Scheme Description) Volume 2 of the EIAR states 'T*he design of the*

Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR). This guidance document was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The project objectives are described in full in Chapter 2 (Need for the Proposed Scheme). The purpose of the PDGB is to complement existing guidance documents / design standards relating to the design of urban streets, bus facilities, cycle facilities and urban realm.

A number of published design standards and guides have been utilised to inform the geometrical design of the Proposed Scheme and, as listed below:

- *The Design Manual for Urban Roads and Streets (DMURS) (Government of Ireland 2013)*
- *The National Cycle Manual (NCM) (NTA 2011);*
- *National Road Design Standards (Transport Infrastructure Ireland (TII));*
- *The Traffic Signs Manual (TSM) (Department of Transport, Tourism and Sport 2019);*
- *Guidance on the Use of Tactile Paving Surfaces (UK Department for Transport (DfT) 2007);*
- *Building for Everyone: A Universal Design Approach (National Disability Authority (NDA) 2020); and • Greater Dublin Strategic Drainage Study (Irish Water 2005).'*

NTA is aware of the recent update to the National Cycle Manual September 2023 and the BusConnects Infrastructure Programme team has had active contribution in the development of this updated manual.

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approved condition.

Use of Results of DCC trials for final detailed design of protected junctions

Dublin City Council have been monitoring a small number of junctions that have been installed in recent years which have trialled design concepts similar to that of the PDGB as set out in Appendix A4.1 of the EIAR. Whilst the junctions in question (for example junction of Balbutcher Lane and Hampton Wood) don't facilitate dedicated bus lanes on any approach, the manner in which they control vehicle / cyclist conflict at the junction is similar to that of the Proposed Scheme. The design team of the Proposed Scheme have been liaising with DCC's BusConnects Liaison Office throughout the design period including in relation to the newly installed junction at Balbutcher Lane and Hampton Wood junction. This liaison will continue for the detailed design process.

Condition for a trial junction

It isn't proposed that a trial junction be constructed as part of the Proposed Scheme. As noted above, the Proposed Scheme has been designed to achieve the stated objectives, and this allows for all junctions in practice to operate on an adaptive basis, permitting priority to be applied to different modes. The EIAR as submitted has robustly addressed this matter.

BusConnects Infrastructure programme will ensure that cyclists adapt to the design principles outlined in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR. As stated in EIAR Volume 2 Chapter 4, Section 4.4, 'T*he design of the Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR). This guidance document was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The project objectives are described in full in Chapter 2 (Need for the Proposed Scheme). The purpose of the PDGB is to complement existing guidance documents / design standards relating to the design of urban streets, bus facilities, cycle facilities and urban realm.'*

NTA is aware of the recent update to the National Cycle Manual September 2023 and the BusConnects

Infrastructure Programme team has had active contribution in the development of this updated manual.

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approved condition.

Traffic Reassignment (Mitigate impacts of traffic reassignment by expediting the approval/construction of the Bray to CC Scheme).

DLRCC are carrying out their own active travel measures and are concerned about traffic reassignment in these areas as a result of the Proposed Scheme, suggesting that the expedition of the Bray to City Centre Core Bus Corridor Scheme will allay their traffic reassignment concerns.

For the purpose of planning, all BusConnects Infrastructure Schemes will undergo their own separate planning process. Each scheme will be designed and assessed in isolation on its own merits and will be capable of operating as a stand-alone scheme without any dependence on other or adjacent BusConnects schemes. The Bray to City Centre Core Bus Corridor Scheme is no different and has been assessed independently of the Belfield / Blackrock to City Centre Core Bus Corridor Scheme, while cumulative assessment has been carried out as part of the EIAR.

Treatment of Side Roads

DLRCC highlight the proposed entry treatment at Grotto Avenue as the exemplar for side road treatment and raise concerns that other side roads have cycle lanes at grade with the carriageway.

To ensure pedestrian priority at side roads, physical interventions in the form of raised table side entry treatments, and raised cycling infrastructure are proposed in line with Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR. Figure 30 of the PDGB (see Figure 3.388 below) illustrates how a footpath and raised-adjacent cycle track will cross an uncontrolled T-junction.

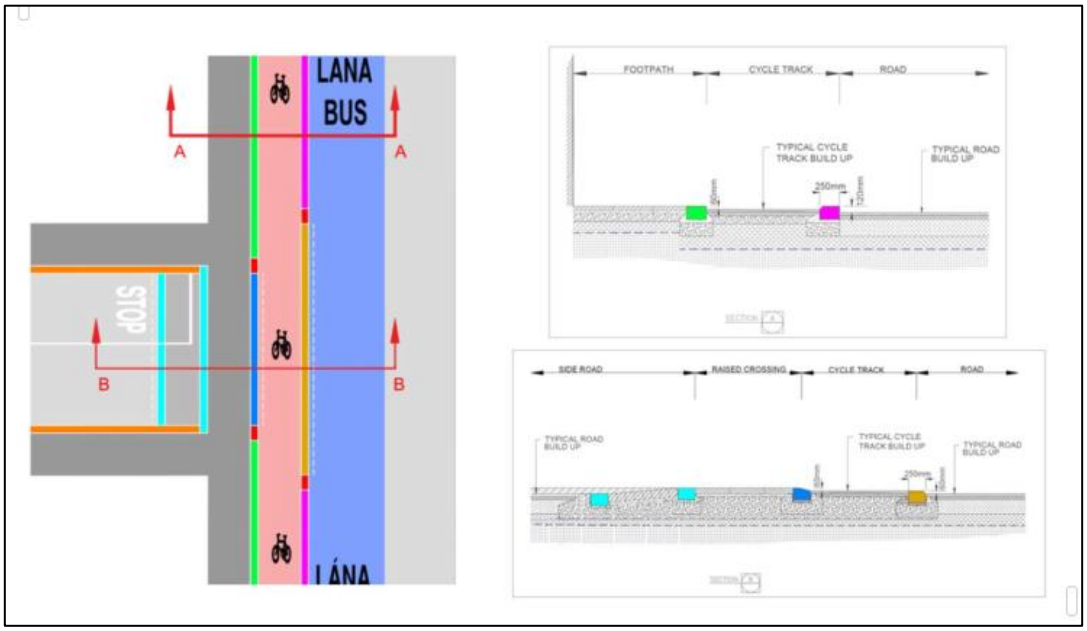


Figure 3.388: Extract from Appendix A4.1 Preliminary Design Guidance Booklet (PDGB) showing footpath and raised-adjacent cycle track will cross an uncontrolled T-junction

The principle of how the raised kerb between the cycle track and the bus lane is dropped across the

side road can be visualised by observing how the kerb between the bus lane and the cycle track in Section A (purple kerb) transitions from 120mm high to 60mm high in Section B (orange kerb). Whilst this kerb height transitions, the level of both the footpath and the cycle track across the side road remains at 120mm above the carriageway and 60mm above the carriageway respectively. The 60mm kerb between the cycle track and the footpath remains also across the side road. This detail allows for the entry treatment to be applied at side road T-junctions where there is no parking either side of the side road.

In situations where parking is provided on either side of a side road (Grotto Avenue, Raglan Road), Figure 31 of the PDGB details how the platform upon which the raised-adjacent cycle track will cross an uncontrolled T-junction, extends to meet the kerb at the edge of the carriageway. Localised road markings will define the roadside edge of the cycle track across the side road.

The Road Safety Audits undertaken for the Proposed Scheme, included as Appendix M of the Preliminary Design Report provided in the Supplementary Information did not highlight any safety issues with the proposed arrangement in this regard.

The Proposed Scheme will increase the number of raised table crossings on side roads from 13 in the Do Minimum to 80 in the Do Something scenario, equating to a 515% increase.

BusConnects Infrastructure programme will ensure that cyclists adapt to the design principles outlined in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR. As stated in EIAR Volume 2 Chapter 4, Section 4.4, 'T*he design of the Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR). This guidance document was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The project objectives are described in full in Chapter 2 (Need for the Proposed Scheme). The purpose of the PDGB is to complement existing guidance documents / design standards relating to the design of urban streets, bus facilities, cycle facilities and urban realm.'*

NTA is aware of the recent update to the National Cycle Manual September 2023 and the BusConnects Infrastructure Programme team has had active contribution in the development of this updated manual.

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approved condition.

Overview of Submission - Specific Comments:

Booterstown Avenue and Mount Merrion Avenue junctions:

Consideration should be given to allowing straight through cycle movements on the side of the junction that presents no motorised traffic conflicts provided that pedestrian movement can be safely accommodated. due consideration to allowing straight through cycle movements to bypass junctions where feasible.

NTA Response:

Junctions on the Proposed Scheme have broadly been categorised into 4 types of junctions as set out in Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR and specifically set out at each location in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR and summarised in Table 4.6, Table 4.11, Table 4.18 and Table 4.23 in Chapter 4 of the EIAR. A more detailed description of the Junction types on the Proposed Scheme is provided in Sections 5.3.3.1, 5.3.3.2, 5.3.3.3 and 5.3.3.4 of the Preliminary Design Report with a detailed summary of the junction types along the Proposed Scheme also provided in Table 5-1, Table

5-2 and Table 5-3 of the Preliminary Design Report.

Each junction within the Proposed Scheme has been designed taking into consideration anticipated demands and predicted operation. Staging and signal times have been proposed on a case-by-case (junction-by-junction) basis considering multiple factors including safety and demand. At the two locations, Booterstown Avenue and Mount Merrion Avenue junction, Junction Type 1 is proposed.

Proposed Scheme design at Booterstown Avenue and Mount Merrion Avenue junction is presented in the 02-General Arrangement Drawings Sheet 17 and 18 in Chapter 4 (Proposed Scheme Description) Volume 3 Part 1 of 3 of the EIAR and shown in Figure 3.389 and Figure 3.390.

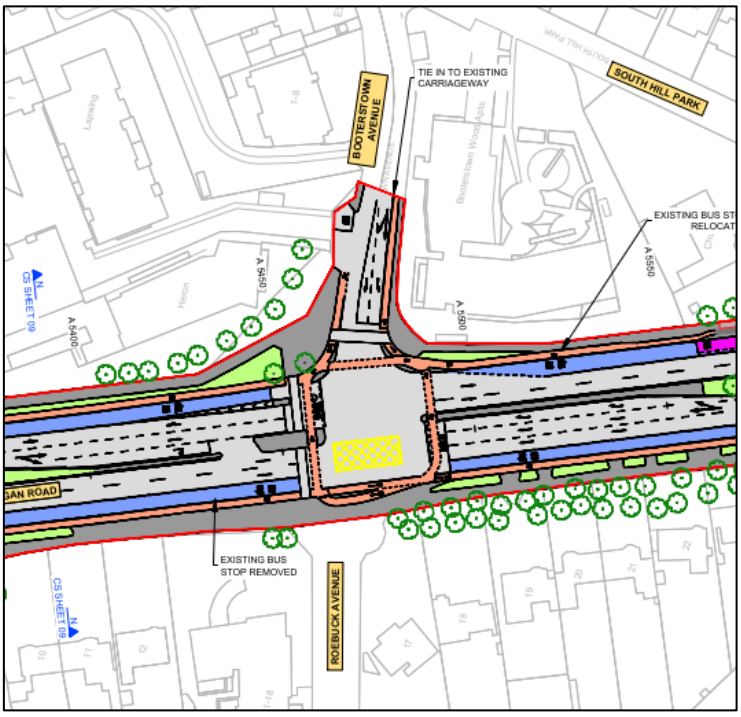


Figure 3.389: Extract from General Arrangement Drawings (Sheet 17)

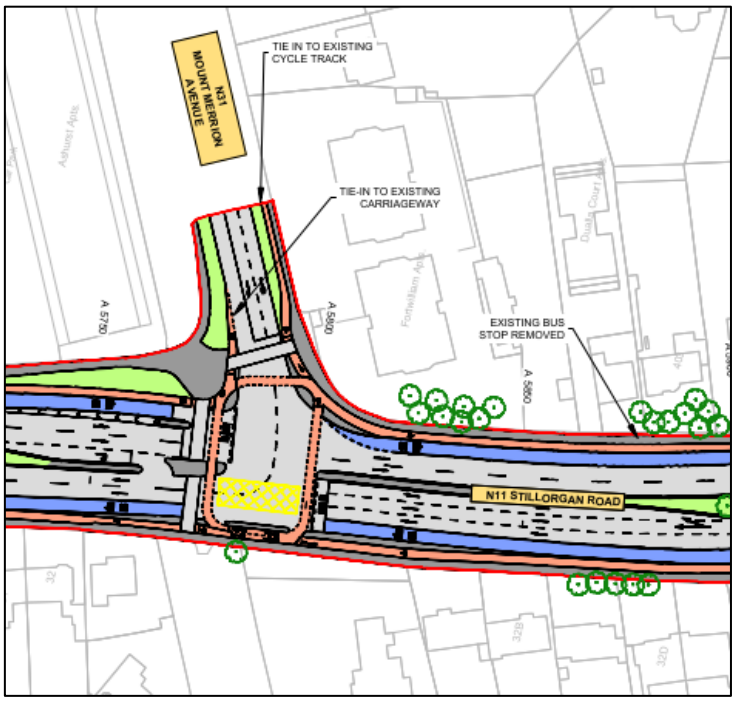


Figure 3.390: Extract from General Arrangement Drawings (Sheet 18)

Page 76, 77, 78, 79, 80 and 81 of the junction assessment presented in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

N11/ Booterstown junction:

> *'The Current arrangement has uni-directional cycle facilities on the R138 Stillorgan Road with no protection through the junction. Booterstown Avenue has no specific provision for cycles.*
>
> *The CBC 13 proposal has improved cycle connectivity throughout the junction with a fully protected layout providing access/egress for all routes and dedicated movements that can proceed without conflict.*
>
> *Left turn slip lanes have been removed to reduce cyclist conflict.*
>
> *Dedicated northbound right turn jug handle cycle track provided to allow for significant cycle stacking and reduced risk of queuing impacting northbound movements.'*

N11/ Mount Merrion junction:

> *The Current arrangement has uni-directional cycle facilities on the N11 Stillorgan Road with no protection through the junction. Mount Merrion Avenue has a dedicated offline cycle track on the approach to the junction that connects to shared space at the junction.*
>
> *The CBC 13 proposal has improved cycle connectivity throughout the junction with a fully protected layout providing access/egress for all routes and dedicated movements that can proceed without conflict.*
>
> *Left turn slip lanes have been removed to reduce cyclist conflict.'*

Shankill Interventions- Junction Proposal at Quinn's Rd / Cherrington Rd / Dublin Rd:

Due consideration to the merits of the proposed roundabout upgrade at this location and to take any potential impact on traffic movements into account. DLRCC are concerned that the proposed design does not appear to allow for right turn movements to be accommodated in an orderly manner at the junction without blocking straight through traffic. It is also noted that the bus priority signals are now pulled back from this junction to just north of the entrance to Castle Farm, It is unclear therefore, to DLRCC, what benefits a signalised junction would provide in terms of bus priority and how traffic flows will be managed at this location.

NTA Response

Refer to response in Section 3.9.3.4.1 on Upgrade of Existing Roundabouts to Signalised Junctions and Section 3.9.3.4.4 on Signal Controlled Priority (SCP) through Shankill including Signalisation of Dublin Road / Quinn's Road / Cherrington Drive Junction.

Shankill Interventions - 30km/hr Speed Limit:

Due consideration to the need for a suite of traffic calming and public realm interventions for Shankill to reinforce the proposed 30km/hr speed limit and facilitate a safer environment for pedestrians and cyclists. DLRCC would welcome a compliance condition in this regard with details to be agreed with the Council, prior to commencement of works.

NTA Response

Proposed Scheme design through Shankill village and proposed public realm interventions is presented in 05-Landscape Drawings Sheet 43 (see Figure 3.391) and 44 in Chapter 17 (Landscape (Townscape) and Visual) in Volume 3, Part 1 of 3 of EIAR. Concrete Setts are proposed across carriageway to enhance the pedestrian crossing as well as marking the start/ end to the Shankill village core. This will also work as traffic calming measure for Shankill to reinforce the proposed speed limit of 30km/hr.

The NTA acknowledges the close liaison with DLRCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within DLRCC. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

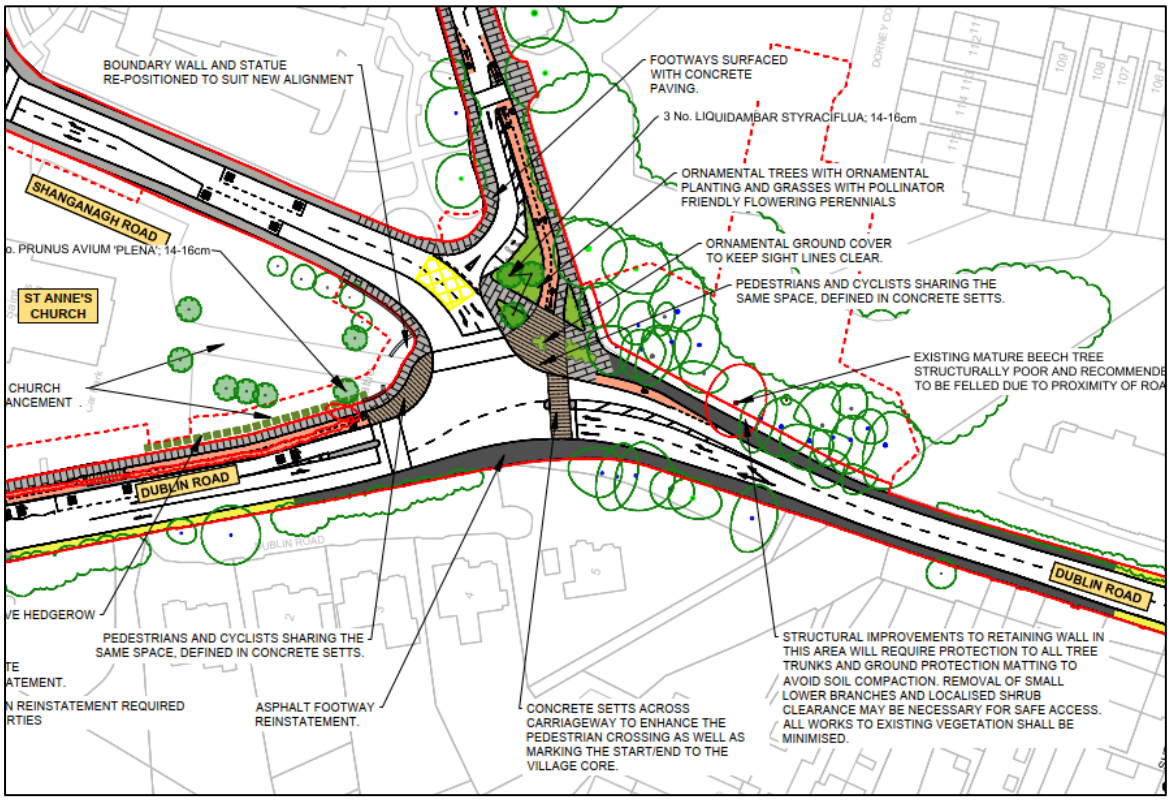


Figure 3.391: Extract from Landscape Arrangement Drawings (Sheet 43)

Cycle facilities between Shankill and Bray:

DLRCC suggest provision of a two-way cycle track along the eastern side of the carriageway between Bray and Shanganagh Park. This would eliminate the need for cyclists to cross the Dublin Road to re-join the cycle lane as per current proposals and would generally present a more coherent cycle network for the area.

NTA Response:

With reference to the overall scheme objectives the Proposed Scheme design between Cricken Lane to Wilford Roundabout brings cyclists directly along the route identified in the GDA Cycle Network Plan and is therefore considered preferable option. This was also the preferred option during the assessment carried out at the Feasibility Stage to inform the Emerging Preferred Route, where alternate route options were assessed. The design was further developed for the Preferred Route Option.

Section 3.4.1.3.1 in Chapter 3 (Consideration of Alternatives) in Volume 2 of the EIAR summarises the alternatives considered and the design development. This is further explained in detail in Section 6.4.2 of the Preferred Route Option, as part of the Supplementary Information.

'The design for this section was developed further as part of the Preferred Route Options development following completion of additional topographical and tree surveys, which allowed for a more detailed analysis of the impacts the proposed EPR would have. The assessment also took into account the responses from the Non-Statutory Public Consultations which outlined that heritage wall and roadside tree loss along this section would impact on the visual identity and feel for this length of road.

Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here until the Woodbrook college. In this section widening has been provided in the east side to minimise impact to the properties. Signal priority measures which

commenced in the adjacent section through Shankill village were extended for southbound buses as far as the Shanganagh Castle grounds to reduce impact on properties.

Cycle tracks and/or footpaths have been brought behind the roadside treeline where suitable, to maintain the roadside tree canopy along the road. At these locations, the intention is to remove the ground-level shrubbery and crown the trees to ensure there is visibility from the road to the newly relocated footpaths and cycle tracks. To optimise the protection of the roadside trees in front of Shanganagh Cemetery, a section of the northbound cycle track has been relocated to the eastern side of the route to create a two-way cycle track from St. James Church, behind the roadside trees at Shanganagh Cemetery, and across Shanganagh Park. The northbound cycle track crosses back to the west side of the road before Allies River Road.

The design has been co-ordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook. These developments have been considered when assessing the most appropriate local alignment, in addition to newly available survey information. In particular, tree survey information has been carefully considered when refining the alignment, to prioritise retention of significant mature trees.

Liaison has taken place with DLRCC to ensure that the design takes into consideration the emerging Shanganagh Park and Cemetery Masterplan interactions with the Proposed Scheme.

The above design development has enabled a reduction in impact on adjacent heritage walls, properties and trees that was evident as a result of the updated topographical survey and tree survey in the area, while maintaining the proposed bus priority infrastructure.'

Between Cricken Lane and Wilford Junction, alternate route option was considered as part of Route 2B, which will bring cyclists off-line from the main route running east of the Dublin Road. Option 1 part of the Route 2B options was the preferred option over Option 2, as it keeps directly on the main route as aligns with the GDA Cycle Network Plan and meets overall BusConnects objectives.

Section 3.3.2.3 in Chapter 3 (Consideration of Alternatives) in Volume 2 of the EIAR also summarises the route options considered at the Feasibility stage and the assessment to inform the Emerging Preferred Route option (EPR).

'Following the Stage 1 sifting process, five viable route options for Section 3 were taken forward for assessment and further refinement as shown in Image 3.13. These five route options were as follows:

- *Route 2A would run parallel to the M11 on a newly constructed busway from Wilford Junction through to Loughlinstown Roundabout and then along the N11 to the Wyattville Interchange;*
- *Route 2B would run via the Dublin Road from Wilford Junction, through Shankill and onto the N11 at Loughlinstown Roundabout to the Wyattville Interchange;*
- *Route 2C would run via the Dublin road and Crinken Lane, and join a newly built bus-way parallel to the M11 at Loughlinstown Roundabout, before following the existing N11 to the Wyattville Interchange;*
- *Route 2D would have buses follow the same route as Route 2B, but general traffic could be diverted around Shankill Village using a newly constructed road on the same alignment as that proposed for the bus route in 2C. A Bus Gate would be put in place on the Dublin Road between the Shanganagh Road and Lower Road junctions; and*
- *Route 2E would combine routes 2A and 2B whereby the route would run parallel to the M11 on a newly constructed busway from Wilford Junction to the intersection with Crinken Lane, then it would run along the Dublin Road from Crinken Lane to Loughlinstown Roundabout and along the N11 to the Wyattville Interchange.*

For the ***Route Option 2B section Wilford Roundabout to Crinken Lane two options*** *were considered.*

- *Option 1 – providing parallel bus lanes, cycle tracks and footpaths in a 20m cross-section. Southbound footpath to run through Shanganagh Park (chosen option);*
- *Option 2 – providing dedicated bus lanes and footpaths with a section of off-line cycle tracks running to the east of the Dublin Road.'*

Chapter 3 (Consideration of Alternatives) further summarises '*Overall 2B overall was deemed to be the most advantageous route, even though it was not the most advantageous under the Environment*

criterion. This is due to its comparatively lower cost; significant benefits in terms of integration, accessibility and social inclusion as it serves the catchment of Shankill, integrates with the DART and provides continuous cycle facilities; and it would deliver a high level of service for bus passengers. Therefore 2B was brought forward into the Emerging Preferred Route.'

The detail assessment of the sub-options under Route Option 2B is discussed below, as noted in Section 6.2.3.2 of the Appendix M - Bray to UCD Core Bus Corridor - Feasibility and Options Report, of the Preferred Route Options Report, as part of the Supplementary Information.

The detail assessment of Route Option 2B is discussed below.

'Option 1 - This option proposes providing a typical 20m wide cross section including bus lanes and cycle tracks in each direction, bounded by footpaths. This option would require in the order of 7m of additional lands to facilitate road widening, including mature trees, and the setting back of boundary walls, on one or both sides of the road.

Option 2 - This option would provide a 16m cross section on the Dublin Road, comprising 2m footpaths, and 3m bus and running lanes in each direction. This option would require in the order of 4m of additional lands to facilitate road widening on one or both sides of the road, along with a further 3m to 4m strip of additional lands further east to provide the cycle track. Between St. James' Church and Crinken Lane the provision of off-line cycle tracks is constrained by the church and adjacent Shanganagh Cemetery and therefore cycle tracks along the Dublin Road would be provided. This scheme option would avoid some of the mature trees by passing the cycle track around the back of the tree line where possible, however a large number of trees would still be affected.

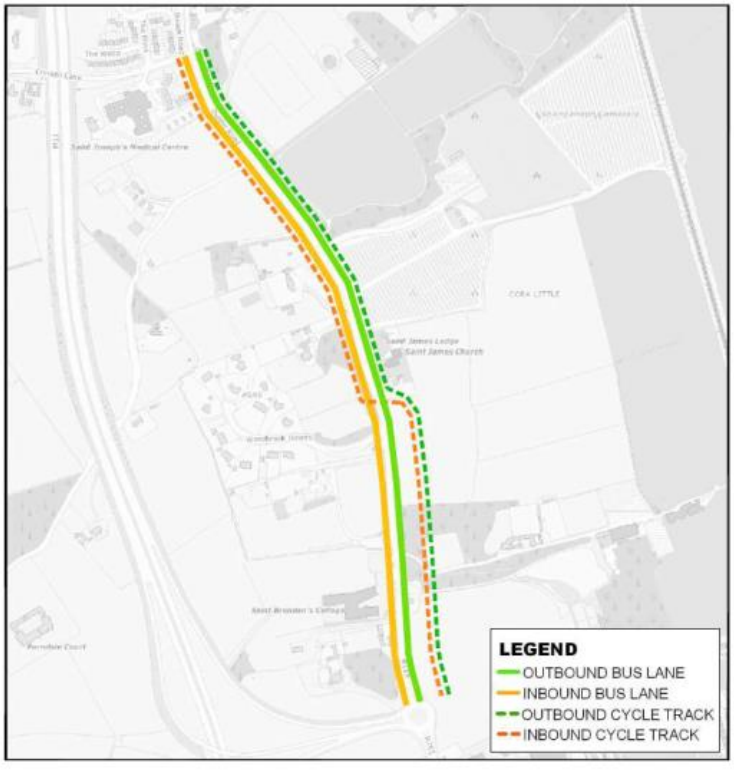


Figure 6.10 Wilford to Crinken Option 2 Scheme Design

A summary of the ranking of route options against the scheme sub-criteria is presented in Table 6.2 of the Appendix M.

Table 6.2 - Wilford Junction to Crinken Lane Scheme Assessment

Assessment Criteria	Sub-Criteria	Option 1	Option 2
Economy	Capital Cost		
	Journey-time reliability and consistency		
Integration	Land Use Integration		
	Residential Population and Employment Catchments		
	Transport Network Integration		
	Cyclists and pedestrian Integration		
Accessibility and Social Inclusion	High volume trip attractors		
	Deprived Geographic Areas		
Safety	Road Safety		
Environment	Archaeological, Architectural and Cultural Heritage		
	Flora and Fauna		
	Soils and Geology		
	Hydrology		
	Landscape and visual		
	Noise, Vibration and Air		
	Land Use and the Built Environment		

Option 1 requires land acquisition and road widening to facilitate the proposed scheme, resulting in the loss of significant mature trees and setting back of existing boundary walls. Option 2 provides a reduced cross section along the Dublin Road in comparison to Option 1, and will therefore require less road widening and is slightly more preferable in terms of Landscape and Visual, but will still result in the loss of significant mature trees and walls bounding the road. The cost of Option 2 is higher as additional works and land acquisition would be required along the cycle route. The cycle route for Option 1 follows a more direct route along the Dublin Road and does not require northbound cyclists to cross the road, as is the case for Option 2, and therefore Option 1 is slightly more preferable in terms of Cyclist and Pedestrian Integration.

There is little to differentiate between the options, however in reference to the overall scheme objectives Option 1 provides for cyclists directly along the route identified in the GDA Cycle Network Plan and is therefore considered preferable and is brought forward for this section of Option Route 2B.'

Rapid Build Active Travel Facilities:

The NTA issued an Active Travel Circular 01/23 Rapid Build Active Travel Facilities Advice Note (February 2023) regarding Rapid Build Active Travel Facilities, to speed up the delivery of active travel infrastructure. DLRCC's Active Travel team are considering a quick build scheme to improve facilities for cyclists and pedestrians to the west of the N11 in the vicinity of Loughlinstown. DLRCC request to include a condition, requiring prior engagement and agreement with DLRCC regarding the final design to ensure that the two schemes are aligned.

NTA Response:

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

Connectivity to Cherrywood:

DLRCC note that the Cherrywood Development Agency Project Team (DAPT), welcomes and supports the NTA's Bray to City Centre Core Bus Corridor (CBC) Scheme under Bus Connects and that it meets the objective of both projects.

NTA Response:

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

Active Travel User Experience:

DLRCC Architect's Department has highlighted the value of landscaping and trees with aiding differentiation of cycle lanes from bus lanes, limiting pollution and providing a greater user experience for pedestrians and cyclists along the upgraded CBC corridor.

NTA Response:

As stated in EIAR Volume 2 Chapter 4 (Proposed Scheme Description), Section 4.4, 'T*he design of the Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR). This guidance document was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The project objectives are described in full in Chapter 2 (Need for the Proposed Scheme). The purpose of the PDGB is to complement existing guidance documents / design standards relating to the design of urban streets, bus facilities, cycle facilities and urban realm.*

As mentioned in the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR), one of the core objectives of the CBC project is to provide segregated cycling facilities along the routes. Physical segregation ensures that cyclists are protected from motorised traffic as well as independent of vehicular congestion, thus improving cyclist safety and reliability of journey times for cyclists. Physical segregation can be provided in the form of vertical segregation, (e.g. raised kerbs), horizontal segregation, (e.g. parking/verge protected cycle tracks), or both.

The 'preferred cross-section template' developed for the CBC project consists of protected cycle tracks, providing vertical segregation from the carriageway to the cycle track and vertical segregation from the cycle track to the footway. A typical cross-section showing the vertical segregation is shown in Figure 8 Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix

A4.1 in Volume 4 of this EIAR), as shown in Figure 3.392.

In case of two-way cycle track a minimum 0.5m buffer strip is provided for safety and segregation from the edge of the running carriageway/ bus lane, which is either landscaped or paved. A typical example is presented in 02-General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume3, Part 1 of 3 of the EIAR as shown in Figure 3.393.

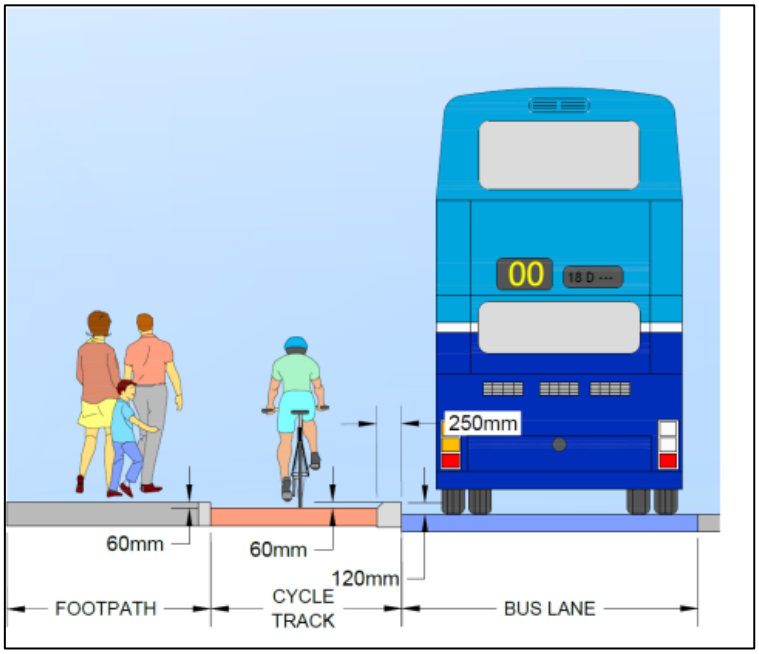


Figure 3.392: Extract from Appendix A4.1, Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (Page 5)

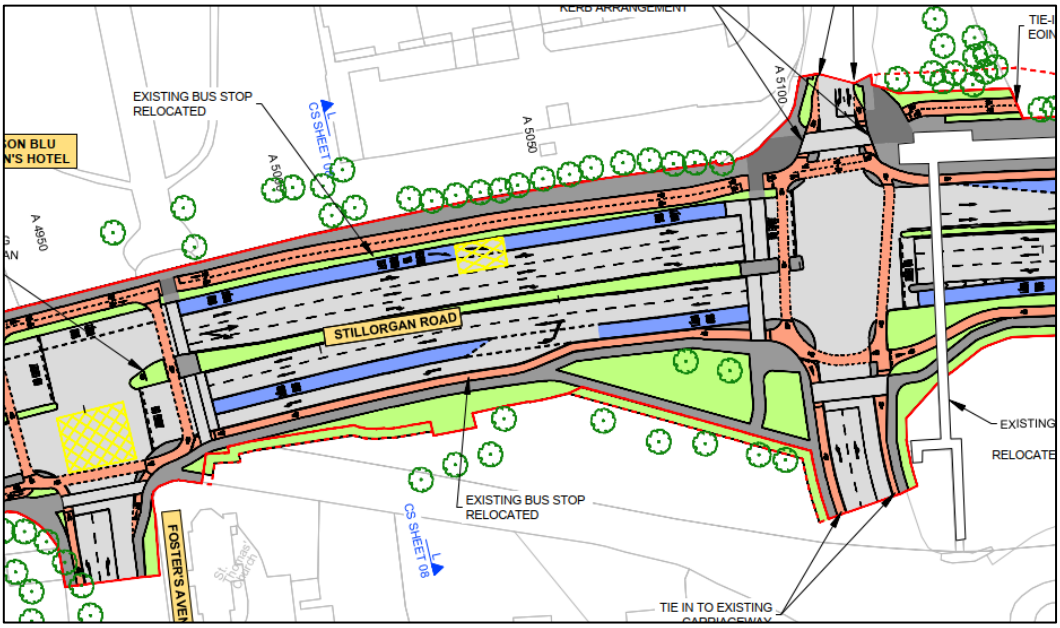


Figure 3.393: Extract from General Arrangement Drawing (Sheet 16)

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the

relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA.

Other Department Comments in Appendix:

Comment 1: DLRCC Housing Department has raised query on the land take of the open space at Patrician Villas. Also requested to confirm if there is a take on far side of dual carriageway adjoining St. Lawrence's Park.

NTA Response:

The Proposed Scheme design at Patrician Vilas/ St Laurence Park is presented in the 02-General Arrangement Drawings Sheet 20 and 21 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.394 and Figure 3.395.

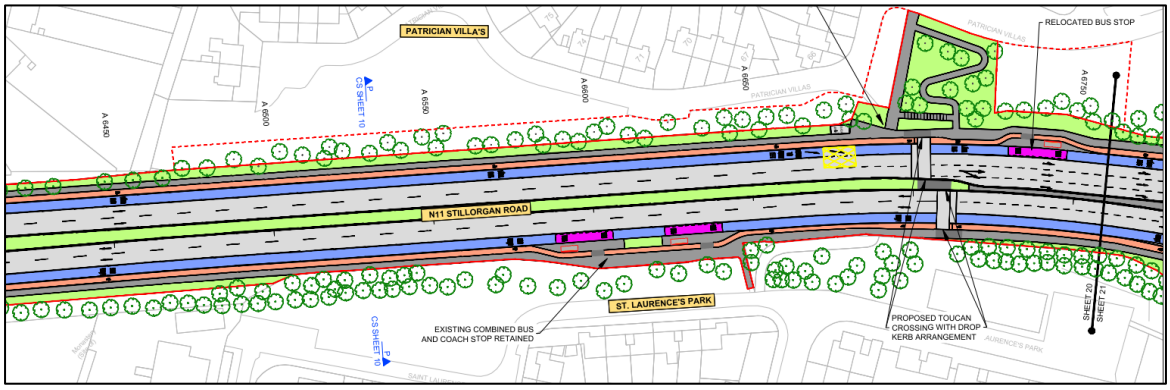


Figure 3.394: Extract from General Arrangement Drawings (Sheet 20)

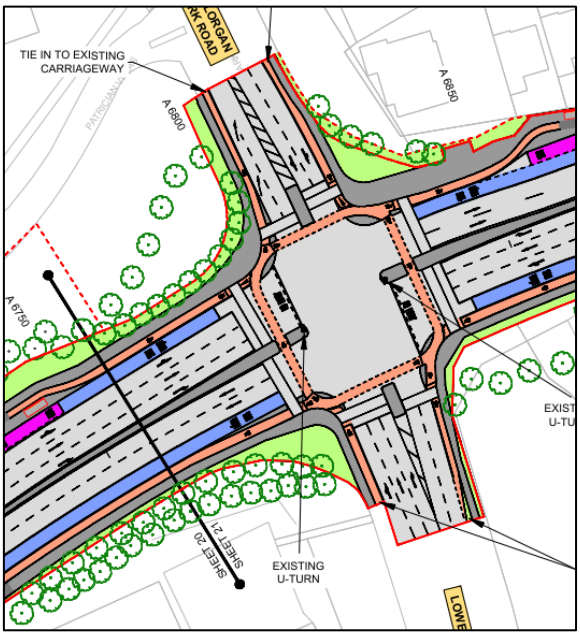


Figure 3.395: Extract from General Arrangement Drawings (Sheet 21)

A 2m wide footpath is proposed along the N11 Stillorgan Road between Priory Drive to Lower Kilmacud Road Junction as part of the Proposed Scheme, as it was considered a desired pedestrian link based on the pedestrian movement along this stretch and is aligned with the local development plans.

A new pedestrian link is proposed in the green area at the Patrician Vilas. The pedestrian link will permeability by opening up the link for residents to access the N11 bus stops and improve local connectivity with Stillorgan. The proposed steps and ramps at the end of the crossing considers the need of the vulnerable and accessibly requirements.

The existing combined coach and bus stop in the northbound direction is retained at its existing position. The existing bus stop in the southbound direction is relocated close to the Patrican Villas/ St Laurence Park, where a new toucan crossing will also be provided across the Stillorgan Road.

There is a strong pedestrian desire line between Patrician Vilas and Stillorgan and the new toucan crossing will provide better connectivity to the local communities and vulnerable users.

The Proposed Scheme retains the existing Patrician Vilas/ St Laurence's Park underpass and the new southbound footpath at this location will require an extension to the existing underpass on the east side.

The permanent land take is required for the construction of the above-mentioned works and achieve the objectives of BusConnects. The proposed land take at Patrician Vilas is shown in the Deposit Map Sheet 29 (see Figure 3.396) and 30 of 40. Plot 1001(03).1f and 1001(06)1f is the permanent land take and plot 1001(04).1f and 1001(05)1f is the temporary land take.

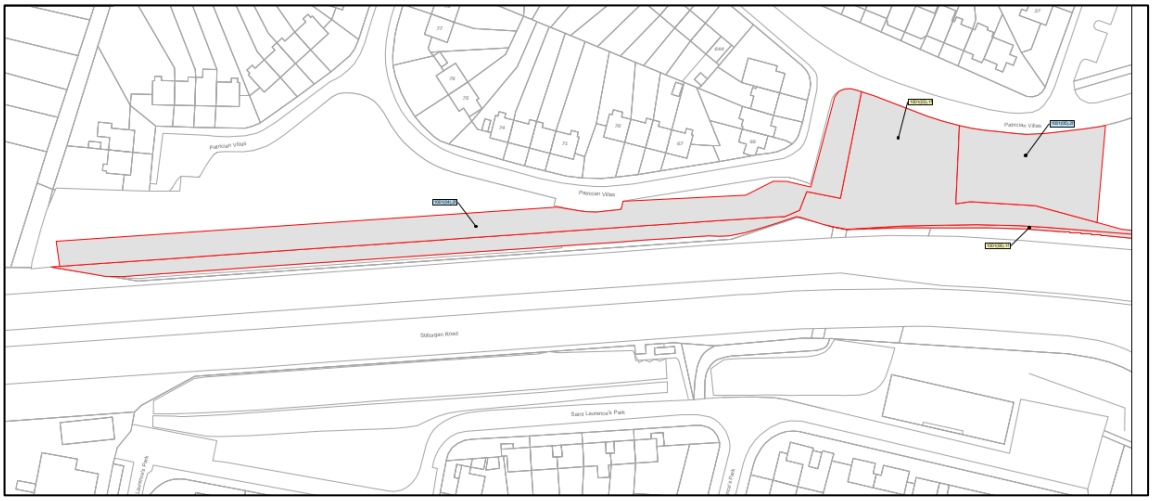


Figure 3.396: Extract from Deposit Map at St Laurence Park Library

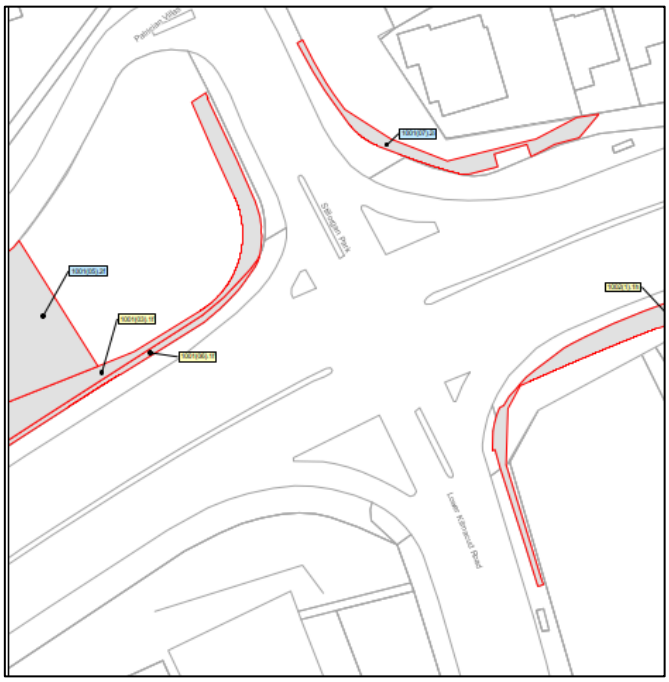


Figure 3.397: Extract from Deposit Map at St Laurence Park Library

There is no proposed land take on far side of dual carriageway adjoining St. Lawrence's Park and the existing footpath is retained. The proposed Red Line for the Proposed Scheme at the side of the St Laurence Park Library, follows the existing fence line as shown in Figure 3.397.

The Proposed Scheme at the side of the St Laurence Park Library can be seen in Figure 3.398.

Figure 3.398: Proposed Scheme at the side of the St Laurence Park Library (Google Street View)

Comment 2: DLRCC noted the awareness on the LDA site at Shanganagh Park is still under construction.

NTA Response:

NTA acknowledge awareness of the ongoing construction at the LDA site at Shanganagh Park and that continuous communication and collaboration has taken place with the proposed LDA's Shanganagh Castle Housing development at this location. This is mentioned in section 4.6.6.3 Integration with Other Infrastructure projects in the EIAR Volume 2 Chapter 4 (Proposed Scheme Description).

'Residential development of 597 no. residential units comprising housing, apartment and Build to Rent apartment units with ancillary commercial units at around chainage A 16200 of the Proposed Scheme,. The planning application has been granted. The Proposed Scheme design has been coordinated with the development.'

Comment 3:

- **SLO 112 -**To facilitate the provision of a pedestrian and cycle corridor connecting Cois Cairn to the Dublin Road, in conjunction with the development of the Council owned 'E' zoned lands and the upgrading of the Wilford Interchange, with any such improvements to be informed by the outcome of the Til's on-going Corridor Studies and any future studies. -Capital Projects
- **Road Objective Cherrywood Road** - Capital Projects; Cherrywood to Dun Laoghaire Strategic Route (R118, Wyattville Road to Glenageary Roundabout) Capital Projects
- **SLO 88 upgrade to Loughlinstown Roundabout** to liaise with Transport Infrastructure Ireland (TII) to investigate potential improvements to the Loughlinstown Roundabout with any such improvements to be informed by the outcome of the TII's on going Corridor Studies. - Capital Projects

NTA Response:

NTA acknowledge the awareness of the above mentioned SLOs and Capital Projects.

The NTA is grateful for the positive and constructive liaison that has occurred with the DLRCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within DLRCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between DLRCC and the NTA.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII and in particular related to the redesign of the existing Wilford Roundabout and the Loughlinstown Roundabout. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Comment 4: Road Objective Shanganagh Road Improvement Scheme. SLO 148 To protect and safeguard the roundabouts on the approaches into Shankill village at St. Anne's Church and at the junction of Dublin Road (R119) and Quinn's Road. - Capital Projects

NTA Response:

Refer to Section 3.9.3.4.2 on Replacement of Roundabouts in Compliance with DLRCC SLO148.

Section 3 – Landscape, Biodiversity, Heritage and Conservation Recommendations

Overview of DLRCC Park's Department Submission

The submission includes a detailed report setting out their concerns and recommendations regarding tree and landscaping impacts (Appendices 1a and 1b of the submission). An overview of the comments raised in the detailed report is provided below, following the structure of that report.

Section 1 - N11 / Stillorgan Road

Section 1 of Appendix 1a of the submission details the issues and proposed conditions described by the Parks Department with respect to the N11 / Stillorgan Road, with the comments summarised as follows:

- The row of standard trees in the central median along the N11 needs to be continued with the median width required to accommodate tree planting being 3m, with the precise detail of this planting to be agreed with DLR Parks.
- Underplanting of the trees with successional bulb planting for the entire length of the median should be an objective of this intervention.
- Grass margin / median shall be no less than 500mm in width. Anything narrower is to be incorporated into the pavement / hardscape as it is not maintainable with conventional machinery.
- Two policies of the dlr Tree Strategy – A Climate for Trees 2023-2030 are to be taken on board within this development:
    - '*Policy 16 The Council will endeavour to plant 'The Right Tree in the Right Place*''; and
    - '*Policy 17 The Council will encourage planting a diversity of tree species, sizes and ages as appropriate to ensure we do not adversely impact on our ecosystems and biodiversity, and non native trees as street trees or specimen trees in parks*'.
- Due to climate change, and the impacts of stress and disease being more prevalent, more diversity in tree species, sizes and ages is recommended. This is to be achieved through the following:
    - 10-20-30 Rule: Urban tree population should include no more than 10% of any one species, 20% of any one genus, or 30% of any one family;
    - Height to First Branch: keeping this space equal between trees so the walking or viewing experience appears uniform between trees; and
    - Tree Size and Shape: planting similar sized trees and similar shaped trees beside each other provides a uniform view.

This section of Appendix 1a lists six proposed conditions with respect to the N11 / Stillorgan Road section of the Proposed Scheme:

- Tree planting to be maximized throughout the route corridor in lieu of existing mature trees being lost due to the proposed development. This should include road verges & central medians. Where space is limited, construction details consisting of CU Soils & extended growing area beneath footpaths / roads should be considered. Where underground services pose a constraint to tree planting, root barrier solutions shall be utilized to redirect future tree root expansion away from services, but this should not prevent tree planting from occurring i.e. N11 central median.
- Appropriate sections along the central median along entire length of Stillorgan road should be considered for incorporating a BioSwale, collecting the surface run-off from the adjacent carriageways. Existing services can be incorporated within the construction detail of the bioswale - refer to NTA 'Greening & Nature-Based SuDS for Active Travel Schemes Advice Note.
- Tree species selection shall be determined by scale appropriateness, environmental conditions, and ground/ substrate conditions. Tree schedule on drawing needs to be reviewed & agreed with Dlr Parks prior to proceeding to construction.
- All landscape works shall have a 36 month, post planting maintenance period to ensure establishment. This shall form part of the contract for the landscape contractor appointed to carry out the installation of the landscape works.
- Care needs to be taken to ensure that any new landscaping or tree planting does not impede visibility of traffic signal heads at junctions and pedestrian crossings.
- All tree planting construction details shall incorporate route barriers to line tree pit trenches/pits to protect both services and adjacent surfaces. Growing substrate, aeration & irrigation details to be developed in collaboration with Dlr Parks. Tree planting details to be agreed & signed off by Dlr Parks prior to proceeding to construction phase.

Section 2 – Arboriculture

Section 2 of Appendix 1a of the submission states that the Arboricultural Assessment and Method Statements Report is very comprehensive, but highlights that the challenge will be in the protection of the root zones during construction to not lose more than the 410 trees anticipated. It goes on to state that at detailed design '*it is essential that further consideration be given to some of the Category A (30 trees) & B (135 trees) whose removal is planned and outlined in the Preliminary Design Tree Removal Plan which is based on the current layout*'.

The submission suggests that localised interventions could aid the retention of some of those trees which have matured over the best part of a century, providing the example of T0135 a Category A Horse Chestnut tree in Shanganagh Park where DLRCC suggest that a pinch point in the width of the path / cycleway could facilitate retention.

The submission proposes two conditions in respect of the above:

- Chapter 6 of the Arboricultural Impact Assessment & Method Statement Bray Report must be strictly adhered to.
- There must be a qualified arborist on site on a daily basis where site preparation, site clearance work and construction works is being implemented in the vicinity of trees to be retained on site in order to ensure the Root Protection Zone is appropriately fenced and protected during site works as this is the greatest period of risk to the trees. Also their presence is required to advise on sensitive works adjacent to trees as they unfold during the construction period.

The submission goes on to state that the greatest unnecessary loss happens due to the Root Protections Zones not being properly enforced, suggesting the following conditions:

- The Arboricultural Consultant must be involved in the detailed design stage as well as the construction stage to identify opportunities for retention of significant trees.
- There should be a tree bond of €1.5 million applied to protect the trees which are to be retained to ensure their safe retention. This is reflective of the importance and value of the trees located within the project area.

The submission goes on to state that the majority of trees scheduled for removal are significant in terms

of maturity and states that it is essential for appropriate numbers of replacement trees to be planted, with it highlighting the importance of retaining the existing tree canopy in the first instance. It goes on to outline a number of measures and policies of relevance from the DLR Tree Strategy – A Climate for Trees – Tree Strategy 2023-2030, and includes a proposed condition as follows:

- The Arboriculture Assessment must take into account the Policies listed the dlr Tree Strategy - A Climate for Trees - Tree Strategy 2023-2030

The submission goes on to state that the part of the route through Shankill Village has a significant impact on the existing mature tree population, and that the proposed juvenile tree replacements fail to adequately compensate for the local amenity, biodiversity and environmental loss, and that carbon sequestration will be diminished considerably, with a reference made to the identification of trees in the County Development Plan (CDP). It states that the removal of healthy mature trees contradicts many of the policies set out in their CDP.

The submission specifically comments on the proposal to remove the mature Category A and B trees on either side of the Woodbrook development, pointing to the effort made to date with the developer to successfully retain the trees at that location, stating that '*Every effort should be made to retain the trees at Woodford, and consideration should be given to the provision of a signal-controlled bus priority and/or other appropriate measures to avoid the provision of a continuous bus lane in both directions as proposed*'.

The submission then proposes two conditions as follows:

- Alternative design solutions must be explored to enable the retention of the high quality trees on either side of the Woodbrook Development.
- Detail of Shanganagh Cemetery boundary wall to consist of low stone wall & railing top. Liaise with DLRCC Parks for approval on detail at detailed design stage. A new pedestrian entrance to cemetery at the southern most corner of the boundary wall (53°13'12.7'N 6°07,12.3'W) along the Dublin Rd., connecting the footpath into cemetery should also be provided, details to be agreed with DLRCC Parks.

Section 3 – Specific Recommendations and Conclusion

The submission includes a series of location specific comments and recommendations in Appendix 1b. These specific issues are specifically responded to as relevant below.

Section 3 of Appendix 1a of the submission concludes with the comment that the proposals should exhaust every avenue to retain trees while at the same time planting new trees at every available opportunity.

Response to DLRCC Park's Department Submission

The planting strategy proposed is appropriate and will result in a coherent landscape, while also including a range of species which can react to the context of a specific area or place.

Section 1 - N11 / Stillorgan Road

The 05-Landscape General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR shows the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. As shown in these plans, there is very little vegetation removal proposed along the N11 central median within DLRCC's jurisdiction (Sheet 13 to Sheet 40). The proposed landscape plans propose planting trees within the central median where space allows and where there are no known constraints as a result of buried utility infrastructure. The plans show 55 proposed new trees in the median between Sheet 25 and Sheet 33, the majority proposed to be Carpinus Betulus, with some Platanus Hispanica in areas where the median is wider towards the southern end of the N11. In addition there are stretches of new native hedgerow proposed in the central median (Sheets 14, 15 and 29) and some new grassed areas in the central median where space allows.

The Proposed Scheme has been designed with cognisance of minimising very small, landscaped areas, as the NTA is aware of the challenges in maintaining such areas. Notwithstanding this, in such constrained environments, even small green areas can be of significant value in providing attractive

and healthy spaces for the local community, but also in providing better air quality, managing surface water run-off and in maintaining and creating habitats. The Proposed Scheme has appropriately balanced the need to provide appropriate levels of green space, while also minimising green spaces that are too small to effectively maintain.

Section 4.6.12.3.1 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines the planting strategy developed as part of the Proposed Scheme. The following is noted in this regard:

- '*Where possible the initial conservation of existing biodiversity has been considered;*
- *Opportunities have been identified to enhance biodiversity through green infrastructure;*
- *Promote the role of street trees planting consistent with the recommendations of the Dún Laoghaire Rathdown County Development Plan 2016-2022 and Dublin City Tree Strategy; and*
- *Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit.*'

Section 4.6.12.5 of Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR outlines the typical planting typologies developed as part of the Proposed Scheme. In relation to central median planting the following is noted:

'*Central median planting varies depending on the context of the landscape character and road. Dual carriageways or wide roads to the edge of settlements are more likely to have wider central medians where tree planting and grass verges can be found. A combination of tree and shrub or species-rich grassland is possible to create a formalised corridor of planting within wide a wide section of road.*'

The proposed new DLRCC Tree Strategy (A Climate for Trees – Tree Strategy 2023-2030) was not published at the time of compiling the EIAR (and remains unpublished at the time of writing this response), therefore it was unable to be incorporated within the assessment and proposed landscape design at the time. However the previous tree strategy (DLRCC Trees: A Strategy for Dún Laoghaire-Rathdown 2011-2015) was used to inform the assessment and design. The NTA notes the comments regarding adherence to the new tree strategy and will review it against the proposed landscape design once it has been published.

With respect to the specific policies and requirements stated in the submission, the landscape design (as presented in the 05-Landscape General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3 Part 1 of 3 of the EIAR) labels the proposed tree species to be planted throughout the Proposed Scheme on the drawings. As can be seen there are a range of species proposed throughout, with the NTA satisfied that the range and location of trees proposed are suitable.

The NTA notes the proposed conditions as laid out by DLRCC Parks' Department in Appendix 1a. The NTA has actively engaged with DLRCC during the design process of the Proposed Scheme and will continue to do so with respect to specific details including the proposed landscaping and softscape design.

All green areas have been considered for SuDS features where appropriate. The Landscaping General Arrangement drawings and the Proposed Surface Water Drainage Works Drawings in Volume 3 of the EIAR identify areas where SuDS measures are proposed.

When preparing the construction contract documents, the NTA will ensure that the appropriate establishment period is specified. The appointed Works Contractor will be required to ensure that all new planting is maintained following their installation until the conclusion of the establishment period.

All new planting has been located to ensure that it does not impede visibility of traffic signal heads at junction and pedestrian crossings.

Section 2 – Arboriculture

The NTA notes the comments and suggested conditions in this section of the DLRCC submission (Appendix 1a) and welcomes the acknowledgement of the comprehensive arboricultural assessment undertaken.

With respect to the suggestions that localised interventions could help to retain more trees the Proposed Scheme has undergone a great deal of design iteration and refinement since the initial feasibility stage of the project to the Proposed Scheme as submitted to An Bord Pleanála. Amendments have been

made based on feedback from the various rounds of public consultation carried out to date, from discussions with communities and stakeholders with an interest in the route, from additional survey data acquired, and based on potential issues highlighted by specialists undertaking the assessments for the EIAR.

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR gives an overview of the types of changes made on the Proposed Scheme through the design development process in Section 17.4.1.2, where it describes the process and key changes as follows:

'*Consideration of the potential landscape (townscape) and visual impacts have been important in defining the Proposed Scheme design. Following initial assessment of impacts, availability of additional information, as well as public consultation, suggestions and recommendations from local residents, community groups and stakeholders, the scheme has undergone iterative design development with the aim of minimising potential negative impacts as far as practicable. This process has also helped define suitable improvements to the urban realm. The design changes are described in Section 3.4 of Chapter 3 (Consideration of Reasonable Alternatives).*

The following are design changes that have been incorporated into the Proposed Scheme design, and which are applicable to this assessment, and have led to a reduction in predicted landscape and visual effects:

- *Changes to the design in order to reduce impacts on trees, specifically through the Shankill area (at Shanganagh Park and Cemetery) and at the Upper Dargle Road junction where there is a significant tree under a Tree Protection Order. A two-way cycle track is to run through Shanganagh Park and Shanganah Cemetery;*
- *Following further engagement with local community in Shankill, the design was amended through the village to removed bus lanes and segregated cycle lanes to maintain existing footways and current village environment;*
- *The design has been further developed between Ravenswell Road and Dwyer Park, at the end of the Proposed Scheme, to provide for continuous cycle lane and bus lane while minimising the impact to properties and the heritage wall on the east side at Belton Terrace and the Castle Street Shopping Centre; and*
- *The design has been further developed to coordinate with other developments and schemes, such as the Fitzwilliam Cycle Scheme at Fitzwilliam Place including the urban realm regeneration at the kiosk corner, the Dodder Greenway scheme interface at Eglinton Road, the UCD Masterplan, Stillorgan Movement Plan, and the Strategic Housing Developments at Shanganagh Castle and Woodbrook in Shankill and tie-in with the Fran O'Toole Bridge Improvement Scheme at Bray end.*'

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the design process and design changes over time in more detail. Section 3.4.1 describes the development of the Draft Preferred Route Option following the first round of public consultation undertaken on the Emerging Preferred Route, with Section 3.4.1.3 describing alternatives and design changes considered between Loughlinstown and Bray North, with changes being made to reduce impact on trees, described as follows:

'*Signal controlled bus priority was applied for northbound buses from Wilford Roundabout to enable a reduction in impact on properties and significant mature trees by locally shortening bus lane extents and widening on the east side, which was further developed for the Preferred Route Option. Signal priority measures through Shankill Village were extended for southbound buses as far as Shanganagh Castle grounds to reduce impact on properties.*

Sections of cycle tracks and / or footpaths have been brought behind the roadside treeline where suitable between Quinn's Road and Wilford Junction, to maintain roadside tree canopy. To optimise the protection of the roadside trees in front of Shanganagh Cemetery and Shanganagh Park, a section of the southbound cycle track has been routed behind the roadside trees at Shanganagh Cemetery, and Shanganagh Park. The northbound cycle track follows the Dublin Road. The cycle track along this section was further evaluated and developed to a two-way cycle track routed through the Shanganagh Park and Shanganagh Cemetery'.

It also states that '*The design has also been coordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook*'.

Section 3.4.2 of Chapter 3 describes the development of the Proposed Scheme following the second round of public consultation on the Draft Preferred Route Option, with Section 3.4.2.3 describing alternatives and design changes considered between Loughlinstown and Bray North, with further refinements made to reduce impact on trees through Shankill, described as follows:

'*From the Dublin Road / Stonebridge Road Junction north to the Loughlinstown Roundabout, the necessary widening is entirely to the west of the carriageway to minimise impact to properties and trees*.'

'*At Shanganagh Park and Cemetery, the design was further developed to move both northbound and southbound cycle track into the Shanganagh Park and along the Shanganagh Cemetery boundary along with the southbound footpath, which allowed protection of the roadside trees in front of Shanganagh Park and Shanganagh Cemetery in addition to reduced impact on the Shanganagh Park play area. The design was co-ordinated and integrated with the Shanganagh Park Masterplan*.'

'*Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to near Woodbrook College to enable a reduction in impact on properties and significant mature trees immediately north of the junction by locally shortening the bus lane extents here. In this section widening has been provided in the east side*.'

Section 3.4.3 of Chapter 3 describes the development of the Proposed Scheme following the third round of public consultation on the Updated Draft Preferred Route Option. Changes made to further reduce impacts on trees at this stage included:

'*The design has been co-ordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook. These developments have been considered when assessing the most appropriate local alignment, bus priority and bus stops while taking into consideration retention of significant mature trees. The junction with the proposed Woodbrook Strategic Housing Development was further developed after the draft Preferred Route Option*.'

'*South of the Shankill Main Street, the design was revised to move the northbound Signal Control Priority from Quinn's Road / Cherrington Drive Junction to a new location at Olcovar Junction to reduce impact on properties and trees. It also includes provision for a right-turning lane at, and signalisation of, the Olcovar Junction*.'

The proposed new DLRCC Tree Strategy (A Climate for Trees – Tree Strategy 2023-2030) was not published at the time of compiling the EIAR (and remains unpublished at the time of writing this response), therefore it was unable to be incorporated within the assessment and proposed landscape design at the time. However, the previous tree strategy (DLRCC Trees: A Strategy for Dún Laoghaire-Rathdown 2011-2015) was used to inform the assessment and design. The NTA notes the comments regarding adherence to the new tree strategy and will review it against the proposed landscape design once it has been published.

With respect to the specific policies and requirements stated in the submission, the landscape design (as presented in the 05-Landscape General Arrangement Drawings in Chapter 4 (Proposed Scheme Description) in Volume 3 Part 1 of 3 of the EIAR) labels the proposed tree species to be planted throughout the Proposed Scheme on the drawings. As can be seen there are a range of species proposed throughout, with the NTA satisfied that the range and location of trees proposed are suitable.

The NTA notes the proposed conditions as laid out by DLRCC Parks' Department in Appendix 1a. The NTA has actively engaged with DLRCC during the design process of the Proposed Scheme and will continue to do so with respect to specific details including the proposed landscaping and softscape design.

Specifically with respect to the Woodbrook development, the NTA liaised with the developers of that development in order to coordinate the Proposed Scheme design at that location including with regards to boundary treatments, the new junction and tie-in proposals.

Section 3 – Specific Recommendations and Conclusion

The NTA have reviewed the specific recommendations included in Appendix 1b of the DLRCC submission. The majority of the recommendations within Appendix 1b are changes to the proposed landscape / softscape design at discrete locations (i.e. type of planting, use of root barriers, etc.) and

these can be explored and, where appropriate, incorporated into the detailed design. The NTA has actively engaged with DLRCC during the design process of the Proposed Scheme and will continue to do so with respect to specific details including the proposed landscaping and softscape design and the recommendations in Appendix 1b.

A number of the recommendations require a specific response as outlined in the following paragraphs.

Recommendation P-02:

This recommendation suggests exploring moving the proposed UCD Bus Interchange to the adjacent car parking area to reduce the extent of tree loss. Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR states the following, '*The bus interchange proposals at UCD have been developed in collaboration with UCD and are coordinated with the UCD Future Campus masterplan… The main interchange plaza adjacent to the N11 northbound slip road will accommodate high frequency bus routes. The interchange bus islands located south of the UCD veterinary building, to the north-west of the main plaza and existing woodland, will be used for lower frequency and regional bus routes, as well as to provide overflow for the main plaza services. The interchange proposals also capture upgrade works for a shared pedestrian and cyclist commuter route along a naturally developed route through the existing woodland area. The overall site will provide 20 bus stop locations with 12 standard NTA / UCD bus shelters finished to match UCD street furniture. Two landmark bus shelters are proposed with passenger seating area. Each shelter will serve two stops on each side of the main plaza, positioned central to the stops they serve. The shelter's cantilevered canopies provide large, covered areas of waiting, supplementing the semi-enclosed waiting rooms. 87m of seating is provided, enough for 40% of the estimated 350 peak bus patrons. They have been designed to provide a cohesive solution adjacent to UCD's proposed Future Campus masterplan development, including the proposed Arrival Plaza*'.

Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR describes the design alternatives for the UCD Interchange in Section 3.4.1.1.3 stating the following, '*Following publication of the Emerging Preferred Route, the design of the UCD bus interchange facility was further developed. It became apparent that additional bus interchange capacity would be required at UCD. Detailed liaison with UCD has taken place to develop an interchange facility that serves the Proposed Scheme requirements while also supporting UCD's sustainable transport objectives and to ensure tie-in with the UCD Future Campus Masterplan. The proposed facility will be located adjacent to UCD's proposed arrival plaza at the Stillorgan Road entrance and will act as a gateway for pedestrian and cyclist access to the campus*'.

Recommendations P-37, P-39, P-41, P-43 and P-44:

These are all comments with respect to tree loss through Shankill, and recommendations with respect to construction methodologies and changes to the design to reduce the impacts on trees.

A detailed and comprehensive options selection process was undertaken to design the Proposed Scheme as submitted to An Bord Pleanála. The NTA has actively engaged with DLRCC through that process and will continue to engage through the detailed design and construction process. The design has been through several iterations through that process, as described in Chapter 3 (Consideration of Reasonable Alternatives) in Volume 2 of the EIAR. This has included refinement and changes through the Shankill section in order to reduce impacts on trees. Section 3.4.2.3 describes alternatives and design changes considered between Loughlinstown and Bray North, with further refinements made to reduce impact on trees through Shankill, described as follows:

'*From the Dublin Road / Stonebridge Road Junction north to the Loughlinstown Roundabout, the necessary widening is entirely to the west of the carriageway to minimise impact to properties and trees*.'

'*At Shanganagh Park and Cemetery, the design was further developed to move both northbound and southbound cycle track into the Shanganagh Park and along the Shanganagh Cemetery boundary along with the southbound footpath, which allowed protection of the roadside trees in front of Shanganagh Park and Shanganagh Cemetery in addition to reduced impact on the Shanganagh Park play area. The design was co-ordinated and integrated with the Shanganagh Park Masterplan*.'

'*Signal Controlled Bus Priority was applied for northbound buses from Wilford Roundabout to near Woodbrook College to enable a reduction in impact on properties and significant mature trees*

immediately north of the junction by locally shortening the bus lane extents here. In this section widening has been provided in the east side.'

Section 3.4.3 of Chapter 3 describes the development of the Proposed Scheme following the third round of public consultation on the Updated Draft Preferred Route Option. Changes made to further reduce impacts on trees at this stage included:

'*The design has been co-ordinated with proposed entrances for recently approved housing developments at Shanganagh Castle and Woodbrook. These developments have been considered when assessing the most appropriate local alignment, bus priority and bus stops while taking into consideration retention of significant mature trees. The junction with the proposed Woodbrook Strategic Housing Development was further developed after the draft Preferred Route Option*.'

'*South of the Shankill Main Street, the design was revised to move the northbound Signal Control Priority from Quinn's Road / Cherrington Drive Junction to a new location at Olcovar Junction to reduce impact on properties and trees. It also includes provision for a right-turning lane at, and signalisation of, the Olcovar Junction*.'

Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR, with Section 4.5.3.8.3 describing the proposed landscape design between Quinn's Road and Wilford Roundabout describing areas of tree loss, tree retention and tree planting:

'*South of Castle Farm entrance, the footpath is to be routed to the rear of existing mature trees to minimise vegetation loss. The wall is to be rebuilt to a reduced level and set to the back of the footpath utilising the existing stone material where possible. A 'no-dig' construction method is to be utilised where the path runs through root protection areas*.'

'*The landscape proposals have been coordinated with the Shanganagh Castle housing development proposals, just north of Shanganagh Park. Cycle path and pedestrian connections have been aligned and the footway has been positioned to maximise the space for new tree planting along the frontage.*

The interface with the Shanganagh Park masterplan has been considered in consultation with the local authority. It is proposed to route the two-way cycle path through the park, utilising in part the existing footpaths. Paths will tie into proposals for the wider park masterplan, while a footpath will also be retained along the roadside to provide a more direct route. Some tree losses are required to accommodate bus and coach stops. Mitigation tree planting opportunities along the boundary are possible that accord with the masterplan proposals.

Land take into the western boundary of the cemetery is required to help retain some of the mature trees in the grass verge adjacent to the carriageway. An over mature row of conifers within the cemetery is to be replaced in consultation with the local authority. A more suitable native hedge is proposed following engagement with the local authority.

The stone piers and railings forming the boundary of Crinken Church remain untouched. The proposed alignment along the west side results in tree loss to the front face of the woodland block which will be repaired with a band of native planting set behind the reinstated stone wall. The alignment south of Woodbrook Downs widens to the east only, therefore protecting all trees and stone walls on the west side. New tree planting and rebuilt stone walls is focussed on the east side providing a consistent landscape approach through this section. The new proposals on the east side will tie into the Woodbrook Strategic housing development site and the associated new junction opposite Woodbrook Downs (see Image 4.12). Liaison has taken place with the development organisation and the local authority regarding boundary treatments and tie-in proposals.

The historic gated entrance into the Woodbrook Estate remains unaffected by any carriageway widening. The surface treatment of the wide footway in front of the gates is enhanced with stone setts and wide granite kerbs. South of the gated entrance the proposed southbound bus stop and carriageway widening in close proximity to Woodbrook College results in the loss of some mature trees, with set-back of the wall also required. The alignment through this section has been considered carefully to minimise tree loss and retain a row of mature trees set further back. Replacement native planting is proposed to re-establish the vegetation belt along this side.'

Chapter 17 (Landscape (Townscape) & Visual) in Volume 2 of the EIAR gives an overview of the types of changes made on the Proposed Scheme through the design development process in Section

17.4.1.2, where it describes the process and key changes as follows:

'*Consideration of the potential landscape (townscape) and visual impacts have been important in defining the Proposed Scheme design. Following initial assessment of impacts, availability of additional information, as well as public consultation, suggestions and recommendations from local residents, community groups and stakeholders, the scheme has undergone iterative design development with the aim of minimising potential negative impacts as far as practicable. This process has also helped define suitable improvements to the urban realm. The design changes are described in Section 3.4 of Chapter 3 (Consideration of Reasonable Alternatives).*

The following are design changes that have been incorporated into the Proposed Scheme design, and which are applicable to this assessment, and have led to a reduction in predicted landscape and visual effects:

- *Changes to the design in order to reduce impacts on trees, specifically through the Shankill area (at Shanganagh Park and Cemetery) and at the Upper Dargle Road junction where there is a significant tree under a Tree Protection Order. A two-way cycle track is to run through Shanganagh Park and Shanganah Cemetery;*
- *Following further engagement with local community in Shankill, the design was amended through the village to removed bus lanes and segregated cycle lanes to maintain existing footways and current village environment;*
- *The design has been further developed between Ravenswell Road and Dwyer Park, at the end of the Proposed Scheme, to provide for continuous cycle lane and bus lane while minimising the impact to properties and the heritage wall on the east side at Belton Terrace and the Castle Street Shopping Centre; and*
- *The design has been further developed to coordinate with other developments and schemes, such as the Fitzwilliam Cycle Scheme at Fitzwilliam Place including the urban realm regeneration at the kiosk corner, the Dodder Greenway scheme interface at Eglinton Road, the UCD Masterplan, Stillorgan Movement Plan, and the Strategic Housing Developments at Shanganagh Castle and Woodbrook in Shankill and tie-in with the Fran O'Toole Bridge Improvement Scheme at Bray end.*'

The NTA are satisfied that the design through Shankill represents the best available solution through the area to retain as much of the existing environment as possible while still meeting the objectives of the Proposed Scheme.

Overview of DLRCC Biodiversity Officer Submission

The submission states on Page 13 that the Biodiversity Officer '*highlights that the move to a more sustainable transport system is welcome and very important, however it should be designed and managed so that it leaves biodiversity in a better state than before*'. It goes on to state that a more detailed report has been prepared by the Biodiversity Officer which has been included as Appendix 2 of the submission. The comments and recommendations set out in that appendix are summarised below, following the headings used in that report.

Section 1 – Biodiversity Chapter 12 of the EIAR

The submission states that the desk study described in the EIAR does not contain any of the DLRCC data held by the Biodiversity Officer, stating that a meeting was requested with the ecologists by DLRCC's Biodiversity Officer during the preliminary meetings held in 2020, however no meeting was ever arranged and therefore the data held by the DLRCC Biodiversity Officer was never shared with the ecologists.

It lists the available data as follows:

- County Hedgerows surveys
- County Tufa Springs surveys
- County Otter survey
- Important Birds
- Riparian Birds
- Brent Geese data
- County Habitats
- Wildlife Corridors and the Ecological Network

- Rare Plants
- Pollinator sites

Section 2 – The Biodiversity Chapter Notes

The submission states that Section 12.3.3 of the Chapter contains no reference to the DLRCC Ecological Network which is contained within the DLRCC CDP and the DLRCC County Biodiversity Plan, and the associated important biodiversity areas and connectivity, important wildlife corridors and important habitats. It goes on to state that it is unclear if the assessment used the DLRCC Ecological Network data as the basis for establishing the important biodiversity within the ZoI.

Section 3 – 12.3.5.12 Dry Meadows and Grassy Verges (GS2)

The submission states that some meadows and pollinator sites are of Local Higher Value given their value for pollinators in an urban setting. It also points to point 8 in their submission (summarised in Section 8 below).

Section 4 – 12.3.5.12 Hedgerows (WL1)

The submission states that it is unclear if the assessment and evaluation of hedgerows has taken account of the DLRCC Hedgerow Evaluations by Smith 2020, JBA 2021 and 2022 and/or if the hedgerows were evaluated as per Foulkes 2013. The Biodiversity Officer comments that the DLRCC hedgerows are considered a significant part of the DLRCC Ecological Network with some being of County Value, stating that it is envisaged that these will be enhanced and restored and should be considered in the Biodiversity Chapter.

The submission continues, stating that it is unclear what extent hedgerows are to be removed and what value each hedgerow may have, stating that providing an overall area is not sufficient in terms of detail, evaluation and assessment.

The submission requests that the detailed evaluation and assessment of the impacted hedgerows is provided with reference to the CDP and the DLRCC Ecological Network.

Section 5 – 12.3.5.17 Treelines (WL2)

The submission states that insufficient information is provided in the Biodiversity Chapter in relation to treelines and the ecological value of trees, providing only a generalised assessment, given that some of the older treelines are often of greater value for biodiversity in urban areas. The submission notes that the arborist's report identifies stages of maturity of the trees within the Proposed Scheme.

Section 6 – 12.3.5.19 Scrub (WS1)

The submission describes the importance of scrub habitat for breeding birds and species such as badger, and to provide connectivity and support to other habitats especially in an urban environment. The submission states that it is not considered Local Lower value and recommends an evaluation of Local Higher value.

Section 7 – 12.3.7 Non-Native Invasive Plant Species

The submission states that Winter Heliotrope has become a significant invasive species, and queries how it has been considered in the assessment given that it spreads easily in transport corridors and through soil movement. The submission requests that the route is checked for Winter Heliotrope and that it is included in the Invasive Species Management Plan if found to be present.

Section 8 – 12.3.13.4 Other Invertebrates

The submission requests that all invertebrates be included and evaluated at Local Higher Level as a minimum. It also provides a link to a recent blog post on the NBDC website entitled 'Managing Urban Parks for Pollinators and People'.

Section 9 – 12.4.3 Construction Phase – 12.4.3.1 Designated Areas for Nature Conservation

The submission states that it is unclear if disturbance or displacement impacts on otter during construction have been taken into account, including noise, visual and other disturbances. It states that it does not appear in Section 12.4.3.1.1.5 Disturbance and Displacement Impacts.

Section 10 – 12.4.3.1.2.3 Habitat Degradation – Groundwater

The submission states that impacts on groundwater dependent terrestrial ecosystems have not been sufficiently considered for the Loughlinstown Woods pNHA, with the assessment not demonstrating an understanding of the hydrogeology relevant to the pNHA including the groundwater catchment. It states that no details are given of any potential drawdown, with drawdown only considered relative to the pNHA boundary rather than the catchment supporting the pNHA. The submission outlines a requirement for a hydrological assessment and quantification of impacts on water flows and groundwater due to excavations. The submission also requests that any other groundwater dependent habitats within the Zone of Influence are identified by a suitably qualified hydrogeologist and assessed with input from a suitably qualified ecologist.

Section 11 – 12.4.3.4.2 Badger

The submission states that it is unclear that a badger survey was undertaken by a mammal specialist following best practice. The submission requests confirmation on what surveys were completed and to what standards for discussion with the DLRCC Biodiversity Officer. Where surveys are insufficient they need to be completed.

The submission also states that it is unclear how the conclusion that the Construction Compound BR1 site is not considered important for commuting / foraging badgers. The submission asks if the scrub was checked for mammal activities and trail cameras placed. It goes on to state that badgers appear in all sorts of urban settings including car parks, roads and scrub. It also asks how the conclusion that the Proposed Scheme is unlikely to affect the conservation status of the local badger was supported.

Section 12 – 12.4.3.4.3 Otter

The submission states that DLRCC Otter survey data is available and it is unclear if it has been used to support the assessment.

Section 13 – 12.4.3.5.1 Breeding Birds

The submission states that there are no breeding bird survey maps for important birds in the habitats likely to be removed. It also states that it is unclear if riparian birds were surveyed or considered including grey wagtail, dipper and kingfisher.

Section 14 – Mitigation, Enhancement and Compensation

The submission requests that where there is a loss of biodiversity and habitats that this is addressed in a realistic manner, requesting that each habitat to be lost along with the associated mitigation / compensation is provided. It also requests that such mitigation / compensation measures are also shown on maps.

The submission notes that ornamental planting and amenity grass planting are not considered biodiversity mitigation or compensation for biodiversity loss and requests that this is addressed by creating suitable biodiversity habitats, including a plan to show how these habitats will be managed for biodiversity.

It goes on to state that the Biodiversity Chapter should seek to provide gains for biodiversity in terms of habitats that will survive in the long-term, located in areas away from areas of light spill and human disturbances to provide refuges for biodiversity.

Appendix 2 concludes with the request that revised assessments are completed taking account of the above comments and that consultation with DLR's Biodiversity Officer is undertaken.

Response to DLRCC Biodiversity Officer Submission

The NTA acknowledges the comments from the DLRCC Biodiversity Officer and has considered all of the points raised in Appendix 2 of the DLRCC submission. The following provides a response to the points raised in the submission.

Section 1 – Biodiversity Chapter 12 of the EIAR

The NTA has actively engaged with DLRCC during the design process of the Proposed Scheme and

will continue to do so with respect to specific details including the proposed landscaping and softscape design. The NTA notes the comment in this regard by DLRCC. The EIAR is robust in this regard and based on a sound and comprehensive ecological data set. It is a matter for An Bord Pleanála to determine whether the data referenced in the submission will assist in their determination.

Section 2 – The Biodiversity Chapter Notes

Chapter 12 (Biodiversity) in Volume 2 of the EIAR references both the DLRCC County Development Plan 2022-2028 and the DLRCC Biodiversity Action Plan 2021-2025. Section 12.3.3 of the Chapter outlines the areas considered to be of biodiversity value from each of the local authority Biodiversity Action Plans relevant to the Proposed Scheme (i.e. DCC, DLRCC and WCC). With respect to the DLRCC Plan the Chapter states the following:

'*The Dún Laoghaire-Rathdown Biodiversity Action Plan 2021-2025 (DLRCC 2021) highlights a number of areas considered to be of biodiversity value present within the DLRCC administrative boundary. These areas that are located within the ZoI of the Proposed Scheme are provided below:*

- *Habitats considered to form part of Locally Important Biodiversity Sites (LIBS) and/or wildlife corridors such as watercourses, riparian habitats, hedgerows, treelines and other associated habitats, such as scrub and woodland;*
- *Loughlinstown Woods pNHA, which contains important native woodland; and*
- *Network of parks and public green spaces, such as Shanganagh Park, which support a variety of species and habitats and is considered to be a valuable biodiversity resource and a LIBS*.'

Section 3 – 12.3.5.12 Dry Meadows and Grassy Verges (GS2)

Section 12.3.5.12 of Chapter 12 (Biodiversity) describes the locations where this habitat type was recorded during surveys as follows:

'*This habitat type was recorded in four areas across the Proposed Scheme including along the boundary of Loughlinstown Woods pNHA and Loughlinstown Pitch and Putt Club, roadside verges at St. Laurence College and at Maple Manor Cabinteely (illustrated in Figure 12.5 in Volume 3 of this EIAR).*'

The Section continues, stating that '*This habitat type is of Local Importance (Lower Value) due to its poor species diversity*'.

The assignment of Local Importance (Lower Value) as described in the Chapter is based on the expertise and professional judgement of the ecology specialists who carried out the assessment, based on sound and comprehensive ecological data and observations made during surveys.

The comments made in part 8 of Appendix 2 of the DLRCC submission are dealt with below in Section 8.

Section 4 – 12.3.5.12 Hedgerows (WL1)

Section 12.3.5.16 of Chapter 12 (Biodiversity) describes the locations where this habitat type was recorded during surveys as follows:

'*Most of the hedgerows which were recorded along the Proposed Scheme consisted of screening vegetation at residential properties, along roadsides and within the vegetated median of larger roads, rather than native and long-established hedgerow. Substantial linear areas of this habitat are present, along the N11 Bray Road between Kilbogget park at Shrewsbury Lawns and Cornelscourt, the R119 Dublin Road Shankill, the central road median of the N11 Bray Road and at St. Columcille's Hospital, include N11 Stillorgan Road from Newtownpark Avenue to St. John of God Hospital, and at UCD, RTÉ and Donnybrook Castle. Property boundaries consisting of this habitat type were identified at Corke Lodge, Cabinteely Way, Kill Lane, Rockbrook Hall, Mount Merrion Avenue, Thornwood, Radisson Blu St. Helen's Hotel, Church of the Sacred Heart, the Clayton Hotel and Starbucks Lower Leeson Street*.'

It goes on to describe the value of this habitat type as being of 'Local Importance (Higher Value) as it is not common in the surrounding area'. Table 12.13 in Section 12.3.14 of Chapter 12 (Biodiversity) summarises all ecological receptors on the Proposed Scheme and highlights hedgerows as a Key Ecological Receptor (KER) for the Proposed Scheme. This is based on the expertise and professional judgement of the ecology specialists who carried out the assessment, based on sound and comprehensive ecological data and observations made during surveys.

Also as outlined under Section 2 above, the ecologists have noted that hedgerows form part of '*Locally Important Biodiversity Sites (LIBS) and/or wildlife corridors*' as per the DLRCC Biodiversity Action Plan 2021-2025.

With respect to seeking clarity on the hedgerows to be removed, the 05-Landscaping General Arrangement Drawings Sheet 43 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) specifically shows the vegetation (hedgerows, individual trees and woodland areas) proposed to be removed across the whole scheme. These drawings also show proposed new hedgerows. See Figure 3.399 below for an example of this in those drawings, showing the removed and new proposed hedgerow at St. Anne's Church in Shankill on Sheet 43.

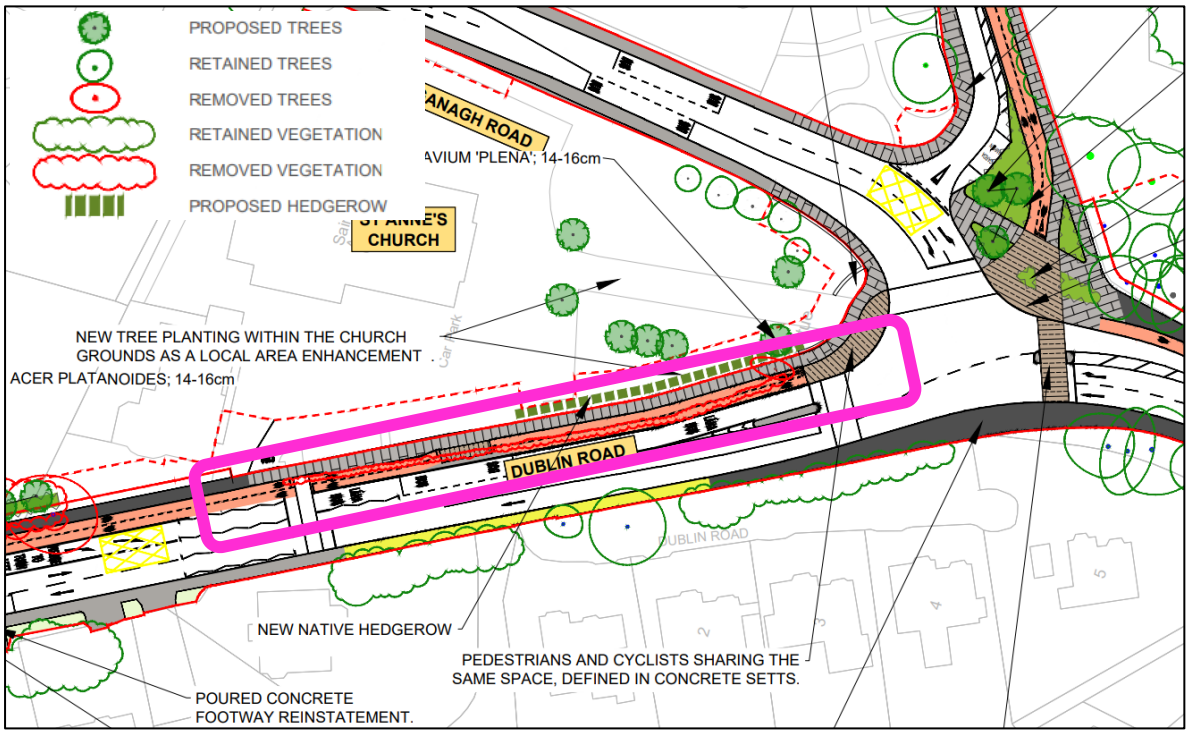


Figure 3.399: Extract from Landscaping General Arrangement Drawing (Sheet 43)

The assessment of the ecological impacts was carried out with reference to all of the relevant design drawings, including the Landscaping General Arrangement drawings. The Chapter states in Section 12.4.3.5.1.1 (Habitat Loss and Loss of Breeding / Resting Sites) that approximately 282m of hedgerow will be lost as a result of the Proposed Scheme. However, in Section 12.5.1.2 (Habitat Loss and Fragmentation) it states that the landscape proposals include planting of 1,662m of proposed new and/or replacement hedgerow, therefore providing a net gain in hedgerow across the whole route.

The NTA is satisfied that a robust ecological assessment has been undertaken of all potentially significant impacts, based on a sound and comprehensive ecological data set.

Section 5 – 12.3.5.17 Treelines (WL2)

Section 12.3.5.17 of Chapter 12 (Biodiversity) describes the locations where this habitat type was recorded during surveys as follows:

'*This habitat comprises narrow rows or single lines of trees which are greater than 5m in height. This habitat type was recorded widely across the study area of the Proposed Scheme (illustrated in Figure 12.5 in Volume 3 of this EIAR). In the context of the Proposed Scheme, treeline habitat is typically composed of urban street planting along footpaths / strips of amenity grassland and road edges. Substantial areas of this habitat are present along the R119 Dublin Road, the N11 Bray Road, N11 Stillorgan Road, R138 Donnybrook Road, R138 Morehampton Road, R138 Leeson Street Upper, R138 Sussex Road, Grand Canal, R138 Leeson Street Lower and Hatch Street Lower.*'

It goes on to describe the value of this habitat type as being of '*Local Importance (Higher Value) as it is not common in the surrounding area and is relatively species-rich in the context of surrounding habitats*'.

Table 12.13 in Section 12.3.14 of Chapter 12 (Biodiversity) summarises all ecological receptors on the Proposed Scheme and highlights treelines as a Key Ecological Receptor (KER) for the Proposed Scheme. This is based on the expertise and professional judgement of the ecology specialists who carried out the assessment, based on sound and comprehensive ecological data and observations made during surveys.

Also as outlined under Section 2 above, the ecologists have noted that treelines form part of '*Locally Important Biodiversity Sites (LIBS) and/or wildlife corridors*' as per the DLRCC Biodiversity Action Plan 2021-2025.

Chapter 12 (Biodiversity) assesses the impact of tree loss in a number of ways. It is assessed with respect to the overall loss and fragmentation of habitat in Section 12.4.3.2.1, with respect to impacts on bats in Section 12.4.3.4.1.2, with respect to impacts on badgers in Section 12.4.3.4.2.1, with respect to impacts on breeding birds in Section 12.4.3.5.1.1, and with respect to impacts on wintering birds in Section 12.4.3.5.2.1. While Chapter 12 (Biodiversity) does not provide a description of the assessment of impact on each individual or group of trees along the 18.5km route, it does include a list of all trees identified as having potential bat roost features within the footprint of the Proposed Scheme in Table 12.8, describing the tree species, a description of the features and stating whether the tree is proposed to be retained or removed. These specific trees are also mapped in Figure 12.7.2 in Volume 3 of the EIAR.

As noted in the DLRCC submission, there is a comprehensive arborist report included in Appendix A17.1 in Volume 4 Part 4 of 4 of the EIAR, which describes every tree or group of trees along the Proposed Scheme in terms of quality and maturity level, and identifies the trees scheduled to be removed. A summary of the numbers impacted is also provided in Table 2 in the report (as shown below).

Table 2. Summary of tree removals by quality.

	Category A	Category B	Category C	Total
Trees	29	121	209	**359**
Groups	1	14	26	**41**
Hedges	0	0	10	**10**
Total	**30**	**135**	**245**	**410**

The Landscape General Arrangement drawings in Volume 3 of the EIAR (drawing set 05 accompanying EIAR Chapter 4) show the proposed landscape plans, including areas of tree removal and locations and details of proposed new tree and vegetation planting. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) in Volume 2 of the EIAR provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement drawings. These proposed quantities to be planted are:

- 551 trees;
- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;
- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

Chapter 12 (Biodiversity), Chapter 17 (Landscape (Townscape) & Visual) and Appendix A17.1 (Arboricultural Impact Assessment) describe a series of mitigation measures to reduce the impact on trees, including measures for the protection of trees during construction to minimise losses as far as reasonable practicable, for tree and vegetation replacement and enhancement where losses are unavoidable, and for the replacement of habitat features (e.g. the use of bat boxes).

Section 6 – 12.3.5.19 Scrub (WS1)

Section 12.3.5.19 of Chapter 12 (Biodiversity) describes the locations where this habitat type was recorded during surveys as follows:

'*Scrub was identified in approximately 10 locations across the Proposed Scheme (illustrated in Figure 12.5 in Volume 3 of this EIAR). The largest areas of this habitat were located south of Wilton* [Wilford] *Roundabout at Cois Cairn and in lands to the north of Cherrywood Luas stop. This habitat occurs intermittently along the Dublin Road, Bray Road and Stillorgan Road. Other discrete areas of scrub occur at Castle Street Bray and along the banks of the River Dodder at Donnybrook.*'

It goes on to describe the value of this habitat type as being of '*Local Importance (Lower Value) due to its relatively low species diversity*'. This is based on the expertise and professional judgement of the ecology specialists who carried out the assessment, based on sound and comprehensive ecological data and observations made during surveys.

Section 7 – 12.3.7 Non-Native Invasive Plant Species

As outlined in the descriptions of the habitats identified during habitat surveys in Section 12.3.5 of Chapter 12 (Biodiversity), Winter Heliotrope was identified within a number of habitats throughout the Proposed Scheme. It was identified in 'spoil and bare ground (ED2)' habitats (Section 12.3.5.6), in 'depositing / lowland rivers (FW2)' habitats (Section 12.3.5.8) particularly within the riparian vegetation along the River Dodder (where it is listed among the non-native invasive species encountered), in 'amenity grassland (improved) (GA2)' habitats (Section 12.3.5.11), in 'dry meadows and grassy verges (GS2)' habitats (Section 12.3.5.12), in '(mixed) broadleaved woodland (WD1)' habitats (Section 12.3.5.14), in 'hedgerows (WL1)' habitats (Section 12.3.5.16), and in 'scrub (WS1)' habitats (Section 12.3.5.19).

Section 12.3.7 describes the baseline with respect to non-native invasive plant species along the Proposed Scheme which are listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011. All of those species identified during surveys of the Proposed Scheme study area are listed in Table 12.7 and mapped in Figure 12.6 in Volume 3 of the EIAR. As Winter Heliotrope is not contained in the Third Schedule, it was not specifically described within this section of Chapter 12 (Biodiversity) and is only recorded in the descriptions of the habitats surveyed as outlined in the previous paragraph.

Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR includes an Invasive Species Management Plan (ISMP) in Section 5.3. With respect to non-native invasive species not listed in the Third Schedule, the ISMP states the following:

'*It is recognised that other non-native invasive species, not listed in the Third Schedule, can and do occur within the footprint of the Proposed Scheme and the wider metropolitan surrounds of Dublin. These are not ordinarily dealt with in non-native invasive species management plans, and there is separate legislation and guidance for the control of noxious weeds (e.g. No. 38 of 1936 Noxious Weeds Act, 1936 and S.I. No. 103 of 1937 Noxious Weeds (Thistle, Ragwort, and Dock) Order, 1937). Species such as butterfly-bush Buddleja davidii can quickly become established and spread in suitable urban areas, including gaps in the built environment such as the sides of old buildings, pavements, and on derelict ground. Where large populations occur, it may be a requirement of some local authorities within the Greater Dublin Area that they be managed to ensure no excessive spread (e.g. Dublin City Council (DCC)), as well as new linear infrastructure projects administered by TII. The implementation of the general measures provided in Section 5.3.4 would minimise the risk of any spread of these species as a result of the construction of the Proposed Scheme.*'

The measures described in Section 5.3.4 of the ISMP includes:

- A pre-construction survey to identify changes since the original surveys, following which the ISMP will be updated to reflect the most up-to-date information available;
- General measures to avoid the spread, including:
    - Site establishment measures;
    - Biosecurity and site hygiene measures;
    - Soil excavation measures;
    - Measures for the disposal of material;
    - Measures for the application of herbicides; and

  - Measures for the importation of soil and other material.
- Post-construction monitoring.

Section 8 – 12.3.13.4 Other Invertebrates

Section 12.3.13 of Chapter 12 describes the baseline with respect to invertebrates, specifically discussing white-clawed crayfish, freshwater molluscs, marsh fritillary butterfly. Freshwater molluscs were given an ecological evaluation of 'Local Importance (Higher Value)', while the others were ruled out for further assessment. All 'other invertebrates' were also considered as part of the baseline ecological assessment, and are described in Section 12.3.13.4 and listed in Appendix A12.1 (Desk Study) in Volume 4 Part 3 of the EIAR where there are close to 100 species of invertebrates listed which have been recorded in the vicinity of the Proposed Scheme according to the National Biodiversity Data Centre. As described in Section 12.3.13.4 of Chapter 12 (Biodiversity):

'*Loss of natural and semi-natural habitats has been a key driver in decline of pollinators who require a balanced diet from a range of plant species throughout their active foraging season, which lasts from early spring until late autumn (Trinity College Campus 2017). Isolated and fragmented sites which are adjacent to the route of the Proposed Scheme include: Loughlinstown Woods pNHA, St. Stephen's Green, Iveagh Gardens, Leeson Park, Herbert Park, Elm Park, UCD, Kilbogget Park, Deerpark, Shanganagh Park and Cabinteely Park. These other invertebrate species favour species-rich semi-natural grasslands and meadows, upland heathland and sand dunes. Habitats within close proximity to the Proposed Scheme which correspond to species requirements include areas of ornamental planting along roadsides, parkland, canals, and gardens. Such habitats are fragmented and highly disturbed and are therefore deemed unsuitable for significant populations of Red listed invertebrates (Biesmeijer et al., 2006; Öckinger et al., 2009). As such, other invertebrates are not considered further in the assessment*.'

The DLRCC submission specifically highlights the importance of grasslands managed for pollinators across DLR. Given the nature of the Proposed Scheme, some habitat losses are unavoidable. These potential losses are summarised in Section 12.4.3.2.1 of Chapter 12 (Biodiversity), and specifically estimated in Table 12.16. The NTA acknowledge the importance of such habitats to pollinators and have included a comprehensive landscape design as part of the planning application, shown in the Landscape General Arrangement drawings (drawing set 05 accompanying Chapter 4 (Proposed Scheme Description)) in Volume 3 of the EIAR. The design includes large quantities of proposed new planting to replace habitats which are lost and enhance the landscape along the Proposed Scheme where possible. This is described in Section 12.5.1.2.1 of Chapter 12 (Biodiversity)as follows:

'*Where practicable, areas of vegetation including habitats of Local Importance (Higher Value), (i.e., mixed broadleaved woodland (WD1), scattered trees and parkland (WD5), hedgerow (WL1), treeline (WL2) and immature woodland (WS2) habitat types), which lie within the footprint, or along the boundary of the Proposed Scheme, will be retained. Proposed planting incorporated into the Proposed Scheme will be implemented by the appointed contractor, shown as design mitigation, is listed below and displayed on the Landscaping General Arrangement drawings (BCIDE-JAC-LA-0013_XX_00-DR-LL-9001) in Volume 3 of this EIAR. These areas will be protected for the duration of construction works and fenced off at an appropriate distance.*

To mitigate loss of habitat, proposed planting incorporated into the Proposed Scheme will be implemented by the appointed contractor listed below. This planting is listed below and displayed on the Landscaping General Arrangement drawings BCIDB-JAC-ENV-LA-0013_XX-DR-LL-0001 in Volume 3 of this EIAR:

- *551 trees planted;*
- *1,662m of proposed hedgerow;*
- *3,942m^2 of proposed species-rich grassland;*
- *1,721m^2 of proposed ornamental planting;*
- *4,153m^2 of proposed native tree planting; and*
- *25,050m^2 of proposed amenity grassland planting*.'

Section 9 – 12.4.3 Construction Phase – 12.4.3.1 Designated Areas for Nature Conservation

The potential for disturbance or displacement impacts on otters have been assessed within Chapter 12 (Biodiversity) of the EIAR. As stated in Section 12.4.3.1.1.5 (as referenced in the DLRCC submission),

'*There are a number of QI species known to occur within the vicinity of the Proposed Scheme. Refer to Section 12.4.3.4 for more details with regards to potential construction impacts on QI mammals*'.

As referenced in Section 12.4.3.1.1.5, the potential Construction Phase impacts on otters are described in Section 12.4.3.4, specifically in Section 12.4.3.4.3. Specific discussion of the potential impact associated with disturbance / displacement of otters during the Construction Phase is described in Section 12.4.3.4.3.5. The description of the potential impacts within that section are as follows:

'*No otter holts were identified during the surveys undertaken. The results of the desk study show that active otter holts are known to occur within the vicinity of the Proposed Scheme, including along the River Dodder and Shanganagh River, and further downstream in the Liffey Estuary Lower. Increased human presence and/or noise and vibration associated with construction works within the footprint of the Proposed Scheme is unlikely to affect these holts. However, construction works associated with the Proposed Scheme have the potential to (at least temporarily) displace commuting or foraging otter, particularly in unpopulated areas that are downslope of the Shanganagh River i.e., wooded sections of the Loughlinstown Woods pNHA that extend eastwards of the Proposed Scheme.*

Chapter 9 (Noise & Vibration) provide the indicative construction noise calculation associated with different construction activities of the Proposed Scheme at varying distances. The results of the noise assessment carried out for the Proposed Scheme confirmed that at 150m, noise levels for general construction activities will be 60dB or less. Therefore, construction activities would not be expected to result in any more than a moderate disturbance at distances beyond 150m. Therefore, 150m is considered to be a precautionary buffer in defining the ZoI of disturbance effects arising from construction activities.

Construction works associated with the Proposed Scheme have the potential to temporarily displace commuting or foraging otter at the proposed River Dodder and Grand Canal crossing points. Noise and disturbance levels associated with these works lie within the range 64-81dB, depending on the activity, at 10m from the Proposed Scheme boundary and return to background levels within 50m (average daytime noise levels within the Leeson Street to Donnybrook (Anglesea Road Junction) section of the Proposed Scheme was in the order of 68dB – refer to Chapter 9 (Noise & Vibration). As such disturbance for mammals is estimated to reach approximately 50m from the Proposed Scheme in this highly urbanised area. Documented otter holts are outside of this ZoI, disturbance effects from the Proposed Scheme are not deemed to cause displacement affects leading to abandonment of these holts or territory.

Otter are known to tolerate human disturbance under certain circumstances (Bailey and Rochford 2006; The Environment Agency 2010; Irish Wildlife Trust 2012). There are numerous records of otter within the urban Dublin area, which suggests a relatively high level of habituation to human disturbance and noise by otter (Macklin et al., 2019a, b). As construction works will typically be undertaken during normal daylight working hours and otter are generally nocturnal in habit, and that otter can (in many circumstances) tolerate high levels of human presence and disturbance, displacement of otter from their habitat is extremely unlikely to affect the local otter population. Therefore, disturbance during construction is not likely to have a significant effect on the species' conservation status and will not result in a likely significant negative effect, at any geographic scale.

Disturbance and displacement effects on otter may also be the result of increased artificial lighting during construction. Nocturnal mammals, such as otter, are likely to be disturbed by the introduction of artificial light into established breeding and foraging areas (Rich and Longcore 2005). Although the majority of the Proposed Scheme corridor is already lit artificially, the construction of the Proposed Scheme may result in the introduction of artificial lighting to previously unlit areas, if Construction Compounds require security lighting for the duration of construction. Given the fact that the locations of the proposed Construction Compounds are remote from any watercourses, lighting during construction is not considered likely to result in any significant effect to otters in the vicinity. However, in view of potential night-time works in near busy road bridges crossing some watercourses e.g. River Dodder at Donnybrook, mitigation measures have been designed to minimise habitat severance during construction (see Sections 12.5.1.4.3.2 and 12.5.1.4.3.4).'

Section 10 – 12.4.3.1.2.3 Habitat Degradation – Groundwater

The potential for impacts on groundwater dependant terrestrial ecosystems for Loughlinstown Woods pNHA has been assessed within the EIAR, within both Chapter 12 (Biodiversity) and Chapter 14 (Land,

Soils, Geology & Hydrogeology). The ecology specialists and the hydrogeology specialists who worked on those assessments consulted with each other when undertaking their individual assessments to ensure that the potential impacts on the pNHA were fully assessed.

The potential ecological impacts are described in Chapter 12 (Biodiversity), Section 12.4.3.1.2.3 as follows:

'*The potential for hydrogeological impacts is highly variable depending on the nature of the proposed works at specific locations and the receiving environment ground conditions. The Loughlinstown Woods pNHA is located downgradient of the Proposed Scheme. There are some ground improvement works required for the Proposed Scheme approximately 400m from the pNHA. Any drawdown from the excavation is expected to be limited, localised, not extending into the boundary of the pNHA site, and temporary. In the absence of mitigation, there is a risk of pollutants entering the groundwater as a result of spillages or accidents, and in such circumstances, this would constitute a significant effect on the Loughlinstown Woods pNHA. Therefore, mitigation measures, as described in Section 12.5.1.2.3 are required to address this potential impact.*'

The potential impacts are assessed in Chapter 14 (Land, Soils, Geology & Hydrogeology), Section 14.4.3.7 as follows:

'*Groundwater dependent habitats may be potentially impacted through accidental contamination of the groundwater which supports them, the alteration of groundwater levels and/or the reduction in the groundwater contribution to the ecosystem. The characteristics which determine the potential impact are:*

- *The proximity to the feature;*
- *The level of hydraulic connection between the feature and the section of aquifer at the Proposed Scheme i.e. is the feature in the same aquifer unit as the Proposed Scheme, or is there a hydraulic divide between the feature and the Proposed Scheme;*
- *The groundwater flow direction in the vicinity;*
- *The level of cut of the Proposed Scheme, which may determine the degree of variation in the groundwater level and also the extent of dewatering which may occur; and*
- *The water quality of the feature and the groundwater from which it receives its baseflow.*

Loughlinstown Wood is directly adjacent to the Proposed Scheme where the proposed design is at grade. There are ground improvement works approximately 400m from the Loughlinstown Wood pNHA. Any drawdown from the excavation is expected to be limited, localised (not extend to the boundary of the pNHA site) and temporary. There is a risk of pollutants entering the groundwater as a result of spillages or accidents where mitigation measures are not implemented. Therefore, the magnitude of this impact is considered moderate adverse. As the importance of the Loughlinstown Wood is very high, the resulting significance of the impact is Significant.'

The 'ground improvement works' referenced by both chapters will be required at Loughlinstown Roundabout as described in Chapter 5 (Construction) in Volume 2 of the EIAR:

'*An existing principal retaining wall (RW043) will be structurally strengthened through ground improvement works along the north bend of the Loughlinstown Roundabout*.'

A full report on the proposals for ground improvement works at Loughlinstown Roundabout are included within the Supplementary Information to the planning application, where it is included as Appendix F3 (Loughlinstown Roundabout Preliminary Design Report), which is an appendix to the Preliminary Design Report for the Proposed Scheme. Section 3.1 of that report describes the proposed works at that location as follows:

'*Four main options were considered in the options report to accommodate the widened highway cross section and bus lane provision at the R13-RW043. The preferred option is Ground Improvement Works, due to the relatively limited technical implications, relatively low geotechnical impacts, and lowest economical and construction impact out of the intrusive options.*

This option would act as a load alleviating measure by locally improving the ground conditions directly below the surcharged traffic area increasing the angle at which the load can be distributed through the ground. The depth of ground improvement would be governed by the distance to the wall and the depth of the foundations which would have to be confirmed in detail design. The ground improvement would

consist of layers of 6I/6J fill typically 300 mm to 500 mm thick compacted into cells confined by a proprietary geotextile system. Engineered granular soil, such as 6N fill, with a high friction angle can be laid to further reduce loading on the wall.'

The proposed solution, as illustrated in the report, is shown in Figure 3.400.

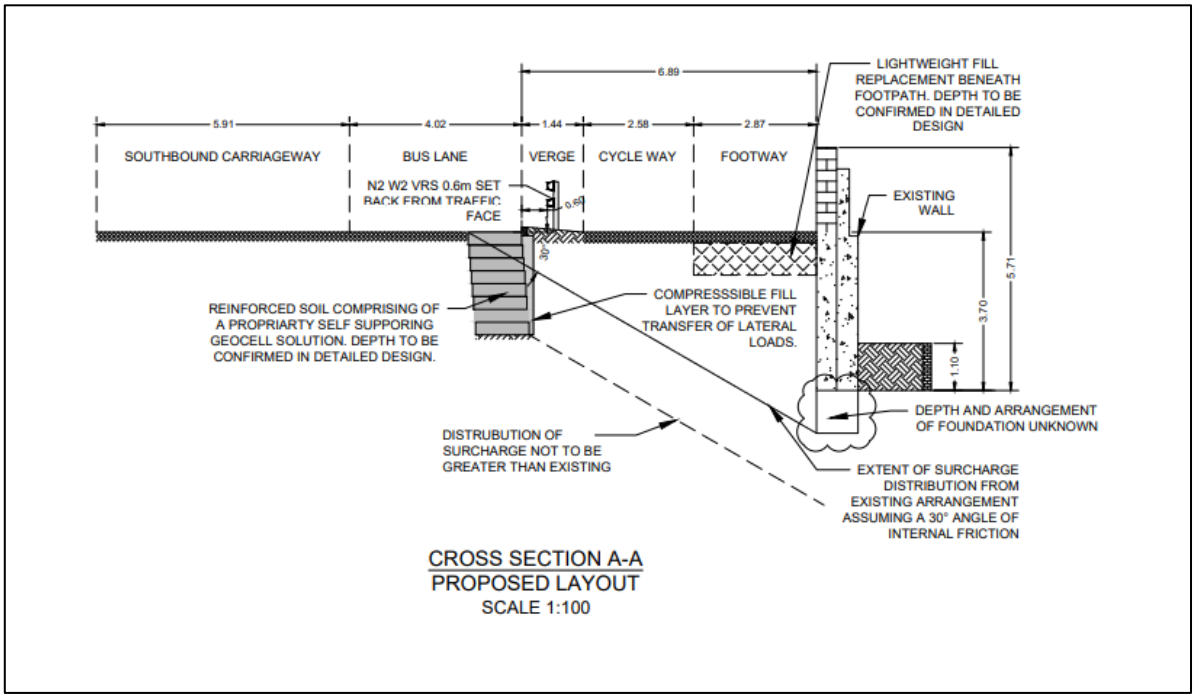


Figure 3.400: Extract from figure included in Appendix A of Appendix F3 to the Preliminary Design Report showing a cross section of the proposed ground improvement works at Loughlinstown Roundabout

Section 6 of the report describes the ground conditions at the location, describing the findings of ground investigation works carried out in 1984 as follows:

'*All the boreholes excavated in the vicinity of the wall encountered stiff Glacial Till (described as Boulder Clay on the logs), immediately below topsoil. None of the boreholes prove bedrock. The deepest borehole (1550A) was advanced to a level of 25.38 m and was terminated after proving 1.8m of Glacial Till. 'No groundwater encountered' was noted on all the exploratory hole logs.*'

A figure (Figure 6.2 in the report) was also included illustrating the ground conditions (see Figure 3.401 below).

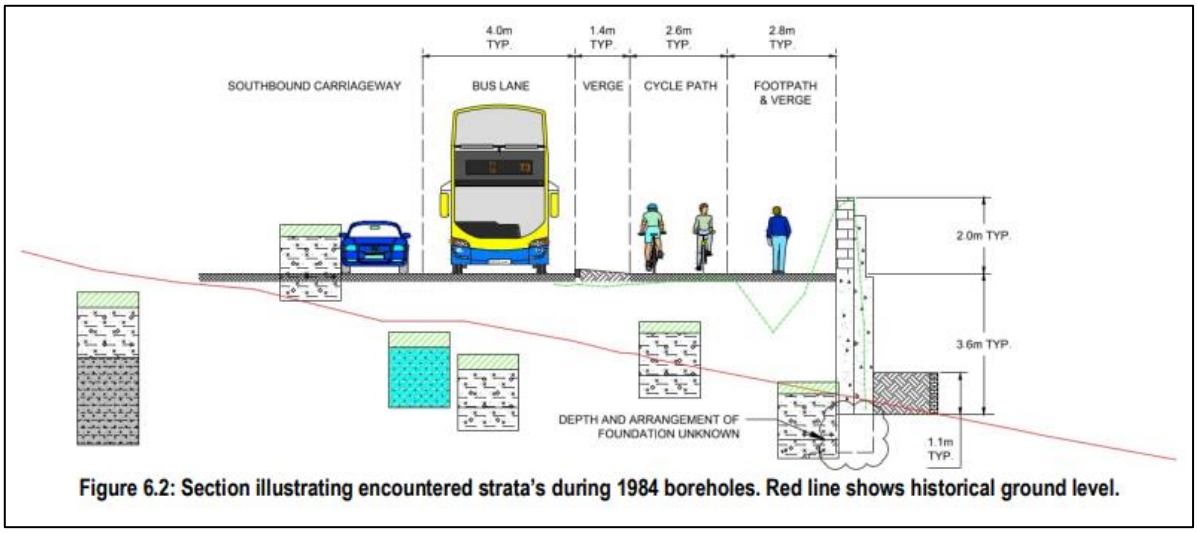


Figure 3.401: Extract of Figure 6.2 from Appendix F3 to the Preliminary Design Report illustrating strata from 1984 ground investigation at Loughlinstown Roundabout

Section 6 of the report concludes with the following summary of the likely ground conditions at the location of the proposed ground improvement works as follows:

'*Ground related considerations / risks:*

- *Made Ground is likely behind the wall.*
- *There is no information available on the nature of the Made Ground, particularly, it's effective angle of friction.*
- *Groundwater is unlikely to be present behind the wall, but it should be capable of resisting water associated with failure of the road drainage.*
- *The ground beneath the wall is expected to be stiff or hard Glacial Till.*
- *The thickness of Glacial Till is not none. This is only likely to be concern if strengthening works that require deep foundations are proposed*.'

It was therefore concluded by the ecology and hydrogeology specialists that the potential for impacts on the groundwater levels as a result of the ground improvement works is very low, as stated in both EIAR chapters and therefore significant impacts as a result of drawdown on any groundwater dependent habitats (including Loughlinstown Woods pNHA) are not anticipated.

Section 11 – 12.4.3.4.2 Badger

Chapter 12 (Biodiversity) in Volume 2 of the EIAR describes the surveys undertaken between 2018 and 2023 to inform the impact assessment. Table 12.2 in the chapter lists all the surveys undertaken by the ecologists, with mammal surveys (excluding bats) undertaken June to August 2018, August 2020, April 2022, and March 2023. Section 12.2.2 lists the main guidance used for the assessment. With specific reference to the surveys, and the approach to badger surveys, it states the following:

'*It should be noted that in some instances standard survey methodology described in some of the guidance documents listed above was modified for practical reasons. Owing to the nature of the Proposed Scheme, being largely within an urban transport corridor, a practical approach was adopted to capture likely presence of protected species and or likely impacts arising as a result of the Construction and Operation of the Proposed Scheme. Thus, in respect of badger, the NRA 2005b guidance* [Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes] *recommends surveys up to 150m beyond corridor boundaries corridor. This is not feasible for much of the existing urban corridor…and the focus of the multidisciplinary and follow-on surveys has been on areas that could, based on evidence from the desktop study, suitable habitat and professional judgement support the protected species*.'

Section 12.2.3.4 of the chapter describes those surveys as follows:

'*The footprint of the Proposed Scheme was surveyed for badger Meles meles and otter Lutra lutra activity as part of the multidisciplinary walkover survey, undertaken between June and August 2018, in August 2020 and again in April 2022. A discrete survey around the grounds of Woodbrook Side Lodge was undertaken in March 2023 which checked for presence of terrestrial mammals. The presence or absence of these species was surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings as well as by direct observation. In addition, the study area was surveyed for the presence of badger setts and otter holts. Where present, any evidence of use was recorded.*

No species-specific surveys were considered necessary for other protected mammal species for which field signs are less frequent and/or less reliable than other larger mammals, such as pine marten Martes martes, Irish stoat Mustela erminea hibernica and Irish hare Lepus timidus hibernicus. Nevertheless, during all surveys, attention was paid to activity signs such as searching soft muds for tracks, and to look for droppings. Potential presence of these species in suitable habitat was determined based on the habitat preferences described in Exploring Irish Mammals (Hayden and Harrington 2000).'

Section 12.3.8.2 of the chapter describes the badger baseline following the surveys and desk study as follows:

'*Badger, and their breeding and resting places, are legally protected under the Wildlife Acts. No evidence of badger (e.g., setts or evidence of badger activity) were recorded during the multidisciplinary surveys carried out along the Proposed Scheme.*

Despite this, badger are widely distributed throughout the Greater Dublin Area (GDA), often utilising

public parks and residential gardens. The desk study returned 16 records, including five live sightings, found within 1km of the Proposed Scheme (see Appendix A12.1 in Volume 4 of this EIAR for further details). The nearest record is from Donnybrook in the grounds of the Church of the Sacred Heart. As such, it has been assumed that badger may occur in vegetated areas adjacent to the Proposed Scheme.

The local badger population is deemed to be of Local Importance (Higher Value) due to the known presence of resident populations within the wider environment of the Proposed Scheme, which are valued as being of Local Importance as they are a Wildlife Acts protected species.'

Section 12.4.3.4.2 of the chapter describes the potential impacts on badgers as a result of the Construction Phase of the Proposed Scheme, introducing the section as follows:

'*During the multidisciplinary surveys did not confirm any badger setts or evidence of badger within the footprint of the Proposed Scheme. Based on the results of the desk study, badger are known to occur in the vicinity of the Proposed Scheme, and the nearest was from Donnybrook in the grounds of the Church of the Sacred Heart.*

Although it cannot be predicted if badger will establish new setts within the ZoI of the Proposed Scheme before construction works commence, it is a possibility, and therefore this scenario has been taken into account in the mitigation strategy (refer to Section 12.5.1.4.2).'

The section goes on to describe the potential impacts as a result of loss of foraging habitat and breeding / rest sites (Section 12.4.3.4.2.1) and due to disturbance / displacement (Section 12.4.3.4.2.2). While it was concluded that there was unlikely to be significant impacts as a result of loss of habitat, with respect to disturbance the chapter states that '*lighting associated with the Construction Phase of the Proposed Scheme could result in a negative effect on badgers, albeit temporary in nature and significant at the local level*'.

Section 12.4.4.4.2 of the chapter describes the potential impacts on badgers as a result of the Operational Phase of the Proposed Scheme, introducing the section as follows:

'*No evidence of badger was recorded along the Proposed Scheme during surveys undertaken. However, based on the results of the desktop study, badger are known to occur within the wider vicinity and therefore potential impacts on this species cannot be excluded and are discussed below.*'

It goes on to describe the potential for impacts associated with habitat severance / barrier effect (Section 12.4.4.4.2.1), mortality risk (Section 12.4.4.4.2.2), light spill (Section 12.4.4.4.2.3) and disturbance / displacement (Section 12.4.4.4.2.4). As described in those sections, no significant impacts are anticipated.

Section 12.5.1.4.2 of the chapter describes the required Construction Phase mitigation for protection of the local badger population, including '*the NTA will ensure that a confirmatory pre-construction check of all suitable badger habitat will be completed within 12 months prior to any construction works commencing*', '*open excavations will be covered when not in use and backfilled as soon as practicable… Excavations will also be covered at night, where practicable, and any deep excavations which must be left open will have appropriate egress ramps in place to allow badgers to safely exit should they fall in*' as well as a number of requirements with respect to construction lighting.

With respect to surveys and studies carried out by the ecologists to assess the potential impact on badger and to come to the conclusions stated within the chapter, the NTA is satisfied that a robust ecological assessment has been undertaken of all potentially significant impacts, based on a sound and comprehensive ecological data set.

Section 12 – 12.4.3.4.3 Otter

Section 12.2.3 of Chapter 12 (Biodiversity) describes the approach to data collection and collation. As well as the multiple surveys undertaken between 2018 and 2023, there were a number of sources referenced as part of the desk study to fully understand the ecological baseline, including the otter baseline. The list of available data sets and sources is provided in Section 12.2.3.1 of Chapter 12 (Biodiversity). The NTA is satisfied that a robust ecological assessment has been undertaken of all potentially significant impacts, based on a sound and comprehensive ecological data set.

Section 13 – 12.4.3.5.1 Breeding Birds

Section 12.3.9.1 describes the baseline with respect to breeding birds, and makes specific reference to the birds listed in the DLRCC submission. The Section describes the baseline for wetland and riverine species as follows:

'*Wetland and riverine bird species identified during the desk study (Appendix A12.1 in Volume 4 of this EIAR), include gulls, waders, waterfowl, swans, ducks, and grey heron Ardea cinerea which utilise intertidal zones freshwater lakes, ponds, canals, and rivers. Suitable habitats within close proximity to the Proposed Scheme include the Grand Canal, River Dodder, Brewery Stream, Kill of the Grange, Carrickmines Stream, Shanganagh River, Rathmichael Stream and River Dargle; the River Dodder and the Grand Canal containing populations of swans, ducks, herons, kingfisher and coot. Rivers are important nesting and foraging sites for species such as kingfisher, mute swan, and coot within the Proposed Scheme. The Proposed Scheme ends at the Dargle River at Fran O'Toole Bridge with known populations of* ***kingfisher****, grey heron,* ***grey wagtail****, mallard and mute swan; and crosses the River Dodder with known populations of* ***kingfisher****,* ***grey wagtail****,* ***dipper****, mute swan, tufted duck, little grebe and moorhen*.

Kingfisher *were not recorded during multidisciplinary surveys within the footprint of the Proposed Scheme*.'

Section 12.4.3.5.1 describes the potential Construction Phase impacts on breeding birds, with Section 12.4.3.5.1.1 specifically describing impacts associated with the loss of habitat, where it states the following:

'*The primary consequence of habitat loss will be increased competition for resources (e.g., nesting habitat and/ or prey / food source) both between and amongst breeding bird species. The magnitude of this effect will be largely defined by many unquantifiable factors such future land use changes and whether the local habitat resource has currently reached its carrying capacity or not in terms of breeding bird species. For species with larger home ranges during the breeding season, habitat loss at the scale of the Proposed Scheme is not likely to have any perceptible effects on breeding success or population dynamics. As the Proposed Scheme will be constructed within an already busy transport corridor, habitats suitable to support breeding birds are limited. Treelines and hedgerows are highly disturbed, and largely within the road median, therefore do not offer significant shelter for breeding bird species.*

The habitat areas that will be lost as a result of the Proposed Scheme form a relatively small part of larger expanses of similar habitat types and mosaics in the wider locality. Parks and greenspaces form a vital resource for breeding birds within an urban setting. These areas of suitable breeding bird nesting and/or foraging habitat available in the wider locality of the Proposed Scheme (i.e., from approximately 0.3 to 2km from these existing sites located within the footprint of the Proposed Scheme) include:

- *Parks and greenspaces with hedgerow, treeline and/or scrub boundaries such as Loughlinstown Woods pNHA, St. Stephens Green, Iveagh Gardens, Leeson Park, Herbert Park, Elm Park golf course, UCD, Cabinteely Park, Kilbogget Park, Deerpark and Shanganagh Park;*
- *Woodland such as that present in Loughlinstown Woods pNHA; and*
- *Sections of the watercourses both upstream and downstream of the Proposed Scheme.*

None of the habitat areas to be lost are unique to the locality and, either individually or collectively, are not likely to support a significant proportion, or the only population, of any given breeding bird species locally. Although a temporary decline in overall breeding bird abundance could potentially occur at a very local level (i.e., the footprint of the Proposed Scheme), this is unlikely to affect the local range of the breeding bird species present nor is it likely to affect the ability of these breeding bird populations to maintain their local populations in the long-term.'

Habitat degradation as a result of surface water quality impacts during the Construction Phase were also assessed (Section 12.4.3.5.1.4). It describes the potential impacts as follows:

'…*the Construction Phase of the Proposed Scheme could potentially result in contamination of receiving water bodies, with a consequent effect on breeding birds either directly (e.g. acute or sub-lethal toxicity from pollutants) or indirectly (e.g. affecting their food supply or supporting habitats).*

However, it is considered unlikely that a pollution event of such a magnitude would occur during the

Construction Phase or be any more than temporary in nature. Nevertheless, a precautionary approach is being taken in assuming a level of risk of water quality impacts and detailed mitigation measures are required to further minimise the risk of the Proposed Scheme having any perceptible effect on water quality during construction.

Habitat degradation as a result of effects on surface water quality during construction has the potential to affect the species' conservation status and result in a likely significant negative effect, at a local geographic scale.'

Section 12.5.1.5.1 describes the mitigation measures required to minimise impacts on breeding birds during the Construction Phase of the Proposed Scheme, with measures for the mitigation of impacts from habitat loss and fragmentation (Section 12.5.1.5.1.1) described as follows:

'*Where possible, habitats of importance to breeding birds such as scattered trees and parkland, treeline and hedgerow habitat types, which lie within the footprint, or along the boundary of the Proposed Scheme, that are not directly impacted will be retained. These areas will be protected for the duration of construction works and fenced off at an appropriate distance. Vegetation to be retained is shown on the Landscaping General Arrangement drawings (BCIDB-JAC-LA-0013 _XX_00-DR-LL-0001) in Volume 3 of this EIAR.*

Planting of treeline, hedgerow and grassland habitats within the Proposed Scheme footprint will be carried out by the appointed contractor, as detailed in the landscape drawings. Refer to the Landscaping General Arrangement drawings (BCIDB-JAC-LA-0013 _XX_00-DR-LL-0001) in Volume 3 of this EIAR for locations.

Many species may not nest near a road development due to disturbance (e.g., drowning out of bird song by traffic noise). Whilst the planting is not likely to fully offset the loss of breeding and foraging habitat (due to the proximity of road traffic disturbance on the operational road) it is likely to provide additional foraging habitat for some species.'

Section 12.5.1.5.1.2 describes the required mitigation against mortality risk during construction as follows:

'*Where practical, vegetation (e.g., hedgerows, trees, scrub, bankside vegetation and grassland) will not be removed, between the 01 March and the 31 August, to avoid direct impacts on nesting birds.*

Where the construction programme does not allow this seasonal restriction to be observed, then these areas will be inspected by a suitably qualified ecologist as engaged by the appointed contractor, for the presence of breeding birds prior to clearance.

Areas found not to contain nests will be cleared within three days of the nest survey, otherwise repeat surveys will be required. Vegetation clearance will not commence where nests are present, works will resume when birds have fledged and nests are no longer in use, or an agreement is reached with the NPWS.'

Section 12.5.1.5.1.4 describes mitigation against habitat degradation due to impacts on surface water quality as follows:

'*In terms of mitigation, an SWMP has been prepared (provided in Appendix A5.1 – CEMP in Volume 4 of this EIAR), which details control and management measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during the Construction Phase of the Proposed Scheme.*

Specific mitigation measures which the appointed contractor will implement in relation to surface water quality are described in Section 12.5.1.2.2 and Chapter 13 (Water).'

Section 14 – Mitigation, Enhancement and Compensation

Section 12.5 of Chapter 12 (Biodiversity) describes all required mitigation and monitoring measures required to mitigate impacts on biodiversity as a result of the Proposed Scheme. All mitigation is also recorded in Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR, and all Construction Phase mitigation has been incorporated into Appendix A5.1 (Construction Environmental Management Plan (CEMP)) in Volume 4 Part 1 of the EIAR which has been compiled to describe environmental requirements of the appointed contractor(s) during the Construction Phase. The

CEMP includes all Construction Phase mitigation measures as described in the EIAR and the NIS for the Proposed Scheme. Of particular relevance to biodiversity, the CEMP also includes an Invasive Species Management Plan (Section 5.3), a Surface Water Management Plan (Section 5.4) and an Environmental Incident Response Plan (Section 5.6).

With respect to the comment requesting mapping showing the locations of compensatory measures, as referenced within Chapter 12 (Biodiversity), Section 12.5.1.2.1 on habitat loss and fragmentation, the Landscape General Arrangement drawings (drawing set 05 accompanying Chapter 4 (Proposed Scheme Description)) in Volume 3 of the EIAR show tree and vegetation losses and provide details on the proposed planting and landscape measures which for part of the Proposed Scheme design. Section 12.5.1.2.1 of Chapter 12 (Biodiversity) also provides the quantities of proposed new and replacement planting for the Proposed Scheme as shown in the Landscape General Arrangement drawings. These proposed quantities to be planted are:

- 551 trees;
- 1,662m of hedgerow;
- 3,942m^2 of species-rich grassland;
- 1,721m^2 of ornamental planting;
- 4,153m^2 of native tree planting; and
- 25,050m^2 of amenity grassland.

An extract from 05-Landscape General Arrangement drawings Sheet 42 in Chapter 17 (Landscape (Townscape) & Visual) in Volume 3, Part 1 of 3 of the EIAR is provided in Figure 3.402 to illustrate the type of mapped landscaping detail around Rathmichael School, Shankill provided in those drawings.

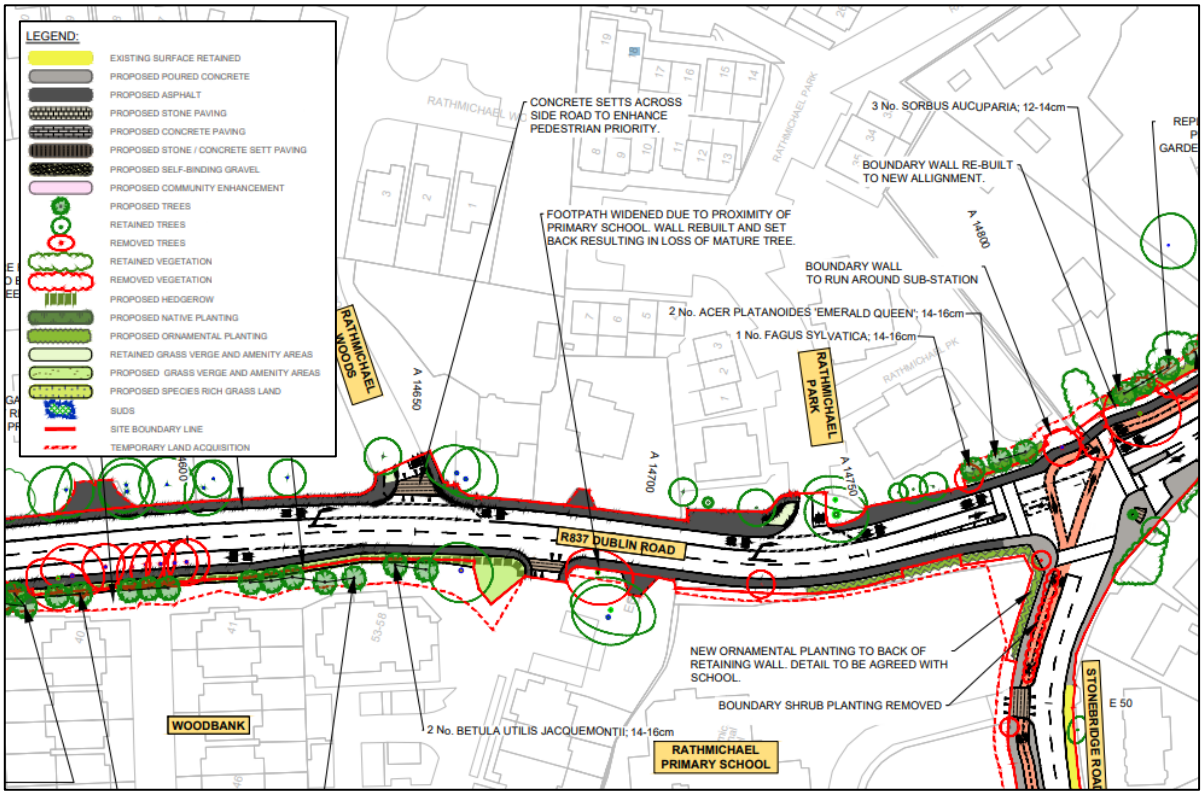


Figure 3.402: Extract from Landscape General Arrangement Drawings (Sheet 42)

Additionally, Chapter 4 (Proposed Scheme Description) in Volume 2 of the EIAR describes the approach to the landscape and urban realm design in Section 4.6.12. In Section 4.6.12.3.1 describes the planting strategy as follows:

- '*Where possible the initial conservation of existing biodiversity has been considered;*
- *Opportunities have been identified to enhance biodiversity through green infrastructure;*
- *Promote the role of street trees planting consistent with the recommendations of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 (Dún Laoghaire-Rathdown County Council 2022) and Dublin City Tree Strategy (DCC 2015a); and*

- *Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit*.'

Section 4.6.12.5 also describes the typical planting typologies, describing new street trees (Section 4.6.12.5.1), central median planting (Section 4.6.12.5.2), native planting / tree planting (Section 4.6.12.5.3), boundary planting associated with commercial and community land use (Section 4.6.12.5.4), residential interface and garden reinstatement (Section 4.6.12.5.5), and key areas of urban realm (Section 4.6.12.5.6).

Additional detail on the proposed landscaping and planting plans is provided in Chapter 14 of the Preliminary Design Report available in the Supplementary Information provided as part of the planning application, where a summary of the trees retained, removed and proposed are provided in Table 14.1.

Overview of DLRCC Conservation Officer Submission

The submission notes that the Conservation Officer has reviewed the planning application and the EIAR and has no further comments to make. The guidance set out in Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) was noted as being particularly welcome by the Conservation Officer.

Response to DLRCC Conservation Officer Submission

The NTA notes the DLRCC Conservation Officer's submission and acknowledges their welcoming of the guidance set out in Appendix A16.3 (Methodology for Works Affecting Sensitive and Historic Fabric) in Volume 4 Part 3 of 4 of the EIAR.

Overview of Age-Friendly County Submission

The submission notes that DLRCC is an age-friendly county and requests that an Bord Pleanála include a condition requiring that public realm interventions are in accordance with Age Friendly Ireland Guidelines, Accessibility Guidelines and best practice requirements for such work.

Response to Age-Friendly County Submission

In line with best practice design principles the NTA has endeavoured to ensure that all designs included as part of the Proposed Scheme are age-friendly and cater for all abilities.

Overview of DLRCC Heritage Officer Submission

The submission notes that action 3.3.1 of the dlr County Heritage Plan '*explore opportunities to pilot new heritage hubs by repurposing buildings, spaces and public transport nodes*', stating that this is an opportunity to incorporate heritage interpretive elements into new waiting spaces and physical infrastructure along the route. It goes on to state that the Heritage Office can advise locally relevant and engaging interpretive content and design, with such elements to be in line with the DLRCC County Heritage Plan 2021-2025.

Response to DLRCC Heritage Officer Submission

The NTA has actively engaged with DLRCC during the design process of the Proposed Scheme and can continue to do so with respect to specific details.

Section 4 – Drainage, Road Maintenance, Public Lighting and Pollution Control Recommendations

Overview of submission

Drainage Comments

SuDS

The submission advises that the requirements for SuDS should be thoroughly investigated to ensure that adequate space is provided and that utility checks are undertaken to confirm the feasibility of SuDS proposals. DLRCC note that they are happy to see areas that are currently paved being changed to landscaped areas, however that not all of these are being utilised for SuDS. The submission requests that this should be addressed where feasible.

Trees

The submission notes that a lot of new trees are proposed but it is not clear why all of these have not been specified as tree pits for surface water runoff. It is noted that redirecting existing footpaths/carriageways to these tree pits could aid in relieving any localised pluvial flooding and provide interception/treatment of this run-off for water quality improvement.

Hardstanding

The submission notes that it is unclear why all new hardstanding is not specified as permeable/porous surfacing. DLRCC state that this scheme presents an ideal opportunity to trial such surfaces in less trafficked areas such as proposed footpaths/cycle paths. It is noted that this would reduce the requirement for gully gratings in cycle paths, which themselves can be a hazard for cyclists, reducing surface water runoff and risk of icy surfaces in winter.

Existing Landscaped Areas

The submission notes that there appear to be some existing landscaped areas that could be altered as part of this scheme to provide bioretention basins, as an alternative or in addition to the oversized attenuation pipes referenced in the report, for surface water run-off, improving water quality, biodiversity and the public realm as a whole. The submission further notes that as alternation works are already proposed in the vicinity, it would be remiss of both the NTA and DLRCC not to take this opportunity to improve drainage and the public realm in this area.

Recommended Conditions

The DLRCC drainage department lists a number of recommended conditions which they request An Bord Pleanála to include in relation to Surface Water and Drainage.

1) Prior to the commencement of development, that the developer submit to the Planning Authority full details of the drainage proposals for the entire scheme. DLRCC note that these proposals must demonstrate SuDS potential has been maximised across the scheme. This should not be limited to proposed increase in hardstanding areas but provided across all sections of the scheme. It further notes that where possible, all trees should be specified as tree pits and bioretention areas incorporated where space is available, such as at junction. All proposed hardstanding areas must be permeable/porous and drain to an appropriately designed SuDS measure. DLRCC note that oversized pipes should not be considered SuDs measures.
2) Prior to the commencement of development, that the developer submit to the Planning Authority full dimensioned construction details of the proposed SuDS measures. DLRCC note that details shall include a construction plan and a post-construction maintenance specification and schedule. Contractors with specialist training in SuDS should be used. Thereafter, woks shall be carried out in accordance with the agreed details. The SuDS measures shall be designed in accordance with the SUDS Manual (C753).
3) Prior to the commencement of development, that the developer submit to the Planning Authority a construction management plan and programme of work that among other items provides for interception, containment and treatment of construction runoff. No construction runoff should be diverted to proposed SuDS measures. Any surface water sewer pipes used to convey construction runoff should be thoroughly cleaned before subsequent connection to SuDS elements.
4) If total infiltration of surface water run-off generated by the scheme is not possible then, prior to the commencement of development, the applicant is requested to submit a design with discharge rate for the scheme limited to Qbar or 2l/s/ha, whichever is greater, subject to the orifice size of the flow control device not being less than 50mm in diameter. The submission shall include detailed calculations, including modelling results of the proposed system during all required storm events.

Road Maintenance Comments

The DLRCC road maintenance department lists a number of recommended conditions which they request An bord Pleanála to include.

- A pre and post PSCI survey shall be carried out by the developed for the access roads along the Core Bus Corridor with active monitoring of the road condition to include sufficient

tie in road surface area and effective remediation measures to rectify any potential damage caused by construction traffic.

- That the developer shall submit for prior agreement with DLRCC, detailed design for all elements of the scheme including but not limited to footpaths, cycle lanes, kerb separators between modes, pavement treatment options, drainage details, tree pits etc.
- That the developer shall submit for prior agreement with DLRCC a detailed pavement treatment plan based on the PMS structural evaluation FWD Level 1 analysis and Level 2 report recommendations.
- That the developer shall submit for prior agreement with DLRCC, a detailed ironworks drawing to include the mastic requirement for the existing and new ironworks. Ironworks shall be reinstated with mastic surrounds in accordance with CC-PAV-04012 as follows:
    - Where they are in the wheel track of a lane,
    - Gullies in the vicinity of bus stops i.e., approximately 5 no. gullies on either side of a bus stop
    - Where existing ironworks are in poor condition; and
    - At any other location identified by the Resident Engineer.

Pollution Control Comments

The DLRCC pollution control section lists a number of recommended conditions which they request An bord Pleanála to include.

That the appointed contractor for the scheme shall engage with DLRCC's Pollution Control Section, in advance of construction works commencing, to agree the relevant details of the Construct Environmental Management Plan and the Surface Water Management Plan in relation to the construction compound.

The DLRCC pollution control section further notes that no petrol interceptors appear to be included in the proposals.

Public Lighting Comments

DLRCC's public lighting department note that street lighting along DLRCC's section of the CBC corridor has all been upgraded to LED lighting in recent years and note that the columns and brackets are in good condition. It is noted that the addition of trees will have to take account of those light locations and ensure that the light levels on the road and footpath surface are not negatively impacted, It is noted that any alteration of the light column locations should be done under a complete lighting design.

Response to submission

Drainage Comments

SuDS

The NTA notes the comment from DLRCC's drainage department that they are happy to see currently impermeable areas being converted to permeable areas as part of the Proposed Scheme. As set out in Section 4.6.15.4 of the EIAR Volume 2 Chapter 4, (Proposed Scheme Description), SuDS features have been proposed where practicable. The following is noted:

'Flows will be controlled by the implementation of SuDS techniques, where practicable. One of the principal objectives of the road drainage system is to minimise the impact of the runoff from the roadways on the surrounding environment via the position of: filter drains, swales, bio-retention areas, tree pits, oversized pipes, silt traps and attenuation features if necessary.'

Proposed SuDS features have been assessed to ensure that sufficient space is allowed for them, and utility checks have been carried out against available utility record information. The following is noted in Section 4.6.45.5 of the EIAR:

'Infiltration rates were assumed to be zero for calculating the required attenuation volumes for SuDS measures. This is a conservative approach and ensures SuDS measures are not knowingly undersized at this stage of the design. Where necessary, permeability tests will be completed so that infiltration rates can be considered in further design.'

Trees

It is noted in Section 4.16.15.5 of the EIAR Volume 2, Chapter 4 (Proposed Scheme Description) that:

'A SuDS drainage strategy has been developed for all newly paved areas in accordance with the SuDS hierarchy. SuDS are provided to ensure no increase on existing runoff rates from new paved areas will also provide a level of treatment before discharging into the existing network system.'

As such, tree pits are proposed in locations where new street trees are proposed in the vicinity of newly paved areas. It is further noted that where trees are proposed in landscaped areas such as verges or similar, tree pits are not proposed.

Hardstanding

Permeable paving was considered as an option for paved surfaces in some specific location but wasn't pursued further.

Existing Landscaped Areas

As noted in the response to the specific query on trees above it is noted in Section 4.16.15.5 of the EIAR Volume 2, Chapter 4 (Proposed Scheme Description) that:

'A SuDS drainage strategy has been developed for all newly paved areas in accordance with the SuDS hierarchy. SuDS are provided to ensure no increase on existing runoff rates from new paved areas will also provide a level of treatment before discharging into the existing network system.'

As such the conversion of existing landscaped areas into bioretention basins does not form part of the scope of the Proposed Scheme.

Response to Recommended Conditions:

1) The NTA acknowledges the close liaison with DLRCC that has been in place during the planning and design stage of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from that DLRCC during the design development process.

   It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include liaison with the drainage department of the Council and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

2) Please refer to the response to proposed DLRCC Drainage Department Condition 1 above.

3) A Construction Environmental Management Plan (CEMP) has been submitted as Appendix A5.1 of the EIAR Volume 4. This Construction Environmental Management Plan includes a Surface Water Management Plan which outlines how surface water shall be manged during the construction stage of the Proposed Scheme. These are matters that can be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

4) As set out in Section 13.4.1.1 of the EIAR Volume 2 Chapter 13 (Water):

'The drainage design is based on a number of general principles, which are set out in the document 'BusConnects Core Bus Corridor Drainage Design Basis' (NTA 2020). A SuDS drainage design has been developed as a first preference and in accordance with the SuDS Management Train described in the CIRIA SuDS manual (CIRIA 2015). The CIRIA SuDS Manual recommends that when considering SuDS solutions, the preferred approach is a hierarchy whereby runoff using source control solutions (e.g. pervious surfacing) are considered first. Where source control is not possible or cannot fully address an increase in runoff from a development, residual flows are then managed using site controls (e.g. bioretention / infiltration basins). If this is not practical or residual flows remain above existing

runoff rates, regional controls (e.g., oversized pipes) are used. SuDS provide the dual benefits of controlling flow and treating water quality.

In areas where the catchment is proposed to remain unchanged as no additional impermeable areas are proposed, the design consists of relocating existing gullies (where possible) to new locations.'

The Proposed Scheme primarily involves the reallocation of existing road space. Where additional impermeable areas are proposed, a SuDS strategy has been developed to ensure that there will be no increase in existing runoff rates. This is the appropriate surface water management strategy for the Proposed Scheme.

Road Maintenance Comments

1) Section 5.2 of the Construction Environmental Management Plan (CEMP) included in EIAR Volume 4 Appendix A5.1, contains the Construction Traffic Management Plan. Section 5.2.3.14 of this document outlines the measures to be carried out by the appointed contractor to ensure that the road condition is not negatively impacted by construction activities. The following is noted:

   'The extent of the lorry traffic movements and the nature of the payload may create problems of:

   - *Fugitive losses from wheels, trailers, or tailgates; and*
   - *Localised areas of subgrade and wearing surface failure.*

   Activities which may reduce the impact on road condition are outlined below. They should be incorporated into the CTMP by the appointed contractor where practicable;

   i. Loads of materials leaving each works area will be evaluated and covered if considered necessary to minimise potential dust impacts during transportation;

   ii. Take all reasonable measures while transporting waste or any other materials likely to cause fugitive losses from a vehicle during transportation to and from the works areas, including but not limited to;

      a. Covering of all waste or material with suitably secured tarpaulin / covers to prevent loss; and

      b. Utilisation of enclosed units to prevent loss.

   iii. Undertake pavement condition surveys along roads forming part of the construction traffic route, based on consultation with the NTA and professional judgement regarding the condition of the route pre-construction. These record the baseline structural condition of the road being surveyed immediately prior to construction; and

   iv. Throughout the course of construction of the Proposed Scheme, undertake on-going visual inspections and monitoring of the construction traffic routes to ensure any damage caused by construction traffic is recorded. Arrangements can then be made to repair any such damage to an appropriate standard in a timely manner such that any disruption is minimised.

   Upon completion of construction of the Proposed Scheme, the surveys carried out pre-construction shall be repeated, and a comparison of the pre-construction and post-construction surveys carried out.'

2) Under the provisions of the relevant legislation, the NTA has exercised certain powers under Section 44(2)(b) of the 2008 Act to the effect that the functions in relation to securing the provision of public transport infrastructure falling within Section 44(2)(a) of the 2008 Act (as amended) in relation to the CBC Infrastructure Works, should be performed by the NTA. Those functions include the design and construction of the Proposed Scheme and, effectively, the NTA becomes the road authority in respect of the exercise of those functions.

   Under the relevant legislation, upon the completion of the construction of the Proposed Scheme the NTA automatically ceases to be the road authority and the status of DLRCC as the relevant

road authority is automatically restored – it does not require the operation of the conventional 'taking-in-charge' arrangements provided for elsewhere in legislation. Accordingly, the legislative provisions appropriately govern the arrangements for the NTA to commence the construction of the Proposed Scheme, subject to the necessary planning and environmental consents, and govern the restoration of the road authority function to the relevant local authority, in this case being Dun Laoghaire Rathdown County Council.

Notwithstanding the above, the NTA intends to continue the close liaison with DLRCC thathas been in place during the planning and design stage of the Proposed Scheme, during and throughout the subsequent construction stage. This will include engaging and collaborating on the construction arrangements, the road maintenance arrangements during construction and the standard to which the Proposed Scheme will be completed prior to transfer back to DLRCC, together with record retention, all in full accordance with the EIAR. Given the legislative framework that is in place, these are matters that can, and will, be successfully addressed between DLRCC and the NTA, in the absence of any approval condition.

3) Please refer to the response to proposed DLRCC Road Maintenance Department Condition 2 above.

4) Please refer to the response to proposed DLRCC Road Maintenance Department Condition 2 above.

Pollution Control Comments

The NTA has included a comprehensive Construction Environmental Management Plan (CEMP) including a Surface Water Management Plan within EIAR Volume 4 Appendix A5.1. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from the pollution control department during the design development process, including in relation to the CEMP and the Surface Water Management Plant in relation to the construction compound as referenced in this requested condition.

The NTA notes the comment by DLRCC in relation to the fact that no petrol interceptors appear to be included in the proposals. For areas where no increase in impermeable area is proposed the proposed drainage strategy is to utilise the existing drainage regime with the relocation of existing gullies where practicable. A SuDS drainage strategy has been developed for all newly paved areas in accordance with the SuDS hierarchy. SuDS are provided to ensure no increase on existing runoff rates from new paved areas will also provide a level of treatment before discharging into the existing network system.

Public Lighting Comments

The NTA notes the comments from DLRCC in this regard. As outlined in Section 4.6.13 of the EIAR Volume 2 Chapter 4 (Proposed Scheme Description):

'Light Emitting Diode (LED) lanterns will be the light source for any new or relocated public lighting provided. The lighting design will involve works on functional, heritage and contemporary lighting installations on a broad spectrum of lighting infrastructure along the Proposed Scheme. This will include, but not exclusively, luminaires supplied by underground and overhead cable installations and those located on ESB infrastructure.'

Proposed relocation of light column locations and new lighting column locations have beencoordinated with existing and proposed tree locations to ensure no adverse effect on the light levels to road and footpath surfaces.

Section 5 – Compulsory Purchase Order

DLRCC's Property Management Section has reviewed the Compulsory Purchase Order submitted to An Bord Pleanála in respect of the Bray to City Centre Core Bus Corridor. Relevant comments on the Compulsory Purchase Order are set out in Appendix 3 - DLRCC Property Management Section's Feedback on the Compulsory Purchase Order for the Bray to City Centre CBC.

The NTA acknowledges and is grateful to the close liaison with DLRCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within DLRCC. The Proposed Scheme as submitted to An Bord Pleanála has properly

considered, and taken into account, the inputs from those sections during the design development process.

NTA acknowledges the detail feedback from the DLRCC Property Management section. It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of DLRCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between DLRCC and the NTA.

3.13.10 97 – Ivana Bacik TD

Summary of Submission

This submission raised the following issues:

1) Support for the Proposed Scheme;
2) Fee related to the Submission; and,
3) Consultation & Engagement.

3.13.10.1 Support for the Proposed Scheme

Summary of issues raised

The submission notes the support for the Proposed Scheme, noting it represents a key step towards improving public transport and cycle infrastructure along this busy route. Further support was mentioned for the changes to the bus service and increased provision of safe cycle lanes and active travel infrastructure.

The submission notes that it is essential that there is a great provision to facilitate active travel and public transport, with buses being given enhanced spaces on the roads. It goes on to note the high level of benefits which will come from the Proposed Scheme, and the substantial benefits to local communities.

Response to issue raised

The NTA welcomes the support for the Proposed Scheme and is grateful for the positive feedback in the submission to support Proposed Scheme.

3.13.10.2 Fee related to the Submission

Summary of issues raised

The submission raised concerns regarding the fee associated with making an ABP submission in relation to the Proposed Scheme, commenting that the Aarhus convention gives the right to public consultation, and that the consultation should not be contingent to income.

Response to issue raised

The fees payable for observations / submissions are determined by An Bord Pleanála, as allowed by Section 144 of the Planning and Development Act 2000, as amended.

3.13.10.3 Consultation & Engagement

Summary of issues raised

The submission notes that whilst the Proposed Scheme is needed, the submission notes that a more robust, accessible planning and consultation process is needed.

Response to issue raised

Refer to response in Section 3.1.4.6 on Lack of consultation with local residents and also note below.

Ireland ratified the Aarhus Convention in June 2012 and it entered into force in Ireland in September 2012. Prior to that ratification, Ireland had to ensure that all the provisions of the Convention were implemented in national law, which took a number of years, and involved over 60 pieces of legislation.

Accordingly, Ireland's obligations under the Aarhus Convention have been fully incorporated into Irish legislation and include rights of access to information on the environment, rights of participation in planning determinations, rights of access to adequate review procedures and various other rights.

These are now statutory provisions, which are binding on all applicable parties.

In relation to transport infrastructure projects, the applicable statutory provisions are set out in the relevant planning and transport legislation, which include requiring major projects to seek planning consent from An Bord Pleanála. Those application processes for large infrastructure schemes provide for a statutory process requiring the making available for public review all of the applicable information set out in the legislation and permitting the making of submissions in relation to the proposals to the determining body, being An Bord Pleanála.

Thereafter, the legislation provides for the holding of an Oral Hearing, enabling direct public engagement and participation in the decision-making process.

As part of the scheme development stage, various non-statutory public consultation processes have been undertaken. These processes are in excess of the requirements of the Aarhus Convention, whose obligations are already enshrined in Irish legislation including "statutory public consultations" which is the stage that the project has now reached.

The NTA notes the comment regarding the technical nature and volume of the documents presenting a potential barrier to the general public seeking access to information relating to the scheme. Given the nature of such infrastructure schemes as BusConnects Core Bus Corridors, there is invariably a substantial amount of technical information which needs to be provided, to ensure that the consent application is comprehensive in nature to meet legislative requirements and provide the competent authority with the necessary information to allow them to reach a decision. Volume 1 of the EIAR comprises the Non-Technical Summary of the EIAR for the Proposed Scheme. Chapter 1 (Introduction) in Volume 2 of the EIAR contains information on the content and structure of the EIAR. Section 1.5.6 of Chapter 1 (Introduction) sets out the information which must be contained in the EIAR. The NTA has sought to make the information as concise as possible, while ensuring that the necessary information has been provided. Section 1.5.7 of Chapter 1 (Introduction) sets out the structure of the EIAR. It is considered that the structure of the EIAR does provide the necessary legibility for those interested parties (both lay persons and technical specialists) to find the information of relevance to them. While the EIAR has been prepared in compliance with the EIA Directive, it has also been written to make it accessible to a wider, non-specialist audience in so far as possible.

3.13.11 134 – Michael Phillips

Summary of Submission

This submission raised the following issues:

1) Need for the Proposed Scheme and integration with Metro and Luas;
2) Changes along the N11, Stillorgan Road; and,
3) Upgrades to N11 not support climate change and sustainability.

3.13.11.1 Need for the Proposed Scheme and integration with Metro and Luas

Summary of issues raised

The submission commented the Proposed Scheme is not needed and requested there is a review of the rate of return on investment in a metro along the route. The submission goes on to say that the Proposed Scheme is refused permission and investing in Metro and upgrade of Luas Line.

The submission raised concerns with the integration of the Sandyford Luas Line and the underground section from Ranelagh to St Stephens Green (Dublin Metrolink).

Response to issue raised

Refer to response in Section 3.9.3.1 on Need for the Proposed Scheme;

Refer to response in Section 3.11.4.3 on Benefits of Proposed Scheme and also note below.

Alternatives considered – EIAR Volume 2 Chapter 3 (Reasonable Alternatives) describes the reasonable alternatives studied and the main reasons for the selection of the proposed Bray to City Centre Core Bus Corridor Scheme (referred to as the Proposed Scheme), taking into account the effects on the environment. It considers the alternatives at three levels:

- Strategic Alternatives;
- Route Alternatives; and
- Design Alternatives.

The reasonable alternatives studied which are relevant to the Proposed Scheme and its specific characteristics are described in the subsequent sections of this Chapter. The strategic alternatives involved study of the following:

- GDA Transport Strategy 2016 – 2035;
- GDA Cycle Network Plan (NTA 2013);
- Bus Rapid Transit – Core Network Report (NTA 2012);
- Review of the DART Expansion Programme (2015);
- BRT Alternative;
- Metro Alternative;
- Light Rail Alternative;
- Demand Management Alternative;
- Technological Alternative; and
- Route Alternatives.

GDA Cycle Network Plan was key in assessing the cycling infrastructure along the Proposed Scheme**.**

Section 3.2.5 and 3.2.6 of the EIAR Volume 2 Chapter 3 (Reasonable Alternatives), notes that consideration of both Metro and Luas. Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high-quality, bus-based transport system supplemented by the implementation of the Luas extension to Bray, would be part of the proposed public transport solution in the corridor of the Proposed Scheme.

Despite the proposal to provide Metro standard rail service within the corridor, the prior GDA Transport Strategy states that this service would need to be supplemented by bus services, with the originally proposed BRT on the N11 from UCD to Blanchardstown, and the core bus radial corridors on the N11 south of UCD and on the Rock Road all being required to meet future demand. The Bray to City Centre CBC (the Proposed Scheme) is part of the bus corridor upgrade.

Also, the implementation of demand management measures would not remove the need for additional infrastructure to serve the bus transport needs of the corridor covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.

‘3.2.5 Light Rail Alternative

The appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route.

For urban transport systems, bus-based transport is the appropriate public transport mode for passenger demand levels of up to 4,000 passengers per hour per direction (International Association of Public Transport (UITP) 2009). Light rail provision would generally be appropriate to cater for passenger demand of between 3,500 and about 7,000 passengers per hour per direction. Passenger demand levels above 7,000 passengers per hour per direction would generally be catered for by heavy rail or metro modes, which would usually be expected to serve a number of major origins or destinations along a particular corridor. In the case of both the bus and light rail modes, higher levels of passenger demand than the above stated figures can be accommodated under specific conditions.

The development of the prior GDA Transport Strategy considered the likely public transport passenger demand levels across the region using the NTA's transport model and took into account the other studies referenced above, in addition to studies that had been carried out to investigate a potential light rail scheme within the area of this corridor. The GDA Transport Strategy found that the demand along this corridor would require a number of solutions to accommodate the level of demand growth anticipated to 2035. This includes upgrade and extension of the light rail provision within the corridor. Therefore, it is intended to further develop the light rail network along this corridor through the implementation of a Luas extension from Bride's Glen to Bray.

The Luas Green Line extension to Bray is intended to extend from the current Luas Green Line terminus at Bride's Glen to Bray DART Station via Shankill. This will provide a high-capacity radial service from Bray to the City Centre via the key employment areas in the western parts of the corridor including Sandyford, Dundrum and Cherrywood, and provide a continuous link from Bray to Dublin Airport and Swords via the proposed MetroLink scheme.

Arising from the various studies and analysis that had been carried out, and the specific assessment and transport modelling work undertaken for the prior GDA Transport Strategy, it was concluded that a high quality bus-based transport system supplemented by the implementation of the Luas extension to Bray, would be part of the proposed public transport solution in the corridor of the Proposed Scheme.

3.2.6 Metro Alternative

As highlighted above, when considering the appropriate transport systems to meet the expected transport demand, Metro systems are a higher capacity form of light rail, generally designed for peak hour passenger numbers exceeding about 7,000 passengers per hour per direction, and often catering for multiples of that level.

Environmentally the metro option compared to the CBC proposal would be more impactful in terms of construction impacts, including flora and fauna, heritage, air and noise. Metro systems require unbroken physical lane infrastructure to achieve high priority. This would involve significantly more land take and potentially involve demolition of buildings at pinch-points. In the case of the CBC proposals bus-priority can be achieved through short lengths at pinch-points by the use of signal-control priority.

Given the consideration of light rail provision, and the level of likely public passenger use along this overall corridor assessed in the transport modelling work, the development of the prior GDA Transport Strategy identified that a metro solution would form part of the strategy for this corridor. It was proposed that the Luas Green Line from the terminus in Bride's Glen to the City Centre (Charlemont) would be upgraded to Metro standard and would link into the proposed Metro North (now MetroLink) in order to provide a new north–south inland rail axis from Swords to Bray. However, as outlined in Section 3.2.5, the section of the line between Bride's Glen and Bray has not been proposed be constructed to Metro standard.

Despite the proposal to provide Metro standard rail service within the corridor, the prior GDA Transport Strategy states that this service would need to be supplemented by bus services, with the originally proposed BRT on the N11 from UCD to Blanchardstown, and the core bus radial corridors on the N11 south of UCD and on the Rock Road all being required to meet future demand. The Bray to City Centre CBC (the Proposed Scheme) is part of the bus corridor upgrade.'

The Dublin Metrolink, Dublin Luas and DART are progressing as a multi-authority project involving Transport Infrastructure Ireland (TII), the National Transport Authority (NTA), and the relevant County Council, with its own overriding objectives.

The purpose of the BusConnects is to provide a continuous service route and serve local bus user needs alongside enhancements to the active travel network. The Proposed Scheme helps to meet the

needs of bus users by providing a convenient and direct bus route through Shankill. Section 6.4.6.1.7.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR states that the Proposed Scheme will provide '16.1km inbound and 17.1km outbound of bus lanes across the corridor. This is an increase from 12.6km inbound and 12.8km outbound in the DoMinimum scenario. This contributes to an increase of 45% in total bus priority measures in both directions compared to the DoMinimum'. The Proposed Scheme shows that implementation of bus priority measures will help increase bus patronage during peak hours and help reduce the interaction between buses and general traffic, thus improving both overall bus journey times and journey time reliability. Active travel provision will be enhanced through improved pedestrian crossings enabling better local connectivity and a series of improvements to cycling facilities as set out in Section 6.4.6.1.5.2 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. Given the improvements along the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic. Qualitative and quantitative impact assessments were undertaken based on the enhancements to bus and active travel proposed by the scheme. The results of the assessment demonstrate that the improvements to the quality of the bus infrastructure will be a long-term positive impact.

The Dublin Metrolink, Dublin Luas and DART were included in the DoMinimum and DoSomething traffic modelling which support the TIA.

3.13.11.2 Changes along the N11, Stillorgan Road

Summary of issues raised

The submission noted concern relating to the right turn ban from the city bound bus lanes onto Johnstown Road, commenting that this has not been given sufficient thought and that the alternative routes using the N11 are not workable due to almost being at capacity.

Another area noted is the village of Deansgrange and the traffic that occurs here, particularly with the traffic queuing at the Kill Lane junction.

The submission notes that DLRCC have installed pedestrian signal crossing near Cornelscourt and raised concerns for the dangers to pedestrians, and requests have been made to replace the bridge and install a parallel one on the other side of the road.

The submissions notes an alternative is to open the Old Bray Road through Cabinteely village, which is currently a cul-de-sac, but acknowledge it will ruin the village.

The submission notes that the DLRCC have introduced additional traffic lights and junction changes which actually delay the morning buses from Ballybrack, and the Killiney Shopping centre which in the next few years will be experiencing a large growth in pedestrian movements due to permissions granted under SID.

Response to issue raised

N11/ Johnstown Road Junction

Currently, there is no existing right turn ban from the city bound lane into the Johnstown Road. The Proposed Scheme design at N11 junction with Johnstown Road allows a right turning lane in the city bound direction towards Johnstown Road.

The Proposed Scheme at N11/ Johnstown Road junction is presented in the 02-General Arrangement Drawings Sheets 33 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.403.

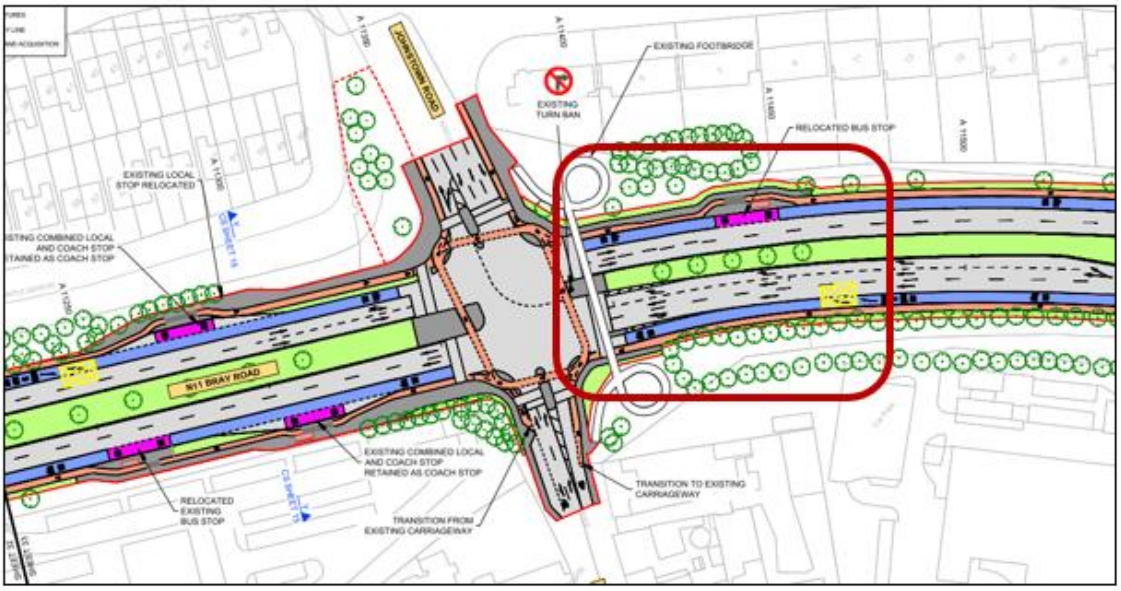


Figure 3.403: Extract from General Arrangement Drawing at N11/ Johnstown Road junction (Sheet 33)

Localised traffic impact at Deansgrange

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents that road links that have been identified as experiencing additional traffic volumes, were assessed using a threshold impact assessment. The threshold impact assessment identified that Kill Lane / N11 junction will have less than a 5% increase on turning flows at junctions. This means that Kill Lane / N11 junction would operate well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios.

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR also presents that road links that have been identified as experiencing additional traffic volumes, were assessed using a threshold impact assessment. The threshold impact assessment identified that Clonkeen Road / N11 junction will have less than a 5% increase on turning flows at junctions. This means that Clonkeen Road / N11 junction would operate well within capacity for all assessed years in both the DoMinimum and DoSomething scenarios.

Kill Lane and Clonkeen Road both experience an increase in traffic flows during the AM and PM Peak hours, although it is determined that there will be an overall Negative, Low and Long-Term effect impact from the redistributed general traffic as a result of the Proposed Scheme. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no further mitigation measures have been considered to alleviate the impact outside of the direct study area. It should therefore be considered that the traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area in the context of the increased movement of people overall and on sustainable modes in particular.

Also, refer to the response under Section 3.8 on Proposed Scheme at N11 Stillorgan Road.

Footbridge at N11/ Cornelscourt

The Proposed Scheme at N11/ Cornelscourt junction is presented in the 02-General Arrangement Drawings Sheets 31 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.404.

Existing footbridge, north of the junction has been retained as part of the Proposed Scheme. Pedestrian crossing has been improved at this junction with a new signalled pedestrian crossing, south of the junction.

The Road Safety Audit for the Proposed Scheme is provided as Appendix M2 of the Preliminary Design report included as part of the Supplementary Information. The report does not identify any problems or concerns associated with the pedestrian crossings at this location.

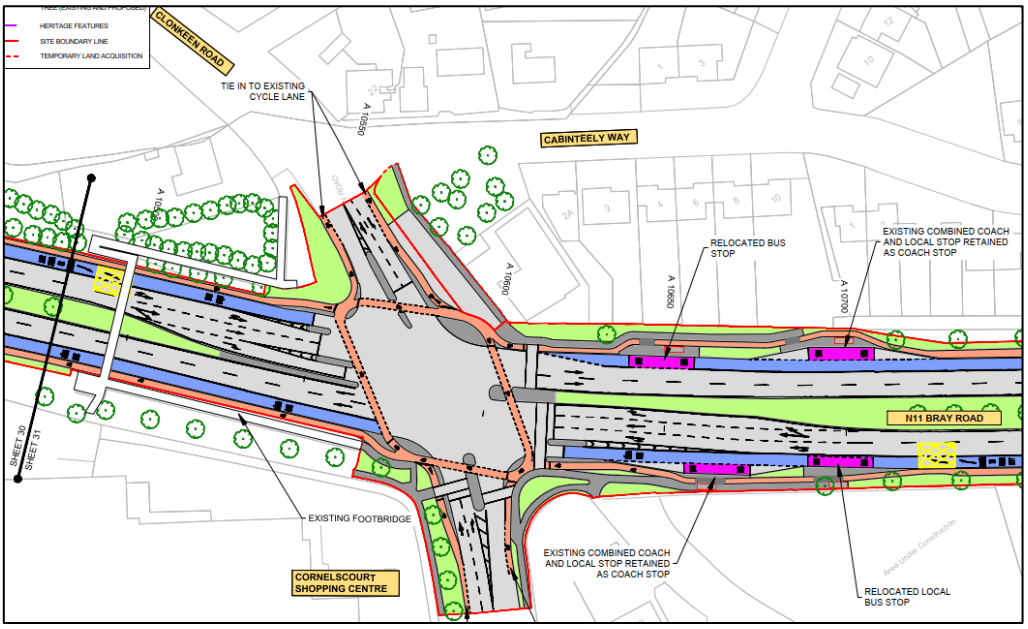


Figure 3.404: Extract from General Arrangement Drawing at N11/ Cornelscourt junction (Sheet 31)

Regarding the other concerns, these issues relating of this nature are the responsibility of Dún Laoghaire–Rathdown County Council and are outside of the remit of the NTA in this Proposed Scheme.

3.13.11.3 Upgrades to N11 not support climate change and sustainability

Summary of issues raised

The submission raised concerns regarding the impact to the climate and sustainability with the Proposed Scheme, in particular with changes along the N11 and the removal of stone walls along Church Road to provide for bus lanes.

Response to issue raised

Refer to response in Section 3.13.5.10 on Recent upgrades to the N11 pavement and also note below.

The existing junctions all along the Proposed Scheme will be upgraded to provide for Protected Junction layout. The typical protected junction layout, as shown in Figure 3.405 below, offers significant safety improvements compared to the traditional junction layout.

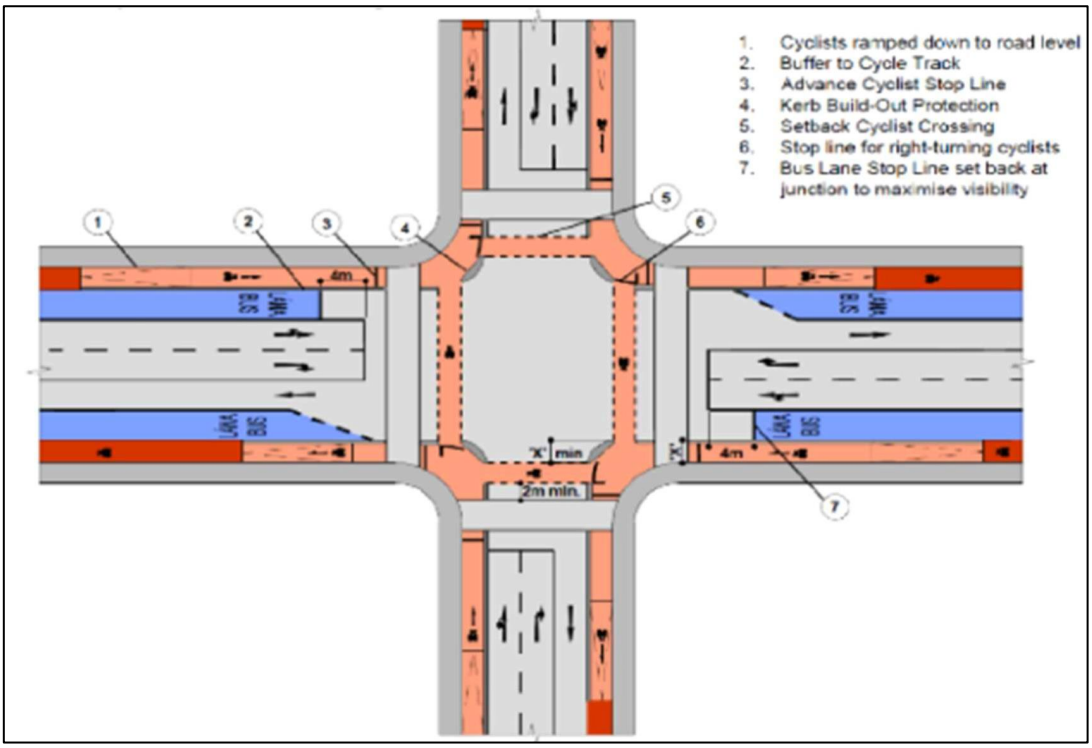


Figure 3.405: Extract from Preliminary Design Guidance Booklet, Typical Junction Design (Figure 16)

To enhance movement by pedestrians and cyclists, the removal of slip lanes will be undertaken at appropriate locations, together with consideration of junction signalling changes. This will better balance the use of the junction between motorised and vulnerable modes, and in urban areas, junctions will be designed so as footpaths on side roads will be carried through at-grade, where practicable and safe to do so. The removal of slip lanes helps to provides safe junction design for both cyclists and pedestrians while achieving bus priority.

Church Road, as mentioned in the submission, is outside the extent of the Proposed Scheme.

Climate change and sustainability – Chapter 8 (Climate) in Volume 2 of the EIAR assesses the climate impact of the Construction and Operational Phases of the Proposed Scheme. The methodology for undertaking the climate assessment is described in Section 8.3, with the assessment looking at both the impact of the project on the climate and the vulnerability of the project to climate change as per the guidance from Highways England's (2021) Design Manual for Roads and Bridges (DMRB) LA 114 Climate. The assessment included both the direct Operational Phase carbon emissions from the Proposed Scheme (Section 8.5.2.4), as well as the indirect Operational Phase carbon emissions (Section 8.5.2.5). The assessment concludes that:

'the Proposed Scheme has the potential to reduce CO_2eq emissions equivalent to the removal of approximately 6,030 and 9,140 car trips per weekday from the road network in 2028 and 2043 respectively.'

Also refer the response to Section 3.11.4.3 on Benefits of the Scheme.

3.13.12 204 - Transport Infrastructure Ireland

3.13.12.1 Overview of Submission

Support for the scheme

This submission identifies the interactions of the proposed BusConnects scheme with the national road network, sets out potential impacts arising and identifies appropriate treatment/mitigations in order for the proposed BusConnects scheme proceed complimentary to, and integrated with the national road network.

The submission is then structured in three parts:

1. National Roads Policy and National Road Network Maintenance and Safety

2. National Road Interactions/ Mitigations Requirements and Recommendations

    a. Proposed scheme (at the intersection of Sections 3c and 4a), Interactions with the M11 at the Bray North (Wilford Roundabout)
    b. Proposed scheme (at the intersection of Sections 2b and 3a), Interactions with the N11, M11 and M50 by works to and in the vicinity of the Loughlinstown Roundabout (N11/M11 / R837 /Parc Na Silla).
    c. Proposed scheme (Sections 2a and 2b}, Interactions with the Nil the Loughlinstown Roundabout (N11/M11 / R837 /Parc Na Silla) to Mount Merrion

3. Necessary national road network mitigation as part of the BusConnects scheme proposal

4. National Road Network Recommendations

3.13.12.2 Response to Issues Raised

Support for the scheme

The submission expressed support for the Proposed Scheme. Transport Infrastructure Ireland (TII) wishes to acknowledge and support the BusConnects Project in playing a key part of the Government's policy to improve public transport and address climate change in Dublin and other cities across Ireland.

The NTA welcome TII's support for the scheme. The NTA is grateful for the positive and constructive liaison that has occurred with TII throughout the design and planning process to date regarding the progression of the Proposed Scheme, which has been achieved through a number of briefings to the TII representatives and direct liaison with the various sections of TII.

The NTA will continue the very positive and constructive liaison with TII throughout the procurement and construction process and respond below to the points included in their submission.

1. National Roads Policy and National Road Network Maintenance and Safety

TII advises that this submission has particular regard to official planning policy for development at or near national roads as outlined in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012) and also specific requirements established in TII Publications.

TII Publications (Standards) documentation defines the requirements that support policy, administrative and technical procedures developed by TH to govern activities with respect to the National Road network. For example, any crossing of the national road network, including by under or over pass will require prior consultation with TII and compliance with all relevant TII Publications available at www.tiipublications.ie.

NTA Response:

Response provided under Section 2 and Section 4.

2. National Road Interactions/ Mitigations Requirements and Recommendations

This submission tabulates the summary of interactions the national road networks and notes the following points:

- TII consider that the existing national road network does not appear to be separately considered as discreet chapters or subsections of the submitted EIAR and in particular reference to the TII Publication;

- TII consider that it would have been appropriate to include official national policy for development at or near National Roads is set out in the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities (2012) in Chapter 2 (Need of the Scheme).

- TII consider that mitigation of potential impacts for the protection of the national road networks should have been included in Chapter 22 (Summary of Mitigation and Monitoring Measures);

- TII consider that that mitigation (traffic management provisions) for the national road network should have been included in Appendix A5.1 CEMP and no such mitigation is recorded in relation to the maintenance and protection of the national road network.

NTA Response to Comment 1 and 2

As stated in EIAR Volume 2 Chapter 4 (Proposed Scheme Description), Section 4.4, 'T*he design of the Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (refer to Appendix A4.1 in Volume 4 of this EIAR). This guidance document was prepared to ensure that a consistent design approach for the Core Bus Corridor Infrastructure Works was adopted based on the objectives of the Proposed Scheme. The project objectives are described in full in Chapter 2 (Need for the Proposed Scheme). The purpose of the PDGB is to complement existing guidance documents / design standards relating to the design of urban streets, bus facilities, cycle facilities and urban realm.'*

Chapter 4 Section 4.1 of the Preliminary Design Report included as part of the Supplementary Information describes the design standards and guides that have been used in designing the Proposed Scheme as follows:

'*A number of published design standards and guides have been utilised to inform the geometrical design of the Proposed Scheme, as listed below:*

- *TII's Design Manual for Roads and Bridges (DMRB)*
- *Design Manual for Urban Roads and Streets (DMURS)*
- *National Cycle Manual (NCM)*
- *Traffic Sign Manual (TSM)*
- *Traffic Management Guidelines (TMG)*
- *NDA's Building for Everyone: A Universal Design Approach*
- *Guidance on the use of Tactile Paving*
- *Construction Standards for Road and Street Works in DCC.'*

The Preliminary Design Report as part of the Supplementary Information, goes on to state in Chapter 4 Section 4.1:

'The Proposed Scheme runs through the N11 National Road section between Mount Merrion Avenue/N11 junction and Loughlinstown Roundabout. The N11 section is split into two sub-sections with respect to existing speed limits:

- *N11 between Mount Merrion Avenue/N11 junction and Kill Lane/ N11 Junction – 60km/h*
- *N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout – 80km/h*

For the N11 section of the Proposed Scheme with the proposed speed limit equal to 60km/h between Mount Merrion Avenue/N11 junction and Kill Lane/ N11 Junction in particular, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case, under the DMURS.

For the N11 carriageway section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case, under TII current publications. In particular, adherence to the following standards is the basis of the Design:

- *DN-GEO-03031 – Rural Road Link Design*
- *DN-GEO-03036 – Cross-sections and Headroom*
- *GN-GEO-03060 – Geometric Design of Junctions (Priority junctions direct access, roundabout, grade separated junction, compact grade separated junction)*
- *GN-GEO-03044 – Geometric Layout of Signal Controlled Junctions and Signalised Roundabouts*
- *DN-GEO-03034 - The Design of RSS for roads and bridges*
- *DN-REQ-03079 - Design of RSS for Constrained Locations Online Improvements, Retrofitting and Urban setting.*
- *DN-PAV-03026 – Footway Design*
- *TII Standards Commission Draft Publication (Literature and Scheme Review Note) - Bus Lanes*

on Dual Carriageways and Motorways

- *DN-GEO-03087 Hard Shoulder Bus Priority Measures on Motorways and Type 2 Dual Carriageway'*

The Preliminary Design Report Table 4.1 provides the BusConnects Key Design parameters applicable for the Bray to City Centre CBC scheme including the N11 National Road section.

Where the existing road geometry does not meet the above design standards, this has been highlighted in the Preliminary Design Report Appendix C Deviations, Departures and Relaxations from Standards, as part of the Supplementary Information.

Details of the Proposed Scheme Standard and design along the N11 National Road section is described in the Section 4.6.1 Chapter 4 (Proposed Scheme Description) Volume 2 of the EIAR, as noted below:

'Traffic lane widths will follow the guidance outlined in DMURS (Government of Ireland 2013), with the preferred width of traffic lanes on the Proposed Scheme being:

- *3.0m in areas with a posted speed limit ≤60km/h; and*
- *3.5m in areas with a posted speed limit >60km/h.*

Along a section of the N11 National Road where the Proposed Scheme makes use of the existing bus and general traffic infrastructure, and the posted speed limit of 60km/h for general traffic and 60km/h for bus lane traffic, under the TII Publications, the preferred width of the traffic lane increases:

- *3.5m in areas with a posted speed limit of 60km/h or as per existing lane width.*

Along a section of the N11 National Road where the Proposed Scheme makes use of existing bus and general traffic infrastructure, the posted speed limit increases to 80km/h for general traffic and 60km/h for bus lane traffic, under the TII Publications; the preferred width of traffic lanes increases:

- *3.5m in areas with a posted speed limit =80km/h or as per existing lane width.*

Along the N11 National Road section, at approaches to junctions, minimum entry lane width considered is 3.0m.

Traffic lane widths of 2.75m are permissible but not desirable and should only be allowed on roads with a very low HGV percentage. In some locations these lane widths have been considered for auxiliary turning lanes where appropriate.

The desirable minimum width for a single direction, with flow, raised adjacent cycle track is 2.0m. Based on NCM this allows for overtaking within the cycle track. The minimum nominal width is 1.5m. The desirable width for a two-way cycle track is 3.25m with a 0.5m buffer between the cycle track and the carriageway. The minimal nominal width of cycle track along the N11 National Road 80km/h section is 1.75m as per TII Publications. 2.0m is a desirable minimum width for footpaths, with 1.2m being a minimum width at pinch points over a 2m length of the path. The minimum nominal width is 1.8m. The minimum nominal width along the N11 National Road 80km/h section is 1.3m as per TII Publications.

Along the N11 section of the Proposed Scheme with the proposed speed limit equal to 60km/h between Mount Merrion Avenue/N11 junction and Kill Lane/ N11 Junction in particular, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *Along this section of the N11 National Road the Proposed Scheme makes use of the existing pedestrian and cyclists infrastructure, and the footpath and cycle tracks have been improved where practical. The Proposed Scheme provides for new footpath link along the section of the N11 between the junction with Priority Drive and Hill Road.*
- *Along this section of the N11 National Road where the Proposed Scheme makes use of the existing bus and general traffic infrastructure, the preferred width of traffic lanes adopted is 3.5m or as per existing lane width.*

For the N11 section of the Proposed Scheme, with the proposed speed limit greater than 60km/h (80km/hr) between the N11 between Kill Lane/ N11 Junction and Loughlinstown Roundabout, the design seeks to minimise largescale changes to the existing infrastructure where it is deemed to be suitable for use in its existing case:

- *Along this section N11 National Road where the Proposed Scheme makes use of the existing pedestrian and cyclists infrastructure to minimise large scale changes to the existing infrastructure, the footpath and cycle tracks have been improved at Bus stop locations considering safety or as per existing;*
- *The Proposed Scheme between N11 between Cornelscourt (junction with old Bray Road) to Kilbogget Junction (ch 9+800 to ch: 12+050) retains the existing pedestrian arrangement and new footpath is not proposed, as it was considered a non-desired pedestrian link based on the pedestrian movement along this stretch and is aligned with the local development plans. Alternative walking routes exist on adjacent quieter roads.*
- *Along this section N11 National Road where the Proposed Scheme makes use of the existing bus and general traffic infrastructure, the preferred width of traffic lanes adopted is 3.5m.*

The existing junctions along the N11 section have been designed to provide safety for pedestrian and cyclists, while giving priority to buses and coaches. The existing left turn slip lanes have been removed and junctions have been design as Protected Junctions layout. Junctions have been designed to primarily provide for Two stage crossing in single crossing with 4m refuge island where space allows. Few existing toucan crossings along the N11 section have been retained to the current two stage staggered crossing, to minimise large scale changes to the existing infrastructure.'

Section 6.4.6.2.8 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the general traffic impact assessment. In this section it describes the use of the Traffic and Transport Assessment Guidelines (PE-PDV-02045) (TII 2014) for the assessment, and describes the thresholds used for the modelling with different criteria used for assessing Local / Regional Roads and National Roads as follows:

'*The impact assessment of increases to the general traffic flows has used the following thresholds based on the above guidelines:*

- ***Local / Regional Roads:*** *Traffic redistribution results in an increase above 100 combined flows (i.e. in a two-way direction) along residential, local and regional roads in the vicinity of the Proposed Scheme in the AM and PM peak hours:*
  - *The threshold aligns with an approximate 1 vehicle per minute increase per direction on any given road. This is a very low level of traffic increase on any road type and ensures that a robust assessment of the impacts of redistributed traffic has been undertaken.*
- ***National Roads:*** *Traffic exceeds 5% of the combined turning flows at junctions with / on/or with national roads in the AM and PM peak hours as a result of traffic redistribution comparing the DoMinimum to the DoSomething scenario with the Proposed Scheme in place:*
  - *The guidelines indicate that a 10% threshold may be used, however, to ensure a rigorous assessment in this instance the lower 5% threshold for turning movements has been utilised. Where road links have been identified as experiencing additional general traffic flow increases which exceed the above thresholds, a further assessment has been undertaken by way of a traffic capacity analysis on the associated junctions along the affected links.'*

The TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR provides the details of the Junction Design.

As part of supplementary information, the Preliminary Design Report Appendix F Structures Reports provides details of the preliminary design of the structures along the N11 National Road, as noted below. The design of the St Laurence Subway extension and design of the retaining wall at the Loughlinstown Roundabout and structural assessment of the UCD Flyover and St Columcille Footbridge has been done in accordance with the TII publications DN-STR-03001 & AM-STR-06042 and this has included liaison and consultation with TII. This is evidenced by the Structures Preliminary Design Report and Record of Structural Review Form, which has been signed off by the relevant signatory in TII Structures team as Technical Approval Authority (TAA).

- St Laurence Subway Preliminary Design Report;
- Loughlinstown Roundabout Preliminary Design Report;
- UCD Flyover Record of Structural Review; ans
- St Columcille Footbridge Record of Structural Review.

With respect to the comment that reference should have been made to the Spatial Planning and

National Roads Guidelines for Planning Authorities (DECLG 2012) in Chapter 2 (Need for the Proposed Scheme) in Volume 2 of the EIAR, while it was not specifically included within the chapter, the Proposed Scheme along the N11 was designed with reference to the other relevant guidance documentation as already outlined above and the NTA are satisfied that the design as submitted to An Bord Pleanála is in alignment with those guidelines.

The NTA is grateful for the positive and constructive liaison that has occurred with TII throughout the design and planning process to date regarding the progression of the Proposed Scheme, which has been achieved through a number of briefings to the TII representatives and direct liaison with the various sections of TII.

NTA Response to Comment 3 and Comment 4

As outlined in Section 22.1 of Chapter 22 (Summary of Mitigation & Monitoring Measures) in Volume 2 of the EIAR the design of the Proposed Scheme has been progressed taking account of environmental constraints and considerations that have been identified in assessments. These constraints and considerations include national road networks insofar as the Proposed Scheme interacts with these networks. Chapter 22 (Summary of Mitigation & Monitoring Measures) notes that the contents of the chapter should be read in conjunction with the Construction Environmental Management Plan (CEMP), included as Appendix A5.1 in Volume 4 Part 1 of 4 of the EIAR, which provides more detail on Construction Phase management and mitigation, and specifically addresses traffic management provisions for the road network in Table 5.4. The reader is also directed to the CEMP in Table 22.2 of Chapter 22.

Section 6.4.5.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the envisaged dedicated construction vehicle routes, and notes that '*it is anticipated that the exporting and delivery of materials will be executed as efficiently as possible along the National roads such as the close by N11, N31 and M50 Motorway and from the local Regional road network. It is assumed that all National and Regional roads including the Regional routes in the immediate vicinity of the Proposed Scheme will be used to supply / remove this material*.'

Section 6.4.5.3 goes on to list the M50, M11, N11 and N31 as the national roads that will be utilised as construction vehicle routes during the construction period while the R113, R118, R119, R133, R138, R761, R811, R825, R837 and R840 will be the regional roads utilised as construction vehicle routes during the construction period.

Section 6.4.5.4.6.2 in Chapter 6 (Traffic & Transport) discusses construction traffic generation and quantifies traffic arising from site operatives and heavy goods vehicles. It notes that the '*CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to general traffic on the surrounding road network*'.

Based on construction activities associated with the Proposed Scheme, the maximum number of HGVs expected to be in operation across the Proposed Scheme during peak haulage activities is 34 vehicles, or 40% of the peak total. This occurs during Year 1, Q2 to Q4 of construction when Sections 1a, 1b, 2a and 2b are all subject to ongoing works.

Section 6.4.5.4.6.2 in Chapter 6 (Traffic & Transport) concludes as follows: '*Given that the above impacts are marginally over the thresholds set out in TII's Guidelines for Transport Assessments, and that the vehicle usage will be spread through the length of the route, it is considered appropriate to define the general traffic impacts of the Construction Phase to be Negative, Moderate and Temporary. Therefore, no further analysis is required for the purpose of this assessment*.'

The maintenance and protection of all roads (including the national road network) is addressed in the Construction Environmental Management Plan (CEMP), included as Appendix A5.1 to the EIAR. Section 5.2.3.14 of the CEMP includes details of the measures to be taken by the appointed contractor where practicable, as follows:

- '*Loads of materials leaving each works area will be evaluated and covered if considered necessary to minimise potential dust impacts during transportation;*
- *Take all reasonable measures while transporting waste or any other materials likely to cause fugitive losses from a vehicle during transportation to and from the works areas, including but not limited to:*

- *Covering of all waste or material with suitably secured tarpaulin / covers to prevent loss; and*
- *Utilisation of enclosed units to prevent loss.*

- *Undertake pavement condition surveys along roads forming part of the Construction Access Route, based on consultation with the NTA and professional judgement regarding the condition of the route, pre-construction. These surveys will record the baseline structural condition of the road being surveyed immediately prior to construction; and*
- *Throughout the course of construction of the Proposed Scheme, undertake on-going visual inspections and monitoring of the Construction Access Routes to ensure any damage caused by construction traffic is recorded. Arrangements can then be made to repair any such damage to an appropriate standard in a timely manner such that any disruption is minimised*

Upon completion of construction of the Proposed Scheme, the surveys carried out pre-construction shall be repeated, and a comparison of the pre-construction and post-construction surveys will be carried out.'

A. Proposed scheme (at the intersection of Sections 3c and 4a), Interactions with the M11 at the Bray North (Wilford Roundabout)

The submission notes that any works within MMaRC Network Area A and will require prior consultation with TII and compliance with all relevant TII standards as detailed within the TII publications. TII advises that consultation and appropriate protocol agreement with the Motorway Maintenance and Renewals Contract Network for the proposed works at the Wilford junction during construction and for ongoing maintenance of the current Wilford Roundabout and proposed Wilford Junction 5 of the M11. Potential safety and queuing impact on Junction 5 of the M11 will require integrated monitoring throughout construction and operation of the proposal.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

B. Proposed scheme (at the intersection of Sections 2b and 3a), Interactions with the N11, M11 and M50 by works to and in the vicinity of the Loughlinstown Roundabout (N/M11 / R837 /Parc Na Silla).

The submission notes that the proposed works in the vicinity of the Loughlinstown roundabout there is potential for impact on the maintenance of the safe and efficient operation of the N11, M11 and M50. Impact on the national road network will require integrated monitoring throughout construction and operation of the proposal. Appropriate monitoring and signalisation response arrangements will require prior consultation and agreement with TII to ensure the co-ordination of national road network and Bus Connects functions.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

C. Proposed scheme (Sections 2a and 2b}, Interactions with the N11 the Loughlinstown Roundabout (N/M11 / R837/Parc Na Silla} to Mount Merrion

The submissions notes that the N11 from the Loughlinstown roundabout is maintained by the local roads authority and is subject to urban speed limits. Notwithstanding, the N11 is part of the national road network and works impacting that road and its structures, including drainage must be identified and undergo detailed design and execution in accordance with TII Publications standards. The proposed BusConnects proposal will interact directly with the N11 and junctions and structures along that route. There is a necessary requirement for the protection of the national road network function and at all of the works proposed under, over and in the vicinity of the N11, especially St. Laurence Subway, be identified and undergo detailed design and execution in accordance with TII Publications standards as highlighted by Section 1.3 of DMURS. The applicant should continue to follow TII structures technical approvals as required under TII publication DN-STR-03001.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

The design of the St Laurence Subway extension and design of the retaining wall at the Loughlinstown Roundabout and structural assessment of the UCD Flyover and St Columcille Footbridge has been carried out in accordance with the TII publications DN-STR-03001 & AM-STR-06042 and this has included liaison and consultation with TII. This is evidenced by the Structures Preliminary Design Report and Record of Structural Review Form, which has been signed off by the relevant signatory in TII Structures team as Technical Approval Authority (TAA). The Preliminary Design Report Appendix F Structures Reports provides details of the preliminary design of the structures along the N11 National Road.

The NTA is grateful for the positive and constructive liaison that has occurred with TII throughout the design and planning process to date regarding the progression of the Proposed Scheme, which has been achieved through a number of briefings to the TII representatives and direct liaison with the various sections of TII.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent detail design and construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition. The detailed design will be subject to the requirements of DN-STR-03001, and the agreed recommendations included in the Record of Structural Review Form.

3. Necessary National Road network mitigation as part of the BusConnects scheme proposal

The submission expresses the view that Chapter 5 (Construction), Chapter 6 (Traffic & Transport) and the CEMP do not appear to fully identify specific methods or techniques proposed for mitigation of potential impact for works traversing or in proximity to the National Road network, including MMaRC Areas. The submission goes on to assert that because the national road network will be utilised for construction haul routes and for construction undertakings there is a need for mitigation of potential construction stage impacts to protect the safe and efficient operation of the national road network. The submission notes that the proposed construction compound BR1 is located within the MMaRC boundary.

The submission goes on to state compliance with the TII Publications (Technical) will be required for any works that impacts the National Roads pavement, structures and infrastructure. Separate structure approval in connection with the proposed works.

NTA Response:

Section 6.4.5.3 of Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR describes the envisaged dedicated construction vehicle routes, and notes that '*it is anticipated that the exporting and delivery of materials will be executed as efficiently as possible along the National roads such as the close by N11, N31 and M50 Motorway and from the local Regional road network. It is assumed that all National and*

Regional roads including the Regional routes in the immediate vicinity of the Proposed Scheme will be used to supply / remove this material.'

Section 6.4.5.3 goes on to list the M50, M11, N11 and N31 as the national roads that will be utilised as construction vehicle routes during the construction period while the R113, R118, R119, R133, R138, R761, R811, R825, R837 and R840 will be the regional roads utilised as construction vehicle routes during the construction period.

Section 6.4.5.4.6.2 in Chapter 6 (Traffic & Transport) discusses construction traffic generation and quantifies traffic arising from site operatives and heavy goods vehicles. It notes that the '*CTMP will control vehicular movement along the construction route, including restrictions on the number of HGVs accessing and egressing the construction works throughout the day to mitigate the impacts to general traffic on the surrounding road network*'.

Based on construction activities associated with the Proposed Scheme, the maximum number of HGVs expected to be in operation across the Proposed Scheme during peak haulage activities is 34 vehicles, or 40% of the peak total. This occurs during Year 1, Q2 to Q4 of construction when Sections 1a, 1b, 2a and 2b are all subject to ongoing works.

Overall Peak Hour Impacts: Table 6.14 (see Table 3.92 below) identifies the anticipated maximum construction traffic generation by site operatives and HGVs during the AM and PM Peak Hours.

Table 3.92: Extract from Chapter 6 (Traffic and Transport) EIAR (Table 6.14)

Table 6.14: Anticipated Maximum Construction Traffic Generation during Construction Phase

Peak Hour	Arrivals		Departures		Total Two-Way Traffic Flows (Vehicles)	Total Two-Way Traffic Flows (PCUs)
	Car / Van (1 PCU)	HGV (2.3 PCUs)	Car / Van (1 PCU)	HGV (2.3 PCUs)		
AM Peak Hour	10	34	0	34	78	166
PM Peak Hour	0	34	10	34	78	166

Section 6.4.5.4.6.2 in Chapter 6 concludes as follows: '*Given that the above impacts are marginally over the thresholds set out in TII's Guidelines for Transport Assessments, and that the vehicle usage will be spread through the length of the route, it is considered appropriate to define the general traffic impacts of the Construction Phase to be Negative, Moderate and Temporary. Therefore, no further analysis is required for the purpose of this assessment*.'

In summary, it is considered that the construction of the Proposed Scheme will not impact the safe and efficient operation of the national road network.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII including Structures. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

The design of the St Laurence Subway extension and design of the retaining wall at the Loughlinstown Roundabout and structural assessment of the UCD Flyover and St Columcille Footbridge has been done in accordance with the TII publications DN-STR-03001 & AM-STR-06042 and this has included liaison and consultation with TII. This is evidenced by the Structures Preliminary Design Report and Record of Structural Review Form, which has been signed off by the relevant signatory in TII Structures team.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

4. National Road Network Recommendations

Proposed Condition 1

Development shall be undertaken in accordance with TII publications. Prior to commencement of

development, plans and details of works on, or in the vicinity of the national road network under TII Publications shall be submitted for the written agreement of the planning authority in consultation with TII.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 2

The long-term maintenance of permanent elements of the proposed development, within areas currently managed by the Motorway Maintenance and Renewal Contracts (MMaRC) or the M50 PPP Contractor shall be agreed between the relevant local authority / NTA and TII.

This proposed condition seeks the enactment of an agreement between the relevant local authority, TII and the NTA, subsequent to the completion of the construction of the Proposed Scheme, addressing issues related to maintenance costs.

The Proposed Scheme upon its completion reverts to the status of a public road under the management of the relevant local authority, in this case Dublin County Council (DCC) and Dún Laoghaire-Rathdown County Council (DLRCC) and Wicklow County Council (WCC). The funding of costs associated with the maintenance of public roads can involve a number of parties depending on the status of the road – for instance, in the case of a national road Transport Infrastructure Ireland would have an involvement. Funding of regional and local roads fall under the ambit of the relevant local authority and the Department of Transport.

The Exchequer does not currently provide the NTA with funds for dispersal to local authorities for maintenance activities and the NTA does not have a role in overseeing or organising general public road maintenance activities. However, the NTA does retain responsibility for bus fleet, bus stops and bus shelters, and maintenance of these elements falls within its remit.

The NTA will continue its collaboration with TII, and DCC, DLRCC and WCC, to ensure the delivery of an appropriate maintenance regime. As part of this collaboration, the NTA will support the provision of the necessary funding by the relevant parties to ensure that the benefits of the Proposed Scheme are not inappropriately eroded. These are matters that can be successfully addressed between TII, DCC, DLRCC and WCC and the NTA, in the absence of any approval condition.

Proposed Condition 3

Prior to the commencement of development, appropriate traffic monitoring and signalisation arrangements at Wilford Junction with the M11 and the Loughlinstown Roundabout shall be agreed between the relevant local authority/NTA and TII.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII and in particular related to the redesign of the existing Wilford Roundabout and the Loughlinstown Roundabout. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 4

Where relevant, Design reports for any works on, over or within the motorway reservation will be required to be prepared and submitted as a Departure Application in accordance with TII publication GE-GEN-01005 and PE-PMG-02041. Works to structure forming part of the national road network requires TT Technical Acceptance in accordance with TII publication DN-STR-03001.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

The design of the St Laurence Subway extension and design of the retaining wall at the Loughlinstown Roundabout and structural assessment of the UCD Flyover and St Columcille Footbridge has been done in accordance with the TII publications DN-STR-03001 & AM-STR-06042 and this has included liaison and consultation with TII. This is evidenced by the Structures Preliminary Design Report and Record of Structural Review Form, which has been signed off by the relevant signatory in TII Structures team.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR.

The NTA is satisfied that these are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition. The detailed design will be subject to the requirements of DN-STR-03001, and the agreed recommendations included in the Record of Structural Review Form.

Proposed Condition 5

Prior to the commencement of development, the Construction Environmental Management Plan (CEMP) shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII for national road elements. The CEMP will include mitigation and monitoring for the national road network and resolution Dublin Tunnel interfaces including an appropriate TII approved risk assessment for works associated with these interfaces.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

Proposed Condition 6

Prior to the commencement of development, the construction traffic management plan including access to services, shall be submitted for the written agreement of the planning authorities subject to the written agreement of TII and shall:

a. demonstrate consultation with the relevant MMaRC and PPP Contractors, via TII and the relevant road authorities,
b. demonstrate contact with thirdpartyworks@tii.ie in advance, as a works specific Deeds of Indemnity will be required by TII where temporary works within any MMaRC Contract Boundary are required to facilitate construction haulage, and
c. include detailed information on traffic management, including signage (static and VMS) to ensure the strategic function of the national road network is protected.

The NTA acknowledges the close liaison with TII that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections

within TII. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII and taking their requirements into consideration, where aligned with and consistent with the EIAR. These are matters that can be successfully addressed between TII and the NTA, in the absence of any approval condition.

3.13.13 210 - Wicklow County Council

3.13.13.1 Overview of Submission

The submission raised concern the loss of parking along Castle Street.

There was one comment on that the Council are developing a bus priority scheme and BusConnects should consider furthering the scheme at Sunnybank junction.

The submission notes that impact to the changes at Wilford Roundabout to traffic flows in Bray needs to be fully understood given the present level of congestion affecting not only cars but also public transport services in the town centre.

Another concern raised was that the Proposed Scheme ends abruptly at the Fran O Toole bridge whilst the proposed E spine service continue through the town centre, consideration to extend bus corridor to where the E spine service will go.

3.13.13.2 Response to Issues Raised

Loss of Parking along Castle Street

Refer to response in Section 3.11.3.1 on Removal of parking spaces and impact on business (Castle Street first response on parking) and also note below.

The General Arrangements Drawing shows the upgrade of Wilford three-arm roundabout to a signalised junction. The upgrade of Wilford three-arm roundabout to a signalised junction results in reduced corner radii and reduced lane widths to encourage slow vehicular speeds and help maximise control at intersections. Traffic signals provide more active control for users including traffic, active travel, and public transport by separating pedestrians from traffic to cross the road safely and therefore reduce the likelihood of collisions. Traffic signals offer active control at intersections and therefore help to reduce congestion.

Section 6.4.6.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents a qualitative impact assessment has been undertaken of the Proposed Scheme impacts for existing parking and loading. The results of the assessment demonstrate that the changes to the parking and loading provision will result in an '*overall loss of 209 spaces (-94 spaces in Section 1, -69 spaces in Section 2, and -46 spaces in Section 4)*'. Given the nature of the loss in parking and the availability of alternative spaces in the indirect study area, the impact is expected to be moderate in Sections 1 and 4, slight in Section 2, and negligible in Section 3. Therefore, the Proposed Scheme has minimal impact on the amount of parking spaces.

Section 6.4.6.1.6.4 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR demonstrates that the Proposed Scheme will impact on some parking and loading locations. There are currently 132 informal parking spaces of which are located in the Castle Street Shopping Centre. It is proposed to reconfigure the existing car park which will result in an '*overall loss of 13 parking spaces*'. This would result in a slight negative impact. This effect is considered acceptable in the context of the Proposed Scheme, which is to improve accessibility in the local area by foot, bicycle, and public transport for residents, visitors, and businesses.

Section 6.4.6.3 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR, a qualitative impact assessment has been undertaken of the Proposed Scheme impacts on the existing parking and loading along Upper Dargle Road. The results of the assessment demonstrate that the changes to the parking and loading provision will *'result in an overall loss of -46 spaces in Section 4'*. Given the nature of the

loss in parking and the availability of alternative spaces in the indirect study area, the impact is expected to be *'Negative, Slight and Long-term'.*

Bus Priority Scheme at Sunnybank junction

Wicklow County Council are presently developing Bus Priority scheme on the Upper Dargle Road. The Proposed Scheme design at the Upper Dargle Road junction has been co-ordinated with the WCC proposed Bus Priority Scheme that runs through the Upper Dargle Road and proposed design takes into account bus priority and cyclists and pedestrian infrastructure.

Page 146 of the junction assessment presented in the TIA Sub Appendix 2 - Junction Design Report Volume 4 Appendices Part 1 of 4 of the EIAR notes the following:

'The proposed junction design has evolved on the BusConnects project from initial Concept Design, Emerging Preferred Route, Public Consultation 2, Public Consultation 3 up to the Current Design. The junction design iterations have been undertaken to optimise pedestrian, cyclist and bus priority infrastructure on the scheme. '

The Proposed Scheme design at the Upper Dargle Road Junction is presented in the 02-General Arrangement Drawings Sheet 54 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.406.

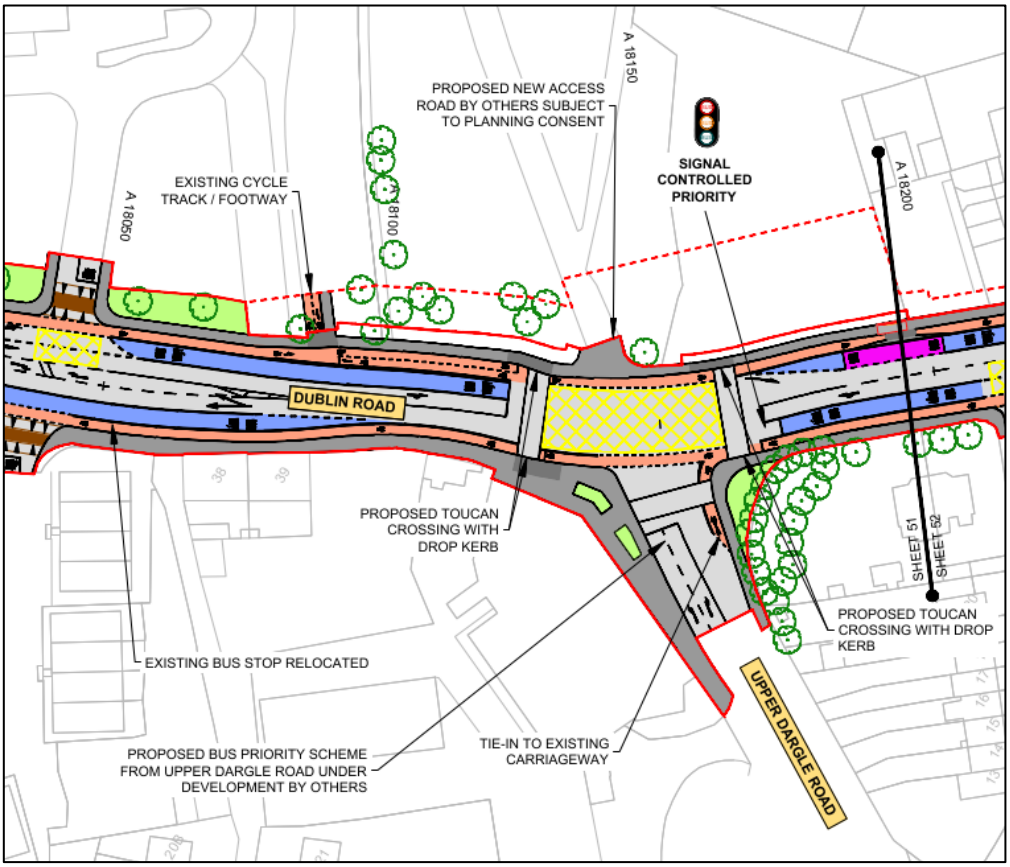


Figure 3.406: Extract from General Arrangement Drawings at Dublin Road / Upper Dargle Road (Sheet 54)

Wilford Roundabout

The submission raised concerns regarding the replacement of the Wilford Roundabout, as the proposed signalised junction will likely result in significant traffic congestion in the area and further contribute to the build up of evening peak hour traffic near the N11/M11 junction and surrounding area. The submission requested that the removal of the roundabout is rejected and the junction be upgraded in line with the proposal for the Loughlinstown Roundabout.

Response to Issue raised

Refer to response in Section 3.9.3.4.1 on Upgrade of Existing Roundabouts to Signalised Junctions and Section 3.9.3.4.5 on SCP and Signalisation at Wilford Roundabout in this report and also note below.

The Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling. It is however recognised that there will be an overall reduction in operational capacity for general traffic along the direct study area given the proposed changes to the road layout and the rebalancing of priority to walking, cycling and bus. This reduction in operational capacity for general traffic along the Proposed Scheme will likely create some level of trip redistribution onto the surrounding road network.

Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR shows that there is a slight to profound reduction of between -297 and -1738 combined general traffic flows along the direct study area during the AM Peak Hour and a slight to significant reduction of between -428 and -1302 combined general traffic flows along the direct study area during the PM Peak Hour in 2028 Opening Year. This is attributed to the Proposed Scheme and the associated modal shift as a result of its implementation. This reduction in general traffic flow has been determined as an overall potential Positive, Slight to Profound Long-Term impact which on the direct study area. The Proposed Scheme demonstrates that there is negligible impact at junctions as traffic queuing is managed efficiently and there would be no negative impact on traffic congestion.

The NTA acknowledges the close liaison with TII, DLRCC and WCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within TII, DLRCC and WCC and in particular related to the redesign of the existing Wilford Roundabout and the Loughlinstown Roundabout. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of TII, DLRCC and WCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between WCC and the NTA, in the absence of any approval condition.

Tie-in at the Fran O Toole Bridge

Refer to response in Section 3.11.3.7 on No clear link with planned future development in the area (Castle Street section) and also note below.

The Proposed Scheme design at Castle Street is presented in the 02-General Arrangement Drawings Sheet 55 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.407. This drawing also shows the tie-in with the proposed WCC Bray Bridge Improvement Scheme in the future.

The junction layout as part of the Proposed Scheme ties into the existing road cross-section North of the Bray Bridge and an alternate layout is presented where it shows *'a coordinated design solution of the overall arrangement in a scenario in which both schemes have been implemented'.*

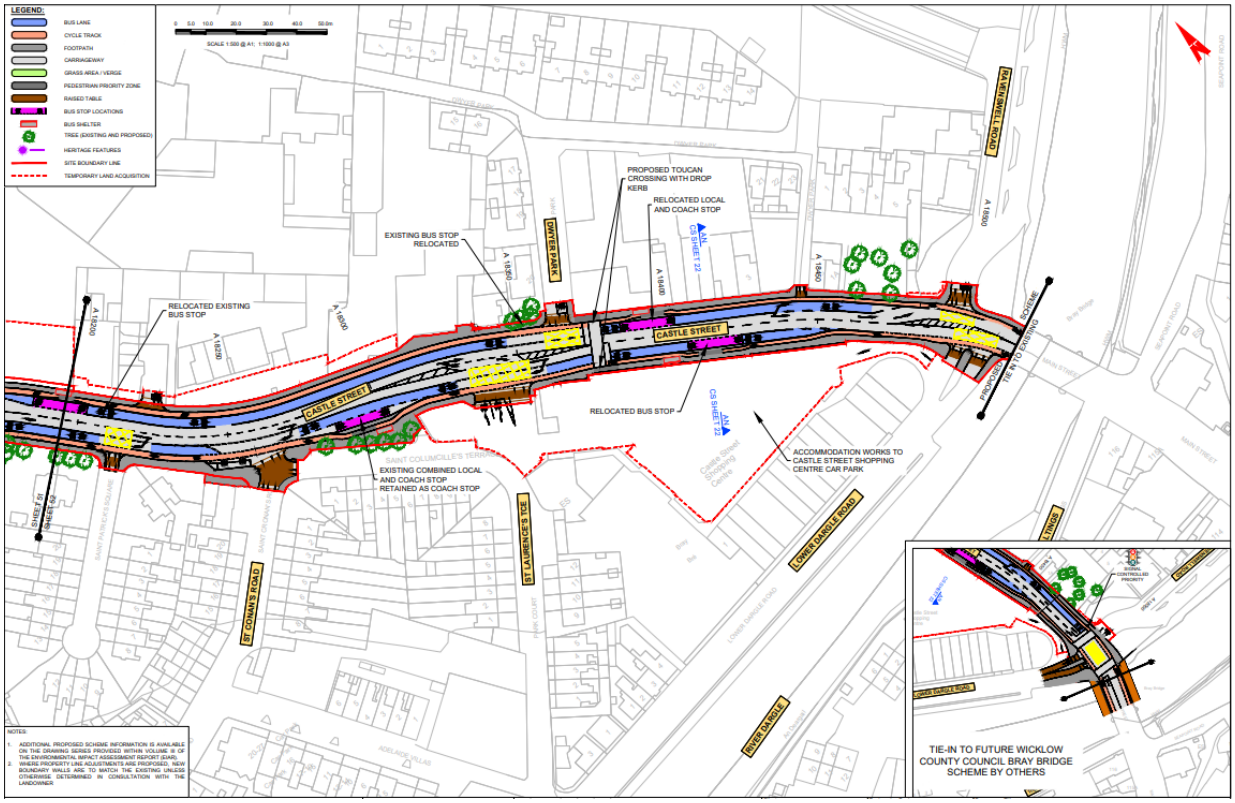


Figure 3.407: Extract from General Arrangement Drawings at Castle Street / Lower Dargle Road Junction (Sheet 55)

As Figure 3.407 shows that the boundary of the Proposed Scheme is at Fran O Toole bridge and therefore the way buses are managed beyond the bridge is part of a different scheme.

3.13.14 211 - Wicklow County Council

3.13.14.1 Overview of Submission

The submission raised concern and advise to remove the proposed bus lane on Castle Street from the scheme as this proposal (along with a proposal for bus lane between Fassaroe and Glen of the Downs) was progressed without ever being formally discussed at any meeting of Wicklow County Council.

3.13.14.2 Responses to Issues Raised

Refer to response in Section 3.9.3.1.3 on Alternate N11/M11 Bus Priority Interim Scheme (Shankill General) and also note below.

The aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor. Refer to response in 3.9.3.1 on 'Need for the Proposed Scheme' for objectives of the core bus corridor CBC Infrastructure Works, applicable to the Traffic and Transport assessment of the Proposed Scheme.

The purpose of a Proposed Scheme is to provide a continuous service along a route. Section 6.4.6.2.8 in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR presents a General Traffic Impact Assessment Summary was undertaken to assess the impact that the Proposed Scheme has in terms of general traffic redistribution on the direct and indirect study areas. The Proposed Scheme shows a reduction in traffic flows along Castle Street, '*there is a moderate reduction of -392 on Castle Street combined flows during the AM peak hour and a significant reduction of -609 on Castle Street combined flows during the PM peak*'. This is attributed to the Proposed Scheme and the associated modal shift from the introduction of bus priority measures. This reduction in general traffic flow has been determined as an overall long-term positive impact on the direct study area and therefore a bus lane along Castle Street will have no negative impact.

The Proposed Scheme design along Castle Street is presented in the 02-General Arrangement Drawings Sheet 55 in Chapter 4 (Proposed Scheme Description) in Volume 3, Part 1 of 3 of the EIAR and shown in Figure 3.408.

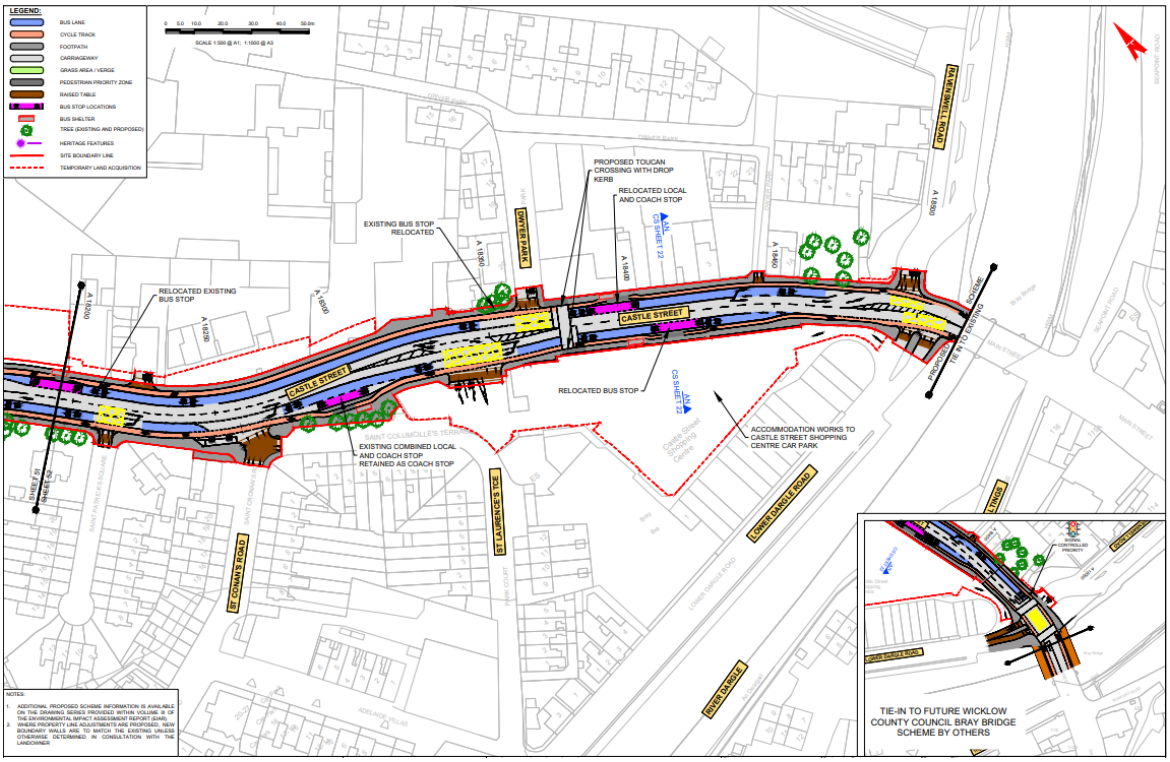


Figure 3.408: Extract from General Arrangement at Castle Street (Sheet 55)

The Proposed Scheme design at Castle Street provides for continuous cycle lane, footpath and bus lane in both direction while minimising the impact to properties and the heritage wall on the east side at Belton Terrace and parking at the Castle Street shopping centre, hence achieving the objectives of BusConnects Infrastructure Works.

The Proposed Scheme at Castle Street also meets the objectives set in the Wicklow County Council Development Plan 2022-2028, as noted in Section 2.3.5.5 of Chapter 2 (Need for the Proposed Scheme) EIAR Volume 2 Main Chapters, as noted in Table 3.93 below.

Table 3.93: Extract from Chapter 2, Wicklow County Council Development Plan 2022-2028

CPO 12.26 *To promote the delivery of improved and new bus services both in and out of the County but also within the County by:* • *supporting the development and delivery of bus service enhancement projects, including BusConnects and measures to improve bus priority such as additional bus lanes and priority signalling etc as may be deemed appropriate;*	The Proposed Scheme aligns with the objective as the BusConnects Dublin Programme is the National Transport Authority's programme to greatly improve bus services in the Greater Dublin Area of which the Proposed Scheme is part. The Proposed Scheme will support integrated sustainable transport usage through infrastructure improvements for active travel (both walking and cycling), and the provision of enhanced bus priority measures for existing (both public and private) and all future services who will use the corridor.

The M11 Fassaroe and Glen of the Downs (N11/M11 BPIS) is progressing as a multi-authority project involving Transport Infrastructure Ireland (TII), the National Transport Authority (NTA), Wicklow County Council and Dún-Laoghaire Rathdown County Council.

The proposal for a bus lane between the M11 Fassaroe and Glen of the Downs have differing aims and objectives to the BusConnects Proposed Scheme and will act in a complementary fashion, rather than prejudicing the delivery of either. The BusConnects Proposed Scheme aims to support local journeys as well as those onward to the city centre using both bus and active travel modes. It provides links between several conurbations to the south of the city centre allowing travel between them for all journey purposes. The scheme developed by Wicklow County Council is focussed on provided a high-quality public transport link to support the development of the Fassaroe area of Bray. This link will connect it to the BusConnects Proposed Scheme providing onward connectivity to the wider sustainable transport network.

The NTA is grateful for the positive and constructive liaison that has occurred with the WCC BusConnects Liaison Office throughout the design and planning process to date, and through that liaison office with other Departments and Sections within WCC regarding the progression of the Proposed Scheme. The Proposed Scheme as submitted to An Bord Pleanála has properly considered, and taken into account, the inputs from those sections during the design development process.

It is the intention of the NTA that this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme. This will include continued liaison with the relevant sections of WCC and taking their requirements into consideration, where aligned with and consistent with the EIAR. The NTA is satisfied that these are matters that can be successfully addressed between WCC and the NTA, in the absence of any approved condition.

4. Response to Individual Submissions on the Proposed Scheme

4.1 01- Aeval Unlimited Company

4.1.1 Submission

The submission raises five potential issues:

i. Support for the Proposed Scheme
ii. Impact to Trees, Walls, and Heritage
iii. Alternative Design
iv. Temporary Land Take
v. Consultation & Engagement

4.1.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.2.3 of this report.

4.2 02 - Aidan Byrne

4.2.1 Submission

The submission raised the following issues:

i. Pedestrian entrance / laneway
ii. Anti-social behaviour
iii. Alternative access options

4.2.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.3 03 - Alan Ashe

4.3.1 Submission

The submission raised the following issues:

i. Removal of mature trees
ii. Safety & Vandalism
iii. Impact to air quality and noise
iv. Loss of Privacy
v. Impact to Parking

4.3.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.4 04 - Alison, Mark, Leya & Esme Fallon

4.4.1 Submission -

The submission raised the following issues:

i. Impact to Shankill Community

ii. Impact to Trees & Environment

iii. Impact to Safety

iv. Change of Working Patterns

v. N11/M11 Route Option

vi. Impact to Traffic Flows

vii. Consultation & Alternatives

viii. Impact to Health & Wellbeing

4.4.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.5 05 – Andrew McNamee & Fernanda De Sousa

4.5.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Impact to air quality and noise

4.5.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.6 06 – Andrew Peet & Others

4.6.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section

ii. Concern for cyclists along the N11 Stillorgan Road

iii. Concern on additional pedestrian crossing at Patrician Vilas along the N11 Stillorgan Road

iv. Newtown Park/ Leopardstown Junction

4.6.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.7 07 – Angela O'Sullivan

4.7.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Impact to Cycle Infrastructure
vii. Impact to Safety (for Pedestrians & Cyclists)
viii. Review of Design Alternatives
ix. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
x. Impact to Shankill Village & Community
xi. Public Consultation
xii. Impact to Heritage & Architecture

4.7.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.8 08 – Anne & Cormac O'Donohoe

4.8.1 Submission -

The submission raised the following issues:

i. Need for the Scheme
ii. Impact to local access
iii. Removal of trees
iv. Future proposed developments

4.8.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.9 09 – Anne Austin

4.9.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction
iii. Foxrock Church/ Kill Lane Junction

4.9.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.10 10 – Anne Marie Murtagh

4.10.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction
iii. Foxrock Church/ Kill Lane Junction
iv. Johnstown Junction

4.10.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.11 11 – Annie O'Gorman Weber

4.11.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise
iii. Loss of privacy

4.11.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.12 12 – Aoibhinn Maloney & Others

4.12.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Investment and intervention to improve bus reliability
iii. Concern for cyclists along the N11 Stillorgan Road
iv. Newtown Park/ Leopardstown Junction
v. Foxrock Church/ Kill Lane Junction

4.12.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.13 13 – Aoife & Ronan Hayes

4.13.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise
iii. Loss of privacy

4.13.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.14 14 – Aoife Stokes & Glenn Mason

4.14.1 Submission –

The submission raised the following issues:

i. N11/M11 Route Option
ii. Impact to Trees
iii. Benefits & Need for the Proposed Scheme
iv. Impact to Shankill Community
v. Conflict with Government Policies

4.14.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.15 15 – Aoife Sweeney

4.15.1 Submission –

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Deficiency in Traffic and Transport Assessment
vii. Impact to Safety (for Pedestrians & Cyclists)
viii. Review of Design Alternatives
ix. Adequacy of Environmental Assessment
x. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

xi. Impact to Shankill Village & Community

xii. Public Consultation

xiii. Impact to Heritage & Architecture

xiv. Support for the Proposed Scheme

4.15.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.16 16 – AWC Estate Owners Management Company CLG

4.16.1 Submission -

The submission raised the following issues:

i. Support for the Proposed Scheme

ii. Benefits & Need for the Proposed Scheme

iii. N11/M11 Route Option

iv. Scheme Objectives Not Met

v. Impact to Trees & Environment

vi. Impact to Health & Wellbeing

vii. Impact on Safety

viii. Changes to Working Patterns

ix. Impact to Traffic Flows

x. Impact to Heritage & Architecture

4.16.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.17 17 – Barry Wallace

4.17.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Impact to Cycle Infrastructure

vii. Impact to Safety (for Pedestrians & Cyclists)

viii. Review of Design Alternatives

ix. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

x. Impact to Green Amenity Areas

xi. Impact to Shankill Village & Community

4.17.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.18 18 – Bastille Realty Limited

4.18.1 Submission -

The submission raised the following issues:

i. Justification for CPO

ii. Constitutional requirements of CPO

iii. Alternative Design

iv. Oversupply of bike racks at Donnybrook

4.18.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 report.

4.19 19 – Beechfield Manor Nursing Home Ltd.

4.19.1 Submission –

The submission raises three potential issues:

i. Land Acquisition and Impact to Boundary Wall

ii. Insufficient EIAR on Noise and Dust Mitigations

iii. Indemnity

4.19.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.3.3 of this report.

4.20 20 – Blathin O'Shea

4.20.1 Submission -

The submission raised the following issues:

i. Need for the Scheme

ii. Proposed laneway

iii. Insufficient public consultation

4.20.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.21 21 – Bray Retailers Group

4.21.1 Submission -

The submission raised the following issues:

i. Wilford roundabout capacity and the retention of roundabouts along the corridor

ii. New roundabouts at a number of locations, namely:

   a. At the Old Connaught intersection

   b. At the Industrial Yarns / Lidl intersection including changes to the Chapel Lane junction

   c. At SuperValu / Dwyer Park or near the base of Bray Bridge

4.21.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.4.3 of this report.

4.22 22 – Brendan Dunne

4.22.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Cycle Infrastructure

v. Impact to Safety (for Pedestrians & Cyclists)

vi. Review of Design Alternatives

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Changes to Working Patterns

ix. Request for Oral Hearing

4.22.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.23 23 – Brendan Heneghan

4.23.1 Submission –

This submission raised the following issues:

i. All one Scheme and therefore should be all one fee;

ii. Deficiency in consultation process;

iii. Errors in Proposed Scheme application;

iv. Traffic counts;

v. Impact to the Southside of Dublin;

vi. Concern on bus gates at Lesson Street;

vii. Impact to trees in Shankill;

viii. Replacement of roundabouts at St Anne's Church;

ix. Combined cycle infrastructure;

x. Alternate N11/M11 Interim Bus Priority Scheme;

xi. Option Assessment not comprehensive and Preferred Route Assessment not appropriate.

4.23.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.2 of this report.

4.24 24 – Brian Hannon & Sinead Ni Argain

4.24.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Traffic Flows, Speed Limit, and Traffic Calming

v. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vi. Impact to Shankill Village & Community

4.24.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.25 25 – Brian Holland

4.25.1 Submission -

The submission raised the following issues:

i. Impact to Trees

ii. Impact from Noise Pollution

iii. Benefits & Need for the Proposed Scheme

iv. N11/M11 Route Option

v. Support for the Proposed Scheme

4.25.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.26 26 – Bridin Hegarty

4.26.1 Submission -

The submission raised the following issues:

i. Benefits of the Proposed Scheme

ii. Adequacy of Environmental Assessment

iii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iv. Impact to Green Amenity Areas

v. Impact to Shankill Village & Community

4.26.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.27 27 – Cara Corbawn Residents Association

4.27.1 Submission -

The submission raised the following issues:

i. Impact to community

ii. Impact to environment

iii. Impact to community green space

iv. Boundary walls

v. Construction impacts

vi. Concern EIAR is insufficient

4.27.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.28 28 – Carol Scott

4.28.1 Submission –

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Traffic Flows, Speed Limit, and Traffic Calming

v. Review of Design Alternatives

vi. Adequacy of Environmental Assessment

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Green Amenity Areas

ix. Impact to Shankill Village & Community

x. Impact to Health & Wellbeing

xi. Impact to Heritage & Architecture

xii. Impact of Road Closure

xiii. Request for Oral Hearing

xiv. Support for the Proposed Scheme

4.28.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.29 29 – Celeste Golden

4.29.1 Submission –

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Impact to Safety (for Pedestrians & Cyclists)

vii. Review of Design Alternatives

viii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

ix. Impact to Shankill Village & Community

x. Impact to Heritage & Architecture

xi. Request for Oral Hearing

4.29.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.30 30 – Celine Smyth

4.30.1 Submission –

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iii. Impact to Safety (for Pedestrians & Cyclists)

iv. Review of Design Alternatives

v. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vi. Impact to Shankill Village & Community

vii. Request for Oral Hearing

4.30.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.31 31 – Chris Horn

4.31.1 Submission –

The submission raises four potential issues:

i. Impact to Property, Boundary Wall, Gate and Trees

ii. Impact to Safety and Need for Pedestrian Crossing and Traffic Calming

iii. Impact to Shankill Village Environment

iv. N11 / M11 Interim Bus Priority Suggestions

4.31.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.5 of this report.

4.32 32 – Ciaran Cuffe MEP

4.32.1 Submission –

This submission raised the following issues:

i. Support for the Proposed Scheme;

ii. Concern on the land take and loss of trees at Patrician Villas;

iii. Retaining slip lane at St Stephen's Green;

iv. Leopardstown Road/ Newtownpark Avenue junction;

v. Lack of footpath along the N11 Bray Road section;

vi. Improved signage for active travel modes; and

vii. Minor traffic calming measures.

4.32.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.3 of this report.

4.33 33 – Circle K Bray

4.33.1 Submission –

The submission noted the following four issues:

i. Impact to business due to temporary land take/ closure of business during construction

ii. Future viability of the operation of the Circle K business

iii. Alternate design proposal

iv. Relocation of bus stop and access/ egress to the site

4.33.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.6 of this report.

4.34 34 – Circle K Donnybrook

4.34.1 Submission –

The submission raised the following issues:

i. Access / Impact on Business
ii. Impact on fuel pricing sign and underground drainage

4.34.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.35 35 – Claire Scott-Lennon

4.35.1 Submission –

The submission raised the following issues:

i. Pedestrian entrance / laneway
ii. Impact to safety
iii. Need for the Scheme
iv. Anti-social behaviour

4.35.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.36 36 – Cllr. Carrie Smyth

4.36.1 Submission –

This submission raised the following issues:

i. Support for the Proposed Scheme;
ii. Removal on slip lanes along N11 and bus lane enforcement;
iii. Cyclists' improvement on the N11 Loughlinstown to Cherrywood;
iv. Pedestrian link at Shanganagh Vale;
v. Reduction in traffic lanes at Corke Abbey Avenue junction;
vi. Signalised junction at the Dublin Road junction with Lower Dargle Road;
vii. Suggestion for Protected junction at Dublin Road with Shanganagh Park/ Cemetery;
viii. Removal of wall at Castlefarm to facilitate footpath;
ix. Removal of Cherrington Road/ Dublin Road/ Quinn's road roundabout;
x. Removal of Dublin Road/ Shanganagh Road/ Corbawn Lane roundabout;
xi. Lack of segregated cycling facilities in Shankill;

xii. Journey time benefits and the impact to heritage and biodiversity and insufficient cycling facilities in Shankill; and

xiii. Request for Oral Hearing.

4.36.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.4 of this report.

4.37 37 – Cllr. Kate Ruddock

4.37.1 Submission –

The submission raised the following issues:

i. Removal of mature trees

ii. Impact to air quality and noise

iii. Loss of privacy

4.37.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.38 38 – Cllr. Martha Fanning

4.38.1 Submission –

The submission raised the following issues:

i. Loss of community green space

ii. Relocation of bus stop

iii. Impact of new footpath

4.38.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 2.4 of this report.

4.39 39 – Cllr. Michael D. Clark & Others

4.39.1 Submission

This submission raised the following issues:

i. Support for the Proposed Scheme;

ii. Benefits of the Proposed Scheme;

iii. Replacement of roundabouts with signalised junctions;

iv. Positioning of bus stops on Shanganagh Road;

v. Removal of traffic lane at Corke Abbey Avenue junction;

vi. Removal of slip lanes along the N11;

vii. Closure of Hill lane on N11;

viii. N11 Commons Road suggest two-way;

ix. Recent upgrades to the N11 pavement;

x. Proposed pedestrian access to South Park; and

xi. Impact to trees at Seaview Park, Dublin Road.

4.39.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.5 of this report.

4.40 40 – Colette Harold & Tim Bebbington

4.40.1 Submission

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Review of Design Alternatives

iii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iv. Impact to Green Amenity Areas

v. Impact to Shankill Village & Community

vi. Impact to Heritage & Architecture

vii. Request for Oral Hearing

4.40.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.41 41 – Conor Gerrad Maher

4.41.1 Submission

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iv. Deficiency in Traffic and Transport Assessment

v. Review of Design Alternatives

vi. Adequacy of Environmental Assessment

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Shankill Village & Community

ix. Public Consultation

x. Impact to Heritage & Architecture

xi. Request for Oral Hearing

4.41.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.42 42 – Cora Plant & D. O'Muirthile

4.42.1 Submission –

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming
iv. Impact to Cycle Infrastructure
v. Impact to Safety (for Pedestrians & Cyclists)
vi. Review of Design Alternatives
vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
viii. Impact to Shankill Village & Community
ix. Impact to Heritage & Architecture
x. Impact During Construction
xi. Public Consultation

4.42.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.43 43 – Councillor Joe Behan

4.43.1 Submission –

The submission raised the following issues:

i. Removal of parking spaces and impact on business
ii. Lack of consistency in traffic planning

4.43.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.44 44 – Councillor Marie Baker

4.44.1 Submission –

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. New toucan crossing

iv. Relocation of bus stop

v. Impact to air quality and noise

4.44.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.45 45 – Courtenay Pollard

4.45.1 Submission –

The submission raised the following issues:

i. Impact to Community

ii. Benefits & Need for the Proposed Scheme

iii. Impact to Traffic Flows

iv. Consultation & Engagement

v. Route Selection Date

vi. Impact to Trees & Environment

vii. Impact to Safety

viii. Impact to Health & Wellbeing

ix. Impact to Businesses

x. Removal of Roundabouts in Shankill

xi. Corbawn Lane & Right Turn Change

xii. Government Policies & Legal Adherence

xiii. Public Consultation

xiv. CPO Limited Information

xv. Oral Hearing Request

4.45.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.46 46 – Damien and Berna MacKenna & Others

4.46.1 Submission –

The submission raised the following issues:

i. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

ii. Impact to Cycle Infrastructure

iii. Impact to Safety (for Pedestrians & Cyclists)

iv. Review of Design Alternatives

v. Adequacy of Environmental Assessment

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

4.46.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.47 47 – Dara Byrne

4.47.1 Submission –

The submission raised the following issues:

i. Pedestrian entrance / laneway
ii. Anti-social behaviour

4.47.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.48 48 – David & Joanne McKenna

4.48.1 Submission –

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Safety & vandalism
iv. Impact to air quality and noise
v. Impact of new footpath
vi. Loss of privacy
vii. Impact to parking

4.48.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.49 49 – David & Eana Bernie

4.49.1 Submission –

The submission raised the following issues:

i. Pedestrian entrance / laneway
ii. Alterations to bus stops

4.49.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.50 50 – David & Mary Reidy

4.50.1 Submission –

The submission raised the following issues:

i. Impact to Safety (for Pedestrians & Cyclists)

ii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iii. Impact to Access

4.50.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.51 51 – David Bowman

4.51.1 Submission –

The submission raised the following issues:

i. Proposed laneway

ii. Need for the Scheme

4.51.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.52 52 – David Lawlor

4.52.1 Submission –

The submission raised the following issues:

i. Removal of roundabouts

ii. Alterations to traffic movement

iii. Impact to the local community

iv. Corbawn Lane

4.52.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.53 53 – Deirdre Spillane & Jason O'Sullivan

4.53.1 Submission -

The submission raises five potential issues:

i. Request for Details on CPO

ii. Inaccurate CPO Mapping

iii. Design Detail and Constitutional Rights

iv. Project Timelines

v. Oral Hearing Request

4.53.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.7.2 of this report.

4.54 54 – Denise & Trish Hosford

4.54.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Impact to access
iii. Impact to trees
iv. Impact to wildlife and environment
v. Impact to the local community
vi. Impact to businesses
vii. Corbawn Lane

4.54.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.55 55 – Derek & Deirdre McCann

4.55.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Relocation of bus stop
iv. Impact to air quality and noise
v. Loss of privacy
vi. Impact to parking

4.55.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.56 56 – Dermot & Anne Grumley

4.56.1 Submission -

The submission raised the following issues:

i. Benefits & Need for the Proposed Scheme
ii. Impact to Trees & Environment
iii. Impact to Heritage & Architecture

iv. Impact to Community

v. Impact During Construction

vi. Removal of Roundabouts

4.56.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.57 57 – Dervila Cooke

4.57.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Loss of community green space

iii. Impact to air quality and noise

4.57.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.58 58 – Development Applications Unit

4.58.1 Submission -

The submission raised the following issues:

i. Archaeology and Cultural Heritage; and

ii. Nature Conservation – specifically regarding bat activity and trees containing potential roost features (PRF), and vegetation impacts near Loughlinstown Roundabout and Stonebridge Road

4.58.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.6 of this report.

4.59 59 – Donagh O'Doherty

4.59.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section

ii. Concern for cyclists along the N11 Stillorgan Road

iii. Concern on additional pedestrian crossing at Patrician Vilas along the N11 Stillorgan Road

iv. Newtown Park/ Leopardstown Junction

4.59.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.60 60 – Donnybrook Fair Limited

4.60.1 Submission -

The submission raised the following issues:

i. Loss of outdoor seating area
ii. Loss of parking / Loading area
iii. Impact on Business

4.60.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.61 61 – Dorothee Corrigan

4.61.1 Submission -

The submission raised the following issues:

i. Removal of parking spaces and impact on business
ii. Access during construction
iii. Operational access/egress and carpark reconfiguration
iv. Environmental Impacts
v. Alternative design options

4.61.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.62 62 – Dr. Dermot Stokes

4.62.1 Submission -

The submission raised the following issues:

i. Impact on Donnybrook Village
ii. Impact on Pedestrians
iii. Traffic Calming
iv. Objectives of the scheme
v. Concern regarding drafting errors
vi. Lack of consultation with local residents
vii. Provision for Cyclists Turning

4.62.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.63 63 – Dublin City Council

4.63.1 Submission -

The NTA's response to the submission is set out as follows:

i. A. Role of NTA & Liaison
ii. B. DCC's Support for the Scheme
iii. C. Certain Observations Raised/Clarification Sought by DCC
    a. C1 – Response to Section 2.1 Relevant Planning History
    b. C2 – Response to Section 2.2 Policy Context
    c. C3 – Response to Section 2.3 Planning Assessment
    d. C3 – Response to Section 2.4 Departmental Reports, including reference to the Appendix
    e. C5 – Response to Section 2.5 Conclusion
    f. C6 – Response to Appendix to DCC Submission

4.63.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.7 of this report.

4.64 64 – Dublin Commuter Coalition

4.64.1 Submission -

This submission raised the following issues:

i. Bus Lane Enforcement;
ii. Bus Lane Hours;
iii. Bus Stop Design;
iv. Junction Design;
v. Pedestrian Crossings;
vi. Shared Space;
vii. Bike parking;
viii. UCD Bus Interchange; and
ix. Cycling Improvements in Shankill.

4.64.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.8 of this report.

4.65 65 – Dun Laoghaire Rathdown County Council

4.65.1 Submission -

The NTA's response to the submission is set out as follows:

i. Section 1 – Introduction and Planning Policy
ii. Section 2 – Traffic and Active Travel Recommendations
iii. Section 3 – Landscape, Biodiversity, Heritage and Architectural Conservation Recommendations
iv. Section 4 – Drainage, Road Maintenance, Public Lighting and Pollution Control Recommendations
v. Section 5 – Compulsory Purchase Order
vi. The submission also includes Appendix 1, 2 and 3
vii. Appendix 1 – Report on Landscape and Arboriculture
viii. Appendix 2 – Biodiversity Officer Response
ix. Appendix 3 – Property Management Department Comments

4.65.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.9 of this report.

4.66 66 – Eamon Griffith

4.66.1 Submission -

The submission raised the following issues:

i. Proposed laneway
ii. Need for the Scheme
iii. Impact to parking
iv. Impact to biodiversity and wildlife
v. Impact to security & privacy
vi. Impact to access & egress

4.66.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.67 67 – Edmund Rice Schools Trust Limited

4.67.1 Submission -

The submission raised the following issues:

i. Duration of works, concern on temporary land acquisition and access/ egress including impacts on All-weather Pitch and Car Parking Facility
ii. Query on the tree removal

4.67.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.3.3 of this report.

4.68 68 – Edward & Noirin Gahan

4.68.1 Submission -

The submission raised the following issues:

i. Review of Design Alternatives

ii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iii. Impact to Heritage & Architecture

iv. Impact During Construction

4.68.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.69 69 – Elizabeth Ryder

4.69.1 Submission -

The submission raised the following issues:

i. Impact on Pedestrians

ii. Proposed alternative design

4.69.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.70 70 – Enda Gavin

4.70.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Loss of community green space

iii. Impact to air quality and noise

4.70.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.71 71 – Eoin Conway & Helen Clarke

4.71.1 Submission -

The submission raises three potential issues:

i. Impact to Property Due to CPO on a Protected Structure

ii. Impact to Trees and Biodiversity

iii. Non-compliance with Policy, Zoning and LAP

4.71.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.8 of this report.

4.72 72 – Esmond Green

4.72.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Review of Design Alternatives

iv. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

v. Impact to Green Amenity Areas

vi. Impact to Shankill Village & Community

vii. Impact to Health & Wellbeing

viii. Impact to Business

ix. Impact to Heritage & Architecture

x. Request for Oral Hearing

4.72.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.73 73 – Eugene Ryan

4.73.1 Submission -

The submission raised the following issues:

i. Impact to Bus Services & Journey Time Benefits

ii. Adequacy of Environmental Assessment

iii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iv. Impact to Green Amenity Areas

v. Impact to Heritage & Architecture

4.73.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.74 74 – Eve & Ian McAuley

4.74.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Traffic Flows, Speed Limit, and Traffic Calming

v. Review of Design Alternatives

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Green Amenity Areas

viii. Impact to Shankill Village & Community

ix. Impact to Health & Wellbeing

x. Impact to Heritage & Architecture

xi. Request for Oral Hearing

4.74.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.75 75 – Fergus McCarthy

4.75.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iii. Impact to Green Amenity Areas

iv. Impact to Shankill Village & Community

v. Impact to Health & Wellbeing

vi. Impact to Heritage & Architecture

vii. Impact on Property Values

viii. Impact to Privacy

4.75.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.76 76 – Fiachra Baynes & Sinead Lucey

4.76.1 Submission -

The submission raised the following issues:

i. Impact to Health & Wellbeing
ii. Impact to Trees & Environment
iii. Benefits & Need for the Proposed Scheme
iv. N11/M11 Bus Priority Interim Scheme
v. Alternative Options
vi. Removal of Roundabouts
vii. Impact to Safety
viii. Historical Planning Decisions

4.76.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.77 77 – Fiona Bennett & Brendan Dunne

4.77.1 Submission -

The submission raised the following issues:

i. Benefits & Need for the Proposed Scheme
ii. Removal of Roundabouts
iii. Impact to Trees
iv. Impact to Noise and Air Quality at Property
v. Impact to Health & Wellbeing
vi. Impact to Community

4.77.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.78 78 – Fiona Connor

4.78.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Relocation of bus stop
iv. Impact to air quality and noise

4.78.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.79 79 – Fionnuala & Noel Gilchrist

4.79.1 Submission -

The submission raised the following issues:

i. Impact to Trees
ii. N11/M11 Route Option
iii. Impact to Traffic Flows
iv. Impact to Property
v. Impact During Construction
vi. Impact to Cyclists

4.79.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.80 80 – Four Star Pizza

4.80.1 Submission -

The submission raised the following issues:

i. Impact on Business
ii. Uncertainty on Timing
iii. No Clarity on Alternative Parking
iv. Loading Bays
v. Benefits of the Bus Corridor Are Unclear
vi. No Clear Link with Planned Future Developments in the Area
vii. Lack of Consistency in Traffic Planning

4.80.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.81 81 – Fr. Michael O'Sullivan SAC, PP

4.81.1 Submission -

The submission raises six potential issues:

i. Protected Structure Status
ii. Loss of Parking

iii. Impact to Property, Boundary Walls, Trees, Hedgerows and Biodiversity

iv. Increase in Traffic in Shankill and Corbawn Lane

v. Lack of Consultation

4.81.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.9 of this report.

4.82 82 – Frances Healy & Others

4.82.1 Submission -

The submission raised the following issues:

i. Impact to Traffic Flows, Speed Limit, and Traffic Calming

ii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iii. Impact to Shankill Village & Community

iv. Consideration of new developments

4.82.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.83 83 – Frank & Trudy Scott-Lennon

4.83.1 Submission -

The submission raised the following issues:

i. Pedestrian entrance / laneway

ii. Impact to safety

iii. Insufficient public consultation

iv. Alternative access options

4.83.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.84 84 – Gavin Doherty

4.84.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Cycle Infrastructure

v. Impact to Safety (for Pedestrians & Cyclists)

vi. Review of Design Alternatives

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Shankill Village & Community

ix. Impact to Business

x. Flooding and Drainage

4.84.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.85 85 – Gerald Kennedy

4.85.1 Submission -

The submission raised the following issues:

i. Pedestrian entrance / laneway

ii. Anti-social behaviour

iii. Insufficient public consultation

iv. Alternative access options

v. Impact to safety

4.85.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.86 86 – Geraldine Comiskey

4.86.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iii. Impact to Cycle Infrastructure

iv. Impact to Safety (for Pedestrians & Cyclists)

v. Review of Design Alternatives

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Shankill Village & Community

viii. Impact to Heritage & Architecture

ix. Impact on Property Values

4.86.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.87 87 – Gerard McCormick

4.87.1 Submission -

The submission raised the following issues:

i. Pedestrian entrance / laneway

ii. Anti-social behaviour

4.87.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.88 88 – Gerry Cosgrave

4.88.1 Submission -

The submission raised the following issues:

i. Impact to Business

ii. Review of Alternatives

iii. Impact to Community

iv. Request for Oral Hearing

v. Land Ownership

4.88.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.89 89 – Gill Owen & Others

4.89.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement

ii. Lack of Scheme benefits

iii. Impact to cycle infrastructure

iv. Impact to trees

v. Impact to wildlife and environment

vi. Impact heritage

vii. Corbawn Lane

4.89.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.90 90 – Grant White & Darina Bewley

4.90.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iii. Impact to Cycle Infrastructure

iv. Impact to Safety

v. Review of Design Alternatives

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Green Amenity Areas

viii. Impact to Shankill Village & Community

ix. Impact to Health & Wellbeing

x. Impact to Heritage & Architecture

4.90.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.91 91 – Gregory Gallagher

4.91.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact During Construction

4.91.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.92 92 – Gregory O'Brien

4.92.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Cycle Infrastructure

v. Impact to Safety

vi. Review of Design Alternatives

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Green Amenity Areas

ix. Impact to Shankill Village & Community

x. Changes to Working Patterns

xi. Public Consultation

xii. Impact to Heritage & Architecture

4.92.1 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.93 93 – Gwen & John Downing

4.93.1 Submission -

The submission raised the following issues:

i. Increase in noise, dust, vibration and pollution

ii. Loss of informal parking.

iii. Impact on access and egress

iv. Design is contrary to consultation

v. Removal of slip lane at Corke Abbey Avenue junction / increase in Dublin Road Traffic

vi. Impact on boundary wall, landscaping and loss of privacy

4.93.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.10.3 of this report.

4.94 94 – Helen Griffin

4.94.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Review of Design Alternatives

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Shankill Village & Community

ix. Corbawn Lane

x. Impact to Business

xi. Impact to Heritage & Architecture

4.94.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.95 95 – Helen Ronanyne

4.95.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Review of Design Alternatives

vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

viii. Impact to Green Amenity Areas

ix. Impact to Shankill Village & Community

x. Support for the Proposed Scheme

4.95.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.96 96 – Ina Knerr

4.96.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement

ii. Impact to access

iii. Impact to parking

iv. Impact to trees

v. Impact to wildlife and environment

vi. Impact to the local community

vii. Impact to businesses and amenities

viii. Corbawn Lane

ix. Impact to bus services

x. Impact to safety

xi. Impact to heritage

4.96.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.97 97 – Ivana Bacik TD

4.97.1 Submission -

This submission raised the following issues:

i. Support for the Proposed Scheme
ii. Fee related to the Submission
iii. Consultation & Engagement

4.97.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.10 of this report.

4.98 98 – Jacinta O'Sullivan & Sean Raghallaigh

4.98.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Impact to access
iii. Impact to parking
iv. Impact to trees
v. Impact to wildlife and environment
vi. Impact to the local community
vii. Impact to businesses and amenities
viii. Corbawn Lane
ix. Impact to bus services
x. Impact to safety
xi. Traffic light impact
xii. Insufficient public consultation
xiii. Impact to pedestrian infrastructure

4.98.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.99 99 – Jacqueline Kennedy

4.99.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction

iii. Johnstown Junction

4.99.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.100 100 – Jade Garcia Webber

4.100.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Relocation of bus stop
iv. Impact of new footpath
v. Loss of privacy

4.100.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.101 101 – Jaime McKeown & Beatrice Journee

4.101.1 Submission -

The submission raised the following issues:

i. Support for the Scheme
ii. Need for the Scheme
iii. Impact to access
iv. Impact to parking
v. Impact to trees
vi. Impact to wildlife and environment
vii. Impact to bus services
viii. Alternative suggestions
ix. N11/ M11 Bus Priority Interim Scheme

4.101.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.102 102 – James & Victoria Fahey

4.102.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction

iii. Foxrock Church/ Kill Lane Junction

iv. Johnstown Junction

4.102.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.103103 – James Bergin

4.103.1 Submission -

The submission raised the following issues:

i. Need for the Scheme

ii. Impact to cycle infrastructure

iii. Insufficient detail

iv. Impact to parking

v. Impact to wildlife and environment

vi. Impact to community

vii. Impact to health and wellbeing

4.103.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.104 104 – Jane & John Deehan

4.104.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Traffic Flows

iii. N11/M11 Route Option

iv. Change in Working Patterns

v. Impact to Community

vi. Impact to Trees & Environment

vii. Improvements in Pedestrian Infrastructure

viii. Improvements in Cycle Infrastructure

4.104.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.105 105 – Jill & John Bolton

4.105.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Impact to trees
iii. Impact to wildlife and environment
iv. Impact to the local community
v. Impact to businesses and amenities
vi. Alternative suggestions
vii. Impact to pedestrian infrastructure

4.105.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.106 106 – Jo Armstrong

4.106.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Safety and vandalism
iv. Relocation of bus stop
v. Impact of new footpath

4.106.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.107 107 – John Barron

4.107.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise
iii. Impact of new footpath

4.107.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.108 108 – John Cullen & Sandra Cullen

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise

4.108.1 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.109 109 – John Healy

4.109.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Impact to Safety (for Pedestrians & Cyclists)
vii. Review of Design Alternatives
viii. Adequacy of Environmental Assessment
ix. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
x. Impact to Shankill Village & Community
xi. Public Consultation
xii. Impact to Heritage & Architecture

4.109.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.110 110 – John Hickie

4.110.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Deficiency in Traffic and Transport Assessment

vii. Impact to Cycle Infrastructure

viii. Impact to Safety (for Pedestrians & Cyclists)

ix. Review of Design Alternatives

x. Adequacy of Environmental Assessment

xi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

xii. Impact to Green Amenity Areas

xiii. Impact to Shankill Village & Community

xiv. Impact to Heritage & Architecture

4.110.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.111 111 – John Kane

4.111.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement

ii. Removal of roundabouts

iii. Need for the Scheme

iv. Support for the Scheme

v. Alternative suggestions

vi. Impact to trees

vii. Impact to wildlife and environment

viii. Corbawn Lane

ix. N11/M11 Bus Priority Interim Scheme

4.111.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.112 112 – Karl Troy

4.112.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Bus Services & Journey Time Benefits

iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iv. Review of Design Alternatives

v. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vi. Impact to Shankill Village & Community

vii. Impact to Heritage & Architecture

viii. Request for Oral Hearing

4.112.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.113 113 – Kathleen Lee

4.113.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Impact of new toucan crossing

iii. Relocation of bus stop

iv. Impact to air quality and noise

4.113.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.114 114 – Kennedy Wilson & Kennedy Wilson Investments

4.114.1 Submission -

The submission raised the following issues:

i. Support for the Scheme

ii. Concern on the impact to the existing access and egress

4.114.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.5.3 of this report.

4.115 115 – Kim & Fintan McAlinden

4.115.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Deficiency in Traffic and Transport Assessment

vii. Impact to Cycle Infrastructure

viii. Review of Design Alternatives

ix. Adequacy of Environmental Assessment

x. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

xi. Impact to Green Amenity Areas

xii. Impact to Shankill Village & Community

xiii. Public Consultation

xiv. Impact to Heritage & Architecture

4.115.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.116 116 – Kingsley Hogan

4.116.1 Submission -

The submission raised the following issues:

i. Elimination of parking spaces and impact on business

ii. Alternatives

4.116.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.117 117 – Kylie O'Grady & Carl Faichney

4.117.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Impact to Safety (for Pedestrians & Cyclists)

v. Review of Design Alternatives

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Shankill Village & Community

viii. Public Consultation

ix. Impact to Health & Wellbeing

x. Impact to Heritage & Architecture

xi. Request for Oral Hearing

4.117.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.118 118 – Louise O'Reilly & Others

4.118.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Safety and vandalism
iv. Impact of new toucan crossing
v. Impact to air quality and noise
vi. Impact of new footpath

4.118.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.119 119 – Maeve Muckian

4.119.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact of new toucan crossing
iii. Impact to air quality and noise
iv. Impact of new footpath

4.119.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.120 120 – Mairead Divilly

4.120.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Impact to Bus Services & Journey Time Benefits
iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming
iv. Review of Design Alternatives
v. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
vi. Impact to Shankill Village & Community

vii. Impact to Heritage & Architecture

4.120.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.121 121 – Mandabard Holdings Ltd.

4.121.1 Submission -

The submission raised the following issues:

i. Access during construction

ii. Operational access/egress and carpark reconfiguration

iii. Land acquisition, value of property and construction compound

iv. Alternative design options

v. Design detail and constitutional rights

vi. Boundary Treatment

vii. Consultation after CPO Notice for land take details

4.121.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.122 122 – Marian Ward

4.122.1 Submission -

The submission raised the following issues:

i. Impact to Shankill Community

ii. Impact to Trees & Environment

iii. Impact to Safety

iv. Change of Working Patterns

v. N11/M11 Route Option

vi. Impact to Traffic Flows

vii. Consultation & Alternatives

viii. Impact to Health & Wellbeing

4.122.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.123 123 – Mark & Christine Russell

4.123.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Trees

iii. Impact to Traffic Flow

iv. Impact to Community

4.123.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.124 124 – Mark Anderson

4.124.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Safety and vandalism

4.124.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.125 125 – Martin D. Bernon

4.125.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Safety (for Pedestrians & Cyclists)

iii. Review of Design Alternatives

iv. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

v. Impact to Green Amenity Areas

vi. Impact to Shankill Village & Community

vii. Changes to Working Patterns

viii. Public Consultation

ix. Impact to Health & Wellbeing

x. Impact to Heritage & Architecture

xi. Impact on future Developments

4.125.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.126 126 – Mary Foran

4.126.1 Submission -

The submission raised the following issues:

i. Removal of parking spaces and impact on business

ii. Alternative design options

4.126.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.127 127 – Maura Harmon

4.127.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

ii. Safety and vandalism

iii. Impact of new toucan crossing

iv. Relocation of bus stop

v. Impact to air quality and noise

vi. Impact of new footpath

vii. Insufficient public consultation

4.127.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.128 128 – MCL Estates Ltd. – Fast Fit tyres

4.128.1 Submission -

The submission raised the following issues:

i. Land acquisition, value of property and construction compound

ii. Design detail and constitutional rights

iii. Drainage

iv. Noise

v. Boundary Treatment

vi. Consultation after CPO Notice for land take details

vii. Footpaths/cycle paths improvements

4.128.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.129 129 – MCL Estates Ltd. – First Stop

4.129.1 Submission -

The submission raised the following issues:

i. Surplus land acquisition / Impact on business
ii. Drainage
iii. Noise
iv. Access – General
v. Route Selection and Design
vi. Boundary treatment
vii. Footpath / Cycle paths

4.129.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.130 130 – Melcorpo Commercial Properties Limited

4.130.1 Submission -

The submission raised the following issues:

i. Impact on Access to Castle Street Shopping Centre and Reduced Circulation
ii. Loss of Car Parking
iii. Impact on Tenants / Devaluation of Shopping Centre
iv. Construction Impacts and Disruption
v. Adequacy of EIAR

4.130.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.131 131 – Melcorpo Commercial Properties Unlimited

4.131.1 Submission -

The submission raised the following issues:

i. Removal of parking spaces and impact on business
ii. Project timeline
iii. Access during construction
iv. Operational access/egress and carpark reconfiguration

v. Land acquisition, value of property and construction compound

4.131.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.132 132 – Michael & Sophie Whelan

4.132.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Impact of new toucan crossing
iv. Relocation of bus stop
v. Impact to air quality and noise
vi. Impact of new footpath
vii. Insufficient public consultation

4.132.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.133 133 – Michael Greene

4.133.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Impact to Traffic Flows, Speed Limit, and Traffic Calming
v. Deficiency in Traffic and Transport Assessment
vi. Impact to Cycle Infrastructure
vii. Impact to Safety (for Pedestrians & Cyclists)
viii. Review of Design Alternatives
ix. Adequacy of Environmental Assessment
x. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
xi. Impact to Green Amenity Areas
xii. Impact to Shankill Village & Community
xiii. Public Consultation
xiv. Impact to Health & Wellbeing
xv. Impact to Business

xvi. Impact to Heritage & Architecture

xvii. Request for Oral Hearing

4.133.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.134 134 – Michael Philips

4.134.1 Submission -

This submission raised the following issues:

i. Need for the Proposed Scheme and integration with Metro and Luas

ii. Changes along the N11, Stillorgan Road

iii. Upgrades to N11 not support climate change and sustainability.

4.134.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.11 of this report.

4.135 135 – Michael Roberts

4.135.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Review of Design Alternatives

v. Adequacy of Environmental Assessment

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

4.135.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.136 136 – Michelle Salter

4.136.1 Submission -

The submission raised the following issues:

i. Removal of roundabouts

ii. Need for the Scheme

iii. Impact to environment

iv. Alterations to traffic movement

4.136.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.137 137 – Mola Architecture

4.137.1 Submission -

The submission raised the following issues:

i. Parking / Impact on business
ii. Justification for CPO
iii. Impact on Donnybrook
iv. No impact on Existing Bottleneck in Donnybrook

4.137.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.138 138 – Monica Glynn & William Cleary

4.138.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Need for the Scheme
iii. Removal of roundabouts
iv. Impact to trees
v. Impact to wildlife and environment
vi. Impact to the local community
vii. Corbawn Lane
viii. Impact to safety

4.138.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.139 139 – Musgrave Limited

4.139.1 Submission -

The submission raised the following issues:

i. Removal of parking spaces and impact on business
ii. Access during construction
iii. Operational access/egress and carpark reconfiguration
iv. Land acquisition, value of property and construction compound

4.139.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.140 140 – Natasha Hogan

4.140.1 Submission -

The submission raised the following issues:

i. Removal of parking spaces and impact on business

ii. Operational access/egress and carpark reconfiguration

iii. Alternative design options

4.140.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.11 of this report.

4.141 141 – Nigel Kenning

4.141.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Impact to Cycle Infrastructure

vii. Impact to Safety (for Pedestrians & Cyclists)

viii. Review of Design Alternatives

ix. Impact to Shankill Village & Community

x. Impact to Health & Wellbeing

xi. Impact to Heritage & Architecture

4.141.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.142 142 – Nina & Peter Brennan

4.142.1 Submission -

The submission raised the following issues:

i. Impact of CPO and on property

ii. Impact to Shankill village community and environment

iii. Need and benefits for the Proposed Scheme
iv. Journey time saving
v. Impact on safety

4.142.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.143 143 – Nuala Weber

4.143.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Relocation of bus stop
iv. Impact of new toucan crossing
v. Impact to air quality and noise
vi. Impact of new footpath
vii. Loss of privacy

4.143.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.144 144 – Oksana Marchenko

4.144.1 Submission -

The submission raised the following issues:

i. Need for the Scheme
ii. Corbawn Lane
iii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

4.144.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.145 145 – Orla & Tom Wilson

4.145.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Consideration of Alternatives and Options Assessment
iii. Alternate N11/M11 Bus Priority Interim Scheme
iv. Impact to Bus Services & Journey Time Benefits

v. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
vi. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
viii. Impact to Shankill Village & Community
ix. Corbawn Lane

4.145.2 Response to Submission

Detailed responses to the issues raised by this submission have been in Section 3.9 of this report.

4.146 146 – Orla Cooke

4.146.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise

4.146.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.147 147 – Padraic & Anna Costello

4.147.1 Submission -

The submission raised the following issues:

i. Proposed laneway
ii. Need for the Scheme
iii. Impact to parking
iv. Impact to biodiversity and wildlife
v. Impact to security & privacy
vi. Impact to access & egress

4.147.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.148 148 – Pam Robinson

4.148.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Impact to air quality and noise
iv. Insufficient public consultation

4.148.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.149 149 – Patricia Beales & Pamela Donlan

4.149.1 Submission -

The submission raised the following issues:

i. Impact to Bus Services & Journey Time Benefits
ii. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming
iv. Impact to Safety (for Pedestrians & Cyclists)
v. Review of Design Alternatives
vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
vii. Impact to Shankill Village & Community
viii. Impact to Health & Wellbeing
ix. Impact to Heritage & Architecture

4.149.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.150 150 – Patricia McKeever

4.150.1 Submission -

The submission raised the following issues:

i. Loss of community green space
ii. Impact of new footpath

4.150.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.151 151 – Patrician Community Centre

4.151.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Safety and vandalism
iv. Impact of new toucan crossing
v. Impact to air quality and noise

vi. Impact of new footpath

4.151.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.152 152 – Patrician Residents Association

4.152.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Safety and vandalism
iii. Impact of new toucan crossing
iv. Relocation of bus stop
v. Impact to air quality and noise
vi. Impact of new footpath
vii. Insufficient public consultation

4.152.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.153 153 – Patrick O'Connell

4.153.1 Submission -

The submission raised the following issues:

i. Impact to trees
ii. Impact to heritage
iii. Corbawn Lane
iv. Impact to cycle infrastructure

4.153.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.154 154 – Paul Cullen

4.154.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Safety and vandalism
iv. Impact of new toucan crossing
v. Impact to air quality and noise

vi. Insufficient public consultation

4.154.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.155 155 – Paul Deery & Michael Fitzgerald

4.155.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Need for the Scheme
iii. Impact to trees
iv. Impact to wildlife and environment
v. Impact to the local community
vi. Impact to heritage
vii. Corbawn Lane

4.155.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.156 156 – Paul Wilcock

4.156.1 Submission -

The submission raised the following issues:

i. Alterations to traffic movement
ii. Corbawn Lane

4.156.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.157 157 – Paula Whelan & Roy Parker

4.157.1 Submission -

The submission raises four potential issues:

i. Request for Further Information and Lack of Details on CPO
ii. Inaccurate CPO Maps
iii. Design Detail and Constitutional Rights
iv. Project Timelines

4.157.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section of this report.

4.158 158 – Pauline Fogarty

4.158.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise
iii. Removal of slip roads

4.158.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.159 159 – Peadar Ward

4.159.1 Submission -

The submission raises four potential issues:

i. Impact to Property and Access
ii. Impact to Shankill Village Community Environment
iii. Insufficient Cycling Infrastructure in Shankill
iv. N11 / M11 Alternate Route Options

4.159.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.160 160 – Pearse Nolan

4.160.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction
iii. Foxrock Church/ Kill Lane Junction

4.160.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.161 161 – Philomena O'Riordan

4.161.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Review of Design Alternatives

vii. Adequacy of Environmental Assessment

viii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

ix. Impact to Green Amenity Areas

x. Impact to Shankill Village & Community

xi. Public Consultation

4.161.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.162 162 – PM O'Loughlin Shankill Limited

4.162.1 Submission -

The submission raised the following issues:

i. Impact to Business

ii. Loss of Parking

iii. Impact on Safety

iv. Need for the Proposed Scheme

v. Consultation & Engagement

vi. EIAR Not Comprehensive

vii. Request for Oral Hearing

4.162.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.163 163 – Pola Finegan

4.163.1 Submission -

The submission raised the following issues:

i. Need for the Scheme
ii. Impact to trees
iii. Impact to wildlife and environment
iv. Impact to the local community
v. Anti-social behaviour
vi. Corbawn Lane
vii. Impact to public realm
viii. Alternative suggestions

4.163.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.164 164 – Professor Patrick Davey

4.164.1 Submission -

The submission raised the following issues:

i. Need for the Scheme
ii. Impact to trees
iii. Impact to wildlife and environment
iv. Impact to air quality
v. Impact to the local community
vi. Impact to pedestrian and cycle infrastructure
vii. Corbawn Lane
viii. Alternative suggestions

4.164.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.165 165 – Rathmichael National School

4.165.1 Submission -

The submission raises seven potential issues:

i. Quality of Maps and Plans
ii. Impact on Boundary Wall and Planting
iii. Concern for Impact on School Facilities
iv. Proposed Outdoor Canopy
v. Impact to Cycling Infrastructure
vi. Construction Management
vii. Oral Hearing Request

4.165.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.10.2 of this report.

4.166 166 – Rathmichael Parish School

4.166.1 Submission -

The submission raises seven potential issues:

i. Quality of Maps and Plans
ii. Impact on Boundary Wall and Planting
iii. Concern for Impact on School Facilities
iv. Proposed Outdoor Canopy
v. Impact to Cycling Infrastructure
vi. Construction Management
vii. Oral Hearing Request

4.166.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.10.3 of this report.

4.167 167 – Rathmichael Residents Association

4.167.1 Submission -

The submission raised the following issues:

i. Impact to Safety (for Pedestrians & Cyclists)
ii. Impact to Shankill Village & Community
iii. Impact During Construction

4.167.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.168 168 – Rayna Connery & Owen Tighe

4.168.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Loss of community green space
iii. Impact to air quality and noise
iv. Loss of privacy
v. Impact to parking

4.168.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.169 169 – Redmond & Judith O'Leary

4.169.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Investment and intervention to improve bus reliability
iii. Concern for cyclists along the N11 Stillorgan Road
iv. Johnstown Junction

4.169.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.170 170 – Redrock Donnybrook Ltd.

4.170.1 Submission -

The submission raised the following issue:

i. Boundary of the proposed development

4.170.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.11 of this report.

4.171 171 – Religious Sisters of Charity

4.171.1 Submission -

The submission raises three potential issues:

i. Insufficient Detail in Design
ii. Temporary and Permanent Access
iii. Impact on Future Development

4.171.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.12 of this report.

4.172 172 – Residents of South Park

4.172.1 Submission -

The submission raised the following issues:

i. Proposed laneway

ii. Need for the Scheme
iii. Impact to parking
iv. Impact to biodiversity and wildlife
v. Impact to security & privacy
vi. Impact to access & egress

4.172.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.6 of this report.

4.173 173 – Richard Noonan

4.173.1 Submission -

The submission raised the following issues:

i. Impact to Bus Services & Journey Time Benefits
ii. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
iii. Impact to Safety (for Pedestrians & Cyclists)
iv. Review of Design Alternatives
v. Adequacy of Environmental Assessment
vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

4.173.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.174 174 – Rod & Mary Allsop

4.174.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Deficiency in Traffic and Transport Assessment
vii. Review of Design Alternatives
viii. Adequacy of Environmental Assessment
ix. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
x. Impact to Green Amenity Areas
xi. Impact to Shankill Village & Community

4.174.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.175 175 – Ross Lawless & Lisa Kenny

4.175.1 Submission -

The submission raises eight potential issues:

i. Impact to Property Due to CPO
ii. Query on Site Being Used as Construction Compound
iii. Extent of Temporary Land Take and Impact on Residents During Construction
iv. Legal Owners
v. Need for the Proposed Scheme in Shankill
vi. Impact on Shankill village and Local Business in Shankill
vii. Impact on Parking and Business in Bray
viii. Impact to Trees and Biodiversity in Shankill

4.175.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.13 of this report.

4.176 176 – Roy Parker

4.176.1 Submission -

The submission raised the following issues:

i. Request for Further Information and Lack of Details on CPO
ii. Inaccurate CPO Maps
iii. Design Detail and Constitutional Rights
iv. Project Timelines

4.176.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.177 177 – Ruth Kennedy

4.177.1 Submission -

The submission raised the following issues:

i. Pedestrian entrance / laneway
ii. Anti-social behaviour
iii. Insufficient public consultation
iv. Alternative access options

v. Impact to safety

4.177.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.178 178 – Ruth Stewart

4.178.1 Submission -

The submission raised the following issues:

i. Impact on biodiversity, green space, street trees and public amenity
ii. Proposed improvements to Proposed Scheme design
iii. Landscaping

4.178.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.2.3 of this report.

4.179 179 – Sandra Maguire

4.179.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Investment and intervention to improve bus reliability
iii. Concern for cyclists along the N11 Stillorgan Road
iv. Johnstown Junction

4.179.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.180 180 – Sarah & Peter Brennan

4.180.1 Submission -

The submission raised the following issues:

i. Improvements to Bus Services & Journey Time Benefits
ii. Impact to Traffic Flows
iii. Impact to Safety
iv. Impact to Pedestrian Infrastructure
v. Impact to Cycling Infrastructure
vi. Request for Oral Hearing

vii. Review of Alternatives

4.180.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.181 181 – Sean Leavy

4.181.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Impact to air quality and noise
iii. Insufficient public consultation

4.181.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.182182 – Senator Barry Ward

4.182.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Review of Design Alternatives
vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
viii. Impact to Green Amenity Areas
ix. Impact to Shankill Village & Community
x. Public Consultation
xi. Impact to Heritage & Architecture

4.182.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.183183 – Shamrock Hill Mgmt. Ltd.

4.183.1 Submission -

The submission raised the following issues:

i. CPO of the land

ii. Stop Line and Raised Table

iii. Landscape

iv. Indemnity

4.183.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.2 of this report.

4.184 184 – Shane Gethings

4.184.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Benefits of the Proposed Scheme

iii. Impact to Bus Services & Journey Time Benefits

iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority

v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Deficiency in Traffic and Transport Assessment

vii. Impact to Safety (for Pedestrians & Cyclists)

viii. Review of Design Alternatives

ix. Adequacy of Environmental Assessment

x. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

xi. Impact to Green Amenity Areas

xii. Impact to Shankill Village & Community

xiii. Public Consultation

xiv. Impact to Heritage & Architecture

4.184.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.185 185 – Shanganagh Marble & Stone Centre

4.185.1 Submission -

The submission raised the following issues:

i. Protected Structure Status

ii. Land Use Zoning

iii. Negative Impact of Client's Business Operations

iv. Alternative Options

4.185.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.14 of this report.

4.186 186 – Shankill Community Action

4.186.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming
vi. Deficiency in Traffic and Transport Assessment
vii. Impact to Cycle Infrastructure
viii. Impact to Safety (for Pedestrians & Cyclists)
ix. Review of Design Alternatives
x. Adequacy of Environmental Assessment
xi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
xii. Impact to Green Amenity Areas
xiii. Impact to Shankill Village & Community
xiv. Public Consultation
xv. Impact to Health & Wellbeing
xvi. Impact to Business
xvii. Impact to Heritage & Architecture

4.186.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.187 187 – Shankill Tidy Towns

4.187.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Benefits of the Proposed Scheme
iii. Impact to Bus Services & Journey Time Benefits
iv. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
v. Impact to Traffic Flows, Speed Limit, and Traffic Calming

vi. Deficiency in Traffic and Transport Assessment

vii. Impact to Cycle Infrastructure

viii. Impact to Safety (for Pedestrians & Cyclists)

ix. Review of Design Alternatives

x. Adequacy of Environmental Assessment

xi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

xii. Impact to Green Amenity Areas

xiii. Impact to Shankill Village & Community

xiv. Public Consultation

xv. Impact to Health & Wellbeing

xvi. Impact to Business

xvii. Impact to Heritage & Architecture

4.187.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.188 188 – Sharon & Nigel Rogers

4.188.1 Submission -

The submission raises three potential issues:

i. Impact to Trees, Boundary Wall, Property, Access, and Gate

ii. Impact to Shankill Village Community and Environment

iii. Impact to Safety and Speeding Issues

4.188.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.189 189 – Shekur Bonomally

4.189.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Bus Services & Journey Time Benefits

iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iv. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

v. Impact to Shankill Village & Community

vi. Request for Oral Hearing

vii. Impact to Privacy

4.189.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.190 190 – Simon Geelon

4.190.1 Submission -

The submission raised the following issues:

i. Impact to Bus Services & Journey Time Benefits
ii. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming
iv. Impact to Cycle Infrastructure
v. Impact to Safety (for Pedestrians & Cyclists)
vi. Review of Design Alternatives
vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
viii. Impact to Shankill Village & Community
ix. Impact to Heritage & Architecture
x. Request for Oral Hearing
xi. Lack of detail in relation to policy

4.190.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.191 191 – Siobhan Mac Cobb

4.191.1 Submission -

The submission raised the following issues:

i. Need for the Scheme
ii. Impact to trees
iii. Impact to wildlife and environment
iv. Impact to the local community
v. Corbawn Lane
vi. Alternative suggestions
vii. Impacts to safety
viii. Insufficient public consultation

4.191.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.192 192 – Sir Marc Cochrane

4.192.1 Submission -

The submission raises five potential issues:

i. Land Use and Non-compliance with DLRCC Development Plan and Shanganagh-Woodbrook LAP

ii. Significant Impacts on Woodbrook Estate Heritage Features and Mature Trees Including Demolition of Protected Structure (Woodbrook Side Lodge)

iii. Impact During Construction

iv. Alternative Proposals

v. Consultation

4.192.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.15 of this report.

4.193 193 – Sophie Wynne-Evans

4.193.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

iv. Impact to Shankill Village & Community

4.193.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.194 194 – Stephen & Marie Hedderman

4.194.1 Submission -

The submission raised the following issues:

i. Benefits of the Proposed Scheme

ii. N11/M11 Route Options

iii. Impact to Safety

iv. Lack of Cycling Infrastructure

v. Removal of Roundabouts

vi. Impact to Environment

vii. Support for the Proposed Scheme

4.194.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.195 195 – Stephen & Patricia Kelly

4.195.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Impact to Bus Services & Journey Time Benefits

iii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iv. Impact to Safety (for Pedestrians & Cyclists)

v. Review of Design Alternatives

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Shankill Village & Community

4.195.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.196 196 – Susan & Gareth Fanning

4.196.1 Submission -

The submission raised the following issues:

i. Impact to Bus Services & Journey Time Benefits

ii. Impact to Traffic Flows, Speed Limit, and Traffic Calming

iii. Deficiency in Traffic and Transport Assessment

iv. Impact to Cycle Infrastructure

v. Impact to Safety (for Pedestrians & Cyclists)

vi. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

vii. Impact to Shankill Village & Community

viii. Request for Oral Hearing

4.196.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.197 197 – Suzanne Cook

4.197.1 Submission -

The submission raised the following issues:

i. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

4.197.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.198 198 – Teresa Deering

4.198.1 Submission -

The submission raised the following issue:

i. Loss of Green Area

4.198.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.3.4.1 of this report.

4.199 199 – Terroirs

4.199.1 Submission -

The submission raised the following issues:

i. Access to Shop During Construction
ii. Pedestrian Access Along Morehampton Road During Construction
iii. Impact on Business - Requirement for Loading Bay & Disabled Parking
iv. Impact on Village
v. Requirement for Traffic Calming
vi. Requirement for Pedestrian Crossing at Junction with Brendan Road

4.199.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.200 200 – The Congregation of Christian Brothers

4.200.1 Submission -

The submission raises one potential issue:

i. Relocation of Bus Stop and Access/ Egress to the Proposed Development at Woodbrook College

4.200.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.16 of this report.

4.201 201 – The Donnybrook Partnership

4.201.1 Submission -

The submission raised the following issues:

i. Impact on Development
ii. Lack of Detail in Mapping

4.201.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.1 of this report.

4.202 202 – Tom Wade

4.202.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction

4.202.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.203 203 – Tony Hearne & Marian Hearne

4.203.1 Submission -

The submission raised the following issues:

i. Cycle track along the N11 Stillorgan Road mainline as per the EPR Design
ii. Visibility
iii. Concern on pedestrian safety due to reduced footpath

4.203.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.5.4 of this report.

4.204 204 – Transport Infrastructure Ireland

4.204.1 Submission -

The submission is then structured in three parts:

i. National Roads Policy and National Road Network Maintenance and Safety
ii. National Road Interactions/ Mitigations Requirements and Recommendations
    a. Proposed scheme (at the intersection of Sections 3c and 4a), Interactions with the M11 at the Bray North (Wilford Roundabout)
    b. Proposed scheme (at the intersection of Sections 2b and 3a), Interactions with the N11, M11 and M50 by works to and in the vicinity of the Loughlinstown Roundabout (N11/M11 / R837 /Parc Na Silla).

c. Proposed scheme (Sections 2a and 2b}, Interactions with the Nil the Loughlinstown Roundabout (N11/M11 / R837 /Parc Na Silla) to Mount Merrion

iii. Necessary national road network mitigation as part of the BusConnects scheme proposal

iv. National Road Network Recommendations

4.204.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.12 of this report.

4.205 205 – Tricia McGrath

4.205.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme

ii. Consideration of Alternatives and Options Assessment

iii. Alternate N11/M11 Bus Priority Interim Scheme

iv. Benefits of the Proposed Scheme

v. Impact to Bus Services & Journey Time Benefits

vi. Impact to Safety (for Pedestrians & Cyclists)

vii. Review of Design Alternatives

viii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)

ix. Impact to Shankill Village & Community

x. Public Consultation

xi. Impact to Health & Wellbeing

xii. Impact to Heritage & Architecture

4.205.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.206 206 – Trustees of St James Church

4.206.1 Submission -

The submission raises six potential issues:

i. Impact to Boundary Wall and Trees

ii. Impact to Access

iii. Missing CPO Detail

iv. Project Timelines

v. Design Details and Constitutional Rights

vi. Oral Hearing Request

4.206.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.12.17 of this report.

4.207 207 – Twomey's Supermarkets Limited

4.207.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section
ii. Newtown Park/ Leopardstown Junction
iii. Foxrock Church/ Kill Lane Junction

4.207.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.208 208 – Una Bannon

4.208.1 Submission -

The submission raised the following issues:

i. Need to the Proposed Scheme
ii. Impact to Bus Services & Journey Time Benefits
iii. Upgrade Roundabouts to Signalised Junction and Signal Control Priority
iv. Impact to Traffic Flows, Speed Limit, and Traffic Calming
v. Impact to Cycle Infrastructure to Safety (for Pedestrians & Cyclists)
vi. Review of Design Alternatives
vii. Impact to Environment (Trees, Biodiversity, Climate, Air Quality, Noise, and Landscape)
viii. Impact to Shankill Village & Community
ix. Impact to Heritage & Architecture
x. Impact to Health & Wellbeing
xi. Support for the Proposed Scheme

4.208.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.

4.209 209 – Violet Doherty

4.209.1 Submission -

The submission raised the following issues:

i. Removal of mature trees
ii. Safety and vandalism

iii. Impact to air quality and noise

4.209.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.210 210 – Wicklow County Council

4.210.1 Submission -

The submission raised the following issues:

i. Concern the loss of parking along Castle Street

4.210.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.13 of this report.

4.211 211 – Wicklow County Council

4.211.1 Submission –

The submission raised the following issues:

i. Remove the proposed bus lane on Castle Street

4.211.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.13.14 of this report.

4.212 212 – William Riordan

4.212.1 Submission -

The submission raised the following issues:

i. Removal of slip lanes for the junctions along the N11 Stillorgan Road section

4.212.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.8 of this report.

4.213 213 – Willow Park Residents

4.213.1 Submission -

The submission raised the following issues:

i. Sound and privacy barrier
ii. Laneway
iii. Impact to trees
iv. Pedestrian safety

4.213.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.7 of this report.

4.214 214 – Windsor Motors

4.214.1 Submission -

The submission raised the following issues:

i. Impact on Access and Egress
ii. Loss of Visibility, Marketing and Brand Effectiveness
iii. Upgrade of Wilford Roundabout to Signalised Junction
iv. Impacts on Business Operations

4.214.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.10.4 of this report.

4.215 215 – Yongjing Xie

4.215.1 Submission -

The submission raised the following issues:

i. Removal of mature trees

4.215.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.4 of this report.

4.216 216 – Zoe Stephenson & Adam Wong

4.216.1 Submission -

The submission raised the following issues:

i. Support for the Proposed Scheme
ii. Need to the Proposed Scheme
iii. Improvements to Bus Services & Journey Time Benefits
iv. Improvements to Cycling Infrastructure
v. N11/M11 Suggestion
vi. Removal of Roundabouts
vii. Impact to Traffic Flows
viii. Impact to Trees

4.216.2 Response to Submission

Detailed responses to the issues raised by this submission have been provided in Section 3.9 of this report.