

**Templeogue /
Rathfarnham to City
Centre Core Bus
Corridor Scheme**

**NTA Observations on
the Proposed Scheme
CPO Objections**

December 2023

**BUS
CONNECTS**

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

Contents

1.	Introduction	1
1.1	Introduction	1
1.2	Overview of Objections Received	1
2.	Response to Objections to the CPO	3
2.1	General Issues Not Related to any Specific Geographic Area	3
2.1.1	Common Issues Raised and Responses	3
2.2	Proposed Scheme at Templeogue Road	41
2.2.1	Overview of Submissions Received	41
2.2.2	Common Issues Raised and Responses	41
2.3	Proposed Scheme at Rathfarnham Road	57
2.3.1	Overview of Submissions Received	57
2.3.2	Common Issues Raised and Responses	57
2.4	Proposed Scheme at Terenure and Rathgar	106
2.4.1	Overview of Submissions Received	106
2.4.2	Common Issues Raised and Responses	106
2.5	Proposed Scheme at Rathmines	145
2.5.1	Overview of Submissions Received	145
2.5.2	Common Issues Raised and Responses	145
3.	Response to Individual Objections to the CPO	156
3.1	CPO-01 – Aidan Neill – 65 Rathfarnham Road	156
3.1.1	Description of Proposed Scheme at this location	156
3.1.2	Summary of the Points of Objection to the CPO by Aidan Neill	159
3.1.3	Responses to the Points of Objection	159
3.2	CPO-02 – Allision Dwyer– 71 Camden Street Lower	162
3.2.1	Description of Proposed Scheme at this location	162
3.2.2	Summary of the Points of Objection to the CPO by Allison Dwyer	166
3.2.3	Responses to the Points of Objection	167
3.3	CPO-03 – Anita Mac Aleavey– 53 Terenure Road East	179
3.3.1	Description of Proposed Scheme at this location	179
3.3.2	Summary of the Points of Objection to the CPO by Anita Mac Aleavey	182
3.3.3	Responses to the Points of Objection	182
3.4	CPO-04 – Ann Kennedy– 62 Terenure Road East	184
3.4.1	Description of Proposed Scheme at this location	184
3.4.2	Summary of the Points of Objection to the CPO by Ann Kennedy	187
3.4.3	Responses to the Points of Objection	187
3.5	CPO-05 – Ashfield Place Management CLG – Ashfield Place, Templeogue Road	188
3.5.1	Description of Proposed Scheme at this location	188
3.5.2	Summary of the Points of Objection to the CPO by Ashfield Place CLG	191
3.5.3	Responses to the Points of Objection	191
3.6	CPO-06 – Bernard Colman and Mary Muldoon– 48 Rathfarnham Road	193
3.6.1	Description of Proposed Scheme at this location	193
3.6.2	Summary of the Points of Objection to the CPO by Bernard Colman and Mary Muldoon	196

3.6.3	Responses to the Points of Objection	197
3.7	CPO-07 – Brendan Timbs– 63 Rathfarnham Road	210
3.7.1	Description of Proposed Scheme at this location	210
3.7.2	Summary of the Points of Objection to the CPO by Brendan Timbs	213
3.7.3	Responses to the Points of Objection	216
3.8	CPO-08 – Brian & Ethna Healy– 11 Rathfarnham Wood	238
3.8.1	Description of Proposed Scheme at this location	238
3.8.2	Summary of the Points of Objection to the CPO by Brian & Ethna Healy	241
3.8.3	Responses to the Points of Objection	242
3.9	CPO-09 – Brid & Tom Rafter – 46 Rathfarnham Road	256
3.9.1	Description of Proposed Scheme at this location	256
3.9.2	Summary of the Points of Objection to the CPO by Brid and Tom Rafter	260
3.9.3	Responses to the Points of Objection	261
3.10	CPO-10 – Celine & John Cullen – 14 Fortrose Park	274
3.10.1	Description of Proposed Scheme at this location	274
3.10.2	Summary of the Points of Objection to the CPO by Celine and John Cullen	277
3.10.3	Responses to the Points of Objection	277
3.11	CPO-11 – Christopher Langheld and Others – 72/73 Camden Street Lower, Dublin 2	280
3.11.1	Description of Proposed Scheme at this location	280
3.11.2	Summary of the Points of Objection to the CPO by Christopher Langheld and Others	283
3.11.3	Responses to the Points of Objection	283
3.12	CPO-12 – Ciara McElinn – 12 Rathfarnham Wood	284
3.12.1	Description of Proposed Scheme at this location	284
3.12.2	Summary of the Points of Objection to the CPO by Ciara McElinn	287
3.12.3	Responses to the Points of Objection	288
3.13	CPO-13 – Claire Hughes & Fergus Bolster – 44 Rathfarnham Road Terenure	289
3.13.1	Description of Proposed Scheme at this location	289
3.13.2	Summary of the Points of Objection to the CPO by Claire Hughes & Fergus Bolster	292
3.13.3	Responses to the Points of Objection	293
3.14	CPO-14 – Conal & Racquel O'Donnell– 76 Terenure Road East	306
3.14.1	Description of Proposed Scheme at this location	306
3.14.2	Summary of the Points of Objection to the CPO by Conal & Racquel O'Donnell	308
3.14.3	Responses to the Points of Objection	309
3.15	CPO-15 – Daniel & Jackie Durkan – 315 Templeogue Road	324
3.15.1	Description of Proposed Scheme at this location	324
3.15.2	Summary of the Points of Objection to the CPO by Daniel and Jackie Durkan	326
3.15.3	Responses to the Points of Objection	327
3.16	CPO-16 – Dearbhail Shannon– 6 The Townhouses, Terenure Road East	331
3.16.1	Description of Proposed Scheme at this location	331
3.16.2	Summary of the Points of Objection to the CPO by Dearbhail Shannon	334
3.16.3	Responses to the Points of Objection	335
3.17	CPO-17 – Denise Russell– 44 Templeogue Road	338
3.17.1	Description of Proposed Scheme at this location	338
3.17.2	Summary of the Points of Objection to the CPO by Denise Russell	340
3.17.3	Responses to the Points of Objection	341
3.18	CPO-18 – Eaton Hall Owners Management Company–Eaton Hall, Terenure Road North	351
3.18.1	Description of Proposed Scheme at this location	351

3.18.2	Summary of the Points of Objection to the CPO by Eaton Hall Owners’ Management Company	354
3.18.3	Responses to the Points of Objection	354
3.19	CPO-19 – Elaine Timbs– 63 Rathfarnham Road	355
3.19.1	Description of Proposed Scheme at this location	355
3.19.2	Summary of the Points of Objection to the CPO by Elaine Timbs	359
3.19.3	Responses to the Points of Objection	362
3.20	CPO-20 – Greg & Audrey Turley – 59 Terenure Road East	362
3.20.1	Description of Proposed Scheme at this location	362
3.20.2	Summary of the Points of Objection to the CPO by Greg and Audrey Turley	364
3.20.3	Responses to the Points of Objection	366
3.21	CPO-21 – Henry Lennon – 53 Rathfarnham Road	383
3.21.1	Description of Proposed Scheme at this location	383
3.21.2	Summary of the Points of Objection to the CPO by Henry Lennon	387
3.21.3	Responses to the Points of Objection	388
3.22	CPO-22 – James J & Catherine Finn – 11 Lissenfield, Rathmines	394
3.22.1	Description of Proposed Scheme at this location	394
3.22.2	Summary of the Points of Objection to the CPO by James. J & Catherine Finn	398
3.22.3	Responses to the Points of Objection	398
3.23	CPO-23 – James M Bourke & Ilona De Burgh– 4 The Townhouses, 73-75 Terenure Road East	398
3.23.1	Description of Proposed Scheme at this location	398
3.23.2	Summary of the Points of Objection to the CPO by James M Bourke & Ilona De Burgh	401
3.23.3	Responses to the Points of Objection	402
3.24	CPO-24 – Jane Neill– 65 Rathfarnham Road	403
3.24.1	Description of Proposed Scheme at this location	403
3.24.2	Summary of the Points of Objection to the CPO by Jane Neill	406
3.25	CPO-25 – Joan Scully– 61 Rathfarnham Road	406
3.25.1	Description of Proposed Scheme at this location	406
3.25.2	Summary of the Points of Objection to the CPO by Joan Scully	409
3.25.3	Responses to the Points of Objection	409
3.26	CPO-26 – John & Marian Deaton – 44 Richmond Street South	413
3.26.1	Description of Proposed Scheme at this location	413
3.26.2	Summary of the Points of Objection to the CPO by John & Marian Deaton	415
3.26.3	Responses to the Points of Objection	416
3.27	CPO-27 – Joseph Phelan – 78 Terenure Road East	424
3.27.1	Description of Proposed Scheme at this location	424
3.27.2	Summary of the Points of Objection to the CPO by Joseph Phelan	426
3.27.3	Responses to the Points of Objection	427
3.28	CPO-28 – Joseph Turley – 45 Terenure Road East	428
3.28.1	Description of Proposed Scheme at this location	428
3.28.2	Summary of the Points of Objection to the CPO by Joseph Turley	431
3.28.3	Responses to the Points of Objection	431
3.29	CPO-29 – Karen Lynch– 8 Rathfarnham Wood	431
3.29.1	Description of Proposed Scheme at this location	431
3.29.2	Summary of the Points of Objection to the CPO by Karen Lynch	434
3.29.3	Responses to the Points of Objection	435
3.30	CPO- 30 – Kathleen and Peter McManamon – 71 Rathfarnham Road	439
3.30.1	Description of Proposed Scheme at this location	439

3.30.2	Summary of the Points of Objection to the CPO by Katheen and Peter McManamon	442
3.30.3	Responses to the Points of Objection	442
3.31	CPO-31 – Liam Bell – 63 Terenure Road East	448
3.31.1	Description of Proposed Scheme at this location	448
3.31.2	Summary of the Points of Objection to the CPO by Liam Bell	451
3.31.3	Responses to the Points of Objection	453
3.32	CPO-32 – Linda & James Hennessey – 50 Rathfarnham Road	454
3.32.1	Description of Proposed Scheme at this location	454
3.32.2	Summary of the Points of Objection to the CPO by Linda & James Hennessey	457
3.32.3	Responses to the Points of Objection	458
3.33	CPO-33 – Lissonfield Management Company CLG	458
3.33.1	Description of Proposed Scheme at this location	458
3.33.2	Summary of the Points of Objection to the CPO by Lissonfield Management Company CLG	461
3.33.3	Responses to the Points of Objection	461
3.34	CPO-34 – Little Sisters of the Assumption – 42 Rathfarnham Road	461
3.34.1	Description of Proposed Scheme at this location	461
3.34.2	Summary of the Points of Objection to the CPO by Little Sisters of the Assumption	464
3.34.3	Responses to the Points of Objection	465
3.35	CPO-35 – Lorna Callanan– 55 Rathfarnham Road	465
3.35.1	Description of Proposed Scheme at this location	465
3.35.2	Summary of the Points of Objection to the CPO by Lorna Callanan	468
3.35.3	Responses to the Points of Objection	469
3.36	CPO-36 – Marcus Purcell & Family– 67 Rathfarnham Road	477
3.36.1	Description of Proposed Scheme at this location	477
3.36.2	Summary of the Points of Objection to the CPO by Marcus Purcell & Family	479
3.36.3	Responses to the Points of Objection	481
3.37	CPO-37 – Margaret Silke – 67 Terenure Road East	484
3.37.1	Description of Proposed Scheme at this location	484
3.37.2	Summary of the Points of Objection to the CPO by Margaret Silke	487
3.37.3	Responses to the Points of Objection	489
3.38	CPO-38 – Maria Blair – 10 Rathfarnham Wood	489
3.38.1	Description of Proposed Scheme at this location	489
3.38.2	Summary of the Points of Objection to the CPO by Maria Blair	492
3.38.3	Responses to the Points of Objection	493
3.39	CPO-39 – Mark Fitzgerald– 149 Rathfarnham Road	496
3.39.1	Description of Proposed Scheme at this location	496
3.39.2	Summary of the Points of Objection to the CPO by Mark Fitzgerald	500
3.39.3	Responses to the Points of Objection	500
3.40	CPO-40 – Mary O'Mahony – 9 Rathfarnham Wood	504
3.40.1	Description of Proposed Scheme at this location	504
3.40.2	Summary of the Points of Objection to the CPO Mary O'Mahony	507
3.40.3	Response to the Points of Objection	508
3.41	CPO-41 – Maureen Egan – 311 Templeogue Road	512
3.41.1	Description of Proposed Scheme at this location	512
3.41.2	Summary of the Points of Objection to the CPO Maureen Egan	516
3.41.3	Response to the Points of Objection	516
3.42	CPO-42 – Michael Bermingham – 6 The Townhouses, Terenure Road East	521

3.42.1	Description of Proposed Scheme at this location	521
3.42.2	Summary of the Points of Objection to the CPO Michael Bermingham	524
3.42.3	Response to the Points of Objection	525
3.43	CPO- 43 – Michael McAuley – 143 Rathfarnham Road	525
3.43.1	Description of Proposed Scheme at this location	525
3.43.2	Summary of the Points of Objection to the CPO Michael McAuley	529
3.43.3	Response to the Points of Objection	530
3.44	CPO- 44 – Michael O'Donoghue – 61 Terenure Road East	533
3.44.1	Description of Proposed Scheme at this location	533
3.44.2	Summary of the Points of Objection to the CPO Michael O'Donoghue	536
3.44.3	Response to the Points of Objection	537
3.45	CPO- 45 – Moto4u c/o Trevor Baker – 1a Main Street	546
3.45.1	Description of Proposed Scheme at this location	546
3.45.2	Summary of the Points of Objection to the CPO Motor4u c/o Trevor Baker	550
3.45.3	Response to the Points of Objection	550
3.46	CPO- 46 – Mr Andrew Fahy and Mrs Denise (Boyle) Fahy – 325 Templeogue Road	552
3.46.1	Description of Proposed Scheme at this location	552
3.46.2	Summary of the Points of Objection to the CPO Andrew Fahy and Denise (Boyle) Fahy	555
3.46.3	Response to the Points of Objection	556
3.47	CPO-47 – Patrick J M Durcan and Mary Clare McCormack Durcan – 60 Terenure Road East	563
3.47.1	Description of Proposed Scheme at this location	563
3.47.2	Summary of the Points of Objection to the CPO by Patrick J M Durcan and Mary Clare McCormack Durcan	565
3.47.3	Responses to the Points of Objection	566
3.48	CPO-48 – Paul Dormer – 15 Fortrose Park	569
3.48.1	Description of Proposed Scheme at this location	569
3.48.2	Summary of the Points of Objection to the CPO by Paul Dormer	572
3.48.3	Responses to the Points of Objection	573
3.49	CPO- 49 – Peter Lynch – 55 Rathfarnham Road	582
3.49.1	Description of Proposed Scheme at this location	582
3.49.2	Summary of the Points of Objection to the CPO by Peter Lynch	584
3.49.3	Responses to the Points of Objection	585
3.50	CPO-50 – Peter McAuley– 141 Rathfarnham Road	592
3.50.1	Description of Proposed Scheme at this location	592
3.50.2	Summary of the Points of Objection to the CPO by Peter McAuley	595
3.50.3	Responses to the Points of Objection	595
3.51	CPO-51 – Reflective Measurement Systems Ltd– 59A Terenure Road East	596
3.51.1	Description of Proposed Scheme at this location	596
3.51.2	Summary of the Points of Objection to the CPO by Reflective Measurement Systems Ltd	599
3.51.3	Responses to the Points of Objection	600
3.52	CPO-52 – Ria Duignan – 47 Lissenfield	602
3.52.1	Description of Proposed Scheme at this location	602
3.52.2	Summary of the Points of Objection to the CPO by Ria Duignan	604
3.52.3	Responses to the Points of Objection	605
3.53	CPO-53 – Rose and Michael O'Neill– 3 Village Green, Rathfarnham Road	606
3.53.1	Description of Proposed Scheme at this location	606
3.53.2	Summary of the Points of Objection to the CPO by Rose and Michael O'Neill	608

3.53.3	Responses to the Points of Objection	609
3.54	CPO-54 – Sean Silke – 67 Terenure Road East	610
3.54.1	Description of Proposed Scheme at this location	610
3.54.2	Summary of the Points of Objection to the CPO by Sean Silke	613
3.54.3	Responses to the Points of Objection	615
3.55	CPO- 55 – Stonepark Investments Ltd. – Earl’s Court, 80 Terenure Road East	615
3.55.1	Description of Proposed Scheme at this location	615
3.55.2	Summary of the Points of Objection to the CPO by Stonepark investments Limited	618
3.55.3	Responses to the Points of Objection	618
3.56	CPO-56 – The Estate Ann Bernadette Smith – 69 Terenure Road East	621
3.56.1	Description of Proposed Scheme at this location	621
3.56.2	Summary of the Points of Objection to the CPO by The Estate Ann Bernadette Smith	625
3.56.3	Responses to the Points of Objection	626
3.57	CPO- 57 – Thomas MacAleavey– 53 Terenure Road East	626
3.57.1	Description of Proposed Scheme at this location	626
3.57.2	Summary of the Points of Objection to the CPO by Thomas MacAleavey	629
3.57.3	Responses to the Points of Objection	629
3.58	CPO-58 – Thomas Sexton– 9 Rathfarnham Wood	630
3.58.1	Description of Proposed Scheme at this location	630
3.58.2	Summary of the Points of Objection to the CPO by Thomas Sexton	633
3.58.3	Responses to the Points of Objection	633
3.59	CPO-59 – Tom Kelly– 2 The Townhouses, Terenure Road East	638
3.59.1	Description of Proposed Scheme at this location	638
3.59.2	Summary of the Points of Objection to the CPO by Tom Kelly	641
3.59.3	Responses to the Points of Objection	642
3.60	CPO-60 – Vera Bannigan – 1A Main Street, Rathfarnham	646
3.60.1	Description of Proposed Scheme at this location	646
3.60.2	Summary of the Points of Objection to the CPO by Vera Bannigan	650
3.60.3	Responses to the Points of Objection	650
3.61	CPO-61– Vivienne and Joan Ryan– 145 Rathfarnham Road	651
3.61.1	Description of Proposed Scheme at this location	651
3.61.2	Summary of the Points of Objection to the CPO by Vivienne and Joan Ryan	655
3.61.3	Responses to the Points of Objection	656
3.62	CPO-62 –Zorana and Sladjan Kuzmanovic– 60 Terenure Road East	667
3.62.1	Description of Proposed Scheme at this location	667
3.62.2	Summary of the Points of Objection to the CPO by Zorana and Sladjan Kuzmanovic	669
3.62.3	Responses to the Points of Objection	670
3.63	CPO-63 – South Dublin County Council	675
3.63.1	Description of Proposed Scheme at this location	675
3.63.2	Summary of the Points of Objection to the CPO by SDCC	689
3.63.3	Responses to the Points of Objection	690
3.63.4	Conclusion	736

Appendices

Appendix A

ESB Asset Alteration Drawings

A-1

A-1

1. Introduction

1.1 Introduction

This report provides a response to the objections made to An Bord Pleanála (“the Board”) in response to the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 (“the CPO”), which relates to the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme (“the Proposed Scheme”).

An overview of the objections is provided in Section 1.2 below.

Section 2 presents an overview of common issues raised throughout the CPO objection submissions, broken down into the main geographic areas of the scheme.

The issues raised in the objections to the CPO, together with the relevant responses to each individual CPO Objection, are provided in Section 3.

1.2 Overview of Objections Received

63 objections to the CPO were provided to the NTA by the Board. Each objection was individually numbered by the Board and this numbering system has been retained for ease of reference in this report.

Twenty-eight of the parties who submitted the objections also made an identical submission in response to the Section 51 Application for the Proposed Scheme.

Table 1.2.1 below sets out the locations referred by the objections and the key issues raised.

Table 1.2.1 Summary of Objections in Response to the CPO

Location	No of CPO Objections	Key Issues Raised
Templeogue Road	7	<ul style="list-style-type: none"> • Accessibility to amenities and impact on local business • Safety concerns associated with discontinuity of cycle tracks on Templeogue Road • Traffic volumes on Templeogue Road • Loss of privacy and increased noise and air pollution • Lack of clarity around CPO • Traffic impact of Templeogue Road Inbound Bus Gate and Associated Traffic Management Proposals • Impact on local businesses • Removal of trees • Impact on access to property
Rathfarnham Wood	4	<ul style="list-style-type: none"> • Impact on Rathfarnham Castle Park • Consideration of alternative bus signalling • Consider stopping scheme before Rathfarnham Castle • Climate impact of tree removal • Biodiversity impact • Replacement of the Castle Wall • No consideration of River Glin • Landscape and visual • Impact on woodland playground • Option Assessment along Rathfarnham Road • Relocation of Bus Stops on Rathfarnham Road • Air and Noise Pollution on Rathfarnham Road • Increased Traffic and Congestion and consequential safety concerns • Impact of CPO
Rathfarnham Road	25	<ul style="list-style-type: none"> • Option Assessment along Rathfarnham Road • Relocation of Bus Stops on Rathfarnham Road • Air and Noise Pollution on Rathfarnham Road

Location	No of CPO Objections	Key Issues Raised
		<ul style="list-style-type: none"> Impact of CPO Increased Traffic and Congestion and consequential safety concerns Impact on business in villages including Terenure due to loss of parking etc Impact on gradients of driveways
Terenure Road East	20	<ul style="list-style-type: none"> Justification for corridor routing along Terenure Road East/Rathgar Road Proposed one-way for general traffic on Rathgar Road Removal of parking/loading in Rathgar Village Removal of parking/loading in Terenure Village Removal of trees on Terenure Road East Impact of CPO Impact on Heritage properties along Terenure Road East Relocation of bus stops Existing Bus Priority Signal on Terenure Road East is Adequate Impact on access to/from Rathgar Road from the north Traffic impact of proposals at Terenure Cross
Terenure Road North	1	<ul style="list-style-type: none"> Impact on access to property
Rathmines Road Lower	3	<ul style="list-style-type: none"> Impact of proposed bus gate on access
Richmond Street South	1	<ul style="list-style-type: none"> Impact on coalholes Proposed footpath width Impact on lightwell
Camden Street	2	<ul style="list-style-type: none"> Impact during construction Extinguishment of Rights Scale of mapping CPO Brought under Inappropriate Provisions

Table 1.2.2 below sets out the location referred by each of the objections.

Table 1.2.2 Location Referred to by each Objection to the CPO (by ABP Reference Number)

No	Location	No	Location	No	Location
1	Rathfarnham Road	22	Rathmines Road Lower	43	Rathfarnham Road
2	Camden Street	23	Terenure Road East	44	Terenure Road East
3	Terenure Road East	24	Rathfarnham Road	45	Rathfarnham Road
4	Terenure Road East	25	Rathfarnham Road	46	Templeogue Road
5	Templeogue Road	26	Richmond Street South	47	Terenure Road East
6	Rathfarnham Road	27	Terenure Road East	48	Templeogue Road
7	Rathfarnham Road	28	Terenure Road East	49	Rathfarnham Road
8	Rathfarnham Road	29	Rathfarnham Wood	50	Rathfarnham Road
9	Rathfarnham Road	30	Rathfarnham Road	51	Terenure Road East
10	Templeogue Road	31	Terenure Road East	52	Rathmines Road Lower
11	Camden Street	32	Rathfarnham Road	53	Rathfarnham Road
12	Rathfarnham Wood	33	Rathmines Road Lower	54	Terenure Road East
13	Rathfarnham Road	34	Rathfarnham Road	55	Terenure Road East
14	Terenure Road East	35	Rathfarnham Road	56	Terenure Road East
15	Templeogue Road	36	Rathfarnham Road	57	Terenure Road East
16	Terenure Road East	37	Terenure Road East	58	Rathfarnham Wood
17	Templeogue Road	38	Rathfarnham Wood	59	Terenure Road East
18	Terenure Road North	39	Rathfarnham Road	60	Rathfarnham Road

No	Location	No	Location	No	Location
19	Rathfarnham Road	40	Rathfarnham Road	61	Rathfarnham Road
20	Terenure Road East	41	Templeogue Road	62	Terenure Road East
21	Rathfarnham Road	42	Terenure Road East	63	Multiple locations

2. Response to Objections to the CPO

2.1 General Issues Not Related to any Specific Geographic Area

A number of submissions raised concerns around general items not specific to any geographic area as described below.

2.1.1 Common Issues Raised and Responses

A number of issues were raised, and these are listed below:

- 1) Need for the Scheme
- 2) Benefits of the Proposed Scheme
- 3) Combining two routes late in the day but keeping other routes separate
- 4) Traffic baseline data out of date (COVID-19)
- 5) Changes to work/travel patterns due to the Covid-19 pandemic
- 6) Metro is a more appropriate solution for this corridor
- 7) Cumulative impact of all CBC schemes on traffic not considered in EIAR
- 8) No park and ride considered
- 9) Removal of trees generally along the scheme
- 10) Implementation of other less intrusive BusConnects measures first
- 11) Inadequate Public Consultation and contravention of Aarhus Convention
- 12) General Concerns about Air Quality
- 13) General Concerns about Noise

2.1.1.1 Need for the Scheme

Summary of Issue Raised

A number of submissions queried the need for the scheme, particularly in light of changes to travel patterns as a result of Covid-19.

Response to Issue Raised

Need for the Scheme

Chapter 2 in Volume 3 of the EIAR presents in detail the need for the Proposed Scheme. Section 2.1 summarises this:

Sustainable transport infrastructure assists in creating more sustainable communities and healthier places while also stimulating our economic development. It 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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks. Furthermore, there are key sections of the current bus lanes that are not operational on a 24-hour basis in addition to being shared with both formal and informal parking facilities and cyclists which compromises the reliability and effectiveness of the bus services in these areas.

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. 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

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 (NTA 2019a) outlined that in 2019 (prior to COVID-19 restrictions) travel by sustainable modes accounted for 72% of all trips into Dublin City, 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.

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.

Further detail on the need for the Proposed Scheme is presented in Chapter 2.

2.1.1.2 Benefits of the Proposed Scheme

Summary of Issue Raised

A number of submissions suggested that the benefits of the Proposed Scheme were minimal and as such did not warrant the significant investment. Typically, these submissions focussed on the journey time savings that the Proposed Scheme would deliver to buses.

Response to Issue Raised

The objectives of the Proposed Scheme are set out in Chapter 2 of Volume 2 of the EIAR:

- *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.*

A number of these objectives are quantified and set out in the various parts of the EIAR and summarised below.

People movement

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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport. It is noted that the modelled forecasts for the 2028 opening year indicate:

- A significant decrease in people travelling to/from the city by car in each peak period with decreases of 30% and 39% in the AM and PM peak periods respectively;
- A significant increase in people travelling by public transport in each peak period with increases of 123% and 145% in the AM and PM peak periods respectively;

- A significant increase in people walking/cycling in each peak period with increases of 79% and 91% in the AM and PM peak periods respectively;

This is summarised in in Figure 2.1.1 and Figure 2.1.2 (reproduced from diagrams 6.6 and 6.7 in Chapter 6).

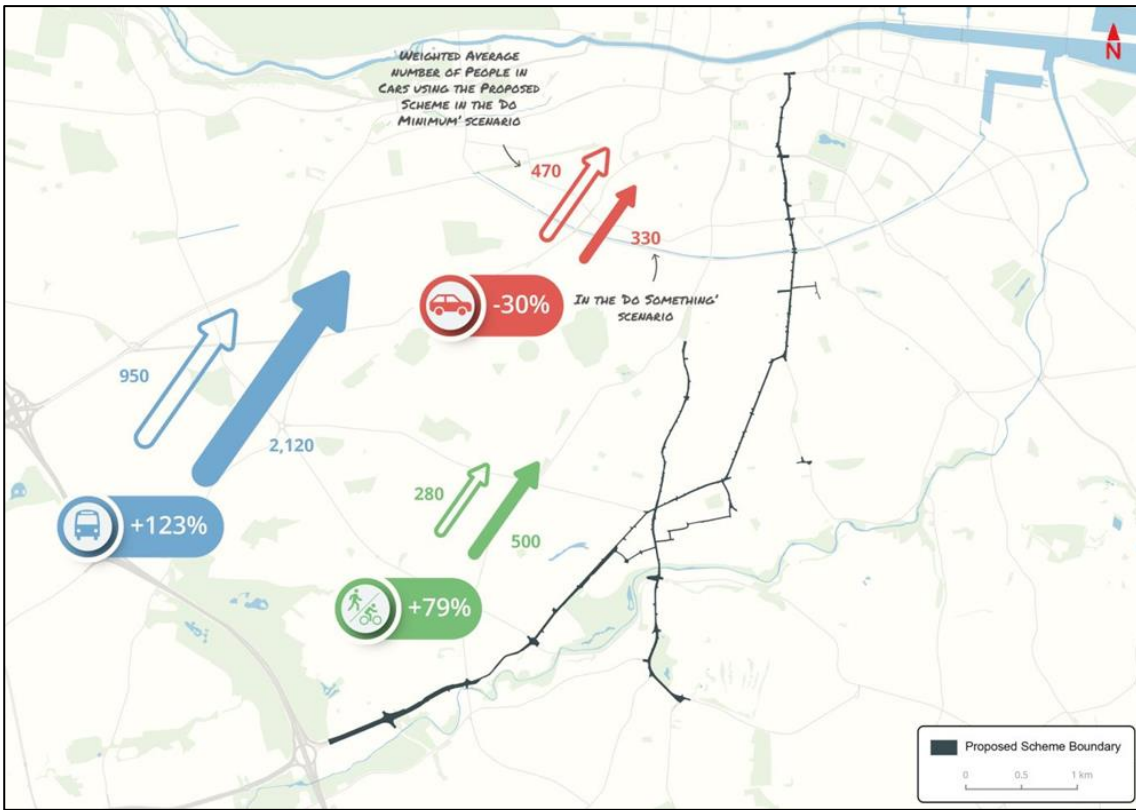


Figure 2.1.1 People Movement by Mode travelling along the Proposed Scheme during 2028 AM Peak Hour (Diagram 6.6 in EIAR Chapter 6)

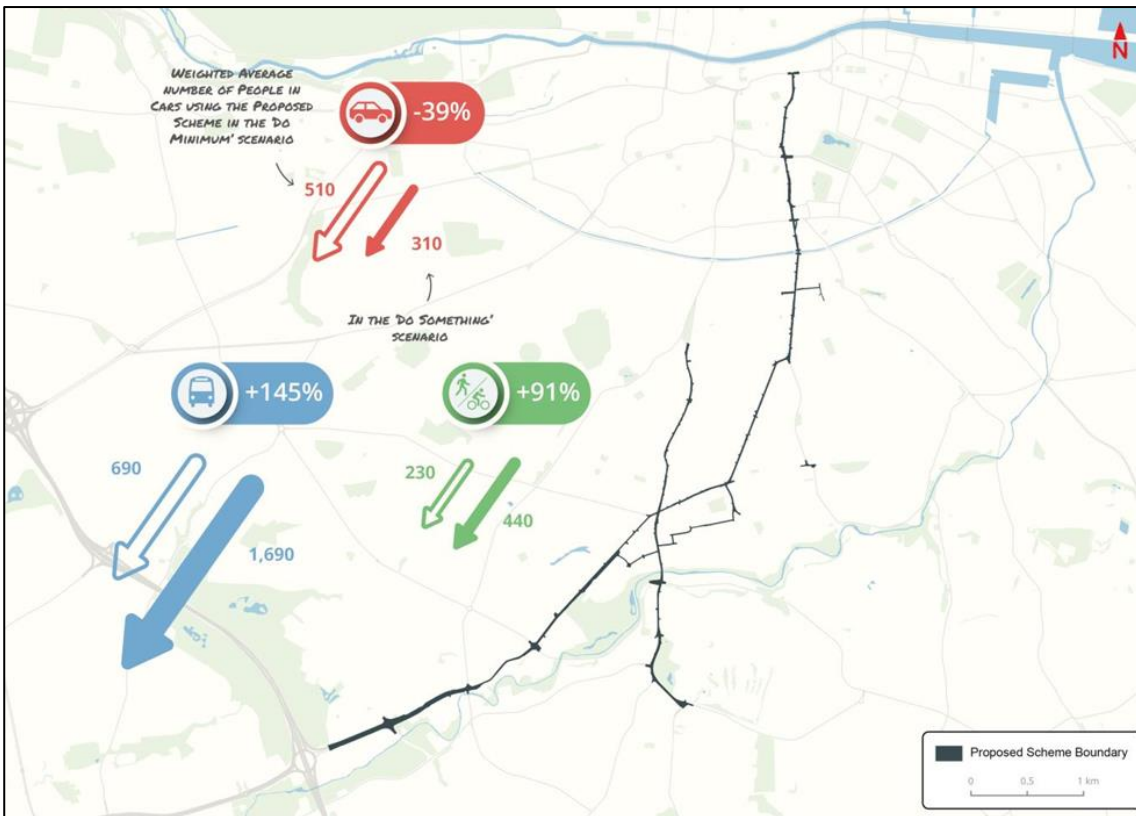


Figure 2.1.2 People Movement by Mode travelling along the Proposed Scheme during 2028 PM Peak Hour (Diagram 6.7 in EIAR Chapter 6)

As noted in section 6.4.6.1.8.1:

The Proposed Scheme will facilitate a step change in the level of segregated cycling provision in comparison with existing conditions along the entire length of the corridor. The transport modelling is conservative in terms of the predicted cycling mode share. The Proposed Scheme has been designed to cater for much higher levels of cycling uptake than modelled outputs, to cater for long-term trends in travel behaviours as people make sustainable travel lifestyle choices, which would otherwise not be achievable in the absence of the Proposed Scheme.

Mode Split

The Proposed Scheme will facilitate a significant modal shift towards sustainable modes. This is evidenced in table 6.42 and 6.43 in Chapter 6 of Volume 2 of the EIA for the AM and PM Peak hours respectively.

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	470	28%	330	11%	-140	-30%
		Public Transport	950	56%	2,120	72%	1,170	123%
		Walking	170	10%	140	5%	-30	-18%
		Cycling	110	6%	360	12%	250	227%
		Combined Walking/Cycling	280	16%	500	17%	220	79%
		Sustainable Modes Total	1,230	72%	2,620	89%	1,390	113%
		Total (All modes)	1,700	100%	2,950	100%	1,250	74%

Figure 2.1.3 Modal Shift of 2028 AM Peak Hour along Proposed Scheme (EIA Chapter 6 Table 6.42)

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	510	36%	310	13%	-200	-39%
		Public Transport	690	48%	1,690	69%	1,000	145%
		Walking	150	10%	130	5%	-20	-13%
		Cycling	80	6%	310	13%	230	288%
		Combined Walking/Cycling	230	16%	440	18%	210	91%
		Sustainable Modes Total	920	64%	2,130	87%	1,210	132%
		Total (All modes)	1,430	64%	2,440	87%	1,010	71%

Figure 2.1.4 Modal Shift of 2028 PM Peak Hour along Proposed Scheme (EIA Chapter 6 Table 6.43)

In the AM peak, the results indicate a 74% increase in people moved as a result of the Proposed Scheme and 113% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

In the PM peak, the results indicate a 71% increase in people moved as a result of the Proposed Scheme and 132% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

Bus Journey Times and Journey Time Reliability

Templeogue to Terenure Section

Section 6.4.6.1.11.2 of EIA Volume 2 Chapter 6 Traffic & Transport which assessed Bus Journey Time and Reliability changes as a result of the Proposed Scheme notes the following:

Inbound direction

Average journey times for the inbound A3 service in 2028 Opening Year and in 2043 Design Year can be seen in Table 6.48. A breakdown of the changes in average journey times for all other bus services using the Proposed Scheme can be found in Appendix A6.4.3 (Average Bus Journey Times).

Table 6.48: A3 Service Bus Average Journey Times (Inbound Direction)

Peak Hour	Do Minimum (minutes)	Do Something (minutes)	Difference (minutes)	% Difference
2028 AM	11.7	10.1	-1.6	-14%
2028 PM	11.0	9.9	-1.1	-10%
2043 AM	10.7	10.0	-0.7	-7%
2043 PM	10.8	9.8	-1.0	-9%

Additional information regarding the range of journey times (minimum, maximum, average and standard deviation) for inbound A3 buses in the Do Minimum (red) and Do Something (blue) can be seen in Table 6.49 and Diagram 6.18. Each dot in the diagram represents the journey time for each individual bus in each scenario. A larger range of journey times are an indication of lower levels of reliability in a given scenario.

Table 6.49: A3 Service – Range of Journey Times (Inbound Direction)

Peak Hour	Do Minimum				Do Something			
	MIN	MAX	AVG	STDEV	MIN	MAX	AVG	STDEV
2028 AM	8.9	14.3	11.7	1.2	8.7	12.8	10.1	0.9
2028 PM	9.0	13.3	11.0	1.0	8.2	12.2	9.9	0.8
2043 AM	8.7	14.0	10.7	1.0	8.4	12.1	10.0	0.7
2043 PM	8.6	12.8	10.8	0.9	8.2	11.2	9.8	0.7

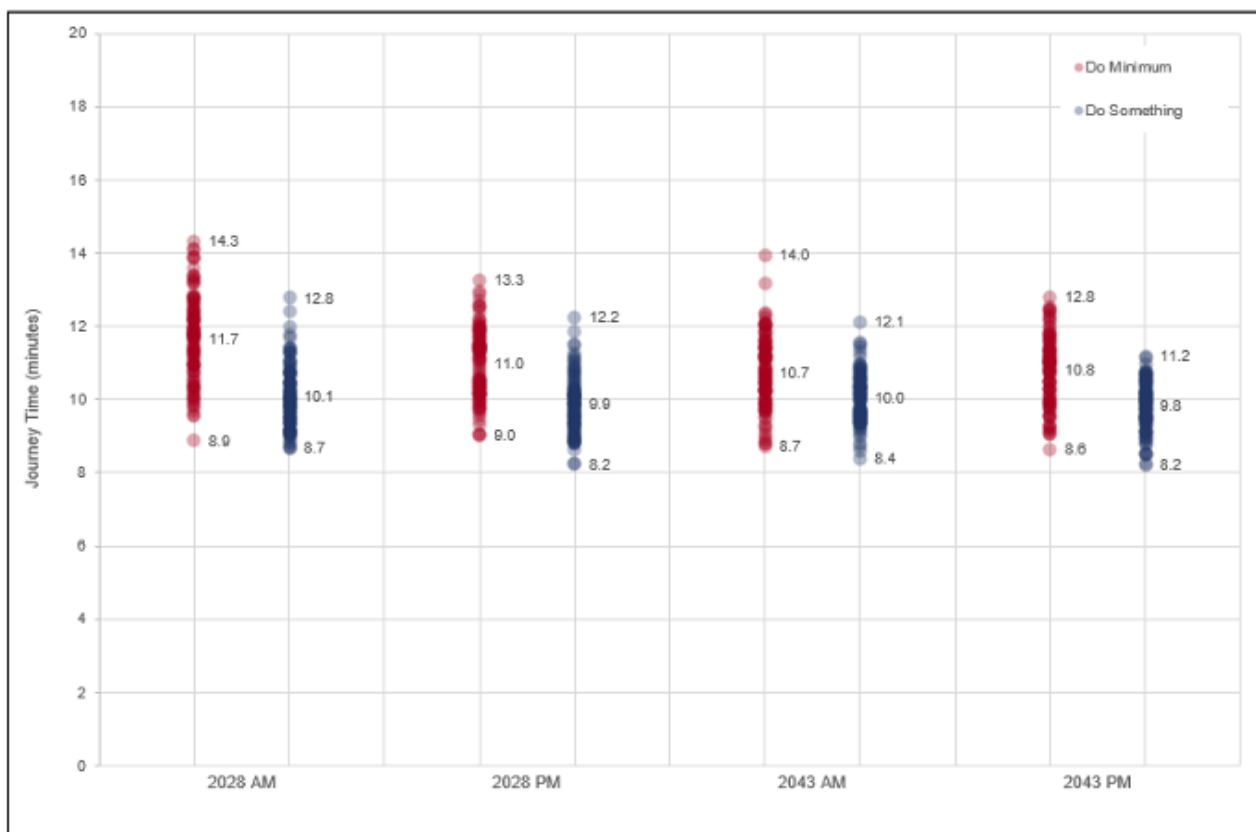


Diagram 6.18: A3 Bus Journey Times (Inbound Direction)

Based on the results presented in Table 6.48 the Proposed Scheme will deliver average inbound journey time savings for A3 service bus passengers of up to 1.6 minutes (14%) in 2028 (AM) and 0.7 minutes (7%) in 2043 (AM). Furthermore, results presented in Diagram 6.18 suggest an improvement in bus journey time reliability in all four 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).

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.

Outbound Direction

Average journey times for the outbound A3 service in 2028 Opening Year and in 2043 Design Year can be seen in Table 6.50. A breakdown of the changes in average journey times for all other bus services using this section of the Proposed Scheme can be found in Appendix A6.4.3 (Average Bus Journey Times).

Table 6.50: A3 Service Bus Journey Times (Outbound Direction)

Peak Hour	Do Minimum (minutes)	Do Something (minutes)	Difference (minutes)	% Difference
2028 AM	10.7	9.3	-1.4	-13%
2028 PM	10.9	9.3	-1.6	-15%
2043 AM	10.4	9.3	-1.1	-11%
2043 PM	10.2	9.4	-0.8	-8%

Figure 2.1.5 A3 Service Journey Times (Outbound Direction) (EIAR Chapter 6 Table 6.50)

Additional information regarding the range of journey times (minimum, maximum, average and standard deviation) for outbound A3 buses in the Do Minimum (red) and Do Something (blue) can be seen in Table 6.51 and Diagram 6.23. Each dot represents the journey time for each individual bus in each scenario. A larger range of journey times are an indication of lower levels of reliability.

Table 6.51: A3 Service – Range of Journey Times (Outbound Direction)

Peak Hour	Do Minimum				Do Something			
	MIN	MAX	AVG	STDEV	MIN	MAX	AVG	STDEV
2028 AM	8.4	13.4	10.7	1.1	8.1	10.8	9.3	0.6
2028 PM	9.3	13.2	10.9	1.0	8.2	10.7	9.3	0.5
2043 AM	8.4	13.0	10.4	1.0	8.2	10.6	9.3	0.5
2043 PM	9.1	12.0	10.2	0.8	8.0	11.3	9.4	0.7



Diagram 6.23: A3 Bus Journey Times (Outbound Direction)

Based on the results presented in Table 6.51, the Proposed Scheme will deliver average outbound journey time savings for A3 service bus passengers of up to 1.6 minutes (15%) in 2028 (PM) and 0.8 minutes (8%) in 2043 (PM). Furthermore, results presented in Diagram 6.23 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.

Rathfarnham to City Centre Section

Inbound Direction

Average journey times for the inbound A2 service (which leaves the Proposed Scheme extents at the south arm of the Dame Street/South Great George's Street junction) in the 2028 Opening Year and in the 2043 Design Year can be seen in Table 6.52. A breakdown of the changes in average journey times for all other bus services using the Proposed Scheme can be found in Appendix A6.4.3 (Average Bus Journey Times).

Table 6.52: A2 Service Bus Average Journey Times (Inbound Direction)

Peak Hour	Do Minimum (minutes)	Do Something (minutes)	Difference (minutes)	% Difference
2028 AM	35.2	29.4	-5.8	-16%
2028 PM	31.1	29.1	-2.0	-6%
2043 AM	33.2	29.3	-3.9	-12%
2043 PM	30.7	29.3	-1.4	-5%

Additional information regarding the range of journey times (minimum, maximum, average and standard deviation) for inbound A2 buses in the Do Minimum (red) and Do Something (blue) can be seen in Table 6.53 and Diagram 28. Each dot in the diagram represents the journey time for each individual bus in each scenario. A larger range of journey times are an indication of lower levels of reliability in a given scenario.

Table 6.53: A2 Service – Range of Journey Times (Inbound Direction)

Peak Hour	Do Minimum				Do Something			
	MIN	MAX	AVG	STDEV	MIN	MAX	AVG	STDEV
2028 AM	31.1	40.7	35.2	2.0	25.9	32.4	29.4	1.5
2028 PM	25.8	35.0	31.1	2.2	24.1	33.2	29.1	1.8
2043 AM	29.8	37.6	33.2	1.7	23.3	32.9	29.3	1.6
2043 PM	25.4	34.7	30.7	1.9	25.8	33.6	29.3	1.7

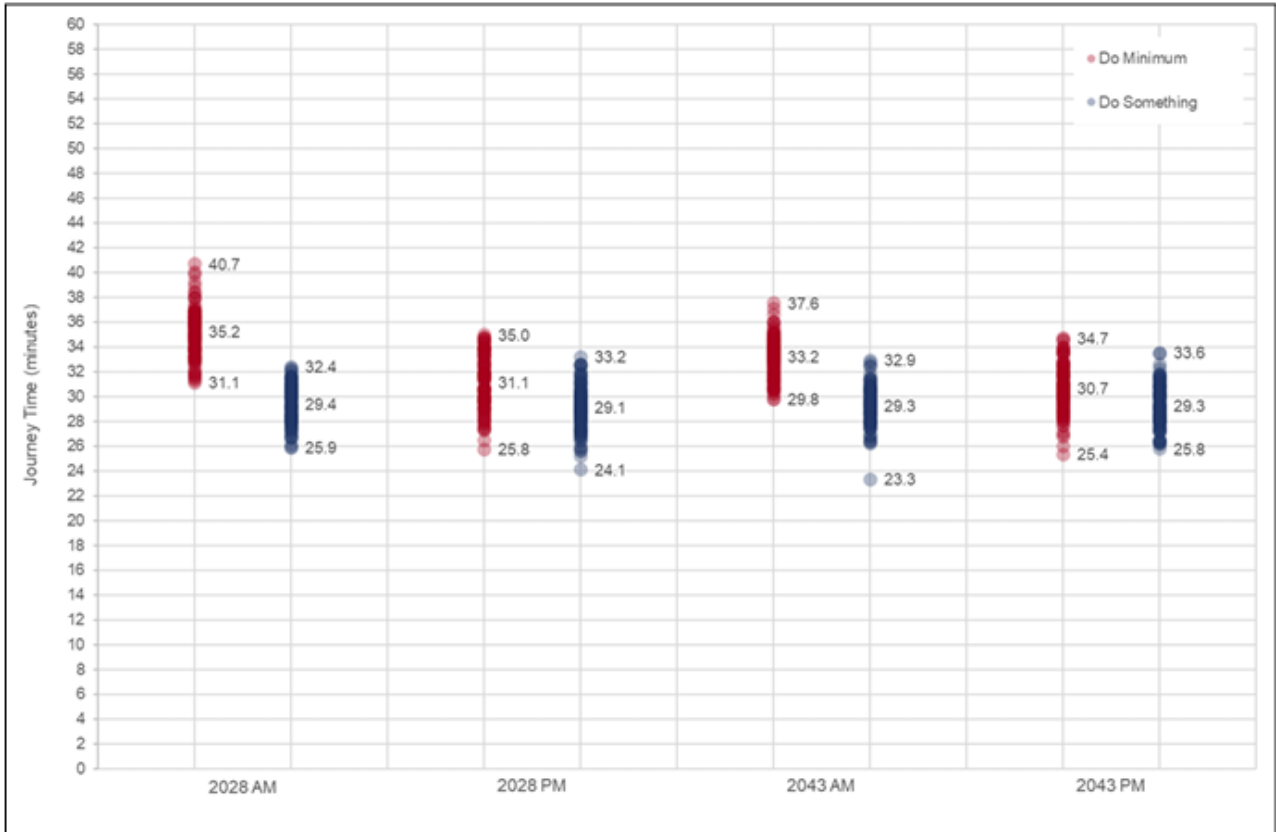


Diagram 6.28: A2 Bus Journey Times (Inbound Direction)

Based on the results presented in Table 6.53, the Proposed Scheme will deliver average inbound journey time savings for A2 service bus passengers of circa 6 minutes in the AM in 2028 and 4 minutes in the AM in 2043. Furthermore, results presented in Diagram 6.29 suggest an improvement in bus journey time reliability 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).

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.

Outbound Direction

Average journey times for the outbound A2 service (which serves the Proposed Scheme extents from (Dame Street to Rathfarnham Wood), in 2028 Opening Year and in 2043 Design Year can be seen in Table 6.54. A breakdown of the changes in average journey times for all other bus services using the Proposed Scheme can be found in Appendix A6.4.3 (Average Bus Journey Times).

Table 6.54: A2 Service Bus Journey Times (Outbound Direction)

Peak Hour	Do Minimum (minutes)	Do Something (minutes)	Difference (minutes)	% Difference
2028 AM	29.5	28.9	-0.6	-2%
2028 PM	35.2	27.0	-8.2	-23%
2043 AM	28.4	28.1	-0.3	-1%
2043 PM	31.1	26.5	-4.6	-15%

Additional information regarding the range of journey times (minimum, maximum, average and standard deviation) for outbound A2 buses in the Do Minimum (red) and Do Something (blue) can be seen in Table 6.55 and Diagram 6.33. Each dot represents the journey time for each individual bus in each scenario. A larger range of journey times are an indication of lower levels of reliability.

Table 6.55: A2 Service – Range of Journey Times (Outbound Direction)

Peak Hour	Do Minimum				Do Something			
	MIN	MAX	AVG	STDEV	MIN	MAX	AVG	STDEV
2028 AM	25.8	33.8	29.5	1.8	24.7	32.2	28.9	1.7
2028 PM	29.3	41.8	35.2	2.4	23.7	30.0	27.0	1.3
2043 AM	25.1	32.8	28.4	1.7	23.6	31.9	28.1	1.6
2043 PM	26.1	35.7	31.1	1.9	23.2	29.4	26.5	1.4

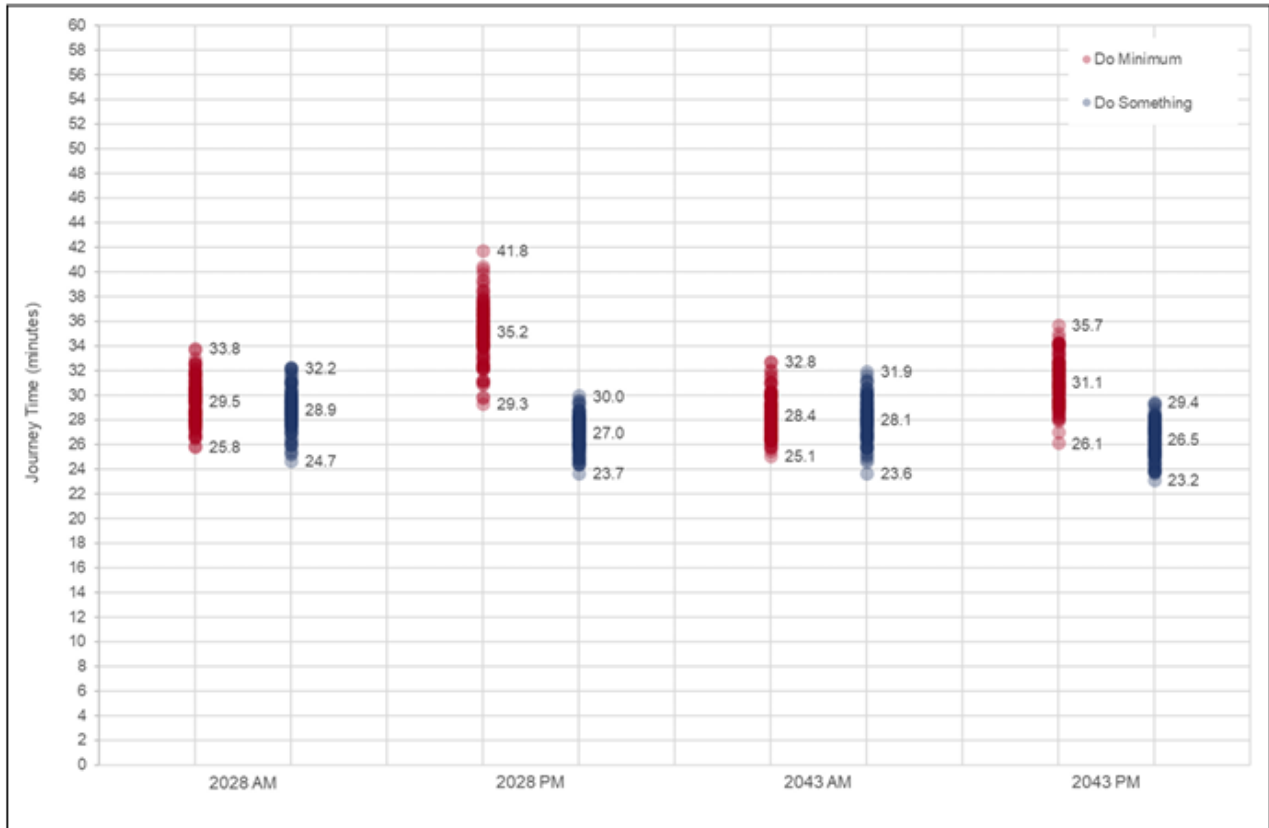


Diagram 6.33: A2 Bus Journey Times (Outbound Direction)

Based on the results presented in Table 6.55, the Proposed Scheme will deliver significant average outbound journey time savings, in the peak direction of travel, for A2 service bus passengers of up to 8.2 minutes (23%) in 2028 (PM) and 4.6 minutes (15%) in 2043 (PM). The Proposed Scheme will deliver modest journey time savings in the non-peak period direction. Furthermore, results presented in Diagram 6.33 suggest an improvement in bus journey time reliability in the two PM peak periods 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).

In the AM peak period in the outbound direction, the improvement in bus journey time reliability is not as notable. This is primarily due to variable journey times through the Terenure Road/Rathfarnham Road junction, where priority is given to the inbound buses. In the PM peak, bus priority 'hurry calls' signalling is provided in the outbound direction only to ensure adequate progression for general traffic through the junction. For this reason, the outbound journey time reliability improvements are more significant in the PM peak, which is appropriate being the peak direction of travel for bus users.

The change in total bus journey time for all buses travelling along both the Templeogue and Rathfarnham sections of the Proposed Scheme, is shown in Table 6.56.

Table 6.56: Total Bus Journey Time

Peak Hour	Do Minimum (vehicle.minutes)	Do Something (vehicle.minutes)	Difference (vehicle.minutes)	%Difference
2028 AM	2240.5	2059.5	-181.0	-8%
2028 PM	2195.2	1930.4	-264.9	-12%
2043 AM	2142.7	1962.8	-179.9	-8%
2043 PM	2050.8	1860.0	-190.8	-9%

Based on the results presented in Table 6.72 modelling indicates that the Proposed Scheme will reduce total bus journey times along the Proposed Scheme by up to 12% in 2028 and 9% in 2043. Based on the AM and PM peak hours alone, this equates to **7.4 hours of savings in 2028 and 6.2 hours in 2043** combined across all buses when compared to the Do Minimum.

On an annual basis this equates to approximately 5,600 hours of bus vehicle savings in 2028 and 7,700 hours in 2043, when considering weekday peak periods only.

Emissions

Chapter 8 Climate of Volume 2 of the EIAR considers the potential climate impacts of the proposed scheme.

The assessment is summarised in Section 8.8.2 which states:

The maintenance CO2e emissions associated with the Operational Phase of the Proposed Scheme, after mitigation, is predicted to be Negligible and Permanent. The operational traffic CO2e emissions associated with the Operational Phase of the Proposed Scheme is predicted to be Negligible and Permanent. Overall, when the carbon emissions associated with the maintenance phase and the Operational Phase are combined, the net GHG emissions will be Negligible and Permanent. Thus, the residual impact from Operational Phase traffic as a result of the Proposed Scheme will be Negligible and Permanent. The Proposed Scheme will also support the delivery of government strategies outlined in the 2023 CAP (DCCA 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.

Based on the analysis outlined above, 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. It is concluded that, the Proposed Scheme will make a significant contribution to reduction in carbon emissions.

It is noted that the implementation of all elements of the BusConnects programme have been considered in the Do Minimum assessment scenario as set out in section 6.4.3.1:

The Do Minimum scenarios (in both 2028 and 2043) include all other elements of the BusConnects Programme of projects (apart from the CBC Infrastructure Works elements) i.e., the new BusConnects routes and services (as part of the revised Dublin Area bus network), new bus fleet, the Next Generation Ticketing and integrated fare structure proposals are included in the Do Minimum scenarios.

As such, the benefits contained in the EIAR, and summarised in this section, represents the incremental benefits associated with the infrastructure improvements.

2.1.1.3 Combining two routes into one scheme

Summary of Issue Raised

A number of the submissions raise concerns about the NTA combining two of the previously separate routes into one scheme when the NTA made its application to the Board for approval under section 51 of the Roads Act. Some of these submissions noted the rationale for this was unclear and that it made it difficult to review and comment on the scheme particulars in the application given the familiarity of the proposals as individual schemes (as presented at the public consultations).

Response to Issue Raised

The Preferred Route Option Report provided as part of the Supplementary Information sets out the rationale for combining.

The Proposed Scheme consists of two sections namely:

- The Templeogue to Terenure section (previously Tallaght to Terenure Core Bus Corridor); and
- The Rathfarnham to City Centre section (previously Rathfarnham to City Centre Core Bus Corridor).

During the non-statutory public consultations and the route selection process up to the choice of the Preferred Route Option (PRO) these two sections had been considered separately. The principle reasons for combining the Templeogue to Terenure and the Rathfarnham to City Centre sections into the Proposed Scheme include: their geographical association, functional interdependence and the fact that the Templeogue to Terenure section joins the Rathfarnham to City Centre section at Terenure Place and shares the remaining section of the route from that junction to the City Centre.

Based on the above it was determined to be appropriate to apply for approval of the scheme as presented.

2.1.1.4 Traffic baseline data out of date (COVID-19)

Summary of Issue Raised

A number of the submissions raise concerns that the traffic data which informed the assessment was collected prior to the COVID-19 pandemic during which travel patterns changed. It is submitted in these submissions that the traffic assessment is therefore based on outdated traffic data.

Response to Issue Raised

The following is noted in Section 2.1 of Chapter 2 of Volume 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 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 pre-pandemic levels. Specifically, Dublin city area bus services carried 12.7m in November 2022, compared to 12.9m in November 2019 representing a 99% recovery.

6.4.6.1.15.1 of Chapter 06 (Traffic & Transport) of Volume 2 of the EIAR has addressed the flexibility in working arrangements brought on following COVID – 19 and states:

“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.

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.”

In summary it is considered that the traffic assessment contained in the EIAR, and the traffic data upon which it is based (collected pre-covid pandemic), represents an accurate basis for the assessment given travel patterns have generally recovered to pre-pandemic levels.

2.1.1.5 Changes to work/travel patterns due to the COVID-19 pandemic

Summary of Issue Raised

A number of the submissions raise concerns that due to the changes to work/travel patterns as a result of the COVID-19 pandemic, there is no need for the scheme as there is less demand for travel.

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 pre-pandemic levels. Specifically, Dublin city area bus services carried 12.7m in November 2022, compared to 12.9m in November 2019 representing a 99% recovery.

The objectives outline in section 2.1 of chapter 2 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.*

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.

2.1.1.6 Metro or light rail is a more appropriate solution for this corridor

Summary of Issue Raised

A number of the submissions request that other options such as Metro or Light Rail are given further consideration for this corridor. These submissions note that such schemes would result in less impact on properties and the environment while also delivering a more appropriate public transport solution for the corridor. Some submissions suggest that the demand projections presented in the modelling work undertaken to inform the Transport Strategy for the Greater Dublin Area 2022 – 2042 Strategy Development indicates that there is sufficient demand to justify a metro.

Response to Issue Raised

The consideration of these and other strategic alternatives have been considered through the preparation of both the GDA Transport Strategy 2016 – 2035 and the new GDA Transport Strategy 2022 – 2042. This is presented Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of the EIAR. Section 3.2.1 states:

The Transport Strategy for the Greater Dublin Area 2022-2042 (Transport Strategy) replaces the prior transport strategy for the period 2016 to 2035. That prior transport strategy set out to contribute to the economic, social, and cultural progress of the Greater Dublin Area (GDA) by providing for the efficient, effective, and sustainable movement of people and goods. In other words, it was about making the Dublin region a better place for people who live and work there, and for those who visit.

Section 3.2.1 goes on to say that:

The challenges outlined in the GDA Transport Strategy 2016 - 2035 and identified need for BusConnects Dublin as determined in the preparation of that prior strategy remain, and the evidence from the detailed corridor studies undertaken in the preparation of the prior strategy is still valid and robust. These studies are set out in section 3.2.2.

Section 3.2.2 sets out the development of the prior strategy and the various studies that informed the strategy.

The prior GDA Transport Strategy 2016-2035 was prepared by the NTA pursuant to Section 12 of the Dublin Transport Authority Act 2008 and approved by the Minister for Transport, Tourism and Sport in February 2016 in accordance with sub-section 12(13) of that Act.

The prior GDA Transport Strategy provided a comprehensive framework to guide the development of transport across the Greater Dublin Region over the period of that strategy. Careful consideration was undertaken of the transport requirements across the seven counties of the GDA, and the prior GDA Transport Strategy then formulated the appropriate transport responses to those requirements.

Various studies and reports were undertaken in the development of the prior GDA Transport Strategy, including:

- *Area-based studies covering the GDA area;*
- *Demand Management Study;*
- *Core Bus Network Study;*
- *Park & Ride Study;*
- *Transport Modelling Analysis; and*
- *Environmental reports.*

Specifically, a Strategic Environmental Assessment (SEA) was undertaken on the prior GDA Transport Strategy (NTA 2016). As set out in the Environmental Report, in respect of which the SEA of the prior GDA Transport Strategy was undertaken, a number of reasonable alternative strategies were devised and assessed, taking into account the objectives and the geographical scope of the strategy. The provisions of the prior GDA Transport Strategy (including bus-based transport modes), were evaluated for potential significant effects, and measures integrated into the prior Strategy on foot of SEA recommendations in order to ensure that potential adverse effects were mitigated. In considering the alternative modes on a corridor basis, the environmental assessment undertaken considered that bus-based projects could contribute towards facilitating the achievement of Ireland's greenhouse gas emission targets in terms of emissions per passenger per kilometre.

In addition to direct studies and analyses undertaken as part of the strategy preparation work, the prior GDA Transport Strategy also took into account prior reports and plans in relation to transport provision. These prior studies included, inter alia, the following:

- *GDA Cycle Network Plan (2013);*
- *Bus Rapid Transit – Core Network Report (2012);*
- *Fingal / North Dublin Transport Study (2015);*
- *Review of the DART Expansion Programme (2015);*
- *Various prior Luas studies (including Line B2 (Bray), Line D1 (Finglas), Line F1, and F2 (Lucan and Liberties), and Line E (2008)); and*
- *Analysis carried for a 2011 Draft Transport Strategy.*

Given the importance of bus transport as the main public transport mode for the overall region, the delivery of an efficient and reliable bus system formed an important element of the prior GDA Transport Strategy, integrated appropriately with the other transport modes. As Dublin is a low-density city with a large geographic footprint, there are few areas with the size and concentration of population necessary to support rail based public transport, and the bus system remains essential to serve the needs of much of the region.

... The development of the prior GDA Transport Strategy took into account the data and analysis provided through the supporting studies and background information and formulated an overall integrated transport system to serve the needs of the GDA up to 2035. In relation to public transport, the prior GDA Transport Strategy and the GDA Transport Strategy 2022-2042 set out a network of heavy rail, metro, light rail and bus proposals, with those networks combining to serve the overall public transport needs of the region.

Consideration has been given to both a light rail or metro option for the corridor and details are presented in Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of the EIAR.

With respect to light rail, Section 3.2.5 states:

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 about 4,000 passengers per hour per direction. (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. That consideration also 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. Likely passenger flows were identified to be within the capacity of bus transport, without reaching the quantum of passenger demand which would support the provision of higher capacity rail solutions.

Section 3.2.2 set out various studies undertaken for the prior GDA Transport Strategy. Arising from these studies and the specific assessment and transport modelling work undertaken for the prior Strategy, it was concluded that a bus-based transport system would be the proposed public transport solution in the corridor of the Proposed Scheme. It was considered that there would be insufficient demand to justify the provision of an additional light rail alternative above what is proposed above, particularly given the low to medium density nature of development in this corridor.

Similar to BRT, environmentally the light rail option compared to the Core Bus Corridor proposal would be more impactful in terms of construction impacts, including flora and fauna, heritage, air and noise. Light rail requires continuous 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 Core Bus Corridor proposals bus-priority can be achieved through short lengths at pinch-points by the use of signal-control priority.

With respect to Metro, Section 3.2.6 states:

"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.

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 not be economically justified within the area covered by this corridor (Corridor D). In addition, the development of an underground metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme, nor would it obviate the need to develop the cycling infrastructure required along the route of the Proposed Scheme.

Environmentally, in comparison to the CBC proposal, the metro alternative 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 bus-based transport solution, bus-priority can be achieved through short lengths at pinch-points by the use of signal-control priority.”

A number of submissions raised concerns around the demand calculations presented in various documents and how this evolved over time. These submissions typically referenced the modelling work undertaken to inform the Transport Strategy for the Greater Dublin Area 2022 – 2042 Strategy Development and as presented in the Modelling Report.

For clarity, the Modelling Report prepared for the 2022 – 2042 Strategy Development presents a number of assessment scenarios which include various assumptions. The initial model runs were to understand the potential upper / hypothetical limit for public transport demand in the corridor, following which demand levels were assessed under various policy, transport supply and demand conditions and assumptions (e.g. increased levels of cycling, changes in travel patterns resulting from Covid-19 etc.) This was done in order to provide a balanced transport strategy that promotes sustainable modes but balances the demand across all modes. A full list of scenarios assessed are presented in Annex 3 Strategy Development Model Run Log of the Modelling Report where in excess of 80 modelled scenarios are listed.

The submissions which query the demand suggest that the demand along the corridor was deliberately reduced along the Rathmines corridor to facilitate a predetermined value that would match that of what the Proposed Scheme was capable of carrying. The changes in public transport demand along the corridor are a function of the iterative process to define the Strategy which best meets the needs of the GDA.

This iterative process is explained in Section 2 of the Modelling Report prepared for the 2022 – 2042 Strategy Development.

It is noted that this application is solely for the infrastructure proposals associated with this corridor. As noted in Section 6.4.6.1.14 Increased Bus Frequency – Resilience Sensitivity Analysis of Chapter 6 states the following:

For the purposes of this EIAR and the transport modelling undertaken in support of the EIAR, no increase in bus service frequency beyond that planned under the current Bus Connects Network redesign proposals was assessed. The bus frequencies used in the modelling are based on the proposed service rollout as part of the BusConnects Network Redesign and are the same in both the Do Minimum and Do Something scenarios. This rollout is currently underway. The rationale for undertaking this approach was that the planning consent being sought and which this EIAR supports is solely for the infrastructural improvements associated with providing bus priority and other sustainable modes measures along the Proposed Scheme.

As noted in 6.4.6.1.14.2 Resilience Testing:

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.

To assess the resilience of the Proposed Scheme to cater for additional bus service frequency provision whilst maintaining a high level of bus journey time reliability, a separate analysis was undertaken in the Proposed Scheme micro-simulation model. 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. The analysis was undertaken in the 2028 Minimum and Do Something models to assess whether the bus priority infrastructure was having the desired impact of protecting bus journey time reliability.

..... The results indicate limited change in average journey times in the Do Something Resilience sensitivity tests per bus. In the Do Minimum Resilience sensitivity test, journey times are more severely impacted, particularly in the AM peak inbound. In the Do Something Resilience sensitivity test bus journey time reliability is maintained with the additional services in place as indicated by the reduced range of journey times compared to the Do Minimum Resilience Test scenario. This highlights the benefit that the Proposed Scheme infrastructure improvements can provide in protecting bus journey time reliability and consistency, as passenger demand continues to grow into the future.

The assessment therefore shows that if required, additional buses can be introduced to match passenger demand of c. 4,500 passengers per hour per direction.

It is noted that the new GDA Transport Strategy 2022 – 2042 acknowledges the need to continue to assess the need for light rail or metro connections to the southwest in future to accommodate future growth which necessitate the need to upgrade the system beyond a bus-based solution post 2042. In terms of metro, section 12.3.2 of the GDA Transport Strategy 2022 – 2042 states:

Measure LRT2 – Further Metro Development

In reviewing and updating the Transport Strategy, which takes place every 6 years, the NTA will assess the requirement to provide additional Metro lines in the GDA based on updated forecast demand for travel and on emerging significant changes in land use and spatial policy, including previously considered options to extend Metrolink southwards towards UCD, or along the existing Luas Green Line, or towards southwest Dublin.

With respect to light rail, section 12.3.8 of the GDA Transport Strategy 2022 – 2042 states:

Measure LRT7 – Post-2042 Luas Lines

The NTA will undertake detailed appraisal, planning and design work for the following Luas lines, with a view to their delivery in the period after 2042:

1. *City Centre to Clongriffin;*
2. *City Centre to Beaumont and Balgriffin;*
3. *Green Line Extension to Tyrrelstown;*
4. *City Centre to Blanchardstown;*
5. *Red Line Reconfiguration to provide the following lines*:*
 - a. *Clondalkin-City Centre; and*
 - b. *Tallaght-Kimmage-City Centre.*
6. *Tallaght to City Centre via Knocklyon*;*
7. *Green Line Reconfiguration to provide the following lines*:*
 - a. *City Centre to Bray via UCD and Sandyford; and*
 - b. *Sandyford to City Centre*

** Subject to Measure LRT2*

It is noted that the Tallaght to City Centre via Knocklyon line could serve areas close to the Proposed Scheme.

2.1.1.7 Cumulative impact of all CBC schemes on traffic not considered in EIAR

Summary of Issue Raised

A number of the submissions noted concern that the cumulative impact of all schemes associated with the BusConnects infrastructure works. Many submissions noted particular concern the cumulative impacts of the Proposed Scheme with immediately adjacent schemes such as the Kimmage to City Centre and Tallaght / Clondalkin to City Centre, did not appear to have been considered. Of particular concern was the cumulative traffic impact of bus gates and traffic management measures proposed along these schemes.

Response to Issue Raised

The potential of cumulative impacts arising from the construction and operation of the Proposed Scheme in combination with other projects (including the other proposed BusConnects schemes) has been considered in Chapter 21 in Volume 2 of the EIAR. Section 21.1 in Chapter 21 states:

“This chapter reports the assessment of cumulative impacts of the Templeogue-Rathfarnham to City Centre Core Bus Corridor Scheme (hereafter referred to the Proposed Scheme) in combination with other existing and or approved projects and projects which, at the time of assessment, were yet to be approved, but for which a decision on such project is reasonably foreseeable over the likely consenting and construction period anticipated for the Proposed Scheme.

In addition, the chapter addresses the potential for interactions between impacts on different environmental factors of the Proposed Scheme itself on the receiving environment.”

Section 21.2.2.1 makes specific reference to the other BusConnects Core Bus Corridors:

“...As noted previously, the other 11 BusConnects Core Bus Corridor schemes were also included for assessment. While each of the other BusConnects Core Bus Corridor schemes will be subject to an application for approval, they have a similar likelihood of going ahead as this Proposed Scheme and therefore, the potential cumulative effects of the other BusConnects Core Bus Corridor schemes are of relevance to the potential cumulative effects of this Proposed Scheme so they were included on the preliminary long list.....”

Section 21.2.7 of EIAR Chapter 21 considers the cumulative traffic impacts for the operation scenario and states: *“For operational cumulative effects including the Proposed Scheme, the assessment has been undertaken based on a scenario where all the other 11 Core Bus Corridor schemes are also operational.”*

Section 21.3.2.1 of Chapter 21 (Cumulative Impacts & Environmental Interactions) of Volume 2 of the EIAR notes the following:

“A multi-tiered modelling framework (described further in Chapter 6 (Traffic & Transport) of this EIAR) was developed to support this iterative design process, whereby the emerging design for each of the Proposed Schemes has been tested using the transport models as part this iteration both in isolation and with all Core Bus Corridor schemes in place. Each of the CBC projects worked closely together to align proposals at direct interface points (e.g., overlapping junctions) as well in the indirect / offline areas where displaced traffic would arise. This included the provision of complimentary traffic management arrangements and/or turn bans to ensure that any displaced traffic was kept to a minimum and/or was maintained on higher capacity roads, whilst continuing to meet scheme objectives along the Proposed Scheme.

For the Proposed Scheme, the iterative process concluded when the design team were satisfied that the Proposed Scheme both in isolation and in combination with the other 11 Core Bus Corridor Schemes, met its required objectives (maximising the people movement capacity of the Proposed Scheme) and that the environmental impacts and level of residual impacts were reduced to a minimum.

Traffic Related Cumulative Effects

To examine the potential cumulative traffic effects that the Proposed Scheme may have in combination with any of the other Core Bus Corridor schemes, an area of influence for each scheme was determined to understand the scale of traffic displacement and its interactions with other schemes. The ‘area of influence’ is the area in which traffic flows are likely to change as a result of the Proposed Scheme measures as indicated by the transport modelling. The outcome of this assessment revealed that the Proposed Scheme has indirect interface with the proposed Kimmage to City Centre Core Bus Corridor Scheme, with modelling indicating some level of traffic displacement between the study areas of each scheme.

In terms of direct interfaces, the Proposed Scheme intersects the Kimmage to City Centre Core Bus Corridor at which the Proposed Scheme interacts at the signalised junction of Harold’s Cross Road / Rathgar Avenue / Kenilworth Square / Kenilworth Park and the junction of Harold’s Cross Road and Parkview Avenue. The BusConnects Infrastructure Team has coordinated the design tie-ins at these locations to ensure a holistic design has been achieved, so that each scheme can be implemented, and integrated, independent of the planning consent process. Further details on the tie-ins between both schemes can be found in Chapter 4 (Proposed Scheme Description) of this EIAR.

When both schemes are operational (as well as all other proposed Core Bus Corridor schemes), this has the effect of constraining the opportunity for traffic to displace onto adjoining / adjacent roads when compared to the effect when only one of the Core Bus Corridor schemes is operational. In addition to this, with all the Core Bus Corridor schemes operational, there is predicted to be a higher modal shift from private car trips to sustainable modes of travel compared to the singular scheme scenario. This is due to the combined effect of all Core Bus Corridor schemes being operational and the journey time savings and reliability for bus travel and the interchange opportunities that this provides to travel around Dublin in combination with the BusConnects network re-design proposals. In addition, the Core Bus Corridor schemes will facilitate a step change in the level of segregated cycling provision in comparison with existing conditions along the entire length of the corridors resulting in more people cycling.

The result of the above is that the cumulative effect of all Core Bus Corridors in operation and in tandem with the roll out of the wider GDA Transport Strategy measures, future growth in overall travel demand is catered for by sustainable modes. No significant negative effects over and above those considered in the standalone assessments for the Operational Phase were predicted in the cumulative impact assessment and therefore no additional mitigation measures are considered necessary.”

Further detail on the cumulative traffic impact is presented in Section 7.2.6.3 of A6.1 Traffic Impact Assessment.

To determine the impact that the Proposed Scheme (in combination with the other proposed Core Bus Corridor schemes) will have in terms of general traffic redistribution, the LAM Opening Year (2028) and Design Year (2043) model results have been used to identify the difference in general traffic flows between the Do Minimum and Do Something scenarios i.e. with and without all proposed Core Bus Corridor schemes in place.

The changes in traffic flows have been presented with reference to TII’s Traffic and Transport Assessment Guidelines (May 2014) i.e., traffic redistribution resulting in an increase or decrease above 100 combined flows (i.e. in a two-way direction) along roads in the vicinity of the Core Bus Corridors in the AM and PM Peak Hours are presented.

The threshold aligns with an approximate 1 vehicle per minute increase or decrease per direction on any given road. This is a very low level of traffic change on any road type and ensures that a robust assessment of the changes in traffic levels are presented.

Diagram 7.13 and Diagram 7.14 below illustrate the difference in traffic flows (Do Minimum vs Do Something) on roads in the AM Peak Hour for the 2028 Opening Year and 2043 Design Year with the Proposed Scheme and all other proposed Core Bus Corridor schemes in place. The diagrams are extracts from Figure 6.13 and 6.15 in TIA Appendix 3 (Maps). Reductions in traffic flows are indicated by the blue lines with increases in traffic flow indicated by the red lines.

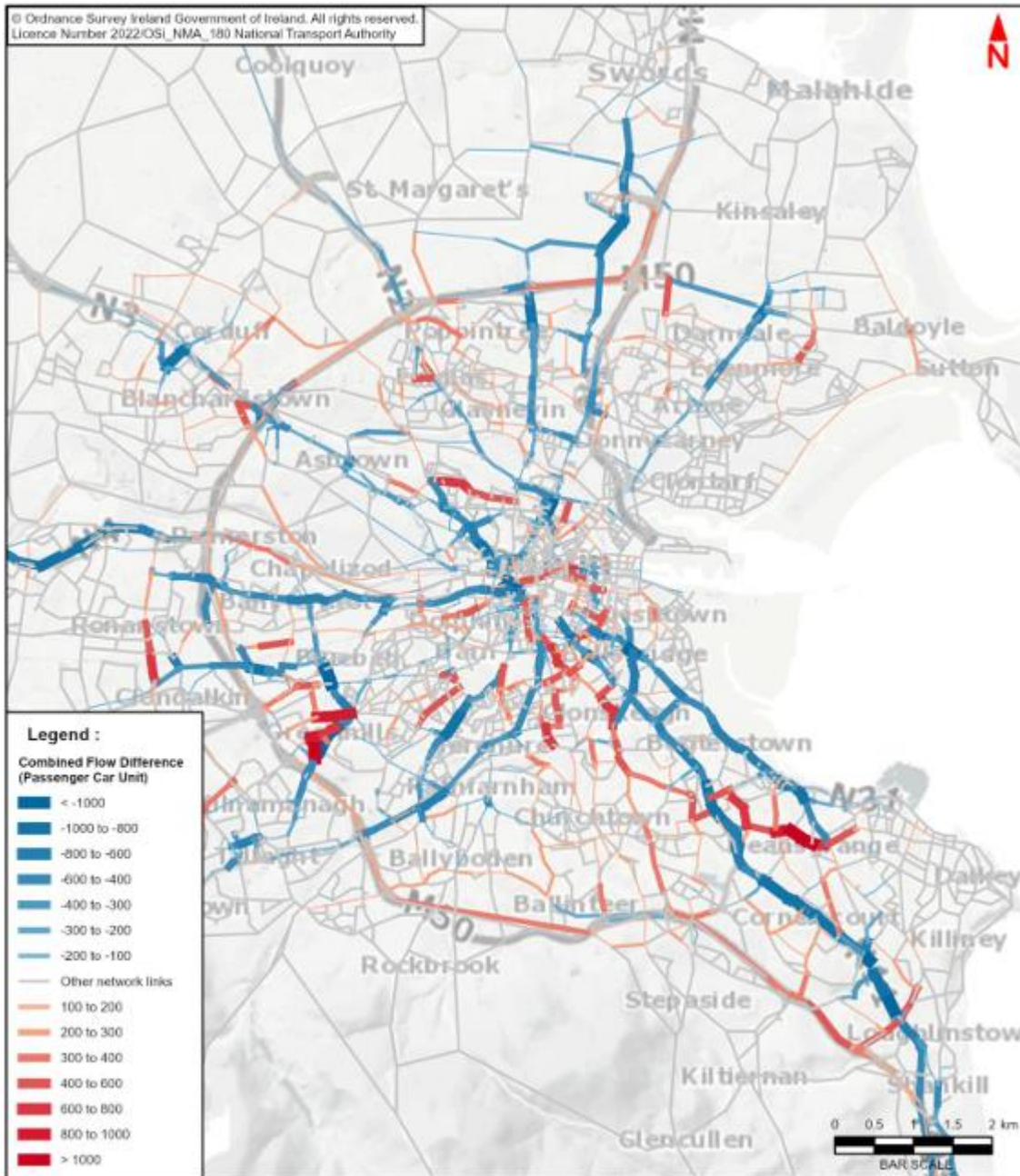


Diagram 7.13: Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year – Cumulative Scenario

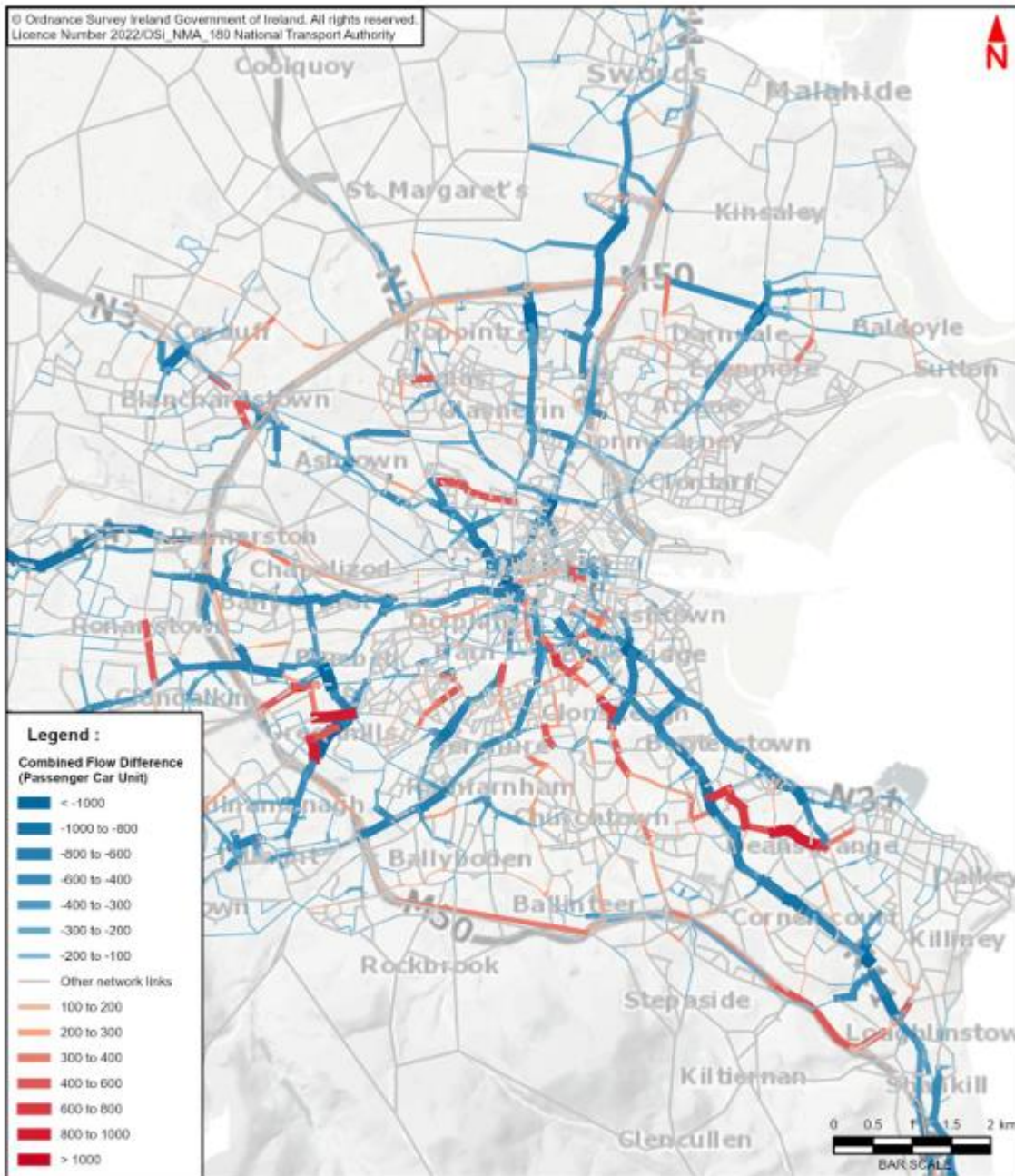


Diagram 7.14: Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2043 Design Year – Cumulative Scenario

Diagram 7.15 and Diagram 7.16 below illustrate the difference in traffic flows (Do Minimum vs Do Something) on roads in the PM Peak Hour for the 2028 Opening Year and 2043 Design Year with the Proposed Scheme and all other proposed Core Bus Corridor schemes in place. The maps are extracts from Figure 6.14 and 6.16 in TIA Appendix 3 (Maps). Reductions in traffic flows are indicated by the blue lines with increases in traffic flow indicated by the red lines.

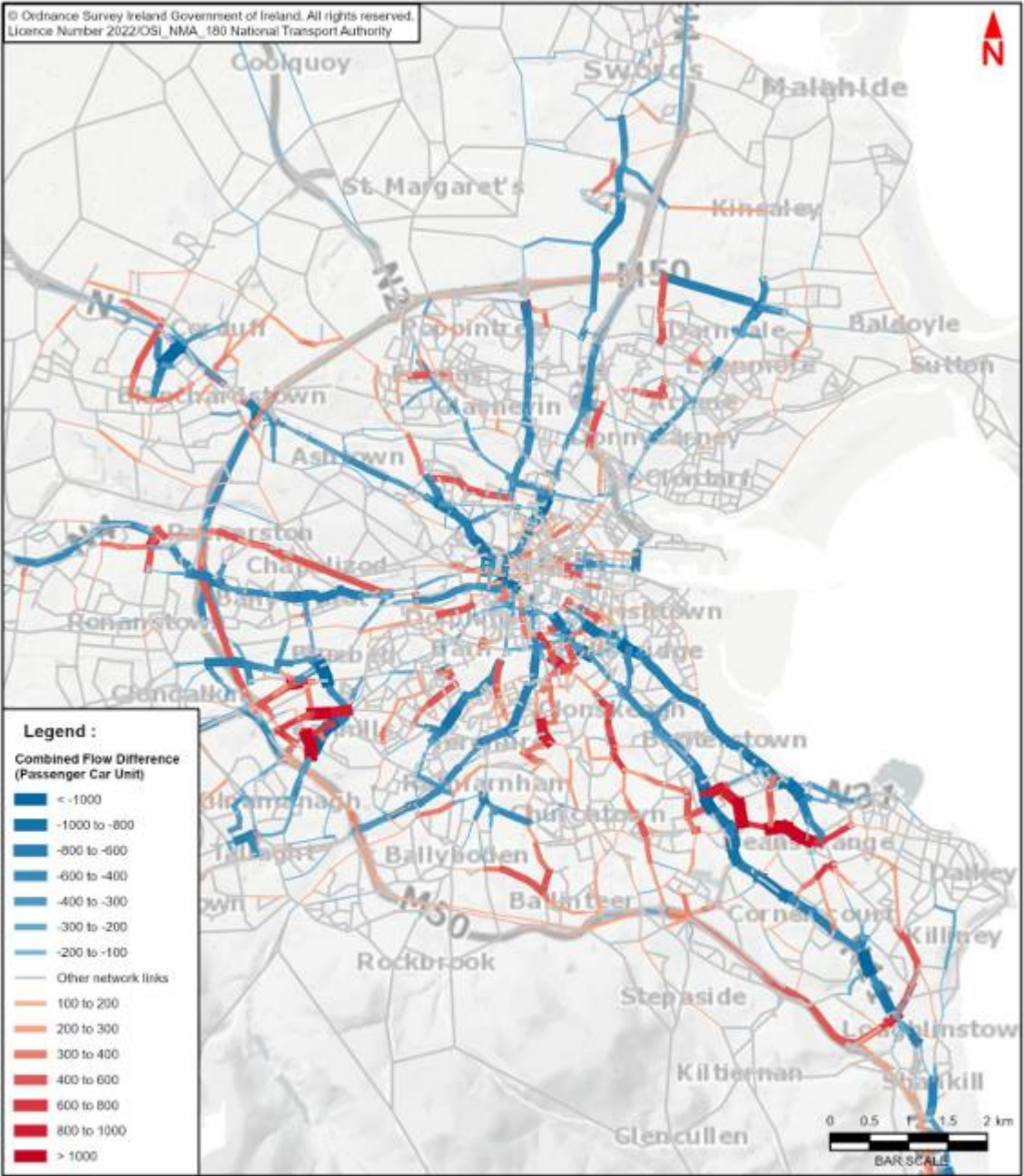


Diagram 7.15: Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year – Cumulative Scenario

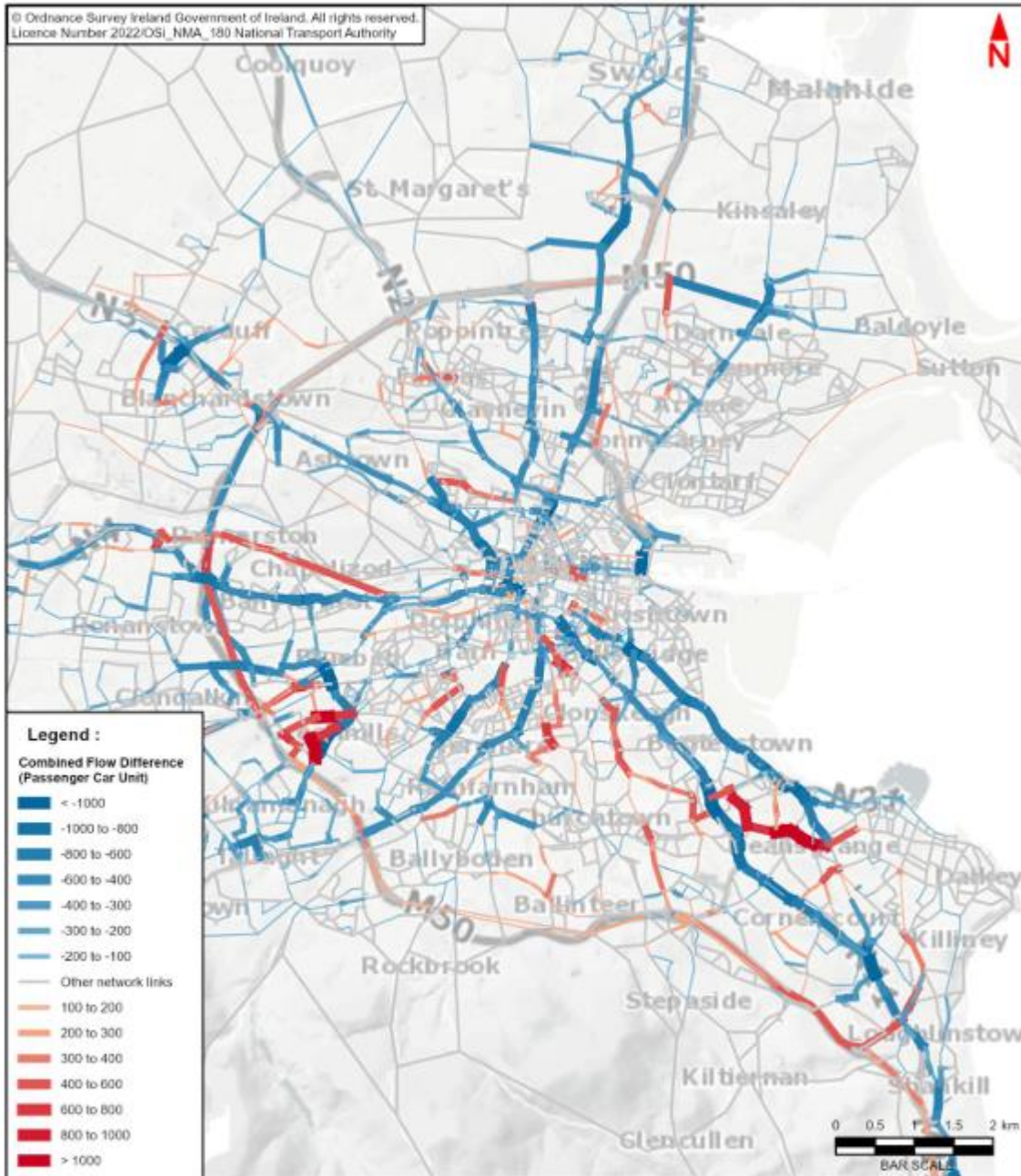


Diagram 7.16: Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2043 Design Year – Cumulative Scenario

7.2.6.4 Cumulative Traffic Flow Summary

As can be seen in the diagrams above, 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. As mentioned previously the implementation of all Core Bus Corridor schemes will facilitate the ability of the network to accommodate significant levels of additional travel growth by sustainable modes. It should be noted that higher levels of modal shift from car to sustainable modes are likely to occur either during or before this period due to the requirement to achieve, for example, 2023 Climate Action Plan (CAP) targets with further policy measures, likely to be implemented. As the specifics of these policy measures have yet to be determined they are, therefore, not included in the transport modelling to ensure a conservative and reasonable worst-case assessment of effects.

The cumulative impact of the Proposed Scheme on people movement across the city is presented in section 7.2.4.3.

Diagram 7.5 illustrates the average People Movement by mode, across all Proposed Schemes, inbound towards the City Centre during the AM Peak Hour in 2028.

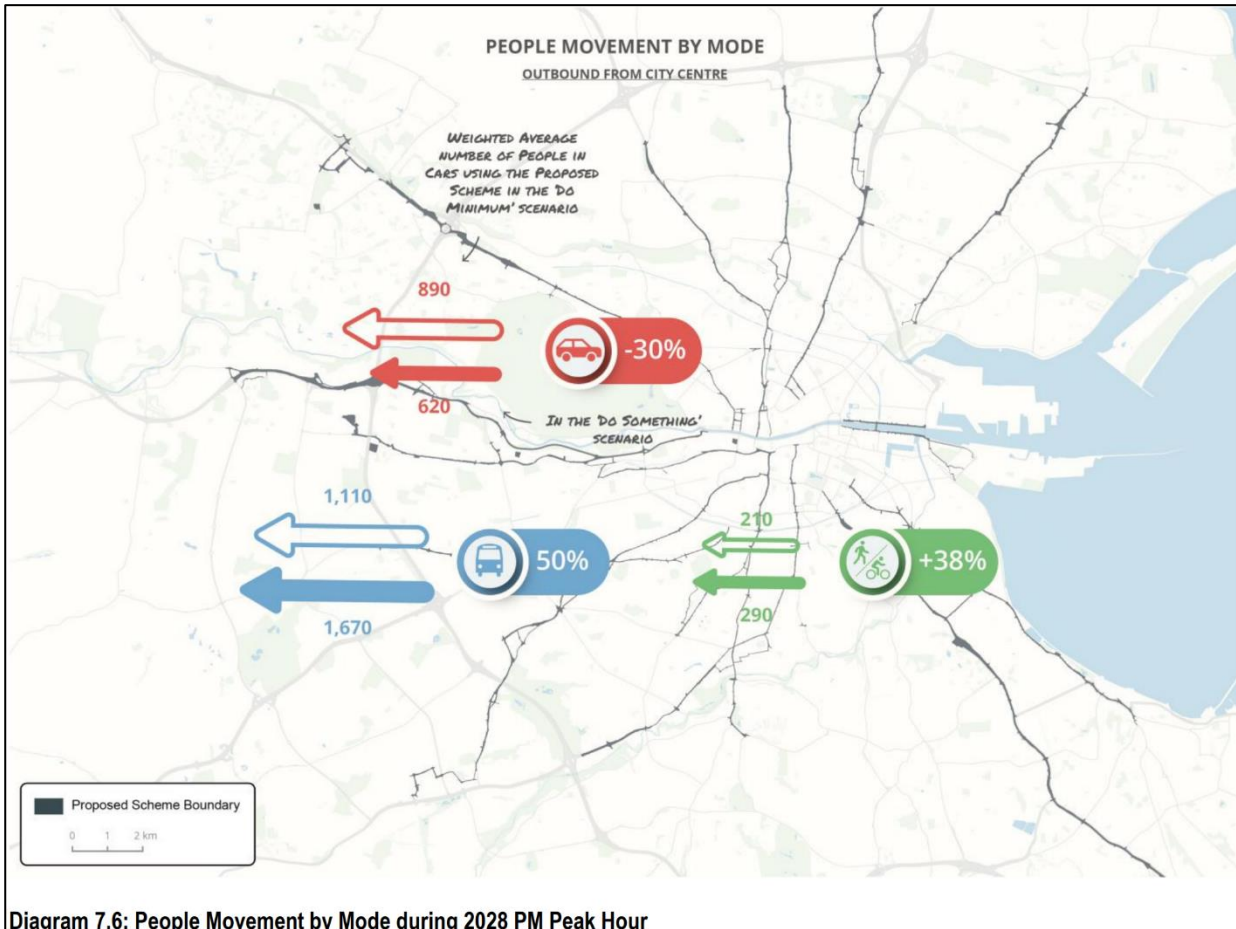
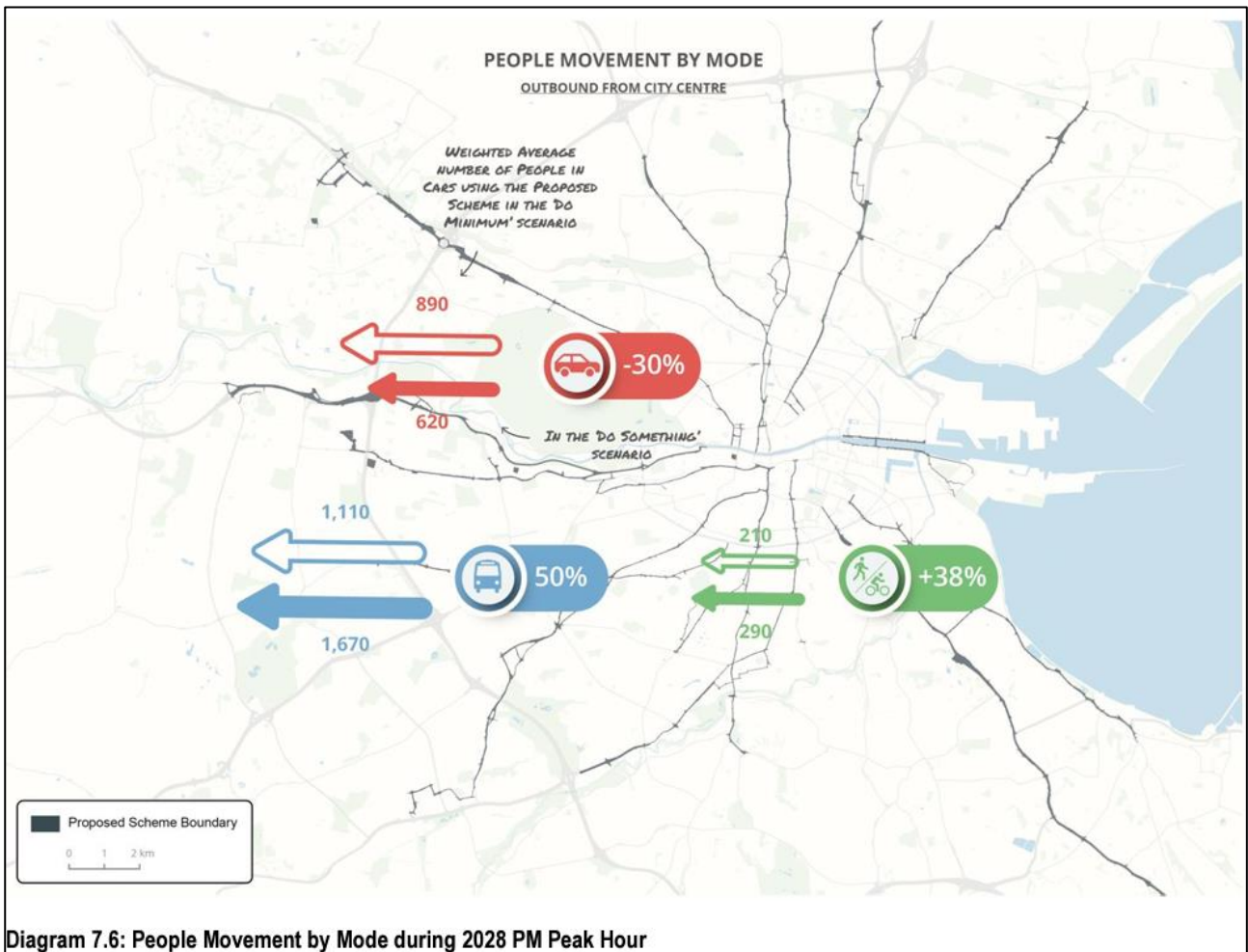


Diagram 7.6: People Movement by Mode during 2028 PM Peak Hour

Diagram 7.6 illustrates the average People Movement by mode, across all Proposed Schemes, travelling outbound from the city centre during the PM Peak Hour.



The cumulative impact on people movement is summarised in section 7.2.7.

7.2.7 People Movement – Cumulative Impact Summary

The cumulative impact for the movement of People Movement by sustainable modes with the Proposed Schemes in place has been appraised as a qualitative assessment, taking into account the changes in mode share, demand changes by mode along the Proposed Scheme (and the other Core Bus Corridors) as well as bus usage and integration with other public transport modes, as presented above. It is acknowledged that a certain level of residual traffic redistribution is likely, however, these increases are largely constrained to new road infrastructure (as part of the Proposed Schemes) and regional and distributor roads that are designed to cater for high volumes of traffic. The Proposed Schemes in combination have been adjudged to deliver a high positive overall impact on People Movement by sustainable modes. The Proposed Schemes can be shown to deliver significant improvements in People Movement by sustainable modes along the direct Proposed Scheme alignments, particularly by bus and cycling, with reductions in car mode share due to the enhanced sustainable mode provision. The Proposed Schemes provide for enhanced integration and efficiencies for all public transport modes by facilitating substantial increases in public transport average network wide travel speeds.

The traffic impact assessment has been used to inform further environmental assessments. As noted in Section 21.6.1 Construction Phase of Chapter 21 in Volume 2 of the EIAR:

The results of the modelling showed that with the CTMPs [Construction Traffic Management Plans] for all schemes in place at the same time, there would be significant traffic displacement across the Dublin area. The large cumulative increase of traffic on local roads had the potential to generate a significant adverse impacts of traffic congestion along with the risk of generating air quality and noise impacts. A revised construction scenario was developed which is based on four schemes which cannot be constructed concurrently with adjoining schemes. This scenario was developed to minimise potential significant impacts on traffic, air quality and noise.

The Biodiversity assessment identified potential for significant residual cumulative effects with regard disturbance and displacement of non-SCI breeding birds during construction and habitat loss for some projects in conjunction with the Proposed Scheme. However, these cumulative effects will be at the local geographic scale and short-term due to the construction duration.

The Landscape (Townscape) and Visual assessment identified the potential for temporary indirect cumulative townscape and visual effects to occur for some projects if the construction periods coincide or are successive with the Proposed Scheme. Effects would be not significant if this is not the case. These effects are most likely to occur at locations where concurrent construction of both schemes have the potential to overlap, however, it is also likely that the extent of any such impacts will be localised and contained.

No other significant construction related cumulative effects were identified from the Proposed Scheme in combination with other projects (including the other Core Bus Corridor Schemes) over and above those identified in the standalone assessments.

As noted in Section 21.6.2 Operation Phase of Chapter 21 in Volume 2 of the EIAR:

For Operational Phase effects, the assessments assume all 12 proposed Bus Corridor Schemes would be operational, along with other identified projects and GDA Strategy projects included in the Do Minimum and Do Something scenarios. For traffic and transport, the assessment predicted that the Proposed Scheme and the other 11 Core Bus Corridor schemes are expected to facilitate a long term, profound positive cumulative effect on People Movement by sustainable modes. The Core Bus Corridor schemes are seen to enable significant improvements in People Movement by sustainable modes along the direct Core Bus Corridor routes, particularly by bus and cycling, with reductions in car mode share due to the enhanced sustainable mode provision. The Proposed Scheme and the other 11 Core Bus Corridor schemes provide for enhanced integration and efficiencies for all public transport modes by facilitating substantial increases in public transport average network wide travel speeds.

The Core Bus Corridor Infrastructure Works will also support the delivery of government strategies outlined in the CAP (DCCAE 2022) and the 2021 Climate Act by enabling sustainable mobility and delivering a sustainable transport system. The Core Bus Corridor Infrastructure Works will provide connectivity and integration with other public transport services leading to more people availing of public transport, helping to further reduce GHG emissions.

Based on the analysis outlined in the assessment, it is concluded that the Core Bus Corridor Infrastructure Works 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 Core Bus Corridor Infrastructure Works has the potential to reduce GHG emissions equivalent to the removal of approximately 105,500 and 209,100 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 2023). It is concluded that, cumulatively, the Core Bus Corridor Infrastructure Works will make a significant contribution to carbon reduction.

The Human Health assessment identified that the proposals for two SDCC planning applications, the DART+ Tunnel Element and the Greater Dublin Area Cycle Network Plan, would be complementary to the Proposed Scheme and could have a cumulative, beneficial effects by connecting different communities and destinations which would improve general accessibility to areas of leisure and employment. These cumulative impacts would result in positive effects in mental health, assessed to be Positive and Significant in the Long-term on health. A similar cumulative effect was identified for the Potential Metro South Alignment, assessed to be Positive and Moderate in the Long-term on health.

The only other significant operational cumulative impacts identified over and above the standalone scheme relate to human health. It was assessed that the proposals for the other 11 Core Bus Corridor schemes would also be complementary to the Proposed Scheme and could have a cumulative beneficial effect by encouraging active travel and increased use of public transport through offering a choice of routes. Due to the substantial size of overall population with the opportunity to benefit from the proposals, the effect is assessed as Positive, Very Significant and Long-term for health.

The Landscape (Townscape) and Visual assessment identified that the Kimmage to City Centre Core Bus Corridor in conjunction with the Proposed Scheme during operation has potential to provide long-term enhance to streetscape where the two projects intersect. There is potential for Positive, Significant, Medium to Long-term cumulative effects on townscape.

As noted in Section 21.6.3 Environmental Interactions of Chapter 21 in Volume 2 of the EIAR:

Significant environmental interactions occur between the topics of population, human health, air quality, noise and vibration and traffic and transport. The assessments made for each of those topics consider those interactions both directly and indirectly. As an environmental factor, landscape and visual considerations have natural relationships with all other environmental factors. Some are direct relationships, e.g., population and visual impacts; biodiversity and landscape; land, soils and water and landscape; or the setting around features of cultural heritage etc. Others may be indirect, e.g. human health, air quality and landscape, material assets and landscape and visual aspects. Wherever possible these potential interactions have been incorporated into the relevant assessments.

In brief, 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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

2.1.1.8 No park and ride considered

Summary of Issue Raised

A number of the submissions raised concern that the Proposed Scheme did not include any proposals for park and ride. These submissions noted that removing people from cars on the outskirts of the city and transferring to public transport would remove the need for road widening.

Response to Issue Raised

EIAR Chapter 2, Need for the Proposed Scheme, Section 2.2.1.5 outlines the following:

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 nine elements are:

1. Core Bus Corridor Infrastructure Works;
2. Dublin Area Bus Network Redesign;
3. Transitioning to a new low emissions bus fleet;
4. State of the art ticketing system;
5. Cashless payment system;
6. Simpler fare structure;
7. New Park and Ride sites in key locations;
8. New bus livery providing a common style across all operators; and
9. New bus stops and shelters with better signage and information.”

It is noted that new park and ride facilities form part of the broader BusConnects programme and will be implemented to complement improvements to the overall bus system, including the Proposed Scheme infrastructure.

2.1.1.9 Removal of trees generally along the scheme

Summary of Issue Raised

A number of the submissions raised concern about the removal of trees generally across the scheme, with no specific area quoted. Concerns ranged from the visual impact of the loss to the impact the removal of trees would have to the environmental impacts. Some submissions raised concerns that the loss would be more significant than that suggested in the EIAR due to further impacts during construction.

Response to Issue Raised

A full assessment of the impact on trees has been undertaken in the EIAR. Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained, and to identify the trees that are to be removed to facilitate the Proposed Scheme.

The impact assessment report is based on the British Standard BS 5837:2012 Trees in relation to design, demolition and construction – recommendations; this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the site to identify trees that may be impacted on by the Proposed Scheme based on the proposed design.

Section 5 of Appendix A17.1 states:

The route traverses both Dublin City Council and South Dublin County Council administrative areas, with the boundary between both Local Authorities located close to the Fortfield Road junction for the Templeogue to Terenure section and at the River Dodder for the Rathfarnham to City Centre section. The relevant development plans of both local authorities have been examined.

National Planning Framework

The National Planning Framework (NPF) seeks to ensure that new development is sustainable and underlines the importance of Green Infrastructure, of which trees form an integral part. This encompasses recognition of the importance of trees in relation to the management of air, soil and water quality along with other associated ecosystem services and climate change adaptation. The NPF also seeks to achieve the protection and enhancement of landscapes and a net gain in biodiversity.

Dublin City County Development Plan 2016 - 2022

Section 10.5.7 of the Dublin City Development Plan 2016 recognises the benefits of trees in humanising spaces, enhancing the environment and minimising the impacts of climate change. Appendix 1: Existing Tree Preservation Orders in Dublin City 2016-2020 of the Dublin City Development Plan has been reviewed and it has been concluded that there are no TPO's identified within the study area.

South Dublin County Council Development Plan 2016 – 2022

Chapter 8 (Green Infrastructure) of the South Dublin County Council Development Plan 2016 contains a number of policies relating to the protection and preservation of existing trees, groups of trees, woodlands and hedgerows, as well as the incorporation of new green infrastructure elements within new developments.

Section 6 of Appendix A17.1 states:

This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.

Table 4 of Appendix A17.1 notes that there will be 169 individual trees removed as a result of the Proposed Scheme.

Section 4.6.13.3.1 of Chapter Proposed Scheme Description of Volume 2 of the EIAR states:

The planting strategy has been developed to meet the needs of the South Dublin County Council Development Plan 2016 –2022, the Dublin City Tree Strategy and the Dublin Biodiversity Action Plan 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 South Dublin County Council Development Plan 2016 –2022 and the Dublin City Development Plan 2016 – 2022; and
- Develop the role of SuDS opportunities within the Proposed Scheme to ideally reduce impervious areas for drainage management benefit.

Section 4.6.13.5.1 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR states:

As noted on the Landscaping General Arrangement (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-9001) in Volume 3 of this EIAR, a range of urban street tree species (Image 4.19) have been incorporated into the design. The type of tree depends on the location and whether trees are to be planted in grass verges or in tree pits within paved urban environments as appropriate, and also to ensure diversity of species and provide habitats for urban wildlife. Typically, trees will be semi-mature and where appropriate, selected for having a clear stem height to facilitate visual permeability.

Refer to Figure 2.1.6 which reproduces Image 4.14.

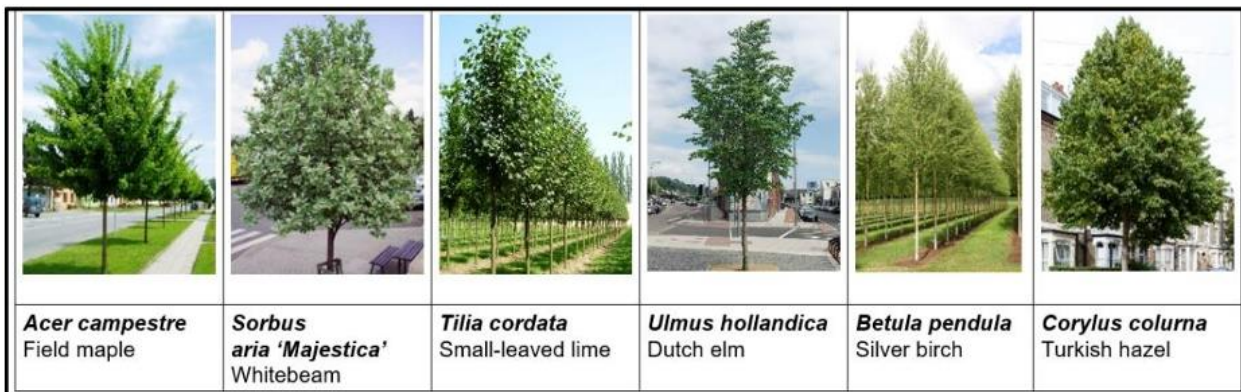


Figure 2.1.6 Street Tree Species

Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 231 trees as a result of the Proposed Scheme.

Chapter 17 of the EIAR has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme). During the Construction Phase, the potential landscape (townscape) and visual impacts associated with the development of the Proposed Scheme have been assessed.

This included streetscape disturbance, impacts on property boundaries, removal of trees and vegetation, traffic issues and the general visual intrusion of construction activities due to utility diversions, road resurfacing and road realignments.

This chapter concludes:

As described in Chapter 3 (Consideration of Reasonable Alternatives) of this EIAR and noted at 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. Nevertheless, the Proposed Scheme will give rise to some degree of townscape and visual effect, most notably during the Construction Phase. These impacts arise especially where there is temporary and / or permanent acquisition of lands associated with residential or other properties including amenities, and where tree removal is required. The Proposed Scheme includes for replacement of disturbed boundaries, reinstatement of the Construction Compounds, return of temporary acquisition areas, and for additional tree and other planting where possible along the Proposed Scheme.

In the Operational Phase localised residual effects will remain for properties, including protected structures, experiencing permanent land acquisition. There will be overall positive effects for all sections of the scheme, excluding Nutgrove to Terenure Road North, which will have a neutral effect. The Proposed Scheme provides for improvements in the urban realm, which will provide positive long-term effects for the townscape and visual character, most notably at centres of Rathgar and Rathmines and along the route from Grand Canal to Dame Street. The restoration and reincorporation of Templeogue Arch into the streetscape will also be a notable improvement. The Proposed Scheme will also provide for a significantly enhanced level of service for public transport and for pedestrian / cycle connectivity.

In relation to submissions which claimed that further trees would be impacted as a result of construction works, Section 17.5.1 of the EIAR 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 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. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*
- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g., Cellweb or equivalent), installed without excavation using no dig techniques.*
- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*
- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*
- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 in Volume 4 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

2.1.1.10 Implementation of other less intrusive BusConnects measures first

Summary of Issue Raised

A number of the submissions requested that other less intrusive elements of the BusConnects programme were implemented first to understand the benefits of these in advance of committing to the infrastructure works. Some of the measures suggested included cashless fares, park and ride and congestion charging. It is suggested in many of these submissions that these measures would enhance bus journey times and reliability and therefore remove the need for road widening to facilitate bus priority.

Response to Issue Raised

As set out in Section 2.2.1.6 of Chapter 2 Need for the Scheme of Volume 2 of the EIAR,

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.....

The full programme for BusConnects Dublin includes a range of interlinked and complementary proposals including:

- 1. Management elements: Redesigning the network to increase the number of homes, jobs and services with coverage, improving orbital accessibility and restructuring radial routes into spines;*
- 2. Technological elements: Introducing new ticketing systems to improve convenience and reduce dwell time at bus stops;*
- 3. Fleet elements: Replacing the bus fleet with low emission vehicles, introducing branding and livery to give a new “look and feel”;*
- 4. Policy elements: Introducing a 90-minute ticket to remove the financial penalty for interchanging between buses or changing mode during trips; and*
- 5. Infrastructure elements: Creating infrastructure to separate buses and cyclists from other traffic to make sustainable travel a faster, safer and more reliable choice. Developing interchange hubs. Improving pedestrian facilities around bus stops.*
- 6. 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 nine elements are:

- Core Bus Corridor Infrastructure Works;*
- Dublin Area Bus Network Redesign;*
- Transitioning to a new low emissions bus fleet;*
- State of the art ticketing system;*
- Cashless payment system;*
- Simpler fare structure;*

- *New Park and Ride sites in key locations;*
- *New bus livery providing a common style across all operators; and*
- *New bus stops and shelters with better signage and information.*

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.

Each of the other elements individually brings its own benefits, but there are cumulative benefits that are dependent on the completion of the entire programme, given the network interdependencies between measures. The effectiveness of the programme is more than the sum of its parts. For example, some additional bus patronage will be attracted by simply adding new services and redesigning the network, but it will take an increase in speed and reliability to reach a wider segment of the market. Addressing fares and making the system easier to use will bring another market segment on board. Additionally, bringing all these changes to people's attention so that they can take advantage of the new opportunities would be difficult without refreshing the information system, the bus livery and the waiting environment.

The implementation of these other elements will progress independently of the CBC Infrastructure Works element.

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.

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.

In terms of the sequencing of implementation of the BusConnects Programme elements, this is an ongoing process with many of the elements already being implemented (e.g., new bus network, transition to low emission fleet). As explained in the above extract from the EIAR, all elements are required to realise the fullest potential of the programme as a whole and the sequence in which they are delivered is irrelevant to this overall goal.

It is noted that the implementation of all elements of the BusConnects programme have been considered in the Do Minimum assessment scenario as set out in section 6.4.3.1:

The Do Minimum scenarios (in both 2028 and 2043) include all other elements of the BusConnects Programme of projects (apart from the CBC Infrastructure Works elements) i.e., the new BusConnects routes and services (as part of the revised Dublin Area bus network), new bus fleet, the Next Generation Ticketing and integrated fare structure proposals are included in the Do Minimum scenarios.

As such, any comparison within the EIAR between Do Minimum and Do Something scenarios is a direct comparison of the scenarios with and without the Proposed Scheme only.

2.1.1.11 Inadequate Public Consultation and contravention of Aarhus Convention

Summary of Issue Raised

A number of submissions noted that they felt excluded from the consultation process and queried if there has been compliance with the Aarhus Convention due to Covid lock down, residents' unfamiliarity with IT, lack of information books at public meetings.

Submissions stated that the consultation process was inadequate and that the entire process took place online therefore disenfranchising people who do not have access to the internet. Some submissions stated that their voice was not listened to and they see little changes in their area from what was originally presented to them.

Response to Issue Raised

As noted in section 1.6.1 Consultation of Chapter 1 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 Consultations; 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.

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, 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 relation to the effect of the Covid lock down it should be noted that every effort was made by the NTA to facilitate public participation and engagement during the Covid-19 pandemic.

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.

In terms of engagement with landowners of potentially impacted properties, section 1.7.3 sets out the various direct communications over the course of the project:

Since the initiation of the pre-application public consultation process in February 2019 there has been ongoing engagement with landowners, and / or anyone with an interest in potentially impacted properties or lands along the corridor of the Proposed Scheme, as the design development has progressed.

As set out in the Consultation Section (Section 1.6) during each round of public consultation those landowners identified as being either potentially impacted or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered on a face-to-face basis pre-COVID, and via Zoom or over the phone since March 2020, for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. Over the three rounds of consultation, approximately 734 letters of this kind were issued.

In addition, approximately 217 letters were issued between August 2020 and November 2020 to request access to properties to undertake more detailed noise or topographical surveys.

Throughout the planning process any requests for meetings, phone conversations, or other requests for information have been accommodated where possible. Many of the submissions received during consultations have included from those potentially impacted owners and as with all other submissions they have been considered in the design development.

Most recently during December 2022 and February 2023, approximately 509 letters (registered) have been issued to properties likely to be the subject of the Proposed Scheme Compulsory Purchase Order (CPO) process seeking to engage with them to ascertain ownership details (or to confirm ownership details based on Property Registration Authority – Registry of Deeds referencing research), or to ascertain any others with an interest in the property/lands. Follow-up conversations have been facilitated as a result of these letters on request.

Over the course of the engagements, affected property owners have had the opportunity to discuss, among other things, the following aspects with the BusConnects Infrastructure team:

- Overall scheme proposals and potential impacts;
- Timelines for the scheme design development and associated EIAR assessment;
- Procedural matters such as planning and CPO process;
- Specific details of impact of scheme on landowner property including approximate extent of encroachment; and
- General information around reinstatement and accommodation works.

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.

Section 38 of the Planning and Development Act 2000 provides that certain documents relating to planning applications shall be made available for inspection and purchase by members of the public. The Act does not prescribe fees for copying the relevant documents and the only reference in the Act to the fee to be charged for such a service is contained in section 38(4) which states: "(4) Copies of the documents under this section shall be made available for purchase on payment of a specified fee not exceeding the reasonable cost of making such a copy." The fees payable for obtaining hard copies of the various EIAR documents for the Proposed Scheme have been determined by the NTA and do not exceed the reasonable cost of making a copy of the EIAR documents.

Full details of the consultation undertaken as part of the Proposed Scheme development is presented in the Public Consultation Report 2018 – 2022 provided as part of the Supplementary Information.

2.1.1.12 General Concerns about Air Quality

Summary of Issue Raised

A number of submissions raised concerns about the impact of the Proposed Scheme on Air Quality generally, stating the scheme would result in poorer air quality along the corridor.

Response to Issue Raised

Chapter 7 Air Quality of the EIAR sets out the methodology adopted to assess the impact on air quality of the Proposed Scheme. Table 7.1 identifies the air quality receptors within the study area.

Construction phase air quality

For the Construction Phase Section 7.4.2.3.3 of Chapter 7 identifies the significance of the changes in the concentration of each of the ambient receptors in the context of the TII significance criteria (TII 2011).

As shown in Table 7.27 and Figure 7.7 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of annual mean PM₁₀ concentrations, with all receptors experiencing a negligible impact.

As shown in Table 7.27 and Figure 7.8 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of the annual mean PM_{2.5} concentration with all receptors experiencing a negligible impact.

In accordance with the EPA Guidelines (EPA 2022), the impacts associated with the Construction Phase traffic emissions pre-mitigation are overall neutral and long-term.

Section 7.6.1 Construction Phase notes the following: *"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.*

The air dispersion modelling assessment of Construction Phase traffic emissions has found that the Proposed Scheme will be neutral overall in the study area. There are no substantial or moderate adverse effects expected as a result of the Construction Phase of the Proposed Scheme.

Therefore, overall, it is considered that the residual effects as a result of the Proposed Scheme's construction are Neutral and Short-term. No significant residual impacts have been identified during the Construction Phase of the Proposed Scheme, whilst meeting the scheme objectives set out in Chapter 1 (Introduction)."

Operational phase air quality

For the Operational Phase Section 7.4.3.3 of Chapter 7 identifies the significance of the changes in the concentration of each of the ambient receptors in the context of the TII significance criteria (TII 2011).

As shown in Table 7.33 and Figure 7.4 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of annual mean PM₁₀ concentrations, with all receptors experiencing a negligible impact.

As shown in Table 7.33 and Figure 7.5 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of the annual mean PM_{2.5} concentration with all receptors experiencing a negligible impact.

In accordance with the EPA Guidelines (EPA 2022), the impacts associated with the Operational Phase traffic emissions pre-mitigation are overall neutral and long-term.

Section 7.4.3.3 goes on to note that the predictions reported are based on conservative assumptions regarding background pollutant concentrations and the improvement in vehicle emission rates. 2019 background pollutant concentrations have been used to represent 2028 and are likely to be lower by the opening year than in 2019. Older fleet projections were used in the absence of a fleet that incorporates the effects of 2023 Climate Action Plan measures – a larger proportion of electric vehicles is planned by the opening year than has been modelled. In reality, total concentrations (and magnitude of change) are likely to be lower than those reported in the EIAR.

Section 7.6.2 describes the residual impacts for the Operational Phase:

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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value.

However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In summary, the EIAR demonstrates that there will be no significant impact on air quality as a result of the operation of the Proposed Scheme.

2.1.1.13 General Concerns about Noise

Summary of Issue Raised

A number of submissions raised concerns about the impact of the Proposed Scheme on Noise generally, stating the scheme would result in increased noise along the corridor.

Response to Issue Raised

The potential Noise impacts, as a result of the Proposed Scheme has been assessed in the EIAR. The process of assessment and the results have been described in Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR.

Construction phase noise

Section 9.4.3.2 of Chapter 9 considers construction noise and Table 9.30 provides the predicted noise levels for Road Widening, Road Construction, Road Upgrade and Utility Diversion Construction Noise Calculations at Nearest NSLs.

As summarised in Table 9.30, road widening, road upgrade and utility diversion works are within 10m to 30m of the nearest NSLs in the four geographical sections of the Proposed Scheme. A minor retaining wall (RW01) is located in Section 1d within 10 to 15m of NSLs. The predicted CNL for these works at the closest NSL façades are between 73 to 83 dB LAeq,T in the absence of any noise mitigation. Making reference to the CNLs in Table 9.30, the potential noise impacts at the closest NSLs range between negative, moderate to very significant and temporary during the daytime period and negative, moderate to very significant, and temporary during the evening and weekend periods in the absence of noise mitigation.

The calculations are based on six plant items with an average noise level of 75 dB LAeq,T at 10m operating simultaneously along a given section of road. The average plant noise level has been calculated on the basis that plant will be operating at varying distances from a NSL at any one time. Reference to Table 9.26 indicates that highest noise levels will occur when breaking, excavators and road planers are operating at the closest distance to NSLs. During specific periods when these activities are operating outside NSLs, higher noise levels may occur compared to those discussed in Table 9.30. These activities will occur, however, for intermittent periods of time at any one location over the course of a working day.

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 in Volume 2 of the EIAR (and are also summarised in Appendix A5.1 Construction Environmental Management Plan in Volume 4 of the EIAR).

Section 9.5.1.1 of the EIAR Chapter 9 states the following:

“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. The mitigation measures outlined below for the Construction Phase have also been included in the Construction and Environmental Management Plan (CEMP) in Appendix A5.1 in Volume 4 of this EIAR.

These measures will ensure 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); and*
- *The best means practicable, including proper maintenance of plant and equipment, will be employed to minimise the noise produced by on site operations.*

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.*

.....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 9.38 indicates that intrusive works occurring within 75m of NSLs with a direct line of sight to work will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e., daytime or evening).”

Section 9.5.1.1.4 of Chapter 9 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. 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 9.50), other construction activities will be scheduled to not result in significant cumulative noise levels.”

In summary the NTA is satisfied that 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.

Operational phase noise

As noted in figure 9.4 (Opening Year 2028 Traffic Noise Impact Summary) and figure 9.5 (Design Year 2043 Traffic Noise Impact Summary) of Volume 3 of the EIAR, an Imperceptible/Positive to Not Significant noise impact is generally forecast along the Proposed Scheme. The exceptions to this for 2028 are outlined in section 9.4.4.1.1.5:

In the year of opening, 2028, along Orwell Road, the short-term change in traffic noise is defined as moderate with a traffic noise level calculated at the closest NSLs along this road categorised as negligible to low. The overall impact is determined to be indirect, negative, not significant to slight and short to medium-term.

Along Grantham Street, Palmerstown Park, Grove Park and Palmerstown Road, the short-term change in traffic noise is defined as moderate with a traffic noise level calculated at the closest NSLs along these roads categorised as low to medium. The overall impact is determined to be indirect, negative, slight to moderate and short to medium-term.

Along Castlewood Park, the short-term change in traffic noise is defined as major with a traffic noise level calculated at the closest NSLs along this road categorised as low to medium. The overall impact is determined to be indirect, negative, moderate and short to medium-term.

The traffic noise levels of 53 to 59 dB LAeq, 16hr at the closest NSLs along the roads discussed in Table 9.39 are typical of the semi-urban to urban environments in which they are located and are also in line with road traffic noise levels in the surrounding environment, as discussed in Section 9.3. The operational noise levels will be below and up to 4 dB above the desirable low noise threshold values set within the Dublin Agglomeration NAP 2018 – 2023 (DCC; FCC; SDCC; DLRCC 2018) and are significantly below the Undesirable High noise threshold.

For all other roads off the Proposed Scheme, impacts are determined to be indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term. Similar to the daytime LAeq, 16hr parameter, the difference in the Lden parameter between the Do Minimum and Do Something scenario is Positive or Not Significant along the Proposed Scheme and the surrounding road network (a change in Lden of less than or equal to 3 dB). Highest increases are along the roads discussed in Table 9.39 which have a calculated increase in the Lden parameter of 2 to 5 dB. The residual noise level along these roads are in the range of 54 and 60 dB Lden, in line with similar traffic noise levels along the surrounding adjacent roads and is typical for an urban environment. No increase in night-time noise levels is calculated along these roads.

A full suite of calculated noise levels along roads within the study area is included in Appendix A9.2 in Volume 4 of this EIAR.

The exceptions to this for 2043 are outlined in section 9.4.4.1.1.5:

During the Design Year (2043), a minor change in traffic noise is defined along Grantham Street, Palmerstown Park, Palmerstown Road and Castlewood Park. The calculated traffic noise level at the closest NSLs along these roads is categorised as low to medium. The overall impact along these roads is determined to be indirect, negative, slight and long-term.

Along Butterfield Road, the long-term change in traffic noise is defined as minor with a traffic noise level calculated at the closest NSLs along this road categorised as negligible to low. The overall impact along this road is determined to be indirect, negative, not significant and long-term.

Along Castlewood Park, the long-term change in traffic noise is defined as moderate with a traffic noise level calculated at the closest NSLs along this road categorised as low to medium. The overall impact is determined to be indirect, negative, slight to moderate and long-term.

For all other roads across the study area, an indirect, positive, imperceptible to slight, to negative, not significant to slight, long term impact is determined.

2.2 Proposed Scheme at Templeogue Road

2.2.1 Overview of Submissions Received

A number of issues were raised, and these are listed below:

1. The Templeogue Road Inbound Bus Gate
 - a. No need for bus gate as existing bus priority signal is considered to be sufficient
 - b. Hours of operation of bus gate are too onerous
2. Traffic impact of Templeogue Road Inbound Bus Gate and Associated Traffic Management Proposals
 - a. Impact on Fortfield Road/Greenlea Road/Lavarna Road
 - i. Increase in traffic on Fortfield Road
 - ii. Effect of Turn Bans on Access
 - iii. Inadequate advanced signage to divert through traffic away from Templeogue Road
 - b. Impact on Access to Rathdown Area
 - c. Effectiveness of proposed turn bans

2.2.2 Common Issues Raised and Responses

2.2.2.1 The Templeogue Road Inbound Bus Gate

Summary of Issues Raised

- a) No need for bus gate as existing bus priority signal sufficient

A number of submissions queried the need for the proposed inbound bus gate on Templeogue Road. Some of these stated that the existing bus priority signal operated satisfactorily and noted that this arrangement could be retained.

- b) Hours of operation of bus gate are too onerous

Some submissions queried the hours of operation of the proposed bus gate stating that these should be limited to peak hours only.

Response to Issues Raised

- a) No need for bus gate as existing bus priority signal sufficient

At present, bus priority along Templeogue Road is intermittent as described in section 6.3.2.3.1 of Chapter 6 Traffic and Transport:

Bus lanes are intermittent along Section 1 of the Proposed Scheme, but are present at the following locations:

- *In both directions between Spawell Service Station and Spawell Roundabout, operating 24 hours;*
- *Northbound between Spawell Roundabout and 90m west of R817 Cypress Grove Road, operating 24 hours (no designated bus lane southbound, however, there are three traffic lanes);*
- *Northbound between the east of Templeogue Village (out the Hollingsworth Cycles shop) and Springfield Avenue/ Templeville Road.*
- *Between the majority of Springfield Road and Fortfield Road, operating 24 hours; and*
- *Northbound for approximately 420m from Rathdown Avenue, operating Monday to Saturday between 07:00 – 10:00 and 12:30 – 19:00.*

In addition to the above physical infrastructure provision, a bus priority signal operates from the termination of the inbound bus lane at Lakelands Drive as far as Terenure Cross.

Given the intermittent nature of the bus priority measures in each direction, as well as the absence of safe, segregated cycle facilities, it is considered that the existing situation will not deliver the aim and objectives to provide enhanced walking, cycling and bus infrastructure on this key corridor, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.

As such, options were developed evaluated using a sifting process and multi-criteria assessment (MCA), with the route and scheme along Templeogue Road identified as the preferred option to deliver the aim and objectives of the scheme. Alternative options considered could not meet the objectives to enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through provision of bus lanes and other measures to provide priority to bus movements over general traffic movements, and to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.

A comprehensive options assessment process was undertaken for the scheme and is summarised in Section 3.3.2.1.2 of Chapter 3 Consideration of Reasonable Alternatives in Volume 2 of the EIAR as presented below:

Due to a number of existing constraints, the section of Templeogue Road between the Fortfield Road/Templeogue Road junction and the Terenure Road East/Templeogue Road junction, required specific consideration which required the identification of alternative scheme options (12 no.) for this section. An MCA was undertaken on these alternative scheme options in order to determine the most appropriate scheme for this section of Templeogue Road. These options, which all follow the same route, are briefly summarised below.

- *Option S2-1 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road/Templeogue Road junction and the Terenure Road West/Templeogue Road junction.*
- *Option S2-2 would consist of providing bus lanes in each direction from Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West with the exception of a 50m section of Templeogue Road approaching Rathdown Park. Segregated cycle facilities would be provided along each side of the Templeogue Road between Fortfield Road/Templeogue Road junction and the Terenure Road West/Templeogue Road.*

A bus gate would be implemented on Templeogue Road at Rathdown Park/Templeogue Road junction and Terenure Road West/Templeogue Road junction to ensure only buses and cyclists are permitted, local access traffic would share with buses in the proposed bus lanes.

- Option S2-3 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. Segregated cycle facilities would be provided along each side of the Templeogue Road between Fortfield Road/Templeogue Road junction and the Terenure Road West/Templeogue Road junction. A bus gate would be implemented on Templeogue Road at Rathdown Avenue/Templeogue Road junction and Terenure Road West/Templeogue Road junction to ensure only buses and cyclists are permitted, local access traffic would share with buses in the proposed bus lanes.
- Option S2-4 would consist of providing bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to the Rathdown Park/Templeogue junction. An inbound bus lane would be provided on Rathdown Park and then connecting with the Rathfarnham CBC on Rathfarnham Road. An outbound bus lane would be provided on Fergus Road connecting Rathfarnham Road to Templeogue Road. From the Fergus Road/Templeogue Road junction to Rathdown Park/Templeogue Road junction outbound buses will share with general traffic in the general traffic lane. Cycle lanes would be provided along each side of Templeogue Road between Fortfield Road/Templeogue Road junction and the Terenure Road West/Templeogue Road junction.
- Option S2-5 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road and Lakelands Park. Between Lakelands Park/Templeogue Road junction and Terenure Road West/Templeogue Road cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West.
- Option S2-6 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. The outbound general traffic lane on Templeogue Road from Rathdown Park to Terenure Cross would be removed to reduce the required land acquisition on residential properties approaching Terenure Cross.

Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road and Lakelands Park. Between Lakelands Park/Templeogue Road junction and Terenure Road West/Templeogue Road cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West.

- Option S2-7 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. The inbound general traffic lane on Templeogue Road from Rathdown Park to Terenure Cross would be removed to reduce the required land acquisition on residential properties approaching Terenure Cross. Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road and Lakelands Park. Between Lakelands Park/Templeogue Road junction and Terenure Road West/Templeogue Road cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West.
- Option S2-8 would consist of providing continuous bus lanes in each direction along Templeogue Road from the Fortfield Road/Templeogue Road junction to Templeogue Road/Terenure Road West junction. A bus gate would be implemented on Templeogue Road to ensure only buses and cyclists would be permitted entry from the Fortfield Road/Templeogue Road junction to Terenure Road West/Templeogue Road junction. Between the aforementioned bus gates, local access traffic would share with buses in the proposed bus lanes. Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road and Lakelands Park.
- Option S2-9 would consist of providing bus lanes in each direction for the majority of the route along Templeogue Road, with the exception of a 300m section of Templeogue Road from Rathdown Park to Terenure Cross where an outbound bus lane would not be provided. The inbound general traffic lane on Templeogue Road from Rathdown Park to Terenure Cross would be removed to reduce the required land acquisition on residential properties approaching Terenure Cross. A bus gate would be implemented on Templeogue Road to ensure only inbound (north-eastbound) buses and cyclists would be permitted entry from Springfield Avenue/Templeogue Road junction to Rathdown Park (Local access would be permitted).

Segregated cycle facilities would be provided along each side of Templeogue Road between Fortfield Road and Lakelands Park. Between Lakelands Park/Templeogue Road junction and Terenure Road West/Templeogue Road junction cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West.

- *Option S2-10 would consist of providing an outbound bus lane along Templeogue Road from Rathdown Park to Fortfield Road. An inbound bus lane would be provided along from Rathdown Park/Templeogue Road junction to Terenure Road West/Templeogue Road junction. A bus gate would be implemented on Templeogue Road to ensure only inbound (north-eastbound) buses and cyclists would be permitted entry from the Springfield Avenue/Templeogue Road junction to Rathdown Park/Templeogue junction (Local access would be permitted). No inbound traffic lane would be provided between the Fortfield Road/Templeogue Road junction and the Rathdown Park/Templeogue junction (Local access would be permitted). Outbound cycle facilities would be provided along Templeogue Road from Terenure Cross to Rathdown Park. Between the Lakelands Park/Templeogue Road junction and the Terenure Road West/Templeogue Road junction cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West. The removal of the inbound general traffic lane is proposed on Templeogue Road from Rathdown Park to Terenure Cross to reduce the required land acquisition on residential properties approaching Terenure Cross.*
- *Option S2-11 would consist of providing bus lanes in each direction for the majority of the route along Templeogue Road, with the exception of a 300m section of Templeogue Road from Rathdown Park to Terenure Cross where an outbound bus lane would not be provided. The removal of the inbound general traffic lane is proposed on Templeogue Road from Rathdown Park to Terenure Cross to reduce the required land acquisition on residential properties approaching Terenure Cross. A bus gate would be implemented on Templeogue Road to ensure only inbound (north-eastbound) buses and cyclists would be permitted entry from Springfield Avenue/Templeogue Road junction to Rathdown Park (Local access would be permitted).*

Outbound cycle facilities provided along Templeogue Road from Terenure Cross to Rathdown Park. Between Lakelands Park/Templeogue Road junction and Terenure Road West/Templeogue Road junction cyclists would be able to divert onto an alternative route via Lakelands Park – Greenlea Grove – Greenlea Road – Terenure Road West.

- *Option S2-12 would consist of providing an outbound bus lane along Templeogue Road from Rathdown Park to Springfield Avenue. An inbound bus lane would be provided between the Olney Grove/Templeogue Road junction and the Terenure Road West/Templeogue Road junction. A bus gate would be implemented on Templeogue Road to ensure only inbound (north-eastbound) buses and cyclists would be permitted entry from Springfield Avenue/Templeogue Road junction to Rathdown Park/Templeogue junction (Local access would be permitted). No inbound traffic lane would be provided between the Fortfield Road/Templeogue Road junction and Rathdown Park/Templeogue junction (Local access would be permitted). A two-way cycle route would be provided through Bushy Park adjacent to Templeogue Road. A shared/mixed street would be provided along Rathdown Drive. Segregated cycle facilities would be provided in the outbound direction from the Terenure Road West/Templeogue Road junction to Rathdown Drive pedestrian access/new proposed Toucan crossing. The inbound general traffic lane on Templeogue Road would be removed from Olney Grove to Terenure Cross, to reduce the required land acquisition on residential properties approaching Terenure Cross.*

A multi-criteria assessment of all scheme options was undertaken. The assessment sub-criteria which were differentiators between scheme options included Capital Cost, Transport Reliability and Quality, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Pedestrian Safety, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character.

The assessment concluded that ‘Option S2-12 was identified as having significant benefits over other options in relation to Capital Cost, Flora and Fauna, Landscape and Visual, Air Quality and Noise and Vibration. Option S2-12 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route’.

- b) Hours of operation of bus gate are too onerous.

The Proposed Scheme along the Templeogue Road proposes an inbound bus gate which will be operational between 06:00 and 20:00 seven days a week. An analysis of existing traffic flow levels on the corridor do not show a significant reduction in traffic volumes through the day (relative to peak hours), and hence bus gate operation during the hours noted above is necessary to provide fast, reliable bus journey times for all services.

2.2.2.2 Traffic impact of Templeogue Road Inbound Bus Gate and Associated Traffic Management Proposals

Summary of Issues Raised

- a. Impact on Fortfield Road/Greenlea Road/Lavarna Road
 - i. Increase in traffic on Fortfield Road
 - ii. Inadequate advanced signage to divert through traffic away from Templeogue Road
 - iii. Effect of Turn Bans on Access

A number of submissions raised concerns around the impact of the proposed inbound bus gate on Templeogue Road on traffic movement in the area.

Some submissions stated that the proposed arrangement would see increases in traffic volumes along Fortfield Road as this is the last opportunity for inbound traffic to divert in advance of the proposed bus gate. Residents were concerned that this would lead to congestion along Fortfield Road and impact on safety of all road users.

It was noted in some submissions that the Proposed Scheme did not include sufficient signage for inbound traffic to adequately notify motorists of the alternative routing to the city centre away from Templeogue Road.

Submissions noted that the proposed right turn bans into Greenlea Road and Lavarna Grove would severely restrict vehicular access to these residential streets impacting on residents on these streets. It was further noted that the right turn ban into Greenlea Road would restrict vehicular access to local amenities including a post office, medical centre and pharmacy.

- b. Impact on Access to Rathdown Area

A number of submissions received noted that the proposed turn bans from Templeogue Road into Rathdown Avenue and Rathdown Park would restrict vehicular access for residents. These submissions noted that alternative access routes would be circuitous and would result in significant inconvenience for residents in Rathdown.

Other submissions noted that the proposed turn bans would restrict vehicular access to Bushy Park and in particular the sporting facilities in the park. It was noted that on-street parking within the Rathdown estate is used by people visiting the park and that the proposed turn bans would restrict the ability for visitors to park here.

- c. Effectiveness of proposed turn bans

A number of submissions received raised concerns about the effectiveness of turn bans stating that these would not be enforced and that traffic would ignore any restrictions. This would result in rat-running along the roads intended to be protected by the proposed turn bans (e.g. Lavarna Grove, Greenlea Road, Rathdown Avenue).

Response to Issues Raised

- a. Impact on Fortfield Road/Greenlea Road/Lavarna Road
 - i. Increase in traffic on Fortfield Road
 - ii. Inadequate advanced signage to divert through traffic away from Templeogue Road
 - iii. Effect of Turn Bans on Access

Increase in traffic on Fortfield Road

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

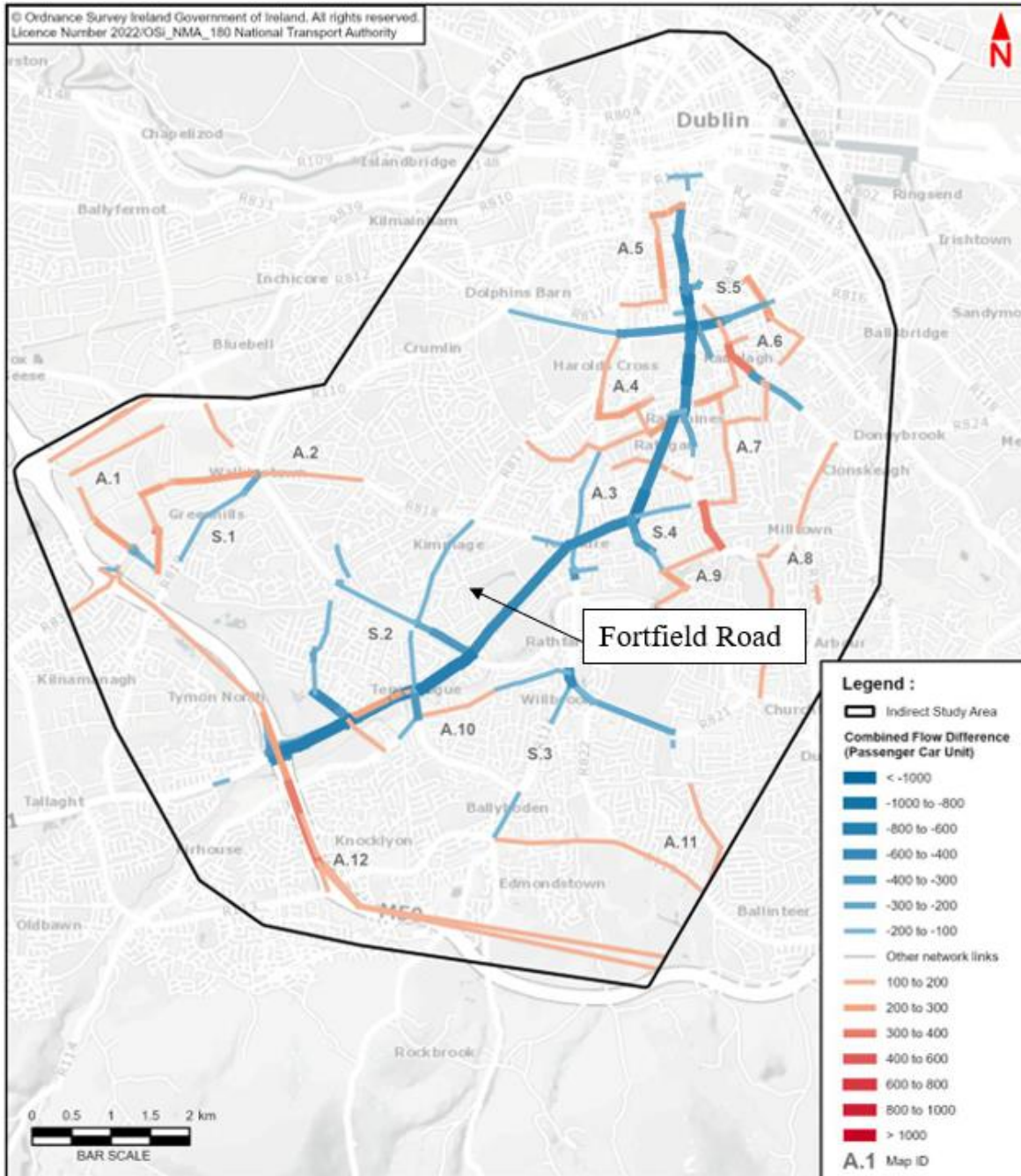


Figure 2.2.1 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

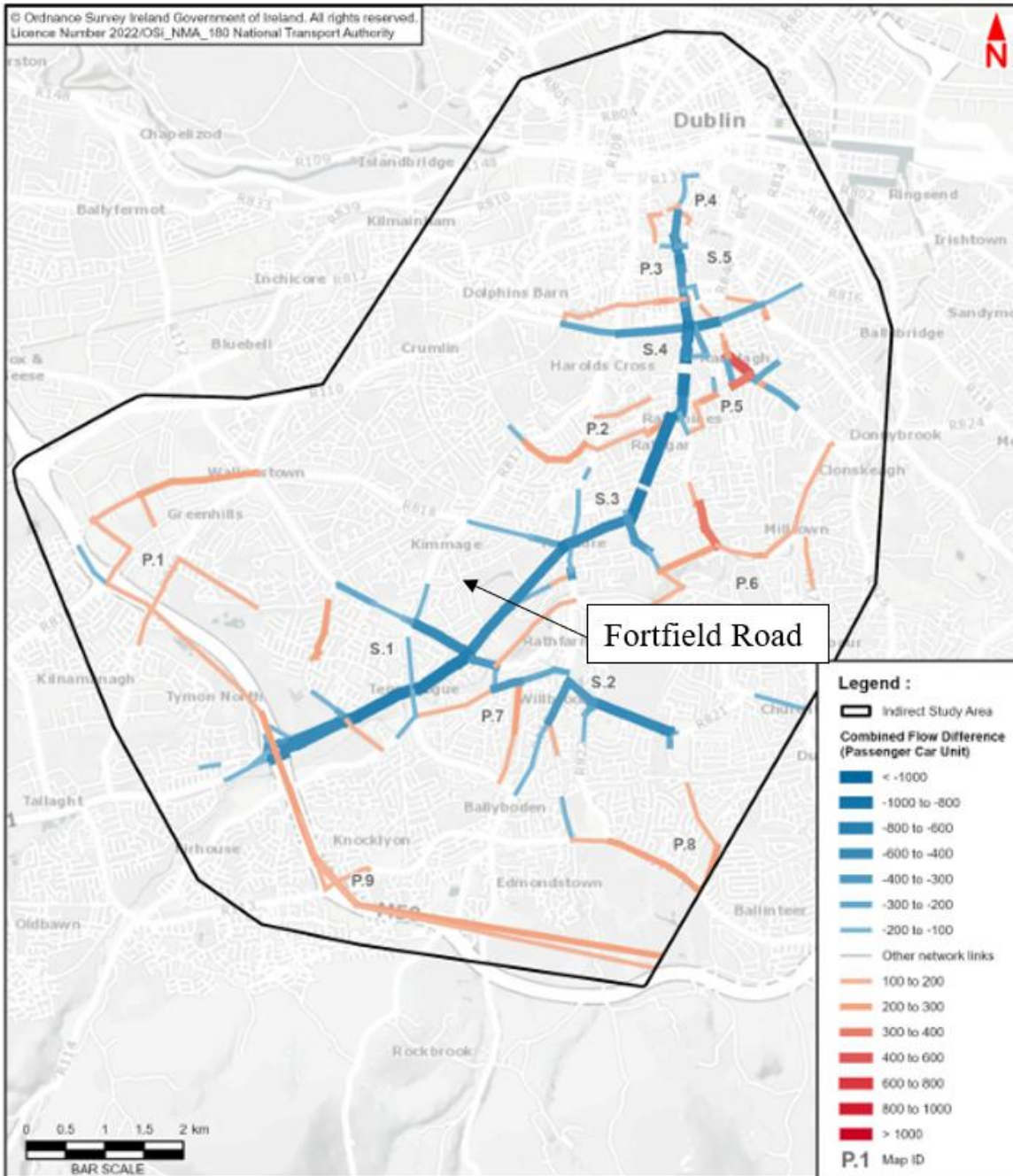


Figure 2.2.2 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

The above figures show that the traffic modelling undertaken does not identify any material change in traffic volumes along Fortfield Road as a result of the Proposed Scheme i.e. any changes in traffic volumes along Fortfield Road are less than 100 passenger car units per hour. As described in the following sections, it is noted that the proposed signage strategy, in combination with supplementary traffic management measures ensure that traffic increases are limited to roads more suitable for dealing with increased traffic. It is also noted that in both peak periods, traffic is seen to divert more strategically as indicated by increases along the M50.

Inadequate advanced signage to divert through traffic away from Templeogue Road

The Traffic Signs and Road Markings Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR present the signage to be included as part of the Proposed Scheme. In order to reflect the required changes to vehicular traffic routing as a result of the proposed inbound bus gate on Templeogue Road, a number of changes are proposed to directional signage. These are described below.

On the western approach to the upgraded Spawell junction, it is proposed to update directional signage to direct city bound traffic right towards Firhouse Road and onwards to the city via Rathfarnham Road. Equally traffic arriving at the junction from Wellington Lane would be directed towards Firhouse Road. Figure 2.2.3 and Figure 2.2.4 present extracts from the Traffic Signs and Road Markings Drawings illustrating the proposed directional signage at the Spawell junction.

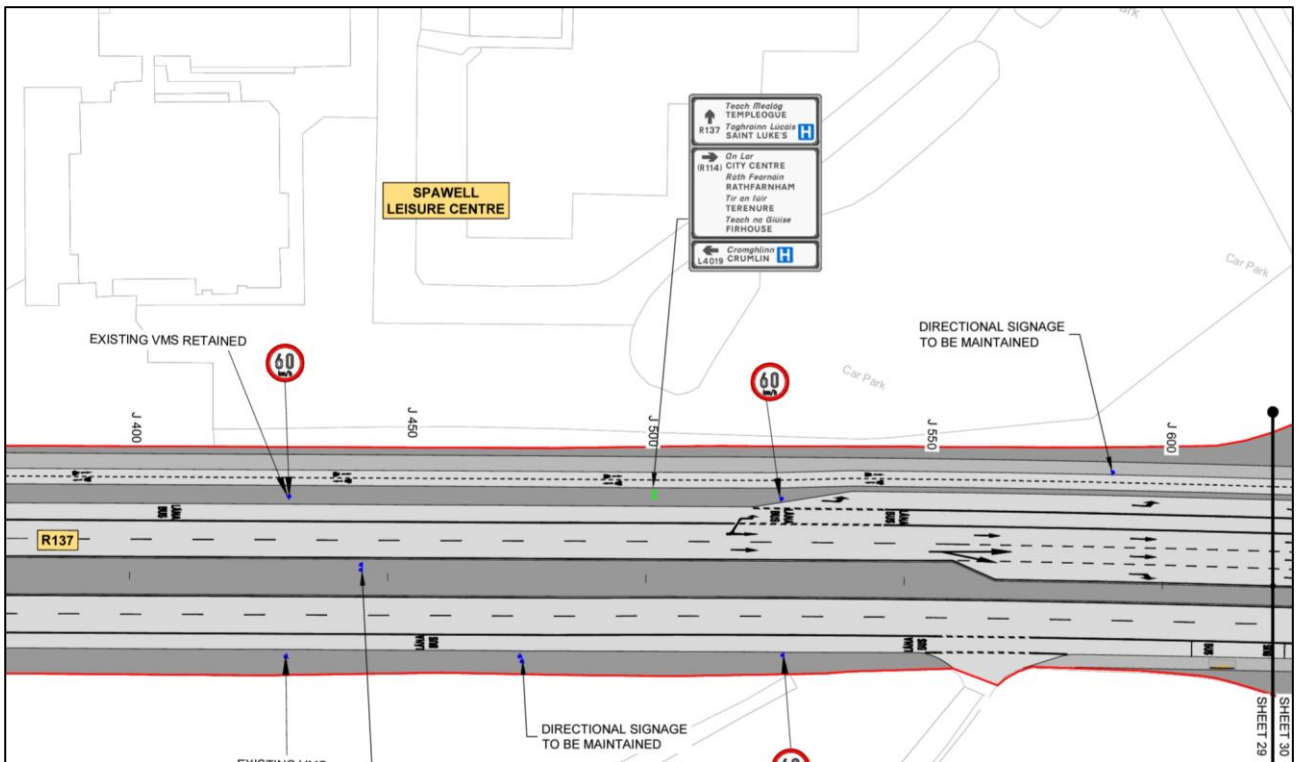


Figure 2.2.3 Extract from Traffic Signs and Road Markings Drawings (Sheet 29)

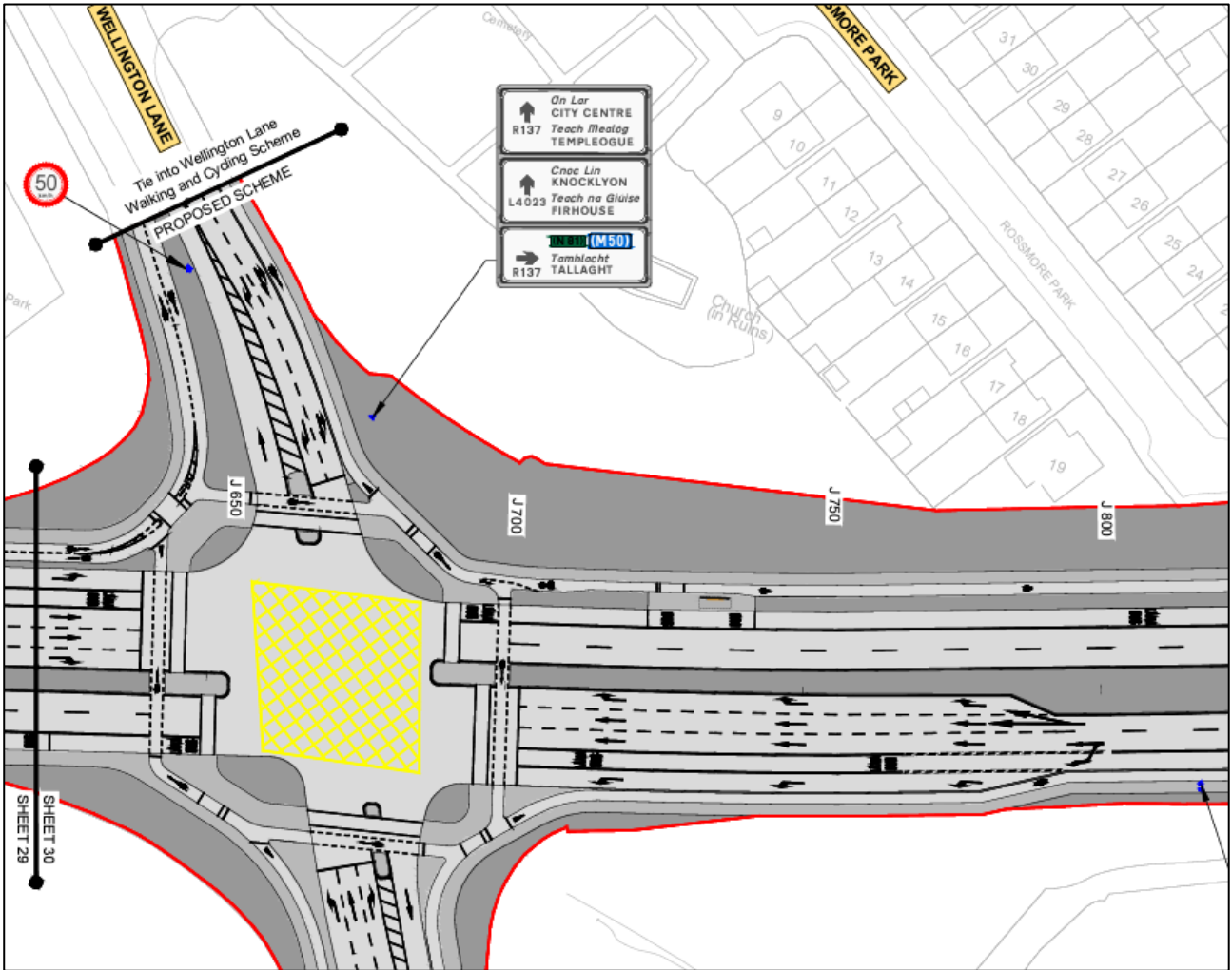
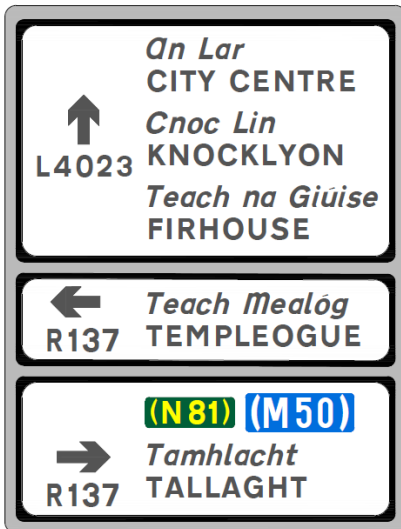


Figure 2.2.4 Extract from Traffic Signs and Road Markings Drawings (Sheet 30)

Note: A minor error is noted on this sign which should direct Templeogue traffic to the left as illustrated below



Similarly, at the Templeogue Road/Cypress Grove Road junction, directional signage is to be updated to direct traffic to turn right from Templeogue Road to Old Bridge Road where traffic can continue to the city centre via Rathfarnham Road. Figure 2.2.5 and Figure 2.2.6 present extracts from the Traffic Signs and Road Markings Drawings illustrating the proposed directional signage at the Templeogue Road/Cypress Grove Road junction.

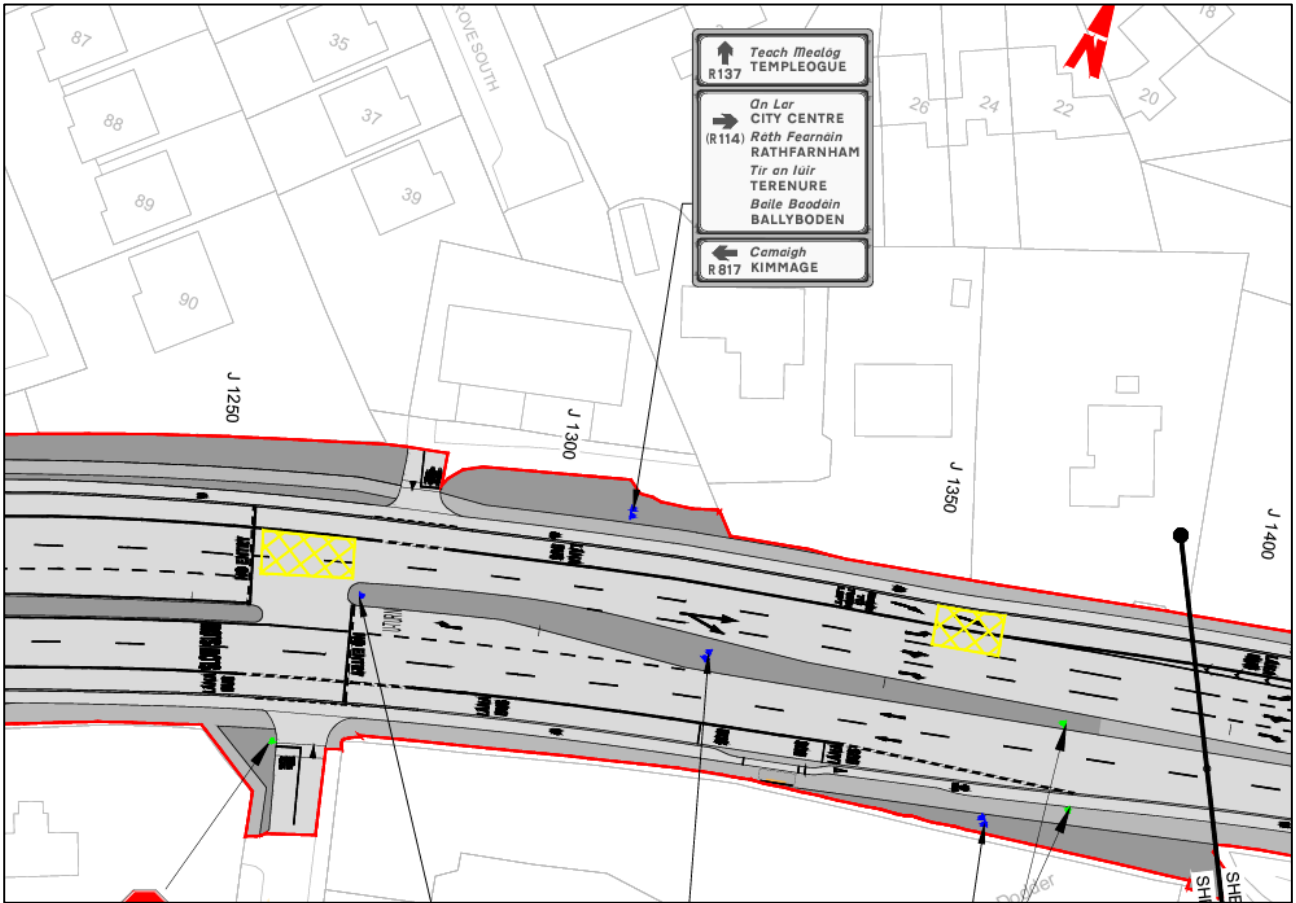


Figure 2.2.5 Extract from Traffic Signs and Road Markings Drawings (Sheet 31)

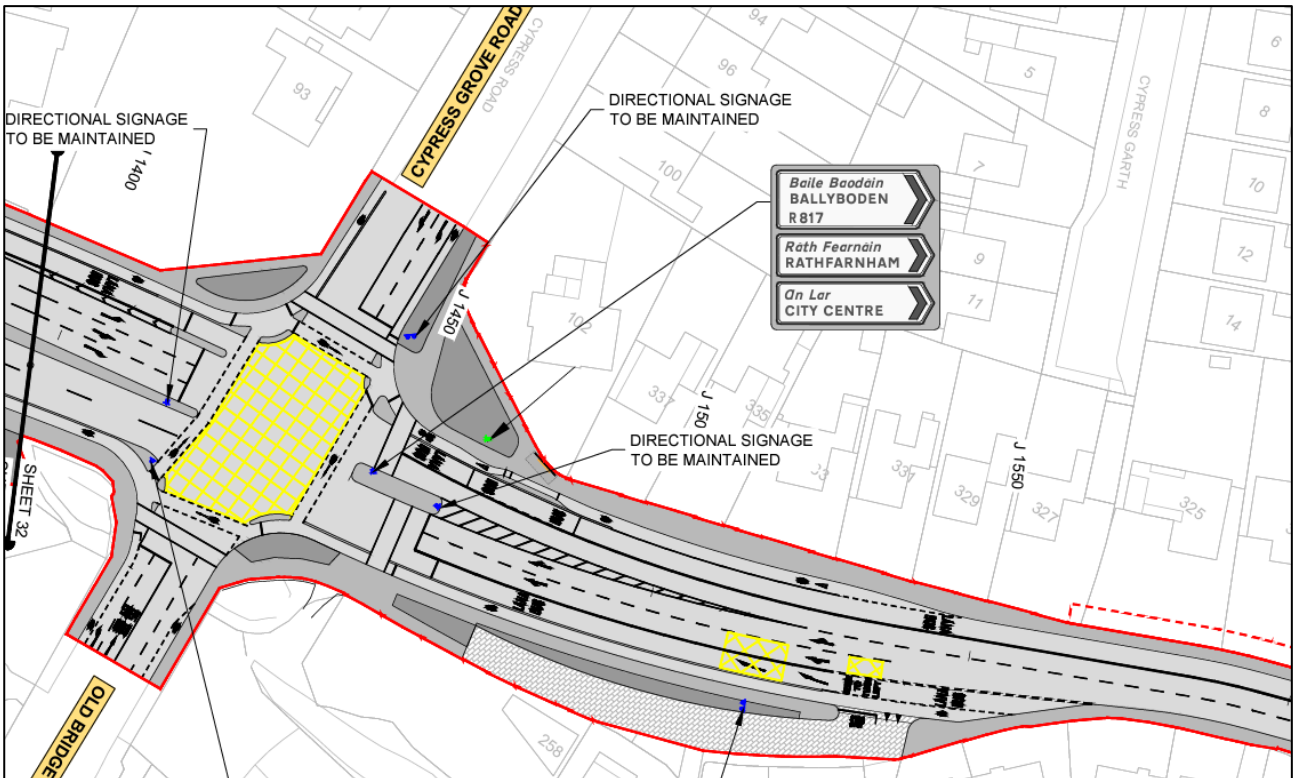


Figure 2.2.6 Extract from Traffic Signs and Road Markings Drawings (Sheet 32)

The above extract shows that both turn bans are proposed to minimise the risk of inbound through traffic utilising either Greenlea Road or Lavarna Grove to bypass the proposed inbound bus gate on Templeogue Road.

It is acknowledged that these turn bans may result in an inconvenience for those seeking to access business or residential premises on Lavarna Grove and Greenlea Road, it is noted that vehicular access will be retained via routes from all other directions (i.e. from the east and west along Terenure Road West and from the north on Fortfield Road). It is noted that no restrictions are proposed for traffic exiting either Lavarna Grove or Greenlea Road.

The following figure presents a sample of the alternative routes available from origins to the south/west of Templeogue Road which currently use a route to turn right into Lavarna Grove or Greenlea Road demonstrating that suitable alternative routes exist to provide vehicular access to these streets.



Figure 2.2.9 Alternative access routes to Lavarna Grove and Greenlea Road from the south/west

It is noted that some submissions suggested that the time periods during which the turn bans are in effect should be reviewed to match those of the proposed bus gate. 24 hour operation of turn bans at this location are preferred in order to provide road users with a road layout and network which is consistent at all times – and hence can be easily understood and safely used by car drivers, pedestrians and cyclists.

b. Impact on Access to Rathdown Area

A number of submissions raised concerns about the proposed turn bans from Templeogue Road to Rathdown Avenue and Rathdown Park. Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets out turning bans and other traffic management measures which will be implemented on the route to direct traffic away from either the Proposed Scheme corridor (to maximise bus journey time reliability) or to limit use of side streets as a short-cut route by through traffic. Two turn bans are proposed from Templeogue Road as set out in table 4.25 of Chapter 4 of the Preliminary Design Report. An extract from this table is presented in Table 2.2.2.

Table 2.2.2 Extract from Table 4.25 of the Preliminary Design Report

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Templeogue Road/Rathdown Avenue	No Right turns onto Rathdown Avenue from Templeogue Road	To avoid general traffic travelling through the Rathdown area due to the proposed inbound Bus Gate on Templeogue Road	No right turn inbound movements from Templeogue Road onto Rathdown Avenue
Templeogue Road/Rathdown Park	No Right turns onto Rathdown Park from Templeogue Road	To avoid general traffic travelling through the Rathdown area due to the proposed inbound Bus Gate on Templeogue Road	No right turn inbound movements from Templeogue Road onto Rathdown Park

The above extract shows that both turn bans are proposed to minimise the risk of inbound through traffic utilising either Rathdown Avenue or Rathdown Park to bypass the proposed inbound bus gate on Templeogue Road.

It is acknowledged that these turn bans may result in an inconvenience for those seeking to access residential premises in the Rathdown Estate or Bushy Park, it is noted that vehicular access will be retained via routes from all other directions (i.e. from the north along Templeogue Road and from the north and south along Rathfarnham Road).

The following figure presents a sample of the alternative routes available from origins to the south/west of Templeogue Road which currently use a route to turn right into Rathdown Avenue or Rathdown Park demonstrating that suitable alternative routes exist to provide vehicular access to these streets.



Figure 2.2.10 Alternative access routes to Lavarna Grove and Greenlea Road from the south/west

c. Effectiveness of proposed turn bans

The NTA acknowledges the comments raised in relation to enforcement of turn bans. With the State having incurred the very large expenditure required to deliver the BusConnects Programme, it is vital to ensure that sufficient enforcement is in place such that the benefits of that investment are not eroded by widespread breaches of the restrictions applying to bus lanes, cycle tracks and junctions. To effectively ensure this outcome, camera-based enforcement will be required to augment the on-street activities of An Garda Síochána. This type of arrangement is in place in many jurisdictions internationally, where camera detection of certain breaches of regulations is linked to the automatic issue of fixed penalty notices.

Action 67 in the Road Safety Strategy Phase 1 Action Plan 2021–2024 sets out the need to *“further develop camera-based enforcement by the Gardaí, including at junctions and for management of bus/cycle lanes, building on existing and recent legislation through establishing suitable cross-agency administrative arrangements; and, where any legislative issues are identified, to consider and develop agreed proposals to remedy them.”*

The Department of Transport has requested the National Transport Authority (NTA) to undertake the first phase of this action, namely to establish and chair a working group to explore this action and to bring forward recommendations on how it should be progressed. The subsequent steps for implementation, including addressing any legislative issues that may be identified, will be determined by the Department of Transport subsequent to the initial phase. It is expected that the report of the Working Group will be finalised and provided to the Department later this year

2.3 Proposed Scheme at Rathfarnham Road

2.3.1 Overview of Submissions Received

A number of issues were raised, and these are listed below:

1. Impact on Rathfarnham Castle Park
 - a. Consider alternate bus signalling
 - b. Consider stopping scheme before Rathfarnham Castle
 - c. Climate impact of tree removal
 - d. Biodiversity impact
 - e. Replacement of the Castle Wall
 - f. No consideration of River Glin
 - g. Landscape and visual
 - h. Impact on woodland playground
2. Option Assessment along Rathfarnham Road
3. Air and Noise Pollution on Rathfarnham Road
4. Increased Traffic and Congestion and consequential safety concerns

2.3.2 Common Issues Raised and Responses

2.3.2.1 Impact on Rathfarnham Castle Park

Summary of Issues Raised

- a. Excessive landtake – consider alternate bus signalling

Submissions contend that sufficient bus priority for outbound buses could be achieved by utilising a bus priority signal at the end of the dual carriageway beside Rathfarnham Village (at the junction of Rathfarnham Road / Butterfield Avenue) in doing so would enable reduction of the landtake necessary and thereby reduce the impact on Rathfarnham Castle Park.

- b. Excessive landtake – consider stopping the scheme earlier

Submissions contend that by stopping the scheme at the Butterfield/Rathfarnham Road junction would result in not needing to widen Grange Road along the Rathfarnham Castle Park boundary and thereby reduce impact on the park.

- c. Climate impact of tree removal

Submissions contend that the tree/habitat removal proposed within Rathfarnham Castle Park to facilitate road widening will have a significant negative climatic impact given the carbon sequestration potential of trees.

- d. Biodiversity impact

Submissions contend that the tree/habitat removal proposed within Rathfarnham Castle Park to facilitate road widening will have a significant negative impact on flora and fauna within the Castle grounds.

- e. Replacement of the Castle Wall

Submissions contend that the replacement wall proposed along the Rathfarnham Castle Park boundary will be of inferior quality to the existing wall.

- f. No consideration of River Glin

A number of submissions note that the Proposed Scheme does not consider the impact on the Glin River (or Whitechurch Stream) that flows under the Grange Road and into Rathfarnham Castle Park.

- g. Landscape and visual

Submissions contend that the tree/habitat removal proposed within Rathfarnham Castle Park to facilitate road widening will have a significant negative landscape and visual impact on the park.

- h. Impact on woodland playground

Submissions contend that the tree/habitat removal proposed within Rathfarnham Castle Park to facilitate road widening will have a significant negative landscape on the woodland playground located within the park.

Response to Issue Raised

- a. Excessive landtake – consider alternate bus signalling

Section 4.5.2.1 in Chapter 4 of Volume 2 of the EIAR describes the proposed scheme along this section. *“The Proposed Scheme will commence at the junction of Grange Road and Nutgrove Avenue. Between this junction and the Castleside Drive junction it is proposed to provide a single bus lane alongside general traffic lanes and cycle tracks in both directions.*

To accommodate the road layout, it is proposed to utilise limited land-take from adjacent properties, including setting back the existing boundary wall to Rathfarnham Castle Park.”

Section 4.4.1.1 of the Preferred Route Options report describes two options considered for this section. Option RC1 which was selected for the purposes of the application would provide a general traffic lane in each direction along the entirety of this route section, as well as dedicated bus lanes and cycle tracks along the CBC for the entirety of this route section. This option is a version of the Emerging Preferred Route Option, refined to reflect issues identified upon review of the topographical survey. The other option RC2 would provide a general traffic lane in each direction along the entirety of this route section, as well a combination of dedicated bus lanes and signal controlled priority and cycle tracks along the CBC. This is graphically illustrated in the Image below. This option is quite similar to the option being suggested as part of the submissions.

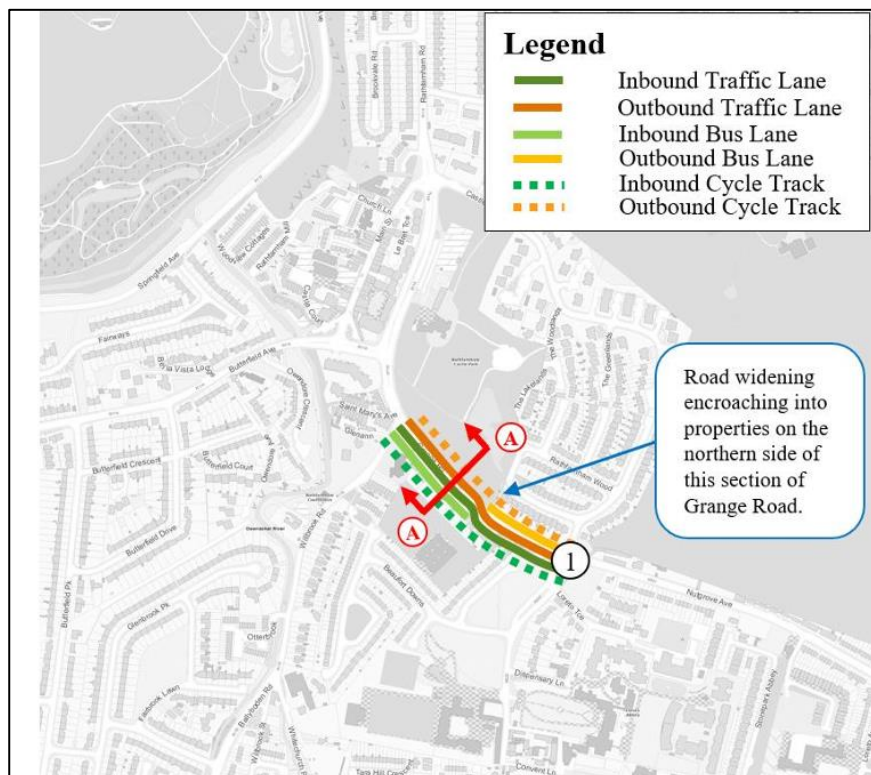


Figure 2.3.1 Route Option RC2 Indicative Scheme Design (Figure 4.34 of the Preferred Route Option Report)

Both options were assessed using a Multi-criteria analysis. Based on that analysis and as described in Section 4.4.1.1.7 of the Preferred Route Options report, Option RC1 was selected for the following reasons:

Based on the assessment undertaken, route Option RC1 offers more benefits over other options. It performs favourably under the Economy and Integration criteria, while performing equally to other options under the Accessibility and Social Inclusion and Safety criteria. Option RC1 is the PRO for the Rathfarnham Road area for the following reasons:

- i. It would provide segregated bus priority on the CBC throughout the entirety of this section of the scheme, supporting reliability of journey time for the bus;
 - ii. It would deliver segregated online cycle facilities on Secondary Route S04 of the GDA cycle network plan; and
 - iii. It would maintain existing general traffic provision along Grange Road.
- b. Consider stopping scheme before Rathfarnham Castle

As stated in Chapter 3 of the EIAR Consideration of Alternatives “the Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report, it was determined that the route should stop at the junction of Nutgrove Avenue and Grange Road, as south of this point generally there are three principal routes between Marley Park and the Dodder crossing namely via Stone Mason’s Way, Grange Road and Ballyboden Road which currently carry less frequent bus services and which converge at Nutgrove Avenue in the vicinity of the junction with Grange Road.”

In addition the network redesign map below demonstrates how the A2, A4 and S6 services split at the Nutgrove junction which further supports the rationale to extend the scheme as far as Nutgrove junction.

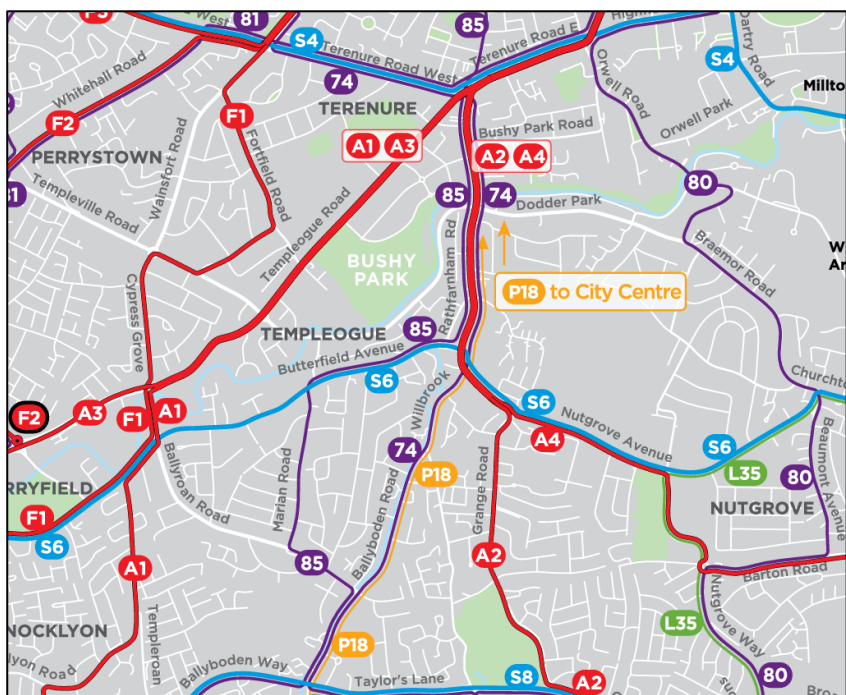


Figure 2.3.2 Extracts from the Dublin Area Bus Network Redesign Revised Proposal (2020)

- c. Climate impact of tree removal

Details of the trees and vegetation to be removed are described in the Arboricultural Impact Assessment which is included as Appendix A17.1 in Volume 4 (Part 4 of 4) of the EIAR. See below extracts from the relevant Tree Protection Plan drawings included. Full details of the tree types proposed for removal along the relevant section are generally described on Pages A5-A10 of said report. It is proposed to remove circa 37 trees with the Rathfarnham Castle Demesne.

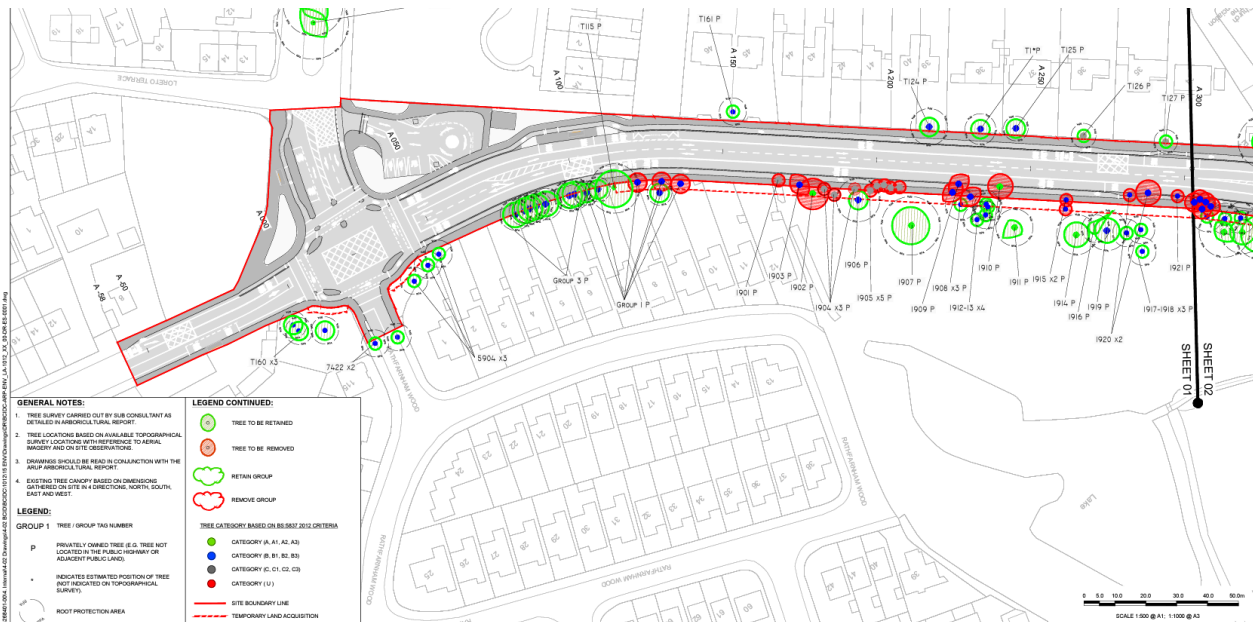


Figure 2.3.3 Extract from Tree Protection Plan in EIAR Appendix A17.1 (Sheet 01)



Figure 2.3.4 Extract from Tree Protection Plan in EIAR Appendix A17.1 (Sheet 02)

Section 8.3.4.1.2 of the EIAR describes that “trees are a natural carbon sink and absorb carbon dioxide (CO₂) from the atmosphere helping in the reduction of climate change. A default value for the amount of CO₂ which a mature tree can absorb is approximately 22 kg CO₂eq/annum (EEA 2011). Trees have the ability to sequester carbon with the peak CO₂eq (carbon dioxide equivalent) uptake rate for tree stands in the order of 5t CO₂eq/hectare/year (tonnes of carbon dioxide equivalent per hectare per year) to 20t CO₂eq/hectare/year with CO₂eq uptake rates declining with maturity and health (UK Forestry Commission 2012). Thus, based on these emission rates, a hectare will typically contain between 225 – 900 trees depending on tree type and maturity. Any felling of trees has the potential to result in a loss or reduction of this carbon sink thus increasing the levels of CO₂ in the atmosphere. In contrast, increased planting of trees on suitable lands will, over time, help to increase the carbon sink potential of the land and benefit climate. 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”.

As described in Section 8.5.1.4 the “Construction Phase of the Proposed Scheme will result in the temporary removal of grassland to facilitate the construction compounds. However, overall, there will be a Negligible impact on carbon sequestration as a result of the Construction Phase of the Proposed Scheme”.

As described in Section 8.5.2.3 the “Operational Phase of Proposed Scheme will result in the permanent removal of some land to facilitate construction of the Proposed Scheme. However, overall, there will not be a significant change to land use as a result of the Proposed Scheme. Thus, there will be a negligible impact on carbon sequestration as a result of the Operational Phase of the Proposed Scheme”.

It is proposed to replace trees within the park, as per the Landscape General Arrangement drawings it is proposed to plant circa 80 new trees. See a relevant extract below.

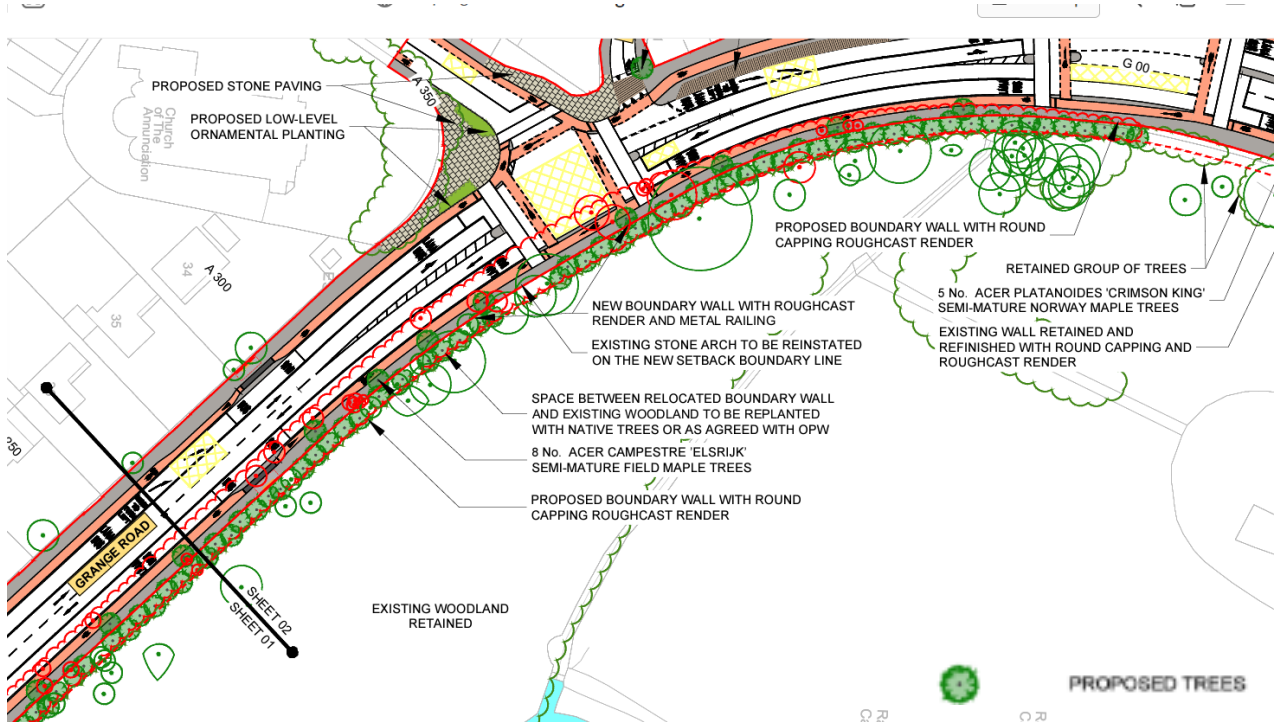


Figure 2.3.5 Extract from Landscaping General Arrangement Drawings from Figures: Part 1 of 3 of Volume 3 of the EIA (Sheet 02)

d. Biodiversity Impact

EIA Volume 2 Chapter 12 describes the assessment of the impact of the scheme on the Flora and Fauna within Rathfarnham Castle Park. The impact on the following flora and fauna is assessed within Chapter 12:

- Habitats
- Rare and Protected Plant Species
- Non-native Invasive Species
- Mammals
- Birds
- Reptiles
- Amphibians
- Fish
- Invertebrates

Table 12.19 provides a summary of the Construction Phase Significant Residual Impacts following implementation of the mitigation measures outlined in Section 12.5. See relevant extracts from the Table below which show the assessment on habitat, rare/protected plant species and fauna species.

Ecological Receptor	Ecological Valuation	Potential Impact (Pre-Mitigation and Monitoring)	Potential Significance	Significant Residual Impact (Post Mitigation and Monitoring)
			national geographic scale	
Rogerstown Estuary SPA Portraine Shore pNHA Rogerstown pNHA	International Importance National Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Lambay Island SPA Lambay Island pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Dalkey Islands SPA Dalkey Coastal Zone and Killiney Hill pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Skerries Islands SPA Skerries Islands NHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
The Murrough SPA The Murrough pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Rockabill SPA	International Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
The Grand Canal pNHA	National Importance	Habitat degradation (hydrology; air quality; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Dodder Valley pNHA	National Importance	Habitat degradation (hydrology; air quality; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Habitats (outside of designated areas for nature conservation)				
Canals (FW3)	National Importance	Habitat degradation (hydrology; air quality; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Depositing / lowland rivers (FW2)	Local Importance (Higher Value)	Habitat degradation (hydrology; non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect
(Mixed) broadleaved woodland (WD1)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	Likely significant effect at the local geographic scale
Scattered trees and parkland (WD5)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	No significant residual effect
Hedgerows (WL1)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	Likely significant effect at the local geographic scale
Treelines (WL2)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	Likely significant effect at the local geographic scale
Rare / Protected Plant Species				

Ecological Receptor	Ecological Valuation	Potential Impact (Pre-Mitigation and Monitoring)	Potential Significance	Significant Residual Impact (Post Mitigation and Monitoring)
Flora species listed on the Flora Protection Order	National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Flora species on Ireland's Red lists (Vulnerable or of higher concern concern)	County to National	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
All other non-Red listed flora species	Local Importance (Lower Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Non-native invasive plant species	N/A	Spread at expense of other habitats, habitat degradation (hydrology)	Likely significant effect at the local to international scale geographic scale	No significant residual effect
Fauna Species				
Bats	Local Importance (Higher Value)	Habitat loss / fragmentation; disturbance / displacement	Likely significant effect at the local geographic scale	No significant residual effect
Badger	Local Importance (Higher Value)	Disturbance / displacement	Likely significant effect at the local geographic scale	No significant residual effect
Otter	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
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	No significant residual effect
Marine mammals (all other marine mammals)	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale	No significant residual effect
SCI bird species	International Importance	See SPAs above	See SPAs above	See SPAs above
All other breeding bird species (non-SCI)	Local Importance (Higher Value)	Habitat loss; mortality risk; disturbance / displacement; habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect (habitat degradation (hydrology); mortality risk) Likely significant residual effect at the local geographic scale (habitat Loss; disturbance / displacement)
All other wintering bird species (non-SCI)	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Amphibians	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Atlantic salmon	Local Importance (Higher Value) – International Importance	Habitat degradation (hydrology)	Likely significant effect at the local to international geographic scale	No significant residual effect
Brown trout	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect

Ecological Receptor	Ecological Valuation	Potential Impact (Pre-Mitigation and Monitoring)	Potential Significance	Significant Residual Impact (Post Mitigation and Monitoring)
European eel / Lamprey species	National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
All other fish species	Local importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Invertebrates - freshwater molluscs	International to National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Local Biodiversity Areas				
DCC				
Grand Canal	National Importance	Habitat degradation (hydrology; non-native invasive plant species air quality)	Likely significant effect at the local geographic scale	No significant residual effect
River Dodder Corridor	County Importance	Habitat degradation (hydrology, non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect
SDCC				
Network of streams and rivers e.g. River Dodder	County Importance	Habitat degradation (hydrology non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect
DLRCC				
Wildlife Corridors- Dodder Valley corridor and Ticknock to River Dodder corridor	County Importance	Habitat degradation (hydrology, non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect

As can be seen from above there is a likely significant impact on habitat at the geographic level. In relation to Rathfarnham Castle Park, Figure 12.5 in Volume 3 of the EIAR the woodland on the Rathfarnham Castle grounds is designated as a WD1 woodland which is a mixed Broadleaf woodland. "Tree species recorded at these locations include maple species *Acer sp.*, birch species *Betula spp.*, alder, horse chestnut *Aesculus hippocastanum*, hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, cypress species *Cupressus spp.*, beech, copper beech *Fagus sylvatica f. purpurea*, ash *Fraxinus excelsior*, holly *Ilex aquifolium*, mallow *Malva sylvestris*, sycamore, aspen *Populus tremula*, cherry laurel, holm oak *Quercus ilex*, oak species *Quercus spp.*, willow species *Salix spp.*, Wilson's honeysuckle *Lonicera nitida*, elder, rowan *Sorbus aucuparia*, small-leaved lime *Tilia cordata*, elm species *Ulmus spp.*, and cotoneaster species". WD1 woodland is described as being locally important as per Table 12.3 of the EIAR.



Figure 2.3.6 Extract from EIAR Figure 12.5 - Habitat Survey Results, Sheet 1 of 8

To mitigate the likely significant impact during construction, as per Section 12.5.1.2 Habitat Loss and Fragmentation “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) and treeline (WL2) habitat types), which lie within the footprint, or along the boundary of the Proposed Scheme, will be retained. Vegetation to be retained is shown in further detail on the Landscape General Arrangement Drawings [BCIDC-ARPELV_LA1012_XX_00-DR-LL-9001] in Volume 3 of this EIA. 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 [BCIDC-ARPELV_LA1012_XX_00-DR-LL-9001] in Volume 3 of this EIA. 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 and displayed on the Landscaping General Arrangement drawings [BCIDCARPELV_LA1012_XX_00-DR-LL-9001] in Volume 3 of this EIA:

- 400 trees planted;
- 126.4m of proposed hedgerow;
- 7,300 m² of proposed species rich grassland;
- 932 m² of proposed ornamental planting; and,
- 9,212 m² of proposed amenity grassland planting.”

In relation to breeding birds there is a likely significant residual effect at the local geographic scale (habitat loss, disturbance/displacement).

As per Section 12.4.3.5.1.1 Habitat Loss and Loss of Breeding / Resting Site “The Proposed Scheme will result in the loss of breeding bird nesting and foraging habitat within the footprint of the Proposed Scheme. The areas of habitat loss within the Proposed Scheme boundary are provided in Section 12.4.3.2 and tabulated in Table 12.14 for all KER habitat types. These areas comprise a total area of approximately 0.78ha of hedgerows (WL1) and treelines (WL2) (also KERs), mixed broadleaved woodland (WD1) (KER) and approximately 0.05ha of scattered trees and parkland (WD5) habitats. In addition, there are areas of scrub (WS1), ornamental / non-native shrub (WS3) and amenity grassland (GA2) within the footprint of the Proposed Scheme, which are not KERs in their own right due to their limited botanical value. However, these habitats may provide nesting and / or foraging habitat for birds (approximately 3.4ha). These areas will be removed during construction of the Proposed Scheme resulting in an additional loss of breeding bird nesting and/or foraging habitat. In summary, the habitats that may be lost comprise

- Treeline habitat located along R115 / R821 bordering Rathfarnham Castle Park”

In relation to Disturbance/Displacement as per Section 12.4.3.5.1.3 “The noise, vibration, increased human presence and the visual deterrent of construction traffic, associated with site clearance and construction will temporarily disturb breeding bird species and is likely to displace breeding birds from habitat areas adjacent to the footprint of the Proposed Scheme. Construction activities will largely involve carriageway and pavement resurfacing / reconstruction as required, readjustment of kerbs and new road. However, as an important transport corridor in a heavily urbanized landscape, there is an existing relatively high level of human disturbance within the immediate environment of the Proposed Scheme (e.g., Rathfarnham Road R114 and N81 / M50 Interchange) and as such it is likely that breeding species present are habituated to a certain degree of disturbance. The magnitude of the impact will be dependent on the type of construction works and their duration; general construction activities will have a less pronounced affect than blasting, in terms of its Z_{o1}, but will be on-going from periods of up to 24 months and multiple breeding seasons across the entirety of the Construction Phase. However, phasing of the construction works in scheme section will reduce the temporary nature of this impact to approximately one to twelve month disturbances in each section of the Proposed Scheme. With regards to the proposed Construction Compounds disturbance impacts will be short-term in nature as they will be ongoing for the duration of the Construction Phase. Table 12.15 provides a summary of the indicative construction noise calculations at varying distances, which have been modelled in the Chapter 9 Noise and Vibration in Volume 3 of this EIA. All areas within 250m of the Proposed Scheme will be subject to construction activities which generate noise levels greater than 50dB (e.g., piling, rock-breaking, etc.). These activities will result in a greater magnitude of effect on the baseline environment. As a result, noise and vibration from these activities, will have the potential to result in the reduced breeding success of breeding bird species in the vicinity of the works. Breeding pairs will be temporarily displaced during the construction works. The area over which disturbance / displacement effects will occur, forms a relatively small part of larger expanses of similar habitat types in the wider locality (e.g., mixed broadleaved woodland (WD1)).

As such, given the availability of suitable habitat in the wider locality of the Proposed Scheme, the construction works are therefore not likely to affect the conservation status of breeding birds and will not result in a significant negative effect, above the local geographic scale. Although it is not possible to quantify the magnitude of this potential impact (or the potential effect zone) with precision, it could potentially extend for several hundred metres from the Proposed Scheme. The results of noise modelling carried out for the Proposed Scheme confirmed that at 150m, noise levels for all construction activities will be below 60dB (See Chapter 9 (Noise & Vibration)). Given the temporary to short-term nature of the construction works, coupled with the existing levels of disturbance within these urban areas, disturbance or displacement effects associated with the Construction Phase of the Proposed Scheme will also be over the short-term. Therefore, these impacts will not affect the conservation status of breeding bird species and will not result in a negative effect, above the local geographic scale.”

Mitigation for the impacts is described in Section 12.5.1.5.1.1 *“Where possible, habitats of importance to breeding birds such as scattered trees and parkland (WD5), hedgerow (WL1) and treeline (WL2) 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 (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-9001) 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 (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-9001) 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.”*

Table 12.20 provides a summary of the Operational Phase Significant Residual Impacts following implementation of the mitigation measures outlined in Section 12.5. As can be seen there are no significant residual effects. See relevant extracts from the Table below.

Ecological Receptor	Ecological Valuation	Potential Impact (Pre-Mitigation and Monitoring)	Potential Significance	Significant Residual Impact (Post Mitigation and Monitoring)
Rogerstown Estuary SPA Portrane Shore pNHA Rogerstown pNHA	International Importance National Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Lambay Island SPA Lambay Island pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Dalkey Islands SPA Dalkey Coastal Zone and Killiney Hill pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
Skerries Islands SPA Skerries Islands NHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international to national geographic scale	No significant residual effect
The Murrough SPA The Murrough pNHA	International Importance National Importance	Habitat degradation (hydrology)	Likely significant effect at the international geographic scale	No significant residual effect
Rockabil SPA	International Importance	Habitat degradation (hydrology)	Likely significant effect at the international geographic scale	No significant residual effect
The Grand Canal pNHA	National Importance	Habitat degradation (hydrology; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Dodder Valley pNHA	National Importance	Habitat degradation (hydrology; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Habitats (outside of designated areas for nature conservation)				
Canals (FW3)	National Importance	Habitat degradation (hydrology; non-native invasive plant species)	Likely significant effect at the national geographic scale	No significant residual effect
Depositing/ lowland rivers (FW2)	Local Importance (Higher Value)	Habitat degradation (hydrology; non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect
(Mixed) broadleaved woodland (WD1)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	No significant residual effect
Scattered trees and parkland (WD5)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	No significant residual effect
Hedgerows (WL1)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	No significant residual effect
Treelines (WL2)	Local Importance (Higher Value)	Habitat loss	Likely significant effect at the local geographic scale	No significant residual effect
Rare / Protected Plant Species				
Flora Species listed on the Flora Protection Order 2022	National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Flora Species on Irelands Red Lists (Vulnerable or of higher concern concern)	County to National Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale	No significant residual effect

Ecological Receptor	Ecological Valuation	Potential Impact (Pre-Mitigation and Monitoring)	Potential Significance	Significant Residual Impact (Post Mitigation and Monitoring)
All other non-Red listed flora species	Local Importance (Lower Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Non-native invasive plant species	N/A	Spread at expense of other habitats	Likely significant effect at the local to international geographic scale	No significant residual effect
Fauna Species				
Otter	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Marine Mammals (Annex II and all other marine mammals)	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local to national geographic scale	No significant residual effect
SCI bird species	International Importance	See SPAs above	See SPAs above	See SPAs above
All other breeding bird species (non-SCI)	Local Importance (Higher Value)	Disturbance / displacement; habitat degradation (hydrology); Collision Risk	Likely significant effect at the local geographic scale	No significant residual effect
All other wintering bird species (non-SCI)	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Amphibians	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Atlantic Salmon	International Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Brown trout	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
European eel / Lamprey species	National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
All other fish species	Local Importance (Higher Value)	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Invertebrates - Freshwater molluscs	International to National Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect
Local Biodiversity Areas				
DCC				
Grand Canal	National Importance	Habitat degradation (hydrology; non-native invasive plant species air quality)	Likely significant effect at the local geographic scale	No significant residual effect
River Dodder Corridor	County Importance	Habitat degradation (hydrology, non-native invasive plant species)	Likely significant effect at the local geographic scale	No significant residual effect
SDCC				
Network of streams and rivers e.g. River Dodder	County Importance	Habitat degradation (hydrology)	Likely significant effect at the local geographic scale	No significant residual effect

e. Replacement of the Castle Wall

Section 4.5.2.1 in Chapter 4 in Volume 2 of the EIAR describes the Proposed Scheme along this section. “The Proposed Scheme will commence at the junction of Grange Road and Nutgrove Avenue. Between this junction and the Castleside Drive junction it is proposed to provide a single bus lane alongside general traffic lanes and cycle tracks in both directions. To accommodate the road layout, it is proposed to utilise limited land-take from adjacent properties, including setting back the existing boundary wall to Rathfarnham Castle Park. The existing boundary wall of Rathfarnham castle will be set back and reconstructed with a round capping roughcast render”. The extent of the proposed wall reinstatement is shown on Drawing Nos. BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001 and BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001, relevant extract from one of those drawings below with the detail highlighted.

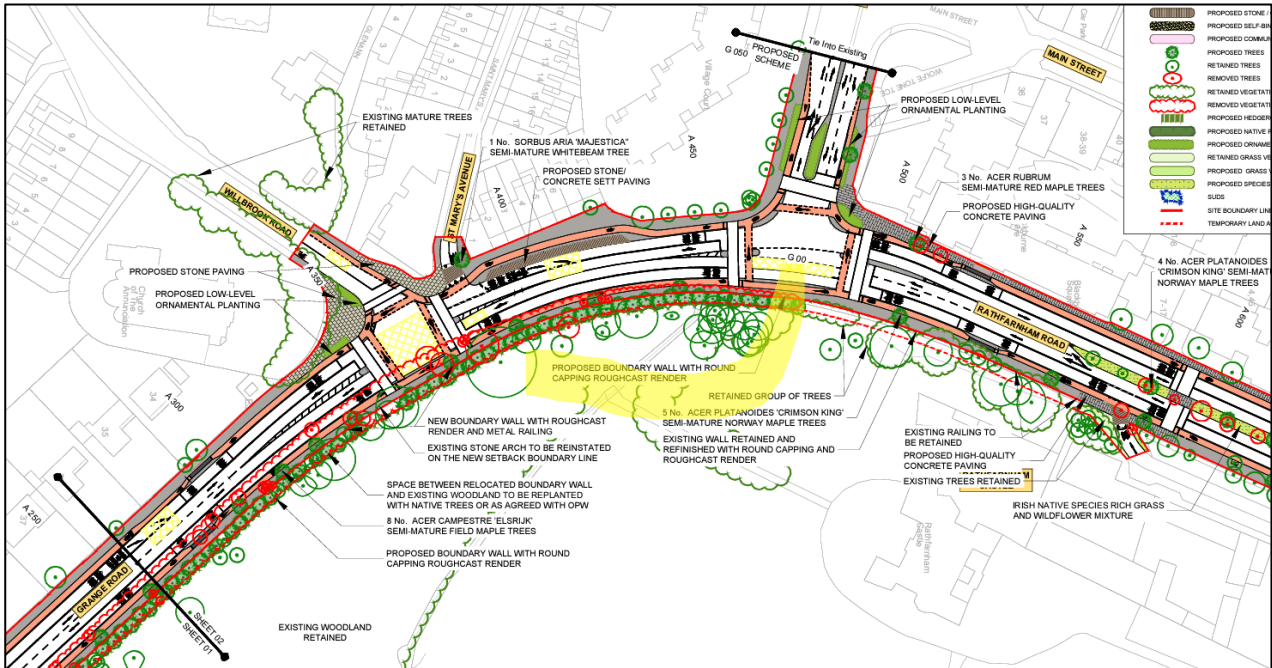


Figure 2.3.7 Extract from Landscaping General Arrangement Drawings (Sheet 2)

As per Section 16.5.1.5 in Chapter 16 in Volume 2 of the EIAR “the proposed land take to Grange Road directly impacts the boundary wall to the Rathfarnham Castle Demesne. Rathfarnham Castle is a 16th century Castle remodelled in the 18th century and is a National Monument (RMP DU022-014, Nat. Mon. No. 628, PO no. 2/1986, SDCC RPS 221) and therefore of High sensitivity. It is also located directly opposite the Rathfarnham Architectural Conservation Area. The Demesne (NIAH 2351) has been much reduced in size but is a public park around the Castle, preserving its setting. Some trees will be removed as a result of the land take and will be a temporary negative visual impact during construction. The pre-mitigation Construction Phase impact is Direct, Negative, Significant Temporary. The present boundary to Rathfarnham Castle on Grange Road and Rathfarnham Road are replacement boundaries built as part of the Rathfarnham Road bypass. The existing mix of boundary treatments on the Grange Road and Rathfarnham Road provides a poor and discordant street frontage and detracts from the streetscape, particularly in relation to the adjoining ACA and Protected Structures. The concrete block walling also detracts significantly from the Castle and its setting and is out of keeping with the Castle and its Demesne. The proposed land take presents an opportunity to reinstate a more consistent and sympathetic boundary treatment which is in keeping with the Castle, its Demesne landscape and the ACA. Consultations have been undertaken with SDCC, OPW, Dept. of Housing, Local Government and Heritage regarding the encroachment into the Rathfarnham Castle Demesne and the removal, set back and replacement of the existing boundary wall. The following boundary treatment is proposed as part of the Proposed Scheme.

The proposed wall will be 2.8m in height with a rounded capping detail. This is consistent with the existing wall and together with the proposed landscape treatment will provide the necessary buffer between the proposed scheme and the Castle and it’s Demesne and maintains and enhances the sense of enclosure.

It is noted that in their submission, South Dublin County Council indicate that proposed boundary wall details are acceptable stating ‘the new boundary wall required at this location will provide a boundary treatment that improves views from the Castle and allows the boundary treatment of the Castle Demesne to be more consistent and improve the overall visual impact and architectural detail’.

f. No consideration of River Glin

The NTA is satisfied that the River Glin and the catchment it forms part of are captured in the EIA assessments and the reasoning for this is set out below.

The Whitechurch Stream (locally known as the River Glin), is not itself directly impacted by the Proposed Scheme. It is important to note that the assessment as presented in the EIAR and AA documents, uses the correct water body name as per the Water Framework Directive (WFD) – this is the Owendoher_010. However, for the purposes of responding to this submission, the name of the Whitechurch Stream/River Glin and/or the Owendoher River are identified as appropriate in this response to address biodiversity issues raised in the Rathfarnham Wood Residents Association submission. A site walkover was conducted of this area on 4th October 2023 for the purposes of addressing the particular issues raised in the submission.

The historical mill race, is diverted underground, leading away from the Whitechurch Stream in the direction of the Rathfarnham Castle Park (RCP). The Whitechurch Stream, is itself culverted in areas and the locations where the historical mapping^[1] indicate it routing underground away in the direction of RCP cannot be confirmed. The mill race is not an EPA identified watercourse. Notwithstanding this fact, the diverted channel flows through the RCP to its ponds before continuing in a North-westerly direction along a narrow, largely vegetation-clogged channel before being culverted underground through the urban environment before discharging via a concrete pipe into the Owendoher River, due west of road bridge over the watercourse at Butterfield Avenue.

The assessment for the Proposed Scheme, while not explicitly identifying the mill race channel from the Whitechurch Stream was considered in both the Chapter 12 (Biodiversity) and Chapter 13 (Water) in Volume 2 of the EIAR, as well as the AA documents pertaining to the Proposed Scheme, in particular the NIS under the WFD named the Owendoher_010. Reference to the Whitechurch Stream is also captured in Appendix A of the flood risk assessment (which is contained Volume 4 of the EIAR).

The works proposed to the culvert which carries the mill race is as follows. At approximate chainage A160 it is proposed to extend an existing culvert under the Grange Road by circa 5m to facilitate road widening at the culvert location which is within the existing Rathfarnham Castle Park as documented in the Proposed Surface Water Drainage Works (Sheet 1, Part 2 of 3 in Volume 3 of the EIAR).

The extended culvert will be a precast reinforced concrete box culvert that will match the existing form and dimension which is circa 2.3m wide and 0.65m high. The culvert extension will be laid to retain the existing level and gradient of the stream. In order to construct the culvert the existing boundary wall will be removed. To minimise disruption to the immediate area the existing stream will be temporarily overpumped for a short period of time during a dry period to allow the footprint of the culvert extension to be prepared for receipt of the culvert section by excavation of the footprint to formation level and placement of a concrete blinding. A small crane will be used to lift the culvert extension into place from the roadside under suitable temporary traffic management measures. After completion of the culvert extension the new boundary wall can be constructed.

At approximate chainage A450 it is proposed to retain in place an existing culvert and headwall. At the location of the culvert it is proposed to widen the existing road by approximately 2m over the existing culvert. The existing culvert will be exposed during construction and surrounded with a suitable bedding material. A precast reinforced concrete protection slab will then be placed at a suitable level over the culvert to ensure that it is not damaged during construction and operation.

In accordance with the requirements of the WFD, all water features are assessed following the EPA river dataset within the WFD compliance assessment with respect to potential impacts of the Proposed Scheme, and the proposed impacts specifically to Whitechurch Stream (or locally known as the River Glin), as well as the Owendoher River (see Chapter 13 of the EIAR; Section 5.1 of the NIS; and the WFD compliance assessment).

The Rathfarnham Woods Residents Association submission, which is appended by a number of other submissions, considers that the mill race is a fragile water feature in terms of the support that it provides to the Rathfarnham Castle Park wildlife, including for frogs, and this is supported from correspondence in respect of a separate development (Appendix I of the Rathfarnham Woods Residents Association submission).

It is considered that there is potential for populations of frogs to occur in Rathfarnham Castle Park. Mitigation is included in Chapter 12 in Volume 2 of the EIAR, which sets out the mitigation measures which will be implemented for amphibians – refer to Section 12.5.1.7. Refer also to Section 12.5.2.2.1.1 in Chapter 12 which outlines the standard drainage design controls included in the Proposed Scheme to protect water quality.

However, the mill race, notwithstanding its potential diversion from the Whitechurch Stream is not considered of significant biodiversity value, given that it is culverted for much of its length (between the approximately diversion from the Whitechurch Stream and the discharge to the Owendoher River and only appears aboveground in Rathfarnham Castle Park (a distance of approximately 300 metres, before it is culverted again under Rathfarnham Road). The species that use the pond are typical of such areas and indeed are habituated to urban settings. As the Proposed Scheme will not directly impact the pond, it is considered that there will be no likely change in use by these species.

^[1] 1st Edition 6 inch mapping and 25 inch mapping series both viewable at: <https://webapps.geohive.ie/mapviewer/index.html>

In terms of aquatic species, the Whitechurch Stream is known to be suitable in parts, as a brown trout nursery, however it is understood that these areas are typically limited to areas further upstream such as around St Enda's Park, or at the confluence with the Owendoher River. Long culverted watercourses such as the mill race diversion that leads to RCP are not considered desirable for fisheries (IFI 2016^[2]). On the October 2023 site visit at the millrace ingress into Rathfarnham Castle Park the presence of 3-spine stickleback was noted, a widespread species that is tolerant of a range of water quality. No other fish were observed.

The water entering the Rathfarnham Castle Park has for most parts an imperceptible flow and the aboveground channels are often stagnant, with vegetation clogging them, with the only noticeable flow observed where physical drops in channel corridor occurs, e.g., after a bridge or when the egress flow enters the culvert near Rathfarnham Road/Butterfield Avenue intersection.

But, based on the Proposed Scheme design and nature of the mill race, no perceptible impact in terms of blockage from the Proposed Scheme are likely, as the only alteration proposed is a short extension of the existing culvert, immediately inside the existing boundary wall where the mill race ingresses into Rathfarnham Castle Park. The imperceptible flow that emerges from the culvert, nor the short culvert extension will not alter the current situation at either construction or operation. Mitigation measures have been prescribed in the EIAR so as to avoid/prevent/reduce any significant impacts on the surface water environment, including the preparation of a Surface Water management Plan (SWMP) contained the CEMP (Appendix A5.1 on Volume 4 of the EIAR). The CEMP and SWMP will be implemented by the appointed contractor during the construction of the Proposed Scheme.

There are no substantive works proposed at the egress of the culvert and therefore the Proposed Scheme will not increase the likelihood of a blockage during the operational phase.

The development and assessment of the design of the Proposed Scheme considered the sensitivity of the surrounding watercourses. The Owendoher and Dodder Rivers under their respective WFD names are identified in both the Chapter 12 Water and Chapter 13 Biodiversity (e.g., Section 12.3; Section 13.3.1) and Appropriate Assessment Reports (e.g., Section 3.3 of the NIS)) have assessed and were fully cognisant of the connectivity of the Owendoher_010 and all up- and downstream connectivity. The mitigation strategies set out in the EIAR (e.g., the SWMP identified in CEMP Appendix A5.1 in Volume 4 of Chapter 4), which will be implemented during the construction of the Proposed Scheme are applicable to the watercourse within the Rathfarnham Castle Park.

The fisheries and biodiversity potential of the ingress channel is such that an approximate 5 metre extension of the existing box culvert is not considered to materially alter the current condition of the canalised mill race which is routed through the Rathfarnham Castle Park. The submission raises the potential for impact on frogs, however it is considered that the proposed works associated with the box culvert extension, will not alter the potential for frogs to be present nor result in loss of perceptible habitat that could be used by them. The remainder of the open mill race channel within the Rathfarnham Castle Park will remain unaffected by the Proposed Scheme.

With regard to potential impacts on Water Quality, there is a potential for some impacts associated with over pumping of the stream to allow the culvert extension. However, these impacts will be negligible following the implementation of the mitigation measures outlined in the SWMP (contained in Appendix A5.1 CEMP in Volume 4 of the EIAR). Mitigation for the operational phase has been built into the design of the Proposed Scheme. No additional mitigation will be required.

Reference is made in a submission to South Dublin County Council Development Plan Policies GI2 and GI3 which in essence relates to protecting natural watercourses and enhancing their biodiversity value. The assessments have been cognisant of this, but it is considered that the mill race is not a natural channel where it comes into the RCP, but rather a highly modified watercourse. The Proposed Scheme is not considered to result in significant potential effects to water quality in the mill race.

The NTA are satisfied that the issues raised in the submissions regarding the River Glin are adequately addressed in the EIAR and the above response and the follow-up site visit of the 4th October supports this.

^[2] Inland Fisheries Ireland (2016). Guidelines on Protection of Fisheries During Construction Works in and adjacent to Water. Available at: <https://www.fisheriesireland.ie/sites/default/files/migrated/docman/2016/Guidelines%20Report%202016.pdf>

g. Landscape and visual

As per Section 17.4.3.1.2 Nutgrove Avenue to Terenure Road North, Chapter 17 of Volume 2 of the EIAR, describes the impact of the scheme during the construction phase is described as follows:

“The baseline townscape is of high sensitivity and the Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and substantial removal of sections of trees and planting. Sections of the existing boundary walls along the eastern side of Grange Road and Rathfarnham Road, adjacent to Rathfarnham Castle Park, will be realigned and reconstructed due to the proposed widening of the carriageway. The low height wall at the junction with Rathfarnham Wood will also be realigned and reconstructed to accommodate the upgrade of the traffic signalised junction. The Construction Phase involves substantial acquisition from residential properties along Rathfarnham Road, and from Rathfarnham Castle grounds with associated removal of a substantial section of mature woodland edge as well as garden hedges and other plantings. This element of works will result in considerable changes along this section of the Proposed Scheme.

The townscape / streetscape impact of the Construction Phase is assessed to be Negative, Very Significant and Temporary / Short-Term.”

Section 17.4.4.1.2 Nutgrove Avenue to Terenure Road North, describes the impact during the operational phase as follows:

“The sensitivity of this section is high. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used. There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision of concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is very high. The townscape / streetscape impact of the Operational Phase is assessed to be Negative, Very Significant and Short-Term becoming Neutral, Moderate and Long-Term.”

Refer to Volume 3 of the EIAR Figure 17.2 for photomontages which show the proposed changes to the trees and boundary wall at the Rathfarnham Castle boundary.



Figure 2.3.8 EIAR Figure 17.2.2.1 View from Grange Road at Willbrook Road - As Existing Photomontage



Figure 2.3.9 EIAR Figure 17.2.2.2 View from Grange Road at Willbrook Road - As Proposed Photomontage

h. Impact on woodland playground

There is an existing woodland playground within Rathfarnham Castle. Section 4.5.2.8 in Chapter 4 of the EIAR provides a description of the landscape and urban design works and it acknowledges that '*...the impacted woodland will be replanted with native species and the existing playground will be integrated with the new planting and setback wall alignment (refer to Image 4.2)*'. An extract of Image 4.2 from Section 4.5.2.8 on Chapter 4 is provided below:



Figure 2.3.10 Rathfarnham Castle (extract from Image 4.2 from Section 4.5.2.8 of Chapter 4)

As a consequence of the proposed scheme the vehicular traffic lanes will be circa 4.5m closer to the playground than the existing road.

The submission contends that the Proposed Scheme will result in negative impacts on the playground, including increased noise.

The Proposed Scheme will require widening into the park boundary, the closest elements of the Proposed Scheme to the new park boundary are the proposed footpaths and cycle lanes. A bus lane will move approximately 4.5 closer to the natural playground as a result of the Proposed Scheme.

Chapter 9 of the EIAR has undertaken a detailed impact assessment relating to both construction and operational phase noise and vibration impacts associated with the proposed scheme taking account of the realignment of all vehicular and active travel lanes and the resultants forecasted traffic flows along the adjoining road network with and without the Proposed Scheme in place. The resultant noise impacts associated with the Proposed Scheme once operational are determined to be neutral to minor positive within the park. This is due to the overall reduction in traffic flows (cars and HGVs) along the Proposed Scheme.

It is noted that the existing boundary wall will be replaced with a wall of the same height along the park boundary and hence no change in the effectiveness of noise screening from the boundary wall treatment will occur. Whilst there will be a portion of trees removed from the park boundary, these do not provide any notable noise screening for road traffic and hence are not relied upon for noise reduction.

Finally it is important to note that all traffic noise calculations are based on full fleet using combustion engines. As noted in Section 9.4.4.1.1.4 in Chapter 9 in Volume 2 of the EIAR, during the proposed year of opening, 2028, the percentage of vehicles with combustion engines will be reduced compared to the existing scenario. 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. This will in turn reduce the operational traffic noise levels from buses along the adjacent bus lane.

2.3.2.2 Option Assessment Along Rathfarnham Road

Summary of Issue Raised

Several submissions expressed concerns about the proposed infrastructure works along Grange Road and Rathfarnham Road. Stating that alternative routes options have not been adequately assessed.

Response to Issue Raised

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives, Section 3.3 outlines the process that set out the route alternatives which were considered a 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**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;

2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. **Development of Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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
7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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.

Feasibility and Options Report (summarised in Chapter 3 of the EIAR)

The Feasibility and Options Reports identified feasible options along the corridor, assessed these options and arrived at an Emerging Preferred Route. Two reports were published for the Proposed Scheme; the Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report and the Tallaght to Terenure Core Bus Corridor CBC Feasibility Study and Options Assessment Report. These Reports formed the basis for the first phase of public consultation. A summary of the process is described below. The Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route, comprising:

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Feasibility and Options Report – Stage 1

The study area for the Rathfarnham to City Centre corridor comprised of three main sections:

- Section 1 examined feasible route options from Taylors Lane and Grange Road to the River Dodder.
- Section 2 examined feasible route options from the River Dodder to the Grand Canal.
- Section 3 examined feasible route options from the Grand Canal to the River Liffey.

At the start of the Stage 1 assessment, an initial 'spider's web' of potential route options (consisting of 104 individual links), that could accommodate a Core Bus Corridor was identified for each study area section as shown in Image 3.3 (extracted from the Feasibility Study and Options Assessment Report).



Figure 2.3.11 Spider's Web of Route Options extracted from 'Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study'

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 specific objectives. 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 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. For example along Rathgar Avenue the route is a narrow single carriageway 2 lane road with the building lines of residential and commercial properties in close proximity to the carriageway along much of this section and limited potential to widen the existing carriageway.

Following completion of the Stage 1 assessment, three options were brought forward to the Stage 2 assessment between Nutgrove Avenue and Dodder View Road (Section 1 of the Rathfarnham to City Centre Corridor), SA1 to SA3. For the section between Dodder View Road and Grand Canal (Section 2 of the Rathfarnham to City Centre Corridor), Seven options were brought forward to the stage 2 assessment, CB1 to CB7.



Figure 2.3.12 Route Options from Initial Sift of Section 1 of the Rathfarnham to City Centre Corridor (Diagram 3.6 of EIAR Chapter 3)

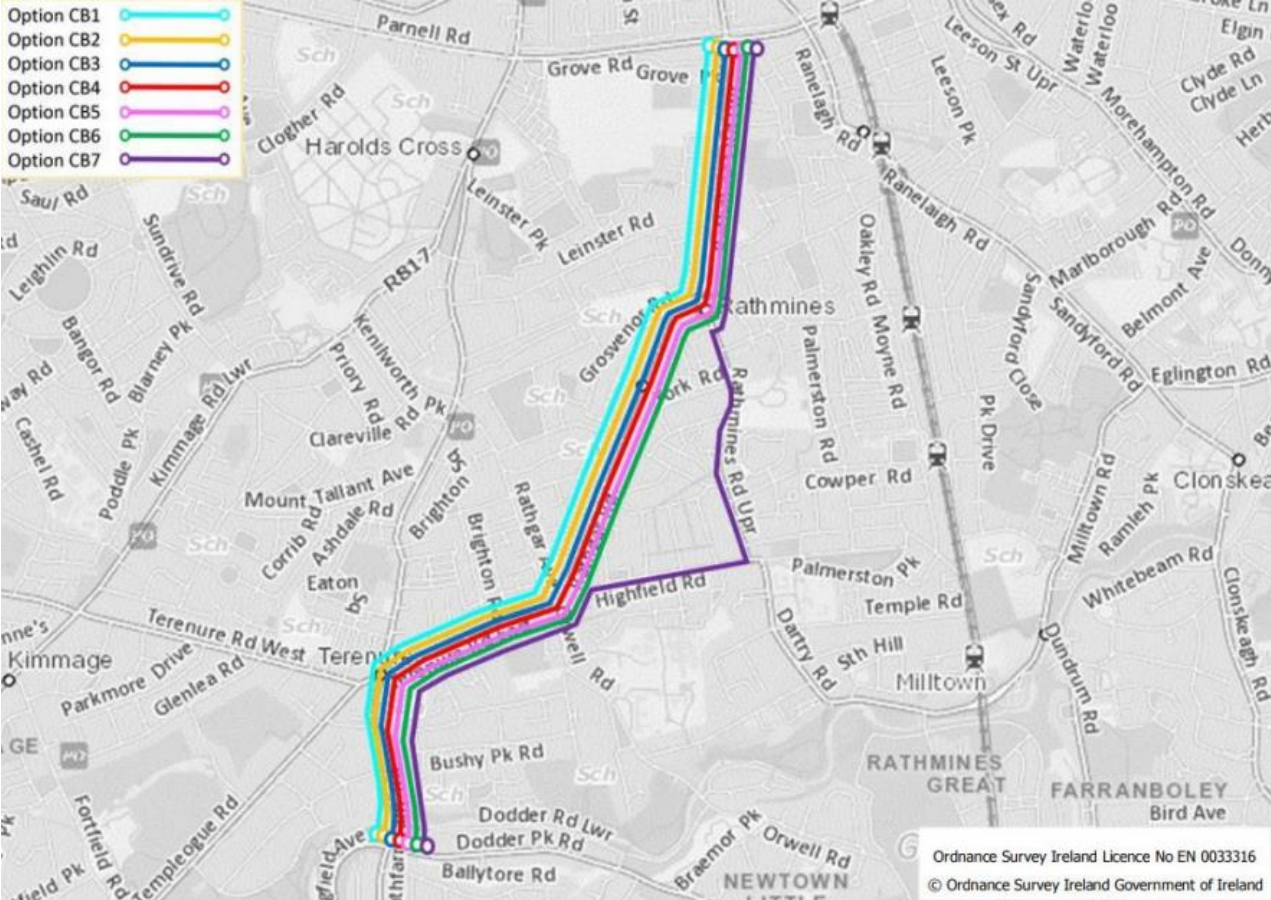


Figure 2.3.13 Route Options from Initial Sift of Section 2 of the Rathfarnham to City Centre Corridor (Diagram 3.7 in EIAR Chapter 3)

Feasibility and Options Report – Stage 2

Section 3.3.2 of EIAR Chapter 3 describes the stage 2 assessment process and the quantitative and qualitative assessment using criteria established to compare the route options:

The indicative scheme for each route option was progressed to a multi-criteria assessment. The 'Common Appraisal Framework for Transport Projects and Programmes' published by the Department of Transport, Tourism and Sport (DTTAS), March 2016, requires schemes to undergo a 'Multi-Criteria Analysis' (MCA) which evaluated the route options under the assessment criteria set out below:

1. *Economy;*
2. *Integration;*
3. *Accessibility & Social Inclusion;*
4. *Safety; and*
5. *Environment.*

Under each headline criterion, a set of sub-criteria were used to comparatively evaluate the options. For the Environment criterion the following sub-criteria were considered in the assessment to inform the Emerging Preferred Route:

Archaeological, Architectural and Cultural Heritage – there is the potential for impacts on archaeological, architectural and cultural heritage environment when providing CBC infrastructure. The assessment had regard to RMPs, Sites of Archaeological or Cultural Heritage and on buildings listed on the National Inventory of Architectural Heritage along or adjacent to the corridor;

Soils and Geology - Construction of infrastructure necessary for the provision of CBC infrastructure has the potential to impact on soils and geology. For example, through land acquisition and ground excavation. These considerations were compared for each scheme under this criterion;

Hydrology - The provision of CBC infrastructure has the potential to impact on surface water bodies as a result of land-take (with particular emphasis on floodplains and flood zones). Any such impacts were considered for each scheme under this criterion;

Landscape and Visual - Provision of CBC infrastructure has the potential to impact on the townscape/streetscape as well as 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. Different schemes were compared and any negative effects considered under this criterion;

Air Quality - The provision of CBC infrastructure has the potential to impact the air quality along the route. These effects were compared for each scheme option under this criterion in relation to the volumes of traffic and on whether the road is moving closer to a sensitive receptor, for example road widening or new realignment;

Noise & Vibration - Provision of CBC infrastructure (e.g., the construction activities), has the potential to negatively impact on noise and vibration along a scheme. These effects were compared for each scheme option under this criterion. The impact was quantified in relation to the volumes of traffic and on whether the road is moving closer to a sensitive receptor, for example road widening or new realignment; and

Land Use Character - The provision of CBC infrastructure has the potential to impact on land use character through land-take, severance or reduction of viability which prevents or reduces it from being used for its intended use.

Feasibility and Options Report – Stage 2 (Section 1 – Nutgrove Avenue to Dodder View Road)

The Stage 2 Assessment for the Rathfarnham to City Centre scheme followed the same three sections as per the Stage 1 assessment. Following the Stage 1 Sifting process, three viable route options for Section 1 (Nutgrove Avenue to Dodder View Road) were taken forward for assessment and further refinement. The Route Option Assessment for section 1 is described in Section 3.3.2.2.1 of EIAR Chapter 3:

- *Route Option SA1: A route option via Grange Road and Rathfarnham Road;*
- *Route Option SA2: A route option via Grange Road and Rathfarnham Road with a parallel cycle route via Rathfarnham Wood and Castleside Drive;*

- *Route Option SB1: A route option via Nutgrove Avenue, Nutgrove Way, Braemor Road and Dodder Park Road.*

Following the assessment of the two constrained sub-sections as outlined in section 3.3.2.2.1.2 of EIAR Chapter 3, an MCA was undertaken of the principal route options along this section of the scheme, in order to determine the most appropriate scheme for this section of the Proposed Scheme. These options are briefly summarised below:

- **Option SA1** would involve the provision of segregated bus lanes between Grange Road/Nutgrove Avenue junction to the Dodder River crossing at Pearse Bridge. Segregated cycle facilities would be provided along the CBC route on Grange Road and Rathfarnham Road to just north of the Rathfarnham Main Street junction. A parallel cycle route would be provided via Brookvale Downs;
- **Option SA2** would involve the provision of segregated bus lanes between Grange Road/Nutgrove Avenue junction to the Dodder River crossing at Pearse Bridge. Segregated cycle facilities would be provided along the CBC route on Grange Road and Rathfarnham Road to just north of the Rathfarnham Main Street junction. A parallel cycle route would be provided via Rathfarnham Wood, Castleside Drive and Brookvale Downs; and
- **Option SB1** would involve the provision of segregated bus lanes between Grange Road/Nutgrove Avenue junction to Dodder Park Road/Rathfarnham Road junction via Churchtown. Segregated parallel cycle routes would be provided along Rathfarnham Wood/Castleside Drive and via Whitehall Road/Landscape Park.

Section 1 Summary Sub Criteria				
Grange Road/Nutgrove Avenue junction to Dodder River Crossing				
Appraisal Criteria	Sub-Criteria	Route Option SA1 Grange Road - Rathfarnham	Route Option SA2 Grange Road – Rathfarnham (Parallel cycle route via Rathfarnham Wood/Castleside Drive)	Route Option SB1 Grange Road – Rathfarnham via Churchtown
1 Economy	1A Capital Cost	Green	Green	Yellow
	1B Transport Quality & Reliability	Green	Green	Red
2 Integration	2A Land Use Policy	Yellow	Yellow	Yellow
	2B Residential Population and Employment Catchments	Yellow	Yellow	Green
	2C Transport Network Integration	Yellow	Yellow	Yellow
	2D Cycle Network Integration	Green	Red	Red
	2E Traffic Network Integration	Green	Green	Yellow
3 Accessibility & Social Inclusion	3A Key Trip Attractors	Yellow	Yellow	Green
	3B Deprived Geographic Areas	Yellow	Yellow	Green
4 Safety	4A Road Safety	Green	Green	Yellow
	4B Pedestrians Safety	Yellow	Yellow	Yellow
5 Environment	5A Archaeology & Cultural Heritage	Green	Green	Yellow
	5B Architectural Heritage	Yellow	Yellow	Green
	5C Flora & Fauna	Yellow	Green	Yellow
	5D Soils, Geology & Hydrology	Yellow	Yellow	Yellow
	5E Landscape and Visual	Yellow	Green	Yellow
	5F Air Quality	Yellow	Green	Yellow
	5G Noise & Vibration	Yellow	Green	Yellow
5H Land Use Character	Yellow	Green	Red	

Figure 2.3.14 Multi-criteria Assessment for Section 1 of Rathfarnham to City Centre Scheme (extract from Rathfarnham to City Centre Core Bus Corridor Feasibility and Options Assessment Report)

A multi-criteria assessment of all scheme options was undertaken. The assessment sub-criteria which were differentiators between scheme options included Capital Cost, Transport Reliability and Quality, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Deprived Geographic Areas, Road Safety, Archaeology & Cultural Heritage, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character.

Option SA1 was identified as having significant benefits over other options in relation to Transport Quality and Reliability and Cycle Network Integration. Option SA1 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route.

A full breakdown of the multi-criteria assessment is outlined in section 3.3.2.2.1.2 of EIAR Chapter 3.

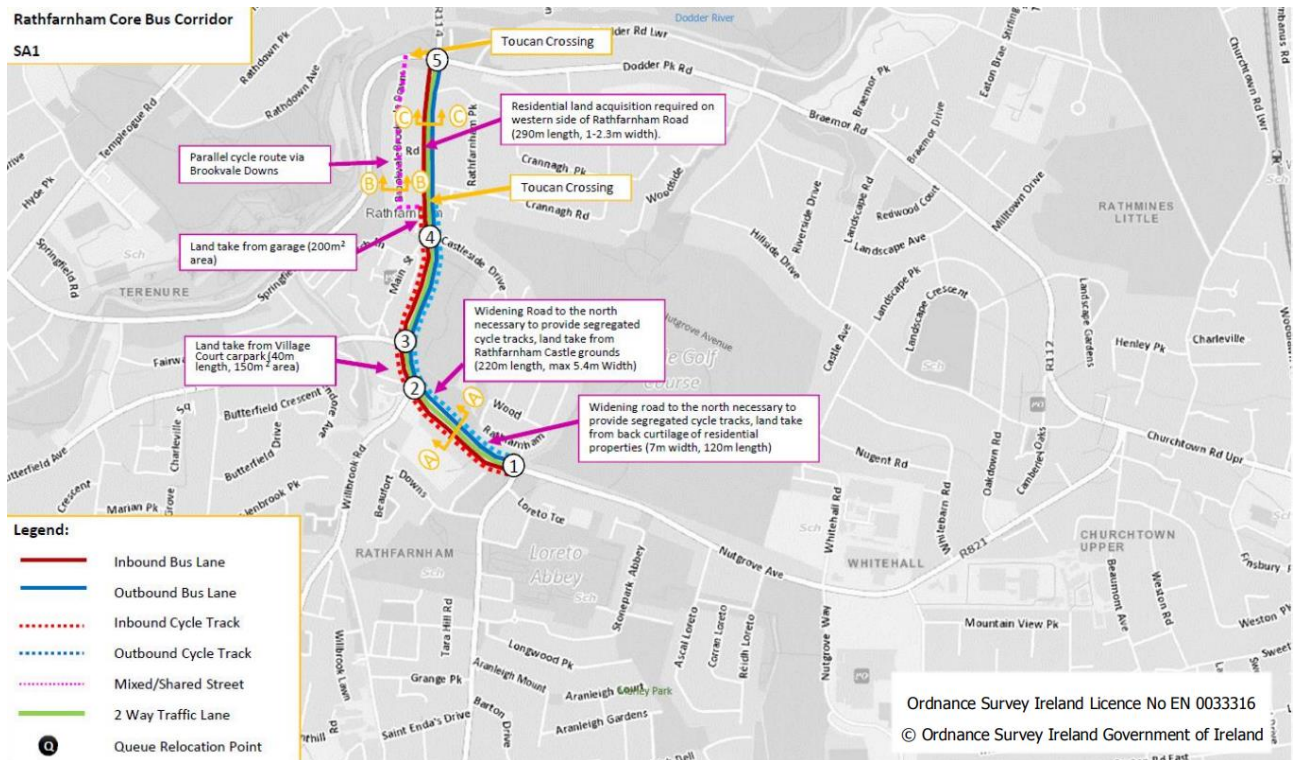


Figure 2.3.15 Principle Route Option for Section 1 of Rathfarnham to City Centre Scheme (Figure 6.18 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

Feasibility and Options Report – Stage 2 (Section 2 –Dodder View Road to Grand Canal)

The Stage 2 Assessment for the Rathfarnham to City Centre scheme followed the same Three sections as per the Stage 1 assessment. Following the Stage 1 Sifting process, seven viable route options for Section 2 (Dodder View Road to Grand Canal) were taken forward for assessment and further refinement. The Route Option Assessment for section 2 is described in Section 3.3.2.2.2 of EIAR Chapter 3:

- *Route Option CB1 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound traffic only on Rathgar Road, Outbound traffic only Rathmines Road);*
- *Route Option CB2 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound traffic only on Rathgar and Rathmines Road);*
- *Route Option CB3 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Outbound traffic only on Rathgar and Rathmines Road);*
- *Route Option CB4 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Parallel cycle route via Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks);*
- *Route Option CB5 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound bus lane provided on Rathmines Road Lower from Rathmines Road Upper to Military Road junction and outbound bus lane provided from Grove Road to Military Road junction);*
- *Route Option CB6 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Outbound traffic only on Rathmines Road Lower); and*
- *Route Option CB7 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Bus lanes via Highfield Road/Rathmines Road Upper) (Parallel cycle route).*

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above. These constrained locations are as follows:

- Terenure Village to Rathgar Village – TVR, as indicated on Image; and
- Cycle Route options between Bushy Park Road junction and Grand Canal

Sub-section: Terenure Village to Rathgar – TVR

Section 3.3.2.2.2.1 of EIAR Chapter 3 describes the subsection between Terenure Village and Rathgar Village:

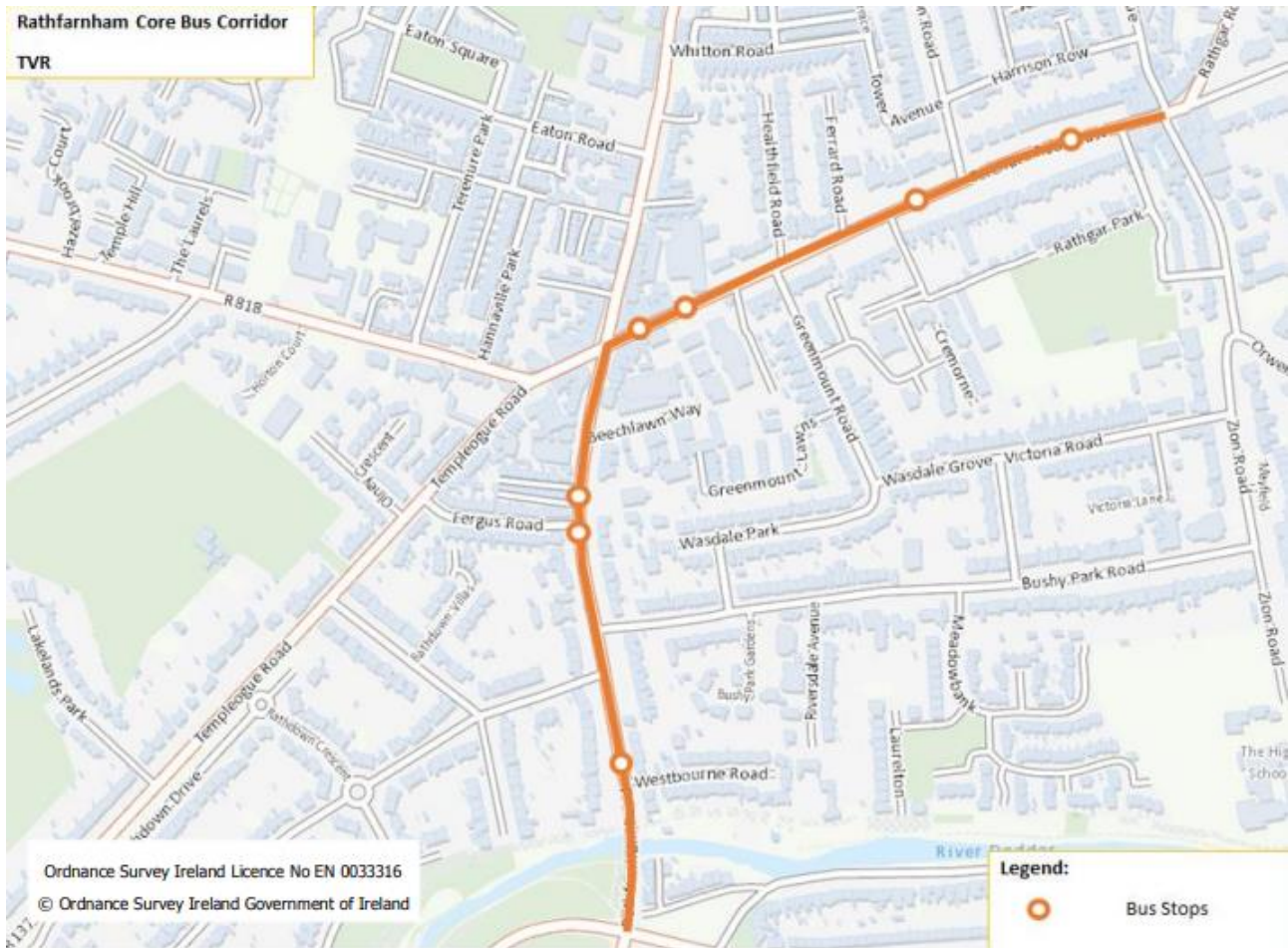


Figure 2.3.16 Terenure Village to Rathgar Village sub-section – TVR (Figure 6.9 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

There were eight scheme sub-options (TVR1 to TVR8) considered for the section along Rathfarnham Road and Terenure Road East to Rathgar Village which are discussed below.

- **Sub-option TVR1:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided and a short section on Rathfarnham Road between Pearse Bridge and Bushy Park Road junction, where an outbound bus lane would not be provided. Segregated cycle facilities would be provided on Bushy Park Road and Orwell Road;
- **Sub-option TVR2:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East. This would require the removal of one of the general traffic lanes in the outbound direction. A 3m wide two-way cycle bridge would be provided on the western side of Pearse bridge. Segregated cycle facilities would be provided on Bushy Park Road and Orwell Road;

- **Sub-option TVR3:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village);
- **Sub-option TVR4:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the west of Pearse Bridge) is proposed, to provide a parallel cycle route from Brookvale Downs to Rathdown Park. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- **Sub-option TVR5:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the east of Pearse Bridge) is proposed to provide a parallel cycle route from the Dodder Greenway to Riversdale Avenue. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- **Sub-option TVR6:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the east of Pearse Bridge) is proposed to provide a parallel cycle route from the Dodder Greenway to Laurelton. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- **Sub-option TVR7:** This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided on a route via the Dodder Greenway, through Orwell Park and along Orwell Road to Rathgar Village; and
- **Sub-option TVR8:** This route sub-option would include the provision of continuous bus priority in both directions but with different routes for the northbound (Bushy Park Road/Orwell Road) and southbound (Terenure Road/Rathfarnham Road), with the exception of the section on Rathfarnham Road from Westbourne Road junction to Bushy Park Road junction where bus priority signalling is proposed in the outbound direction at this pinch point. Segregated cycle facilities would also be split in terms of direction. These facilities would be provided in the opposite direction to the bus facilities on Bushy Park Road/Terenure Road East. There is also a 100m section of Terenure Road East at Terenure Cross where the inbound cycle lane would not be provided.

Section TVR Summary (main criteria)								
Terenure Village- Rathmines								
Appraisal Criteria	Option TVR1 Bus lane in both directions, parallel cycle route	Option TVR2 Inbound Traffic Lane on Terenure Rd East	Option TVR3 Bus lane and Cycle lane in both directions	Option TVR4 Cycle Route via Rathdown Park	Option TVR5 Cycle Route via Riversdale Avenue	Option TVR6 Cycle Route via Laurelton/ Meadowbank	Option TVR7 Cycle Route via The Dodder Greenway and Orwell Road	Option TVR8 Inbound bus lane Bushy Park Rd & Outbound bus lane Terenure Rd East
1 Economy	Yellow	Green	Green	Green	Green	Green	Green	Red
2 Integration	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow
3 Accessibility & Social Inclusion	Green	Green	Green	Green	Green	Green	Green	Yellow
4 Safety	Yellow	Green	Green	Green	Green	Green	Green	Yellow
5 Environment	Green	Yellow	Green	Yellow	Red	Red	Green	Yellow

Figure 2.3.17 Terenure Village to Rathgar Village sub-section Options Assessment Summary (Main Criteria) (Table 6.3 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character.

Following an MCA, **sub-option TVR3** was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

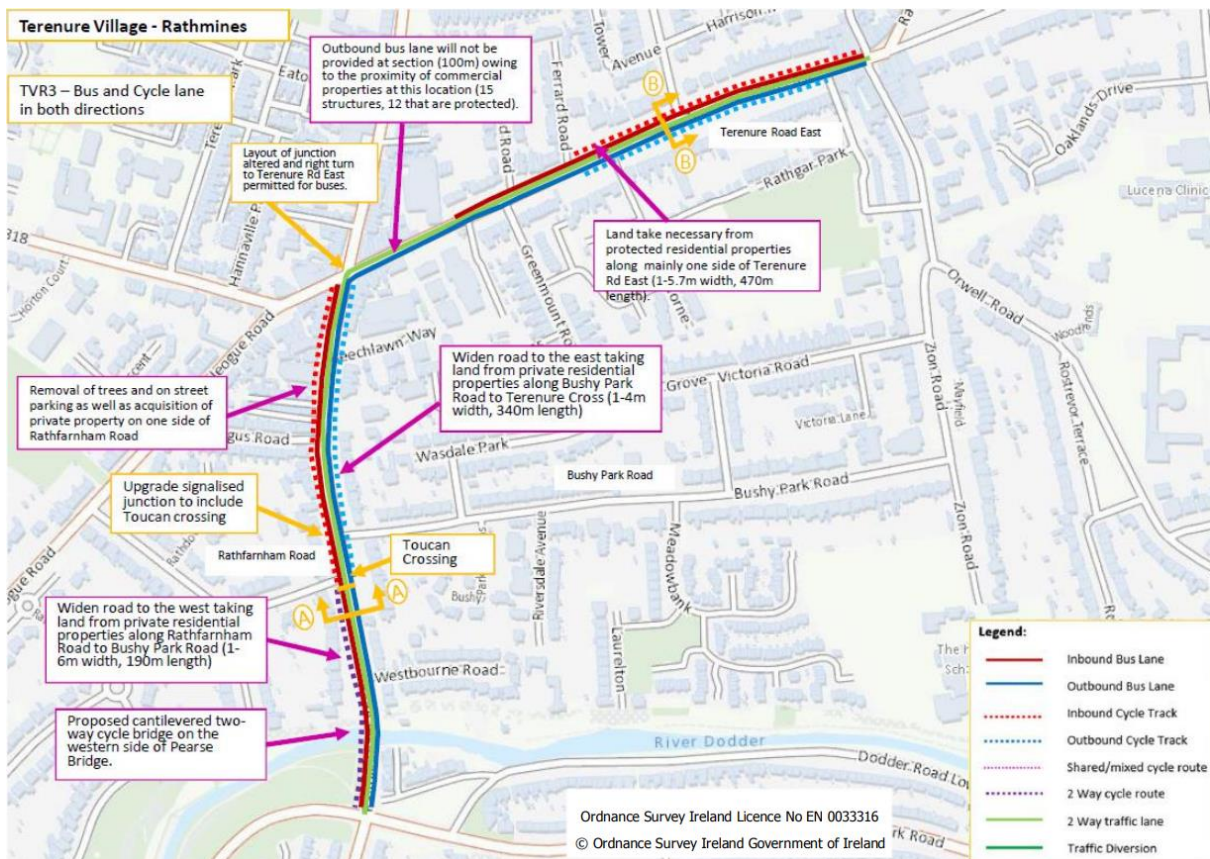


Figure 2.3.18 Route Option TVR3 Proposal for Terenure Village to Rathgar Village sub-section (Figure 6.14 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

Sub-section: Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal

Section 3.3.2.2.2 of EIAR Chapter 3 describes the Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal sub-section:

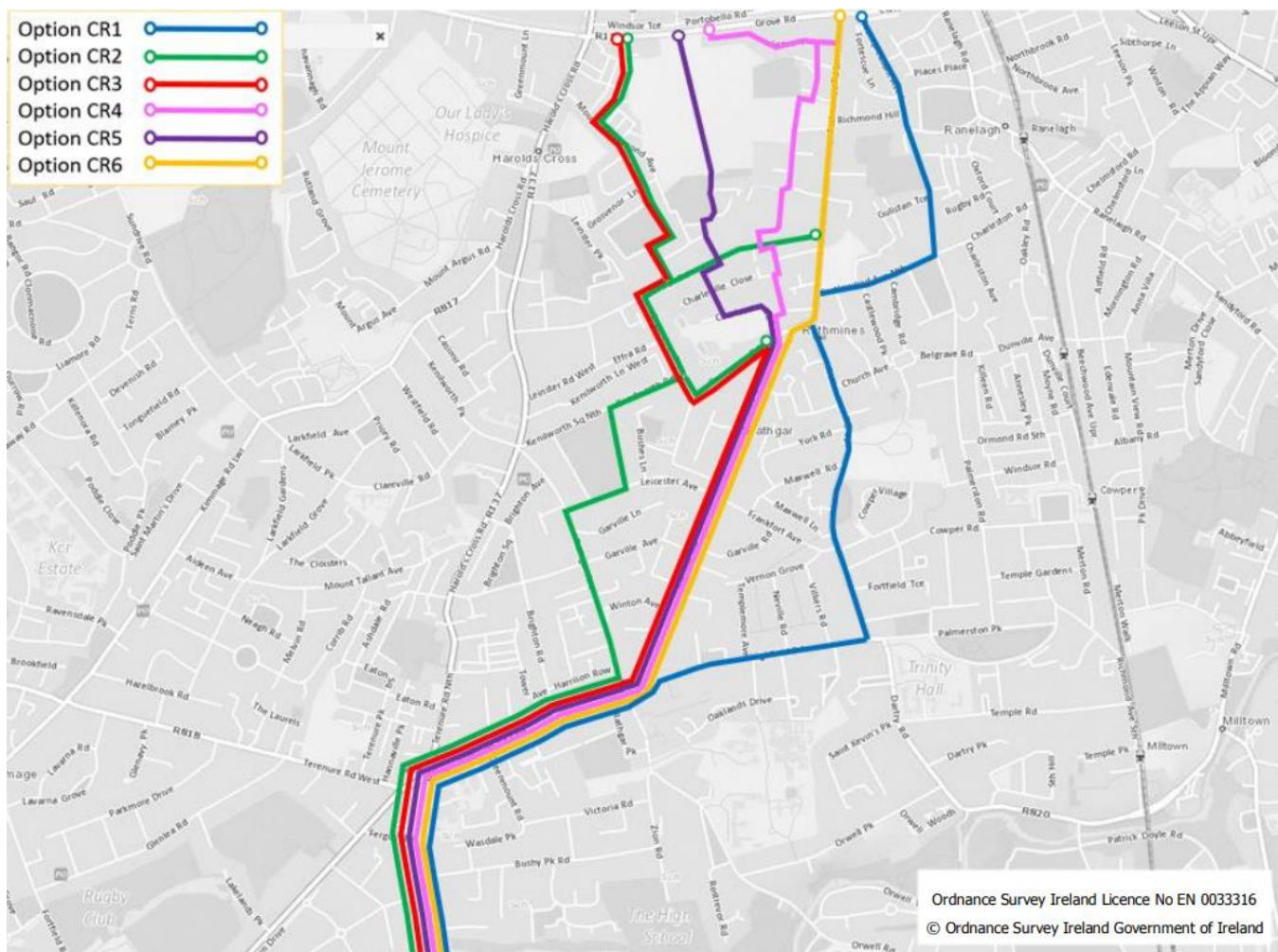


Figure 2.3.19 Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal sub-section (Figure 6.28 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

There were six scheme sub-options (CR1 to CR6) considered for the section between the Bushy Park junction on Rathfarnham Road to the Grand Canal Crossing via Rathmines Village which are discussed below.

Sub-option CR1: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Highfield Road, Rathmines Road Upper, Castlewood Avenue and Mount Pleasant Avenue. The route would also include a new cycle bridge crossing the Grand Canal;

Sub-option CR2: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Rathgar Avenue, Kenilworth Square, Grosvenor Square, Mount Drummond Avenue, and O'Hara Avenue. The route would also include a new cycle bridge crossing the Grand Canal;

Sub-option CR3: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Rathgar Road, Grosvenor Road, Grosvenor Square, Mount Drummond Avenue, and O'Hara Avenue. The route would also include a new cycle bridge crossing the Grand Canal;

Sub-option CR4: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road, Charleville Road, Wynnefield Road, Prince Arthur Terrace, Leinster Square, Louis Lane, Ardee Road, Lissenfield, and Grove Park. The route would also include a new cycle bridge crossing the Grand Canal;

Sub-option CR5: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road, Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks. The route would also include a new cycle bridge crossing the Grand Canal; and

Sub-option CR6: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road and Rathmines Road Lower. Due to width constraints on La Touche Bridge a new cycle bridge is proposed to the west of the bridge, connecting with Martin Street.

Section 2 Summary Main Criteria						
Cycle Routes – Rathfarnham to Rathmines						
Appraisal Criteria	Route Option CR1 Cycle Route via Rathfarnham Road, Terenure Road East, Highfield Road, Rathmines Road Upper, Castlewood Avenue and Mount Pleasant Avenue.	Route Option CR2 Cycle route via Rathfarnham Road, Terenure Road East, Rathgar Avenue, Kenilworth Square, Grosvenor Square, Mount Drummond Avenue and O'Hara Avenue.	Route Option CR3 Cycle Route via Rathfarnham Road, Terenure Road East, Rathgar Road, Grosvenor Road, Grosvenor Square, Mount Drummond Avenue and O'Hara Avenue.	Route Option CR4 Cycle Route via Rathfarnham Road, Charleville Road, Wynnefield Road, Prince Arthur Terrace, Leinster Square, Louis Lane, Ardee Road, Lissenfield, and Grove Park.	Route Option CR5 Cycle Route via Rathfarnham Road, Terenure Road East, Rathgar Road, Charleville Road, Grosvenor Lodge, and Cathal Brugha Barracks.	Route Option CR6 Cycle Route via Rathfarnham Road, Terenure Road East, Rathgar Road and Rathmines Road Lower.
1 Capital Cost	Green	Green	Green	Yellow	Yellow	Red
2 Road Safety	Green	Yellow	Green	Yellow	Green	Green
3 Coherence	Red	Red	Yellow	Green	Green	Green
4 Directness	Red	Red	Yellow	Green	Green	Green
5 Attractiveness	Yellow	Red	Green	Green	Green	Green
6 Comfort	Yellow	Green	Green	Yellow	Green	Green
7 Environmental	Green	Green	Green	Yellow	Yellow	Red

Figure 2.3.20 Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal sub-section Options Assessment Summary (Main Criteria) (Table 6.3 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Road Safety, Coherence, Directness, Attractiveness, Comfort, and Environment. Sub-option CR5 was identified as having significant benefits over other sub-options in relation to Attractiveness and Comfort, and some benefits over other sub-options in relation to Road Safety, Coherence and Directness. Following an MCA, **sub-option CR5** was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

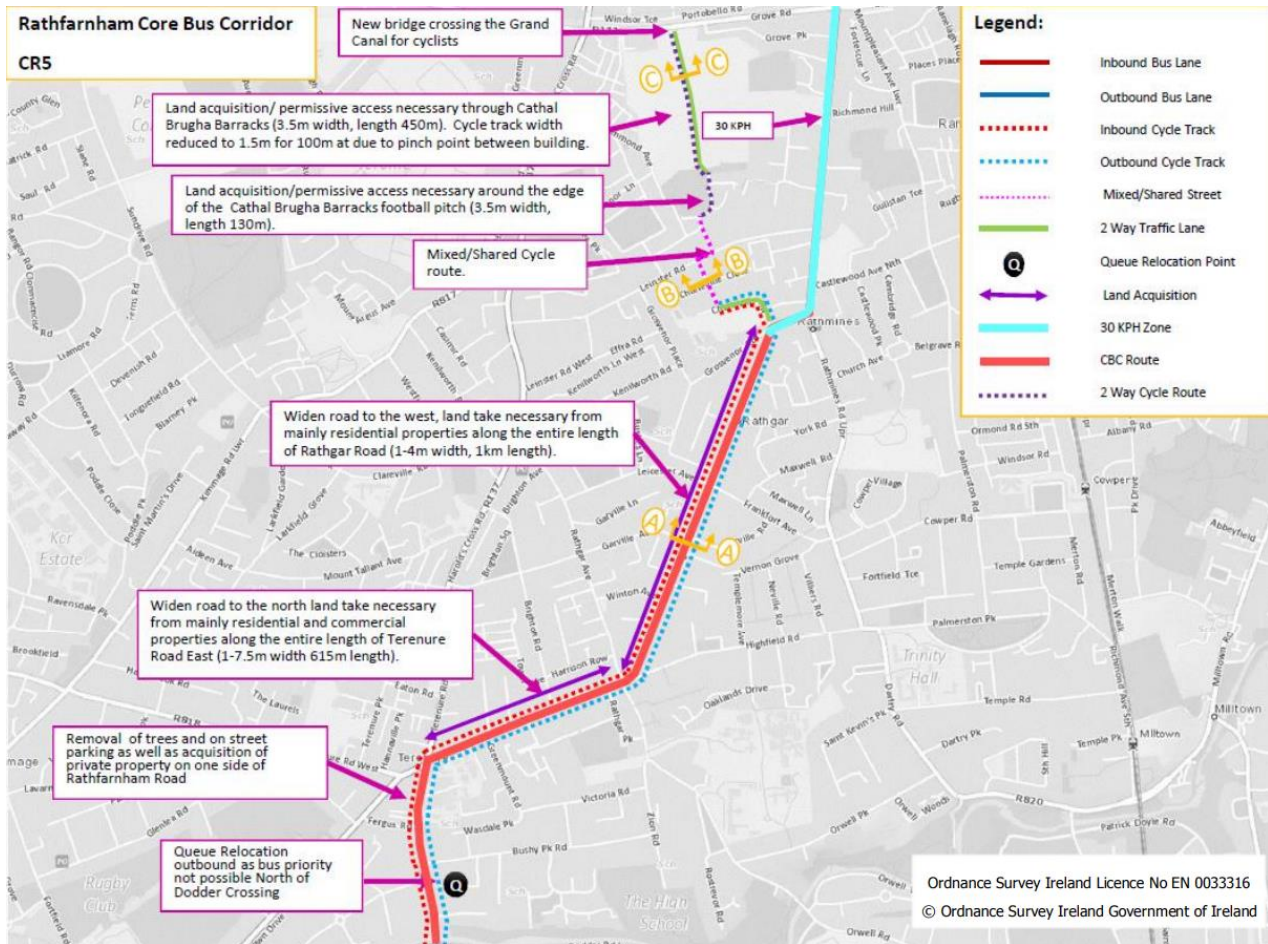


Figure 2.3.21 Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal sub-section (Figure 6.14 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

Following the assessment of the two constrained sub-sections as outlined above, an MCA has been undertaken of the principal route options along this section of the scheme in order to determine the most appropriate scheme for this section of the Proposed Scheme. These options are briefly summarised below.

- Option CB1 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Outbound traffic would be removed from Rathgar Road and, inbound traffic would be removed from Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB2 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Outbound traffic would be removed from Rathgar Road and Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB3 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Inbound traffic would be removed from Rathgar Road and Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB4 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). It is proposed to provide segregated cycle facilities on Rathfarnham Road, Terenure Road East and Rathgar Road. Cyclists would be catered for via a parallel cycle route along Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks;

- Option CB5 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and Rathmines Village (with exception of a 100m section at Terenure Cross). An inbound bus lane would be provided on Rathmines Road Lower from Rathmines Road Upper to the Military Road junction, whilst an outbound bus lane provided from Grove Road to the Military Road junction. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB6 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). It is proposed to remove general traffic in the northbound (inbound) direction along Rathmines Road Lower between Castlewood Avenue and Grove Road. It is also proposed to provide segregated cycle facilities along the majority of the CBC route; and
- Option CB6 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). It is proposed to remove general traffic in the northbound (inbound) direction along Rathmines Road Lower between Castlewood Avenue and Grove Road. It is also proposed to provide segregated cycle facilities along the majority of the CBC route; and

Option CB4 was identified as having significant benefits over other options in relation to Transport Quality and Reliability, Traffic Network Integration, Road Safety and Land Use Character. Option CB4 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route.

A full breakdown of the multi-criteria assessment is outlined in section 3.3.2.2.2 of EIAR Chapter 3.

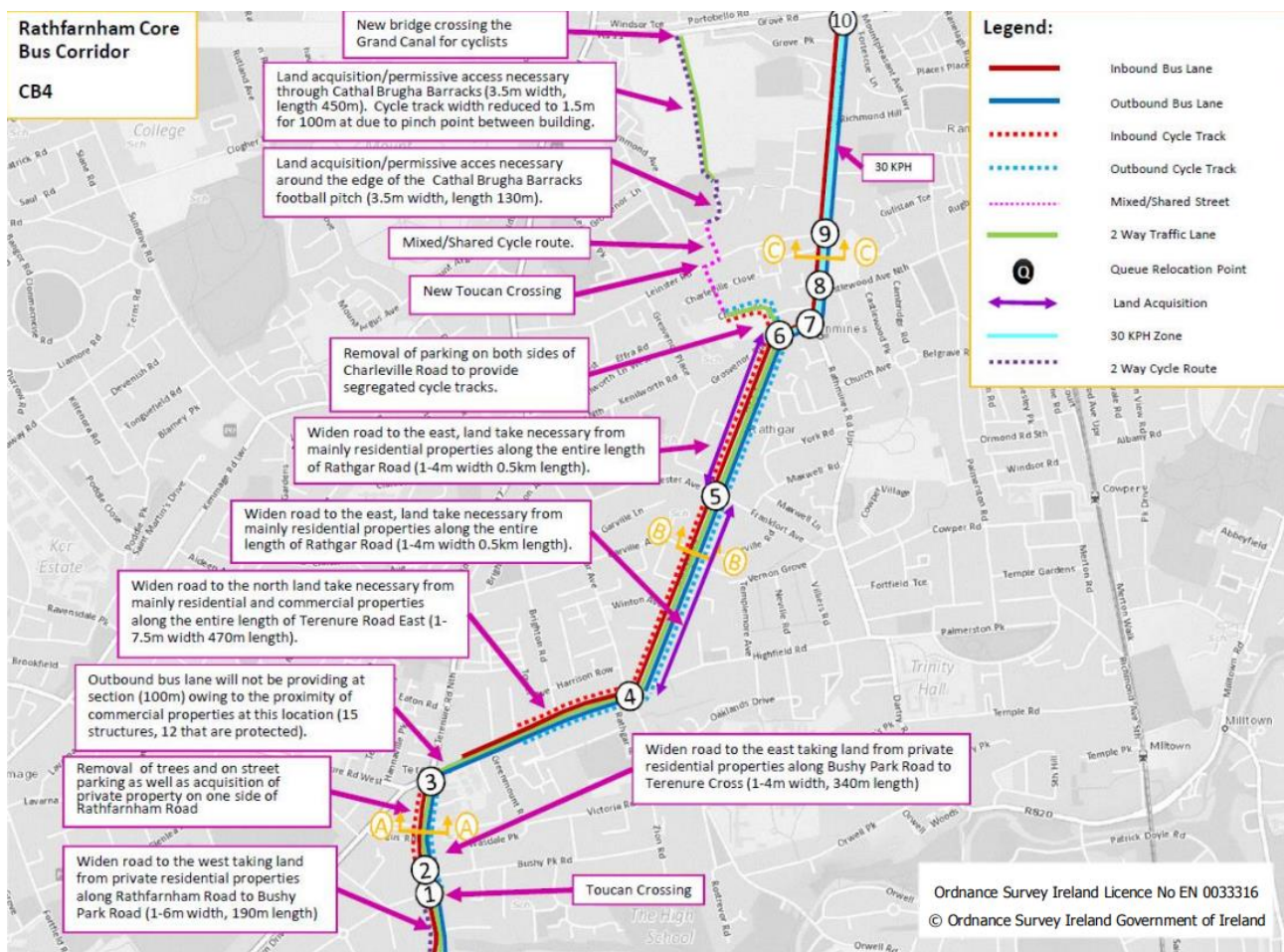


Figure 2.3.22 Route Option CB4 Proposal – Section 2 (Figure 6.57 of Rathfarnham to City Centre Core Bus Corridor Route Options Assessment Main Report)

Development of Emerging Preferred Route

Informed by the appraisal of options described in earlier section, the Emerging Preferred Routes were identified. A non-statutory public consultation on this Emerging Preferred Route was undertaken from 23 January 2019 to 30 April 2019, providing feedback which was then meaningfully considered in the further development of the scheme proposal.

Section 3.4.1 of EIAR Chapter 3 describes the development of the Draft Preferred Route Option:

Following the completion of the public consultation process 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 main alternatives considered within the section along between Grange Road and Rathdown Park during the development of the draft Preferred Route Option are set out in section 3.4.1.1.2 of EIAR Chapter 3:

The EPR Option proposal within this section of the scheme included a proposed connection for cyclists to Brookvale Downs via a narrow laneway between an existing residential property and a petrol station. While it was proposed as part of the EPR Option to widen a section of this laneway, it is noted from a review of the topographical survey that this would require demolition of one or other of these buildings to accommodate a two-way cycle route as well as accommodating pedestrians. Concerns relating to the proposal from the public were coupled with the delivery of a compromised and potentially unattractive route for cyclists. As such, alternative cycle route options were explored in this area in determining the draft PRO.

Furthermore, based on a review of the topographical survey, it became more evident that a number of properties along Rathfarnham Road, between Brookvale Road and Dodder Park Road, as well as north of the Dodder, between Dodder Park Road and Rathdown Park, currently have steep driveways in excess of current standards. As part of the public consultation, the issue of compliance with Part M of the Building Regulations was highlighted. It was considered, that with the level of land acquisition proposed as part of the EPR Option, existing driveways would be made much steeper than they currently are and would not be compliant with the Regulations without substantial mitigation. As such, alternative design solutions were therefore explored in this area in determining the draft PRO.

Within this section of the CBC route, Rathfarnham Road is particularly constrained in terms of the available width. As such, this section of the route was brought through an initial assessment to determine the optimum alternative cycle route for this section.

In developing options for alternative cycle routes, it became evident that some options being considered would require a new pedestrian and cyclist bridge crossing the River Dodder. Two potential bridge sites were identified within this general location. In order to rationalise the number of parallel cycle route options to be assessed, an initial assessment of two potential bridge locations within this area was undertaken. The preferred bridge option was then incorporated into end-to-end parallel cycle route options for comparative assessment.

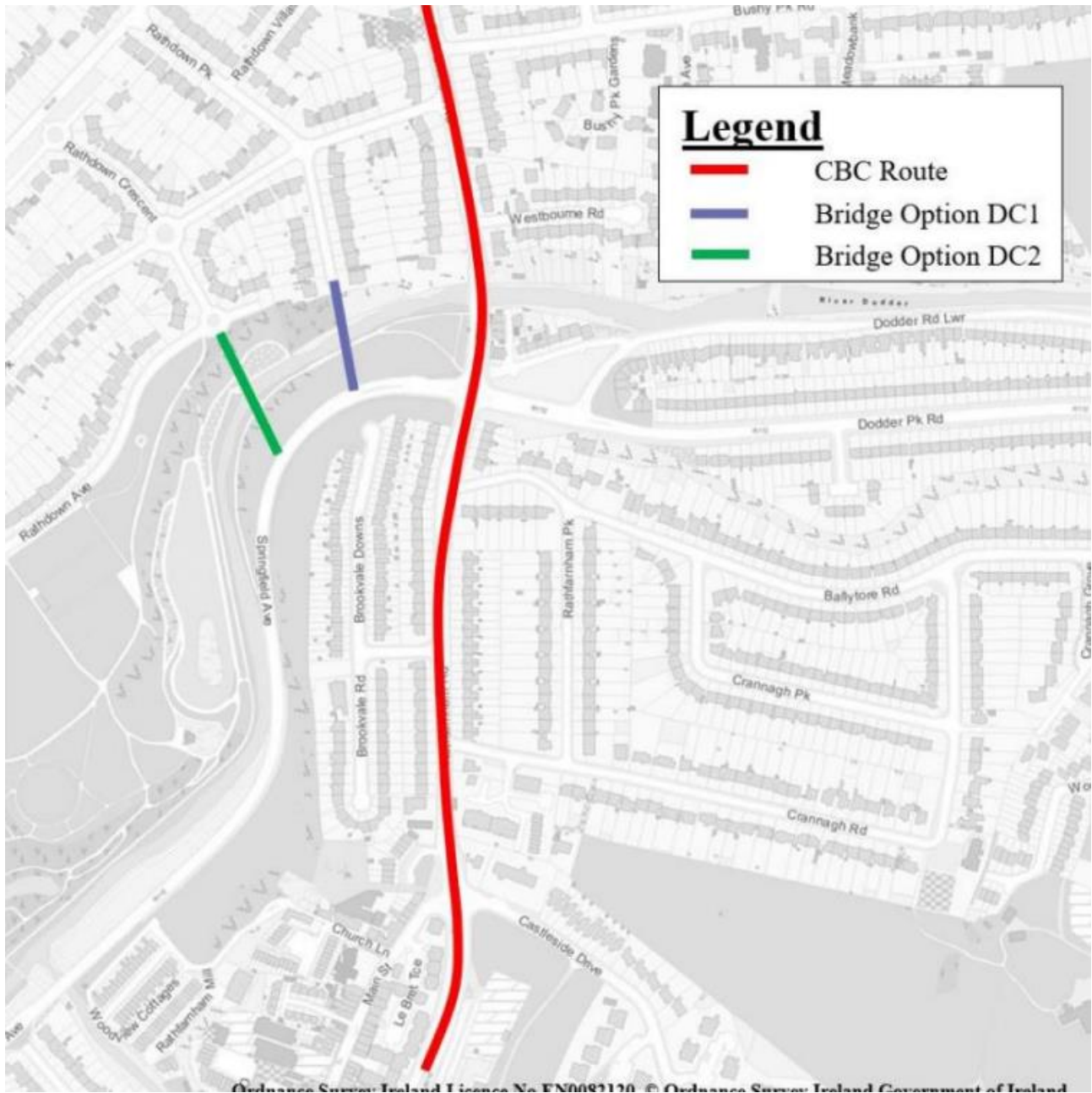


Figure 2.3.23 Locations of two bridge options developed (Diagram 3.17 of EIAR Chapter 3)

Bridge Option DC1 was found to be the preferred option for the provision of a pedestrian and cyclists bridge in this location as it was the more easily constructable option due to the reduced span compared to Option DC2 and it provided better cycling connectivity thus best aligning with the objectives of the Proposed Scheme.

Following the identification of the preferred bridge option, as outlined above, 10 alternative parallel cycle route options were developed along this section of the Proposed Scheme. These options are briefly summarised below:

- Option PC1 (EPR Option) – Parallel cycle route via Brookvale Downs using laneway north of Texaco Station and crossing River Dodder via a new boardwalk at Pearse Bridge;
- Option PC2 - Parallel cycle route via Brookvale Downs using laneway north of Texaco Station and crossing River Dodder via a new pedestrian/cycle bridge to Rathdown Park;
- Option PC3 - Parallel cycle route via Brookvale Downs using Brookvale Road and crossing the River Dodder via a new boardwalk at Pearse Bridge;
- Option PC4 - Parallel cycle route via Brookvale Downs using Brookvale Road and crossing River Dodder via a new pedestrian/cycle bridge to Rathdown Park;

- Option PC5 - Parallel cycle route along Butterfield Avenue and the Owendoher River connecting to the Dodder Greenway and crossing the River Dodder via a new boardwalk at Pearse Bridge;
- Option PC6 - Parallel cycle route along Butterfield Avenue and Owendoher River connecting to the Dodder Greenway and a new bridge to Rathdown Park;
- Option PC7 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to the Dodder Greenway and a new boardwalk via a new boardwalk at Pearse Bridge;
- Option PC8 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to the Dodder Greenway and new bridge to Rathdown Park;
- Option PC9 - Parallel cycle route along Butterfield Avenue and the Owendoher River connecting to Bushy Park utilising the proposed Dodder Greenway bridge; and
- Option PC10 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to Bushy Park utilising the proposed Dodder Greenway bridge.

These options were comparatively assessed in order to determine the draft preferred route option for a parallel cycle route in this section. This assessment was based on the same methodology presented in the 'Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report' for cycle route options considered in Rathgar/Rathmines. Further detail on the assessment methodology and criteria used in the assessment of these alternative cycle facilities is included in Section 3.3.3 and Table 3.1.

Appraisal Criteria	Option PC1	Option PC2	Option PC3	Option PC4	Option PC5	Option PC6	Option PC7	Option PC8	Option PC9	Option PC10
1 Capital Cost	Green	Green	Green	Green	Yellow	Yellow	Red	Red	Green	Yellow
2 Road Safety	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Green
3 Coherence	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
4 Directness	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
5 Attractiveness	Red	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green
6 Comfort	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow
7 Environmental	Green	Green	Green	Yellow	Green	Green	Yellow	Yellow	Green	Green

Figure 2.3.24 Grange Road to Rathdown Park - Parallel Cycle Routes Summary MCA (Table 4.9 of Preferred Route Option Report)

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Road Safety, Coherence, Directness, Attractiveness, Comfort, and Environmental. Sub-option PC8 was identified as having significant benefits over other sub-options in relation to Road Safety and Attractiveness. Following a detailed MCA, sub-option PC8 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

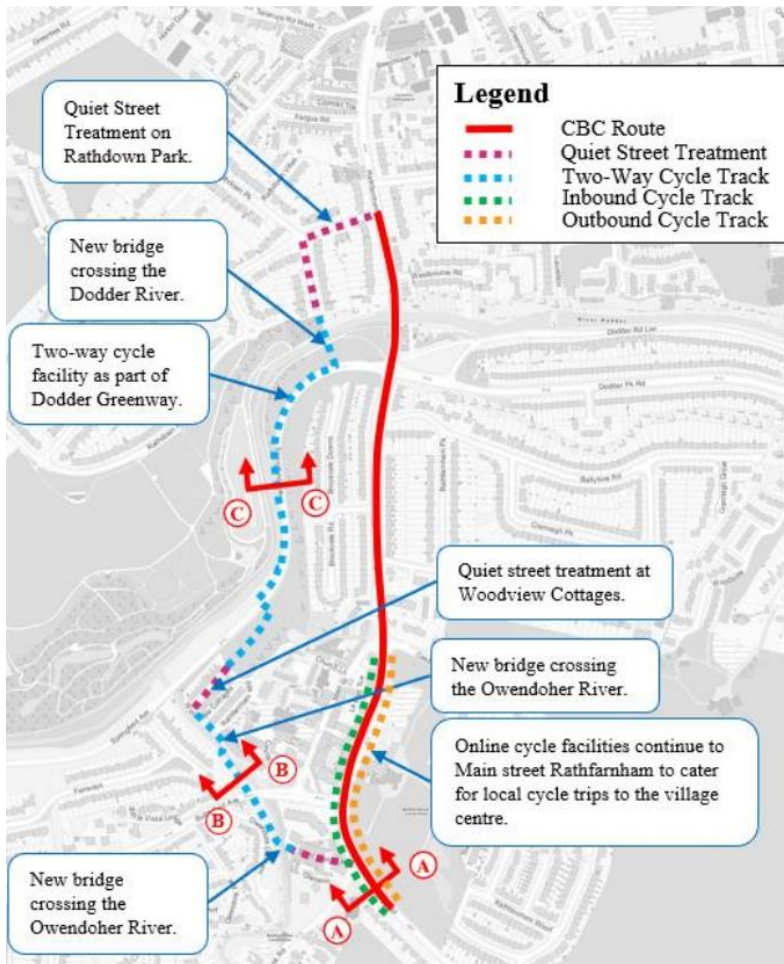


Figure 2.3.25 Cycle Route PC8 Scheme Proposals (Figure 4.62 in the Preferred Route Option Report)

Following the initial assessment of Parallel Cycle Route options, a number of principal route options for the delivery of the CBC scheme from Grange Road to Rathdown Park were developed. These are briefly described below:

- Option RF1: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of the Dodder with cyclists diverted to Brookvale Downs. Two bus lanes, two general traffic lanes and two cycle tracks provided on Rathfarnham Road north of the Dodder. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey, namely the existing steep driveway gradients on Rathfarnham Road;
- Option RF2: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of the Dodder with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process;
- Option RF3: One-way inbound general traffic on Rathfarnham Road between Castleside Drive and Dodder Park Road with two bus lanes and online cycle tracks on the CBC. A combination of bus lanes and signal controlled priority two general traffic lanes and two cycle tracks provided north of the Dodder;
- Option RF4: One-way inbound general traffic on Rathfarnham Road between Castleside Drive and Dodder Park Road with two bus lanes on the CBC with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process;
- Option RF5: A combination of bus lanes and signal controlled priority provided on Rathfarnham Road south of the Dodder, with two-way general traffic and online cycle tracks on the CBC. A combination of bus lanes and signal controlled priority, two general traffic lanes and two cycle tracks provided north of the Dodder; and

- Option RF6: A combination of bus lanes and signal controlled priority provided on Rathfarnham Road south of the Dodder, with two-way general traffic and with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process.

Option RF2 – the provision of two bus lanes and two general traffic lanes Rathfarnham Road south of the Dodder with cyclists diverted to the draft preferred parallel route - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing full physical bus priority throughout the section and minimising the impact on residential properties with steep existing driveways on Rathfarnham Road through the provision of an alternative cycle route linking to Rathdown Park. This option would provide bus priority, and while cycle facilities would not be provided along a short section of the CBC, the proposal included an attractive and safe alternative.

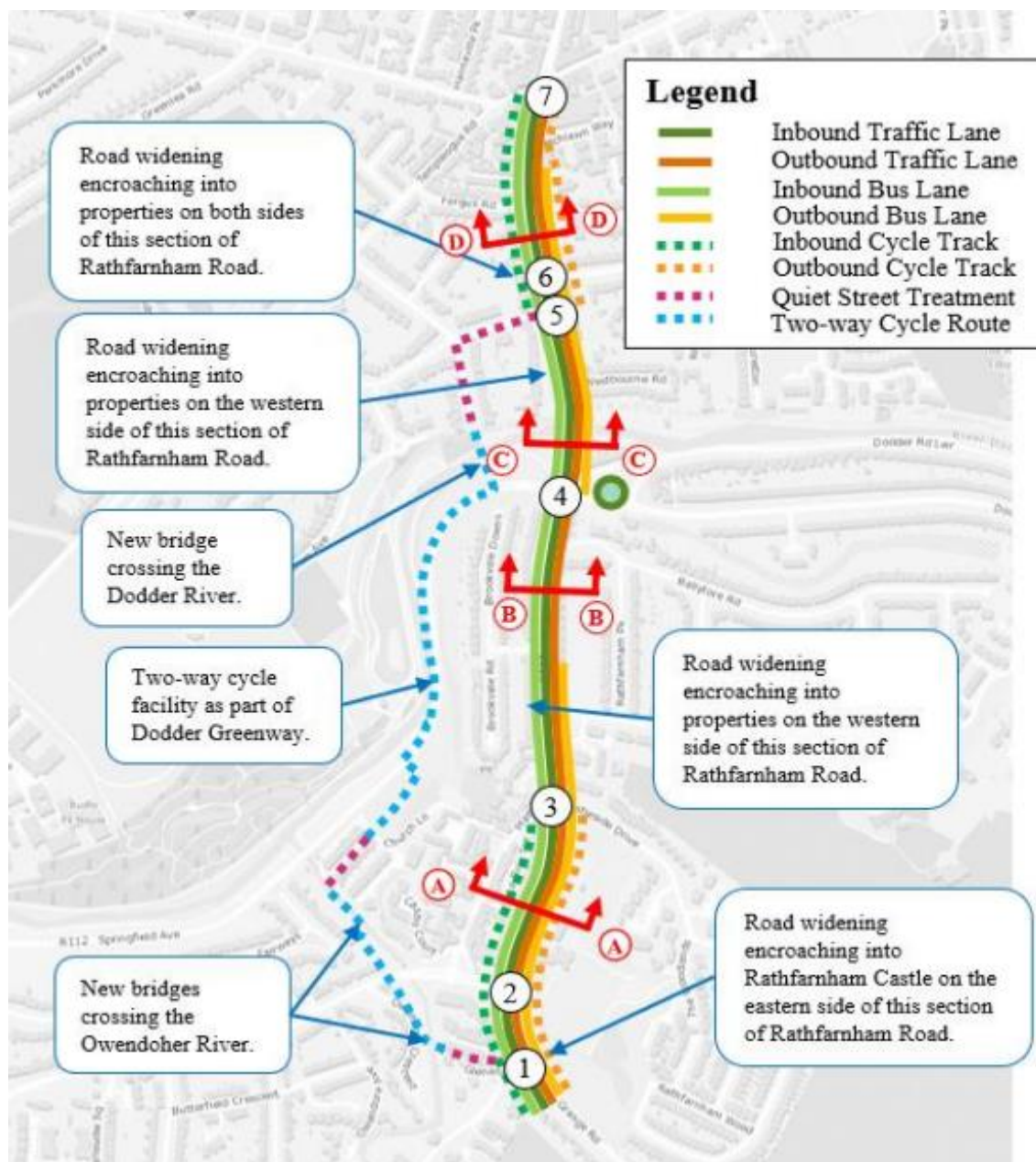


Figure 2.3.26 Route Option RF2 Indicative Scheme Design (Figure 4.75 in Preferred Route Option Report)

It is noted that a number of other options were also considered in the area but were not carried forward for the reasons briefly outlined below:

- Option of a bus gate along Rathfarnham Road between Castleside Drive and Dodder Park Road. This option was not considered feasible as through traffic would be required to undertake a diversion of up to 2km to continue beyond the bus gate, resulting in a route almost four times as long when compared to the most direct route.

Similarly, local access for residents along Rathfarnham Road could be increased by up to 2.5km resulting in a route almost 10 times as long for some residents compared to the most direct route. This diversion length was considered to be too disruptive in this area and as such a bus gate at this location was not considered further.

- Option of a bus gate along Rathfarnham Road between Dodder Park Road and Rathdown Park. This option was not considered feasible as through traffic would be required to undertake a diversion of up to 3km to continue beyond the bus gate, resulting in a route almost six times as long when compared to the most direct route. Similarly, local access for residents along Rathfarnham Road could be increased by up to 2.5km resulting in a route over 10 times as long for some residents compared to the most direct route. Furthermore, the proposal to provide an inbound bus gate along Templeogue Road (where physical space is not available for other options) as part of the Tallaght to Terenure CBC would further restrict inbound traffic movements in this area. For these reasons, this option was not considered feasible.

Further Consideration following Updated Draft Preferred Route Option Consultation

The third round of public consultation on the updated draft Preferred Route Option took place from the 04 November to 16 December 2020 and was held virtually due to the continuing effect of the COVID-19 pandemic and associated restrictions. There was a total of 1,543 submissions received during this round of public consultation. Arising from the feedback received during this consultation process, a number of changes to the design were made based on feedback received during the third round of public consultation and dialogue with stakeholders.

Nutgrove Avenue to Willbrook Road

Section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application outlines the option assessment between Nutgrove Avenue to Willbrook Road:

Submissions received as part of the public consultation raised concerns about the impact of land acquisition along this section of the route as well as the removal of trees.

In addition, upon review of the EPR Option within this section it was noted that while a number of options were explored, alternative options could be feasible within this Section of the Proposed Scheme. For these reasons, alternative options have been considered in these areas.

A number of alternative options have been developed with the objective of addressing the issues noted above. These options are outlined in more detail below:

- *Option RC1: Option RC1 would provide a general traffic lane in each direction along the entirety of this route section, as well as dedicated bus lanes and cycle tracks along the CBC for the entirety of this route section. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey.*
- *Option RC2: Option RC2 would provide a general traffic lane in each direction along the entirety of this route section, as well as a combination of dedicated bus lanes and signal controlled priority and cycle tracks along the CBC.*

Route Option RC2 is described in additional detail in section 4.4.1.1.4 of the Preferred Route Option Report:

This section of the route would commence on Grange Road at the junction with Nutgrove Avenue. A general traffic lane, bus lane and 2.0m wide cycle track in each direction is proposed.

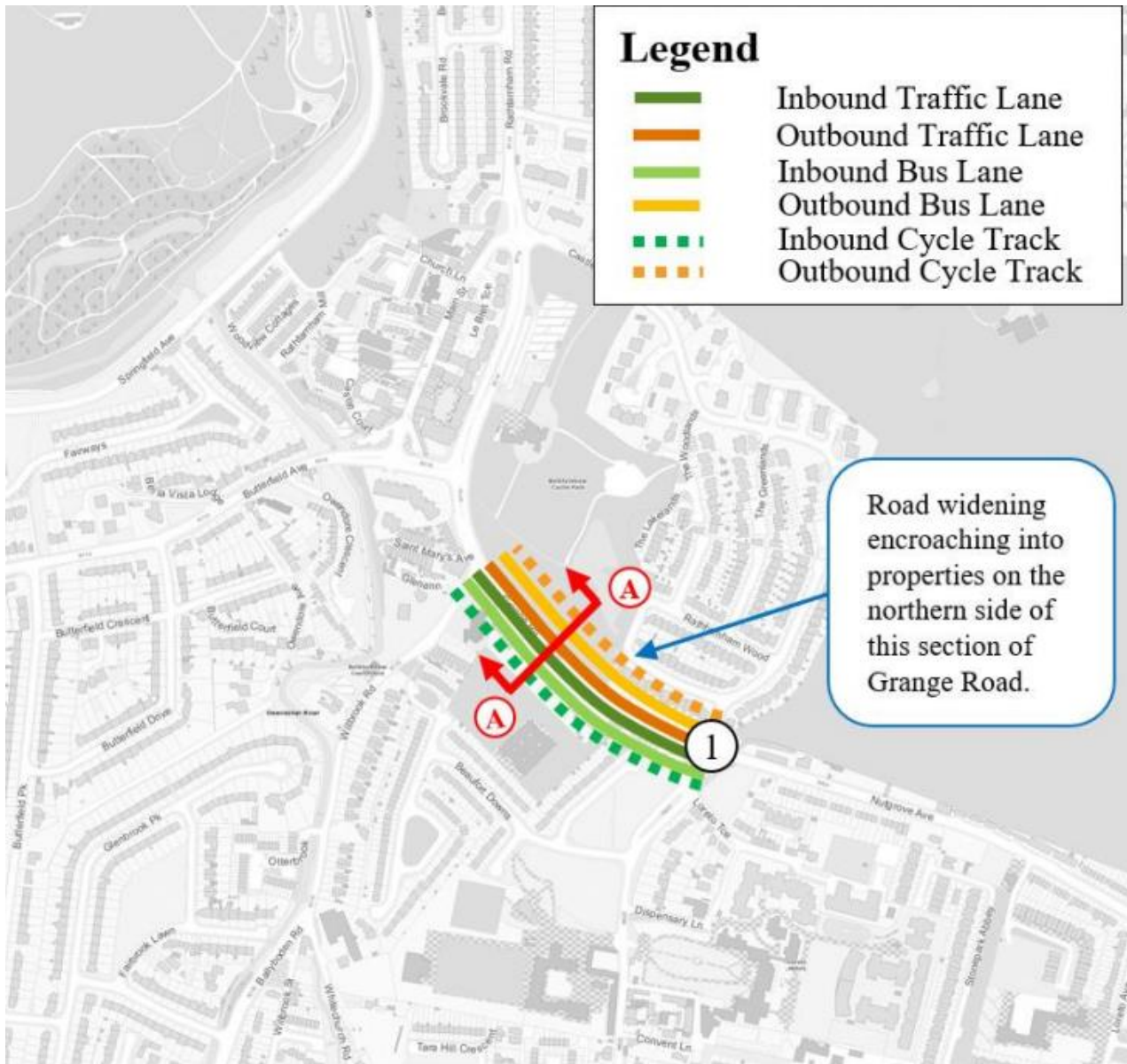


Figure 2.3.27 Route Option RC1 Indicative Scheme Design (Figure 4.31 of the Preferred Route Option Report)

Route Option RC2 is described in additional detail in section 4.4.1.1.5 of the Preferred Route Option Report:

This section of the route would commence on Grange Road at the junction with Nutgrove Avenue. A general traffic lane and 2.0m wide cycle track in each direction is proposed. An inbound bus lane would be provided on approach to the Willbrook Road junction and an outbound bus lane would be provided on approach to the Nutgrove Avenue junction.

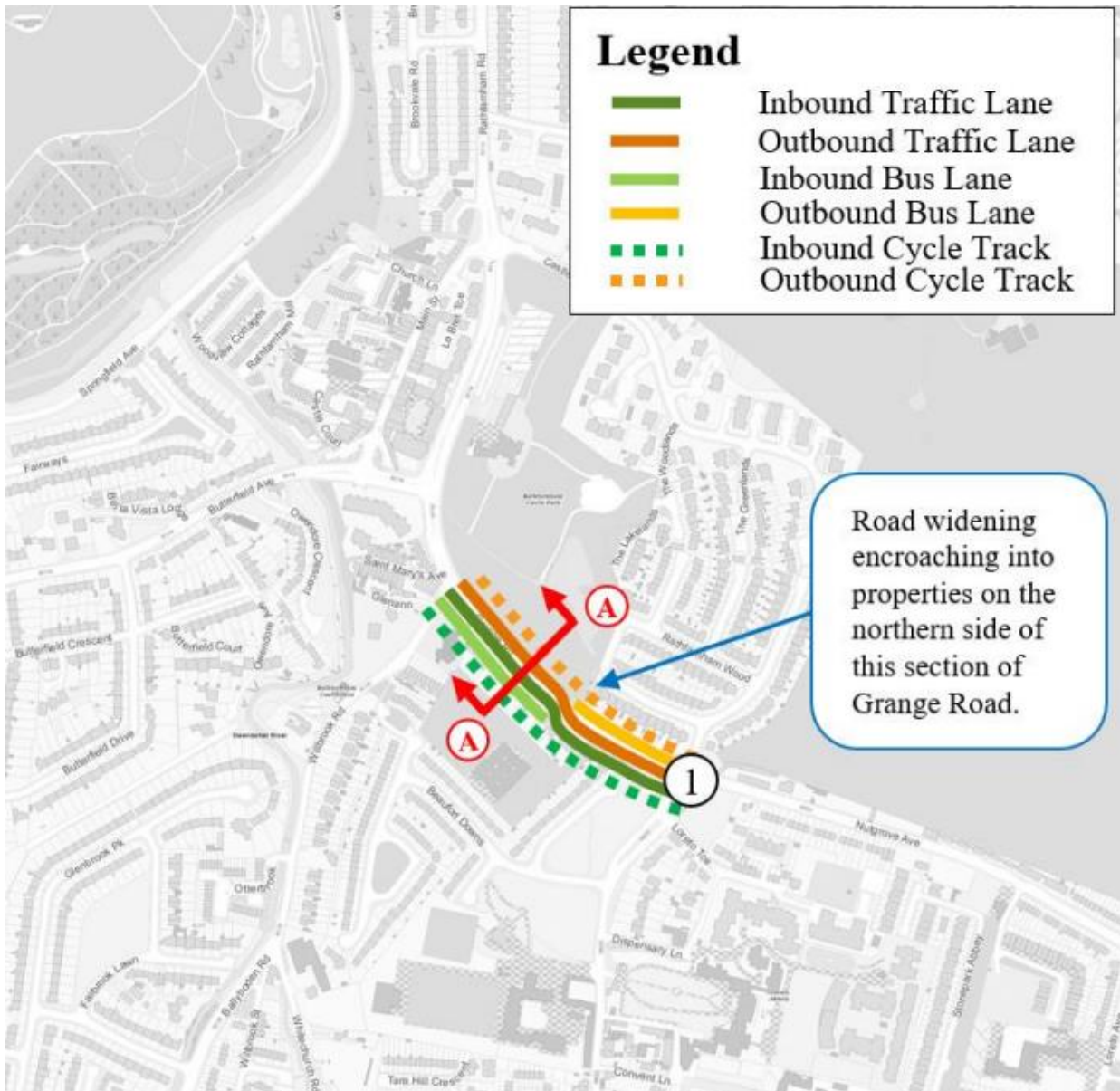


Figure 2.3.28 Route Option RC2 Indicative Scheme Design (Figure 4.34 in Preferred Route Option Report)

Based on the assessment undertaken, route **Option RC1** offers more benefits over other options. It performs favourably under the Economy and Integration criteria, while performing equally to other options under the Accessibility and Social Inclusion and Safety criteria. Option RF1 is the PRO for the Rathfarnham Road area for the following reasons:

- It would provide segregated bus priority on the CBC throughout the entirety of this section of the scheme, supporting reliability of journey time for the bus;
- It would deliver segregated online cycle facilities on Secondary Route S04 of the GDA cycle network plan; an
- It would maintain existing general traffic provision along Grange Road.

Appraisal Criteria	Option RC1	Option RC2
1 Economy		
2 Integration		
3 Accessibility & Social Inclusion		
4 Safety		
5 Environment		

Figure 2.3.29 Nutgrove Avenue to Willbrook Road (Table 4.6 in Preferred Route Option Report)

Grange Road to Rathdown Park

Section 3.4.3.2 of EIAR Chapter 3 describes the additional assessment that was complete for the Grange Road to Rathdown Park section of the Proposed Scheme:

Following feedback received as part of the public consultation in addition to further environmental constraints identified through further environmental investigations, additional assessment was considered warranted for this section of the Proposed Scheme. Furthermore, between Brookvale Road and Dodder Park Road, the cross section is particularly constrained. The potential impacts of the construction works would include:

- *Potential temporary closure of vehicular access to some properties during construction works;*
- *Potential need to undertake significant utility works including raising of manhole covers/gullies, and potentially utility ducts;*
- *Potential temporary closure of Rathfarnham Road to traffic during construction to facilitate works; and*
- *Extended construction period when compared to sections where works are less complex.*

Upon review, the collective and individual impact of the required construction works were not considered to be practicably feasible due to significant disruption caused by the unique construction works required to deliver this option. Alternative design solutions have therefore been explored in this area in determining the PRO.

Based on the above a number of additional options were developed for consideration within this section. Given the significant changes to options explored within this section of the scheme at this stage, the assessment is described in its totality below. It is noted that the northern extent of the study area for this section was extended to Terenure Cross to allow for a more comprehensive assessment of scheme options along Rathfarnham Road.

The options assessed are briefly described below:

- *Option RF1: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of Brookvale Road with cyclists diverted to Brookvale Downs. Between Brookvale Road and the River Dodder, two general traffic lanes and an inbound bus lane would be provided with outbound bus priority being maintained through use of signal-controlled priority. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road north of the River Dodder as far as Terenure Cross. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey, namely the existing steep driveway gradients on Rathfarnham Road;*

- *Option RF2: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of Brookvale Road with cyclists diverted to the preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process. Between Brookvale Road and the River Dodder, two general traffic lanes and an inbound bus lane would be provided with outbound bus priority being maintained through use of signal-controlled priority. Two bus lanes, two general traffic lanes on Rathfarnham Road north of the River Dodder as far as Terenure Cross with two 1.5m wide cycle tracks provided north of Rathdown Park where the parallel cycle route re-joins the CBC;*
- *Option RF3: A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Main Street Rathfarnham and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross;*
- *Option RF4: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Main Street Rathfarnham and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross;*
- *Option RF5: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross;*
- *Option RF6: A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross;*
- *Option RF7: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Main Street Rathfarnham and Terenure Cross. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. An outbound bus gate provided on Rathfarnham Road, north of Dodder Park Road;*
- *Option RF8: One-way inbound general traffic, two bus lanes and two 1.5m wide cycle tracks on Rathfarnham Road south of the River Dodder. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross; and*
- *Option RF9: One-way inbound general traffic and two bus lanes provided on Rathfarnham Road south of the River Dodder. Two bus lanes and two general traffic lanes provided on Rathfarnham Road between the River Dodder and Bushy Park Road. Cyclists diverted to the preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross.*

Appraisal Criteria	Option RF1	Option RF2	Option RF3	Option RF4	Option RF5	Option RF6	Option RF7	Option RF8	Option RF9
1 Economy	Green	Orange	Orange	Orange	Green	Orange	Orange	Orange	Green
2 Integration	Orange	Green	Green	Green	Green	Green	Green	Green	Orange
3 Accessibility & Social Inclusion	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
4 Safety	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
5 Environment	Orange	Orange	Green	Green	Green	Green	Green	Green	Orange

Figure 2.3.30 Section 1 MCA Criteria Summary (Table 4.11 in Preferred Route Option Report)

Option RF5 - an inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by balancing the provision of physical bus priority and segregated cycle with engineering and construction constraints.

A summary of the MCA criteria for the section between Grange Road and Rathdown Park is depicted in Figure 2.3.30 above, additional information on the breakdown of the MCA is included in section 3.4.3.2 of EIAR Chapter 3.

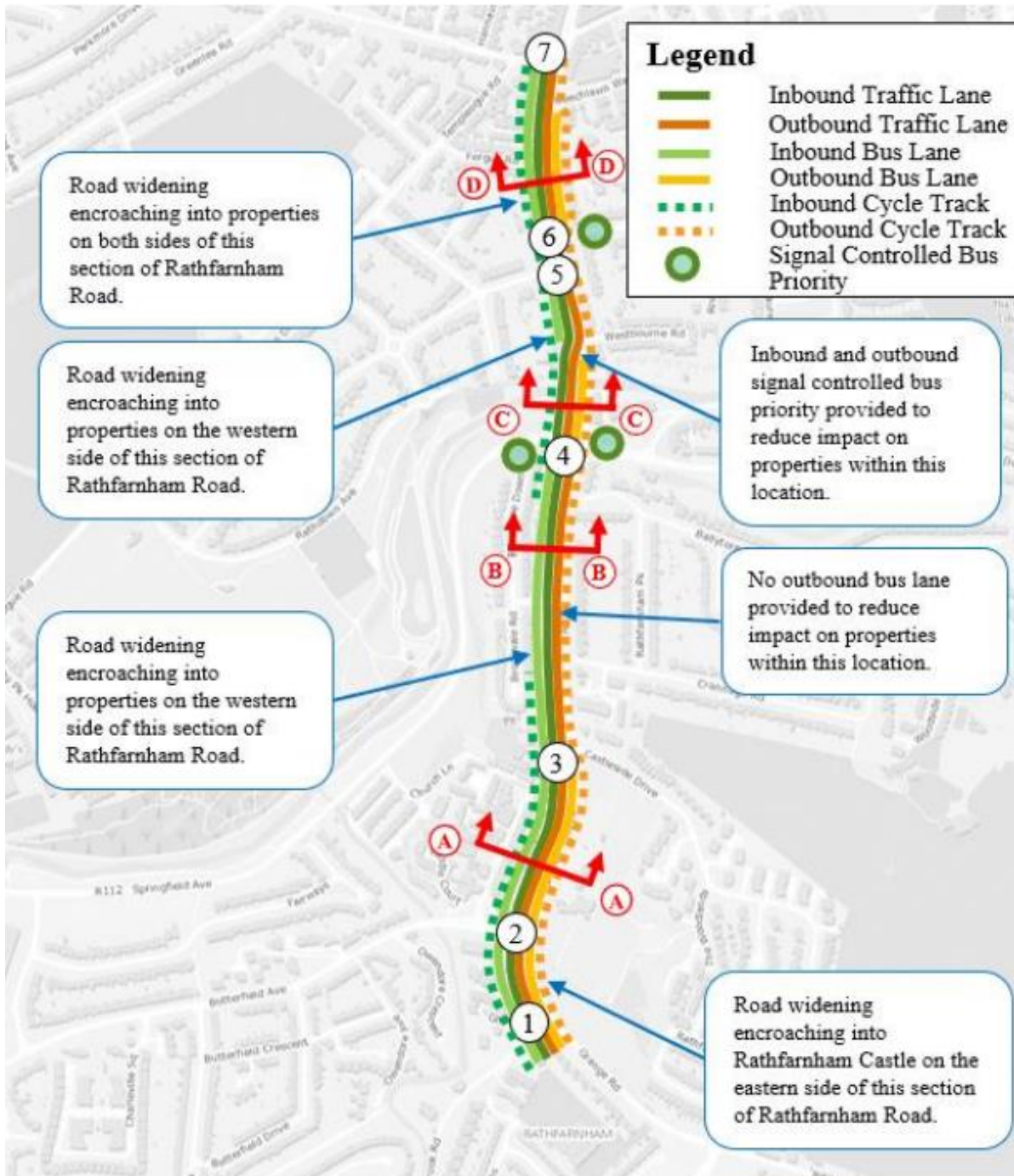


Figure 2.3.31 Route Option RC2 Indicative Scheme Design (Figure 4.85 in Preferred Route Option Report)

In addition to the above MCA's, a number of minor changes to the design were made based on feedback received during the second round of public consultation and dialogue with stakeholders. These changes made to the draft Preferred Route Option were relatively small scale and no further option assessments using the MCA described in Section 3.3.2 were required.

For the portion of the Proposed Scheme along Rathfarnham Road the following changes were made:

- At the junction of Grange Road and Nutgrove Avenue, the scheme was extended slightly to tie into an existing cycle track;
- At the junction of Grange Road and Nutgrove Avenue, the existing right turn general traffic lane which was proposed to be removed from the western arm of the junction, was reintroduced;
- The redesign of the Rathfarnham Road/Willbrook Road junction to provide kerb protection for cyclists;

- The redesign of the Rathfarnham Road/Castleside Drive junction to provide kerb protection for cyclists;
- The redesign of the Rathfarnham Road/Dodder Park Road junction to provide kerb protection for cyclists;
- The provision of a westbound cycle track on Bushy Park Road from Wasdale Park to Rathfarnham Road;

Summary

The Preferred Route Option, as described in the General Arrangement Drawings detailed in Volume 1 of the EIAR and Chapter 3 Proposed Scheme Description included in the EIAR Volume 2 has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Furthermore, the design has also been significantly influenced by the feedback received from the public and other stakeholders, gathered through the three rounds of Public Consultation.

Initially, the Feasibility and Options Report was prepared which set out the initial set out the initial route options following a two-stage assessment process. Stage 1 was a high-level route options assessment, which appraised routes in terms of ability to achieve the scheme objectives and whether they could be practically delivered. Stage 2 appraised routes that passed the stage 1 assessment and a more detailed qualitative and quantitative assessment was complete. All options progressed to this stage were compared against one another using a detailed MCA in accordance with the Department of Transport Document 'Common Appraisal Framework for Transport Projects and Programmes'.

The Feasibility and Options Report was concluded with the identification of the Emerging Preferred Route and formed the basis of the first round of non-statutory public consultation which was undertaken from 23 January 2019 to 30 April 2019. Following the first round of non-statutory public consultation the development of the Draft Preferred Route Option was complete between April 2019 and March 2020. Informed by feedback from the first round of public consultation, stakeholder engagement and the availability of additional design information, the design of the Emerging Preferred Route evolved with further alternatives considered.

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. Following the second round of consultation further development of an updated Draft Preferred Route Option was undertaken which took account of submissions received, continuing stakeholder engagement and additional design information.

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. Finalisation of the Preferred Route Option was informed by feedback from the overall public consultation process, continuing stakeholder engagement and the availability of additional design information.

2.3.2.3 Air and Noise Pollution

Summary of Issue Raised

Submissions contend that the Proposed Scheme will result in increased air and noise pollution.

Response to Issue Raised

In relation to air quality, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios.*

There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value.

However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicate all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

In relation to noise levels, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*”

Section 9.6.2 states that: *Once operational, there will be a direct, positive, imperceptible to slight impact along the Proposed Scheme due to a reduction in traffic volumes during both the year of Opening Year (2028) and the Design Year (2043).*

2.3.2.4 Increased Traffic and Congestion and consequential safety concerns

Summary of Issue Raised

The Proposed Scheme will result in increased traffic and congestion and consequential safety concerns along Rathfarnham Road, Rathdown Park and Dodder View Road.

Response to Issue Raised

- a. Increase in traffic on these roads

As set out in Section 2.1 of EIAR Chapter 2 Need for the Scheme, “*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.*”

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. Section 6.4.6.2 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR states that:

*Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be a **Positive, Moderate and Long-term** effect whilst the impact of the redistributed general traffic along the surrounding road network will have a **Negative, Slight and Long-term** effect. Thus, overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area.*

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport. It is noted that the modelled forecasts for the 2028 opening year indicate that one of the impacts of the proposed Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme is that there is a reduction of 30% in the number of people travelling via car along the Proposed Scheme towards the city centre at AM peak hour. Similarly, in the PM peak hour, there is a reduction of 39% in the number of people travelling outbound via car, as shown in Figure 2.3.32 and Figure 2.3.33 (reproduced from diagrams 6.6 and 6.7 in Chapter 6).

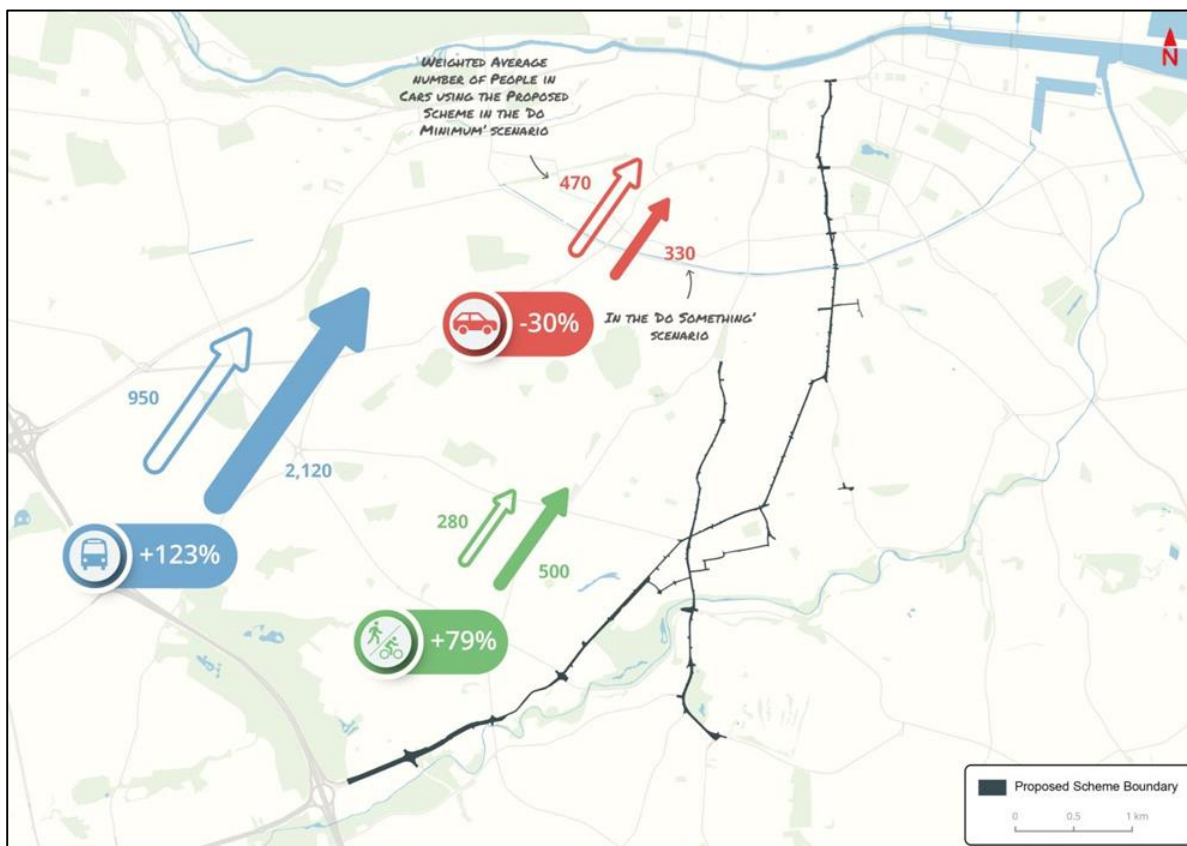


Figure 2.3.32 People Movement by Mode travelling along the Proposed Scheme during 2028 AM Peak Hour (Diagram 6.6 in EIAR Chapter 6)

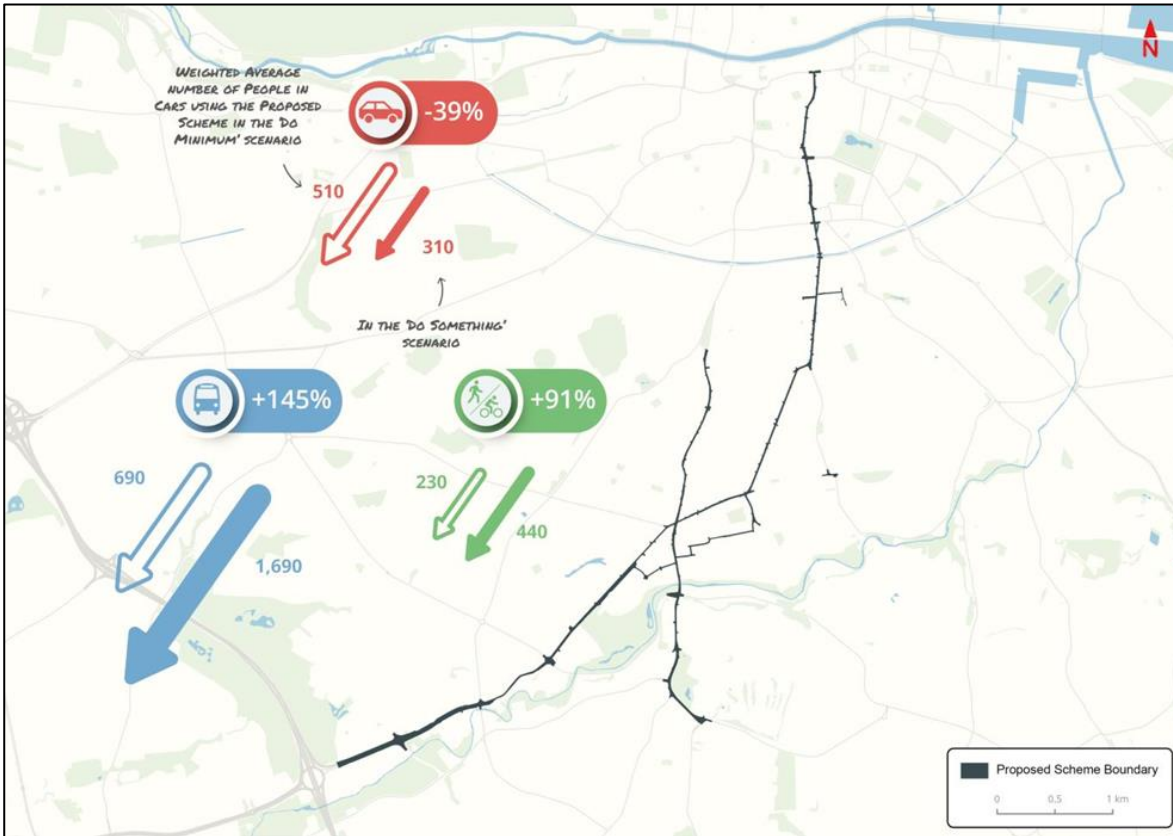


Figure 2.3.33 People Movement by Mode travelling along the Proposed Scheme during 2028 PM Peak Hour (Diagram 6.7 in EIAR Chapter 6)

Section 6.4.6.1.15.3 of EIAR Chapter 6 Traffic and Transport discusses the difference in flow of general traffic in the AM peak hour as a result of the Proposed Scheme. The differences are illustrated in Diagram 6.40 and the road links listed in Table 6.60 where there is a generally no change to traffic on most of Rathfarnham Road with a decrease in traffic on Grange Road and other roads adjoining Rathfarnham Road as shown in Figure 2.3.34 – Figure 2.3.35.

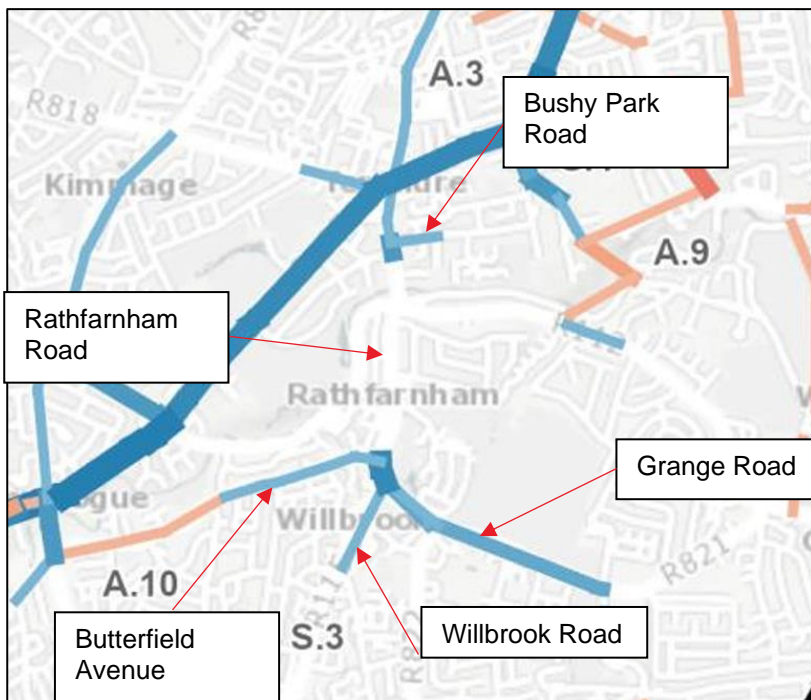


Figure 2.3.34 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

Table 6.60: Road Links that Experience a Reduction of ≥ 100 Combined Flows during AM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.2	Cypress Grove Road	1,108	926	-182
		Old Bridge Road	1,333	983	-350
		Tallaght Road	1,675	1,400	-275
		Templeville Road	1,036	689	-348
		Wellington Lane	2,141	1,851	-291
	S.4	Templeogue Road	665	212	-453
Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	S.3	Butterfield Avenue	979	822	-158
		Grange Road	606	484	-122
		Nutgrove Avenue	1,275	995	-280
		Rathfarnham Road	1,336	843	-493
		Willbrook Road	798	602	-196
	S.4	Bushy Park Road	441	301	-141
	Rathfarnham Road	950	837	-114	

Figure 2.3.35 Extracts from EIAR Chapter 6: Table 6.60

The assessment shows that during the morning peak period, the Proposed Scheme will result in decreases to traffic on Grange Road, Rathfarnham Road and their adjoining roads, Butterfield Avenue (- 158 PCUs), Grange Road (-122 PCUs), Nutgrove Avenue (-280 PCUs), Rathfarnham Road (-493 PCU) and Willbrook (-196 PCUs).

Section 6.4.6.1.15.4 of EIAR Chapter 6 Traffic and Transport discusses the difference in flow of general traffic in the PM peak hour as a result of the Proposed Scheme. The differences are illustrated in Diagram 6.41 and the road links listed in Table 6.64 and Table 6.65 where there is a generally no change to traffic on most of Rathfarnham Road with a decrease in traffic on Grange Road and other roads adjoining Rathfarnham Road except for Rathdown Park and Dodder View Road as shown in Figure 2.3.36 – Figure 2.3.38.

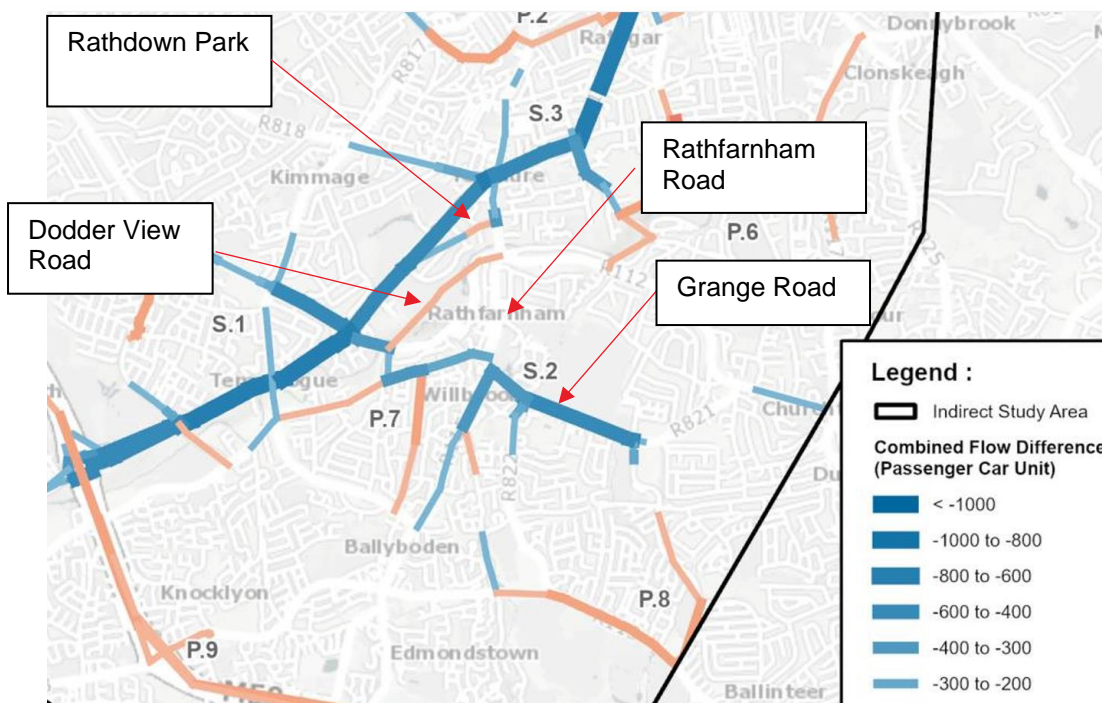


Figure 2.3.36 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

Table 6.64 Road Links that Experience a Reduction of ≥ 100 Combined Flows during PM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.1	Cypress Grove Road	1,080	900	-180
		Old Bridge Road	1,242	1,087	-155
		Springfield Avenue	1,265	926	-339
		Tallaght Road	1,471	1,044	-427
		Templeogue Road	1,303	852	-451
		Templeville Road	972	558	-414
		Wellington Lane	2,241	1,960	-280
	S.2	Templeogue Road	864	462	-402
	S.3	Rathdown Park	171	30	-140
		Templeogue Road	864	462	-402
		Terenure Place	1,535	795	-740
		Terenure Road West	802	584	-218
	Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	S.2	Butterfield Avenue	894	630
Grange Road			711	496	-215
Nutgrove Avenue			1,279	736	-543
Rathfarnham Road			1,610	765	-845
Willbrook Road			979	667	-311
S.3		Rathfarnham Road	980	826	-154
Section 3 - R137 Terenure Road	S.3	Harold's Cross	1,091	983	-107

Figure 2.3.37 Extracts from EIAR Chapter 6: Table 6.64

Table 6.65: Road Links that Experience an Increase of ≥ 100 Combined Flows during PM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	P.7	Spawell Link Road	844	975	+131
		Templeogue Road	924	1,025	+100
Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	P.2	Rathdown Park	189	305	+116
	P.7	Dodderview Road	1,051	1,171	+120
		Rathdown Park	116	240	+124
Section 3 - R137 Terenure Road North to Charleville Road	P.2	Grosvenor Road	354	563	+209
		Kenilworth Park	719	893	+174
		Kenilworth Square North	330	498	+167

Figure 2.3.38 Extracts from EIAR Chapter 6: Table 6.65

The assessment shows that during the evening peak period, the Proposed Scheme will result in decreases to traffic on Grange Road, Rathfarnham Road and their adjoining roads, Butterfield Avenue (- 264 PCUs), Grange Road (-215 PCUs), Nutgrove Avenue (-543 PCUs), Rathfarnham Road (-845 PCU) and Willbrook (-311 PCUs). The assessment also shows that there will be increases in traffic at Rathdown Park (+116 & +124) and Dodder View Road (+120).

Further junction capacity assessment was undertaken along these road links to determine they have the capacity to cater for the additional traffic volumes as a result of the Proposed Scheme.

The full analysis tables for the PM Peak period, demonstrating the Do Minimum and Do Something Peak Hour traffic flows and maximum V / C ratio for each junction assessed is detailed in Table 17 of Appendix A6.4.4 (General Traffic Assessment) in Volume 4 of the EIAR, extracts for which are presented in Figure 2.3.39.

Location					Peak Hour Traffic Flow		Max Volume over Capacity Ratio (%)		Ranges		Description of Impact
Orientation	Map ID	Road Name	Junction ID	Junction Name	Do Minimum Flow	Do Something Flow	Do Minimum VoC	Do Something VoC	Do Minimum	Do Something	
Western Side of Proposed Scheme	P.6	Butterfield Park	21146	Butterfield Park / Ballyroon Road	557	632	30	32	<85%	<85%	Negligible
		Butterfield Park / Butterfield Orchard	21139		124	353	7	16	<85%	<85%	Negligible
		Canal Road	6316	Canal Road / Charlemont Street / Grand Parade / Ranelagh Road	1828	1532	82	76	<85%	<85%	Negligible
		Castlewood Avenue / Castlewood Road	11259		662	824	10	29	<85%	<85%	Negligible
		Dodderview Road	9144	Dodderview Road / Fairways / Springfield Avenue	1599	1362	89	91	85%-100%	85%-100%	Negligible
		Dodder View Road	10385	Dodder View Road / Dodder Road	604	661	33	36	<85%	<85%	Negligible
		Dundrum Road / Milltown Bridge Road	11327		997	1086	86	92	85%-100%	85%-100%	Negligible
		Firhouse Road / Spawell Link Road	21204		1542	1556	92	85	85%-100%	85%-100%	Negligible
		Grand Parade	6301	Grand Parade / Leeson Street Lower / Leeson Street Upper / Mespil Road	2480	2395	67	58	<85%	<85%	Negligible
		Grange Road	19436	Grange Road / Stonemason'S Way	1338	1587	56	96	<85%	85%-100%	Low
			21175	Grange Road / Taylors Lane	866	1059	50	60	<85%	<85%	Negligible
		Ballyboden Road	21144	Ballyboden Road / Whitechurch Road / Willbrook Road	951	791	47	31	<85%	<85%	Negligible
		Belgrave Square North	11357	Belgrave Square East / Belgrave Square North / Charleston Road / Mount Pleasant Avenue Upper	945	1036	68	47	<85%	<85%	Negligible
			61000	Belgrave Square North / Castlewood Avenue	0	810	0	23	<85%	<85%	Negligible
		Braemor Road	11297	Braemor Road / Lower Dodder Road	1099	1129	59	68	<85%	<85%	Negligible
		Castlewood Avenue	40073	Castlewood Avenue / Castlewood Park	516	678	15	28	<85%	<85%	Negligible
		Leeson Street Upper	11136	Leeson Street Upper / Leeson Street Upper	640	869	35	47	<85%	<85%	Negligible
		P.8	Charlemont Street	6100	Charlemont Street / Charlemont Mall	836	945	51	55	<85%	<85%
Charleston Road	11312		Charleston Road / Cullinstown Road	691	1057	17	32	<85%	<85%	Negligible	
Leeson Street Upper	11131		Leeson Street Upper / Dartmouth Road	1060	1228	60	64	<85%	<85%	Negligible	
P.1	Leinster Road	11287	Charleville Road / Leinster Road	378	450	18	18	<85%	<85%	Negligible	
		11160	Leinster Road / Leinster Road West	240	391	10	13	<85%	<85%	Negligible	
	Limekiln Road	9186	Limekiln Avenue / Limekiln Road	360	436	24	40	<85%	<85%	Negligible	
	South Circular Road	7258	Dufferin Avenue / South Circular Road	1098	1248	46	58	<85%	<85%	Negligible	
	Wellington Road	9195	Limekiln Road / Wellington Road	1422	1560	69	85	<85%	<85%	Negligible	
P.2	Parnell Road	7211	Donore Avenue / Parnell Road	1583	1484	98	96	85%-100%	85%-100%	Negligible	
P.3	Bride Street	6172	Bride Street / Peter Street	433	604	14	22	<85%	<85%	Negligible	
	South Circular Road	6484	Emonville Avenue / South Circular Road	865	1079	32	46	<85%	<85%	Negligible	
		6134	South Circular Road / Bloomfield Avenue	846	1040	28	36	<85%	<85%	Negligible	
		6132	South Circular Road / Curzon Street	790	979	34	42	<85%	<85%	Negligible	
		6131	South Circular Road / Kingsland Park Avenue	946	1162	41	51	<85%	<85%	Negligible	
		7209	South Circular Road / Raymond Street	952	1109	35	40	<85%	<85%	Negligible	
		7208	South Circular Road / St Albans Road	1117	1267	32	37	<85%	<85%	Negligible	
		7213	Washington Street / South Circular Road	1000	1141	40	46	<85%	<85%	Negligible	
Stephen Street Upper	6332	Stephen Street Upper / Great Ship Street	216	326	17	27	<85%	<85%	Negligible		
P.4	Clareville Road	8133	Clareville Road / Larkfield Park	647	893	18	26	<85%	<85%	Negligible	
	Golden Lane	6438	Chancery Lane / Golden Lane	504	648	20	21	<85%	<85%	Negligible	

Figure 2.3.39 Extracts from EIAR Appendix A6.4.4: Table 17

The assessment presented in Table 17 of Appendix A6.4.4 in Volume 4 of the EIAR, shows that the Proposed Scheme would result in negligible traffic impact on Dodder View Road as a result of the Proposed Scheme.

2.4 Proposed Scheme at Terenure and Rathgar

2.4.1 Overview of Submissions Received

A number of issues were raised, and these are listed below:

1. Justification for corridor routing along Rathgar Road
2. Proposed 1-way for general traffic on Rathgar Road
 - a. Impact on Highfield Road / Rathmines Road Upper
 - b. Reduced footpath widths on Rathgar Road
3. Removal of parking/loading in Rathgar Village
4. Removal of parking/loading in Terenure Village
5. Removal of trees on Terenure Road East
6. Impact on Heritage properties along Terenure Road East
7. Existing Bus Priority Signal on Terenure Road East is Adequate

2.4.2 Common Issues Raised and Responses

2.4.2.1 Justification for corridor routing along Rathgar Road

Summary of Issue Raised

A number of submissions query the routing of the core bus corridor along Terenure Road East, Rathgar Road and Rathmines Road. These submissions suggest that the route should continue straight through Terenure Cross on Terenure Road North and continuing along Harold's Cross Road to connect to the Kimmage to City Centre Core Bus Corridor.

It is noted in these submissions that this was the routing identified for the Clongriffin to Tallaght Bus Rapid Transit scheme. It is submitted that the optioneering carried out of the Proposed Scheme does not consider the routing of the corridor along Harold's Cross Road.

Submissions note that the routing through Terenure Road North / Harold's Cross Road is dismissed in brief text and graphics in the Preferred Route Option Report and that this dismissal is based on outdated data namely the 2011 Census and 2016 Dublin bus patronage figures.

Response to Issue Raised

Section 3.4.1.1.2.2 of Chapter 3 Reasonable Alternatives of Volume 2 of the EIAR identifies that consideration of the routing the corridor along Harold's Cross Road:

Option of the CBC following Harold's Cross Road and connecting to the Kimmage to City Centre CBC. The primary reason that this option has not been progressed is the significantly stronger demand for bus along the Rathgar Road / Rathmines Road when compared to Harold's Cross Road. This route corridor serves the urban village of Rathmines, which is a significant trip attractor on southern side of the city. The strength of the high demand for bus in Rathmines compared to Harold's Cross Road is clearly evident from the extracts from the Dublin Area Bus Network Redesign Revised Proposal (October 2019) presented in Image 3.18 and Image 3.19. The patronage shown in Image 3.18 is based on existing bus services.

This is elaborated upon in Section 4.3.4.1.1 of the Preferred Route Option Report provided in the Supplementary Information which sets out the rationale for the routing of the corridor along the Terenure Road/Rathgar Road/Rathmines Road corridor.

The primary route corridors considered in the assessment of Section 2 focussed on the Harold's Cross and the Rathgar/Rathmines corridors. The 'Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report' concluded that the Rathgar/Rathmines corridor was preferred for a number of reasons, one of which being that the Harold's Cross corridor would have duplicated the then proposed Clongriffin to Tallaght Bus Rapid Transit (BRT) Route.

It is evident in section 5.5.4 of the previous revision of GDA Transport Strategy (2016-2035) which states:

"[a] number of the Core Radial Bus Corridors are proposed to be developed as Bus Rapid Transit routes, where the passenger numbers forecast on the routes are approaching the limits of conventional bus route capacity."

As design and planning work progressed, it became clear that the level of differentiation between the BRT corridors and the Core Bus Corridors would, ultimately, be limited, and that all of the Core Radial Bus Corridors should be developed to provide a BRT level of service.

The BRT routes shown in the GDA Transport Strategy (2016-2035) are indicative only. Section 5.5.4 of the strategy document states:

"The routes of these two BRT schemes are indicative and subject to design development. Such design development may include changes to the indicated alignments and /or terminal points of the schemes, including further extension of the routes."

Notwithstanding the fact that the BRT Route is no longer currently being progressed, the Rathgar/Rathmines Corridor remains the preferred corridor for the Rathfarnham to City Centre section.

The primary reason for this is the significantly stronger demand for bus along the Rathgar Road / Rathmines Road when compared to Harold's Cross Road. This route corridor serves the urban village of Rathmines, which is a significant trip attractor on southern side of the city. The strength of the high demand for bus in Rathmines compared to Harold's Cross Road is clearly evident from the extracts from the Dublin Area Bus Network Redesign Revised Proposal (October 2019) presented in Figure 4.27 and Figure 4.28. The patronage shown in Figure 4.27 is based on existing bus services.

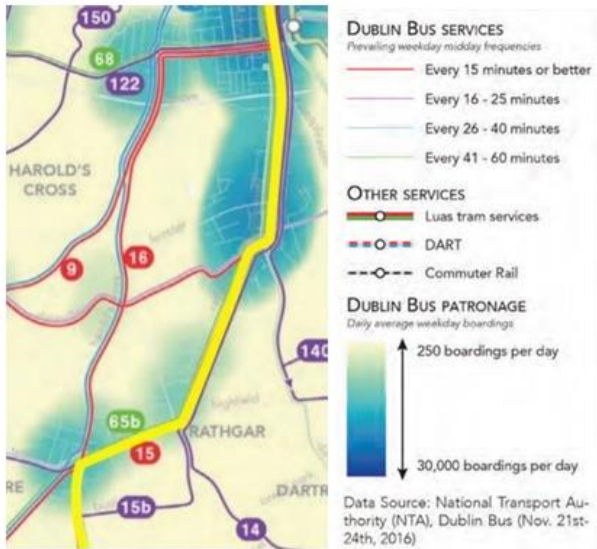


Figure 4.27: Average Daily Bus Patronage - Heatmap

(Source Dublin Area Bus Network Redesign Revised Proposal (October 2019) – the Rathfarnham to City Centre section highlighted yellow. Patronage based on existing bus services.)

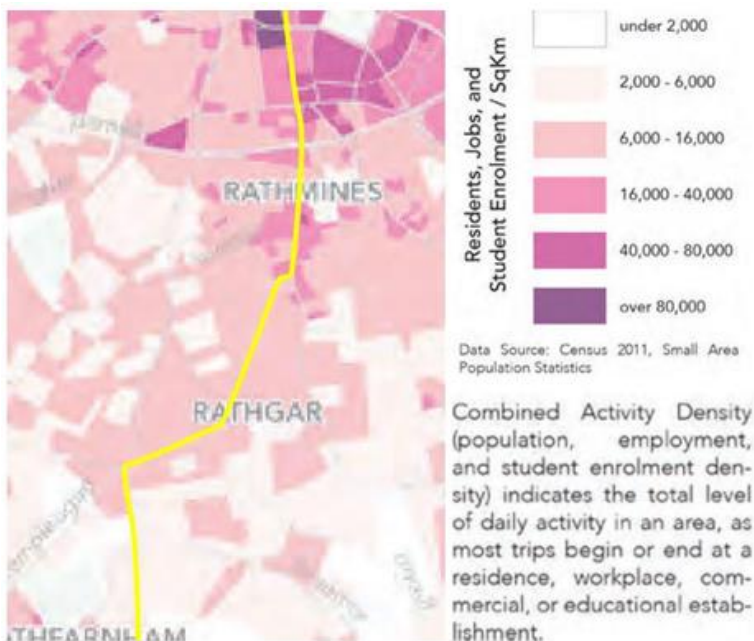


Figure 4.28: Combined Activity Density Map

(Source Dublin Area Bus Network Redesign Revised Proposal (October 2019) – the Rathfarnham to City Centre section highlighted yellow. Note darker colours represent areas with a higher density of activity)

The data presented above shows that the selected corridor through Rathmines will serve areas of higher density of activity (as demonstrated by the census data) as well as areas with already higher levels of bus patronage (as demonstrated by the Dublin Bus patronage data).

It is noted that the above graphic was based on the 2011 census. At the time of writing this response, the 2022 census data was not yet available, however an updated combined activity density map has been prepared based on the 2016 census and is presented below, confirming that the demand has not changed in any significant way.

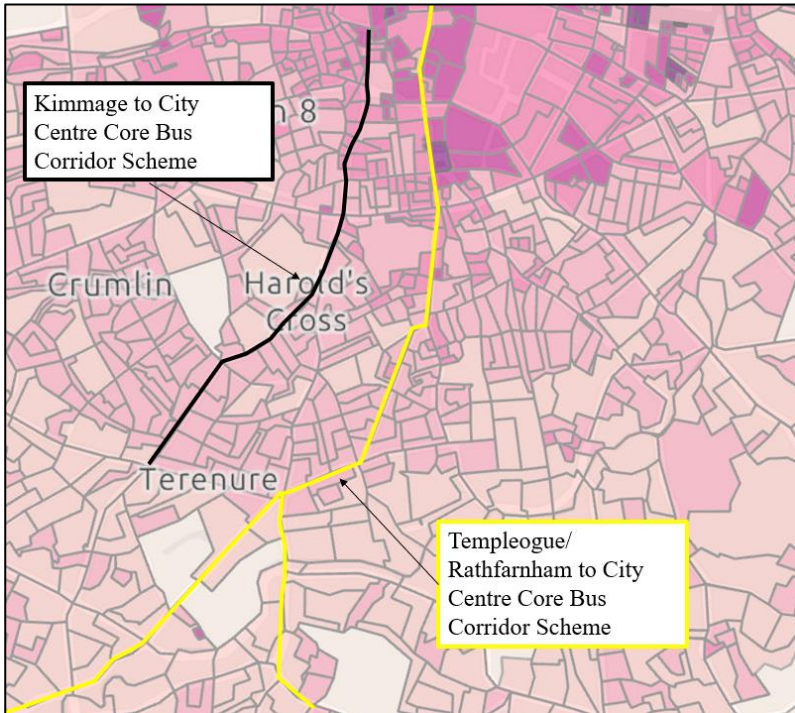


Figure 2.4.1 Combined Activity Density Map based on 2016 Census

Figure 2.4.1 shows that a higher density of activity is still present along the Rathgar Road /Rathmines Road Lower corridor than through Harold's Cross. It also demonstrates that bus service demand needs to be served along both the Rathgar Road / Rathmines Road Lower corridor, and along the Kimmage Road / Harold's Cross Road corridor, which is why the two 'Spines', as identified in the Dublin Area Bus Network Redesign Revised Proposal October 2019, are identified as major corridors extending out of the City Centre that require very high frequency service.

It is noted that a route via Rathgar Road and Rathmines Road is designated as a the A Spine route in the BusConnects Network Redesign. The Dublin Area Bus Network Redesign Revised Proposal October 2019 notes the following in relation to spine routes.

To locate the spines, we identified the major corridors extending out of City Centre that required very high frequency service. We then paired corridors on either side of the city, based on the following considerations:

- *Paired corridors should be on opposite sides of the City Centre, so that a spine combining them will form a reasonably direct line that is likely to be useful for many purposes.*
- *Paired corridors should support comparable levels of frequency off-peak, since the frequency on the core part of a spine will be the same on both sides of the City Centre.*

In practice, each spine is made up of several routes that join to form the spine on one side of the city, and then split up again on the other side. Each of these routes is a "branch" of the spine. The timetables of different spine branches would be staggered to ensure a consistently short time between buses on the main spine segment. We designed the branching structure using the following principles:

- *Spines should split where the combined frequency of the spine is no longer justified by demand, preferably not too close to the City Centre to provide a long high-frequency segment.*
- *Each branch should deliver the right frequency given the demand in the neighbourhoods it serves. In some cases, this means that a spine branches into two and then, further out, branches again.*
- *The total travel time of a route should not exceed two hours from one end of the route to the other.*

The following is noted regarding the A Spine:

A Spine: Whitehall to Terenure

The A spine would combines the Swords Road corridor on the north side of the city with the Rathmines - Rathgar corridor on the south side. These are Dublin's busiest bus corridors, so service on the A spine would run every 3 minutes on weekdays.

On the north side, the A spine would split at Whitehall (Collins Avenue) into four branches, each with service every 12 minutes:

- *A1 would extend to Beaumont Hospital via Lorcan Avenue. This would add a new radial service to Beaumont Hospital via the Swords Road.*
- *A2 would extend on Swords Road to the Airport, similar to Route 16 but without a deviation into Beaumont.*
- *A3 would extend on Collins Avenue, going past DCU and continuing into Santry to the Santry Garda Station. This would provide a new radial service to DCU while also maintaining service currently provided by Route 1 in Santry.*
- *A4 would extend to Swords Main Street and Swords Manor, combining several existing segments of Routes 41 and 41c.*

In the south, the A spine services remain together to Terenure, then split into the four 15-minute branches:

- *A1 would extend past Templeogue to Knocklyon, similar to existing Route 15.*
- *A2 would extend past Rathfarnham to Ballinteer and Dundrum, combining elements of existing Routes 16 and 14.*
- *A3 would extend past Templeogue to Tallaght, providing a new high-frequency service to Tallaght via Rathmines - Rathgar.*
- *A4 would extend past Rathfarnham to Nutgrove Shopping Centre, allowing direct travel to this centre from far more areas.*

On the segment between Terenure and Templeogue, the A1 and A3 would combine to provide a service every 6 minutes. The A2 and A4 do the same on the segment between Terenure and Rathfarnham.

It is noted that the proposed routing of the A Spine via Rathgar Road and Rathmines reflects the existing high frequency bus service provided along this corridor when compared to the Terenure Road North/Harold's Cross Road corridor, as shown in Figure 2.4.2 below. Equally the proposed routing of the F Spine via Kimmage Road / Harold's Cross Road reflects the existing high frequency bus service provided along that corridor when compared to the Terenure Road North/Harold's Cross Road corridor. The case for the BRT route option combining the Templeogue / Rathfarnham to City Centre CBC Scheme with the Kimmage to City Centre CBC Scheme at Harold's Cross area fell away once the high frequency bus service demand analysis was fully considered in the consideration of reasonable alternatives.

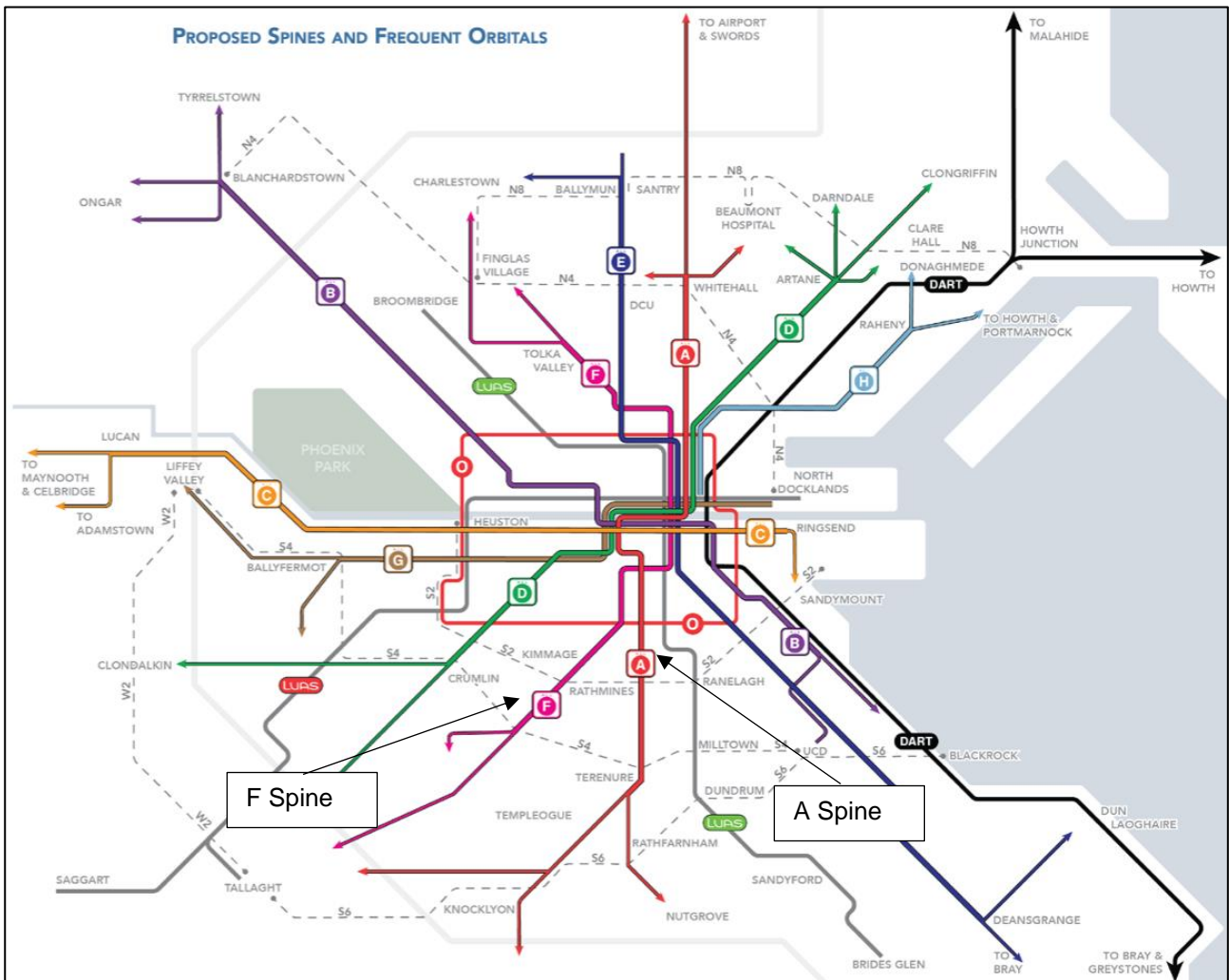


Figure 2.4.2 Extract from Revised Network Proposal Executive Summary (Figure 17)

2.4.2.2 Proposed one-way for general traffic on Rathgar Road

Summary of Issue Raised

- a. Traffic Impact on Highfield Road / Rathmines Road Upper and surrounding roads

A number of submissions received raised concerns in relation to the impact that the proposed one-way regime for general traffic on Rathgar Road would have on roads in the vicinity of the Rathgar Road due to rerouting of traffic. These submissions included references to increases in traffic, congestion and potential safety issues on roads such as Highfield Road, Rathmines Road Upper, Palmerston Park and Palmerston Road. Some submissions noted that the introduction of the right turn from Rathmines Road Upper to Highfield Road would encourage traffic to use these routes. Many submissions noted that these roads were unsuitable for accommodating additional traffic.

- b. Noise Increases on Highfield Road / Rathmines Road and surrounding Roads

Some submissions were concerned that due to the rerouting of traffic along Highfield Road, Rathmines Road Upper, Palmerston Park and Palmerston Road there would be a significant increase in noise along these streets.

- c. Reduced footpath widths on Rathgar Road

A number of submissions received raised concerns about the proposal to reduce footpath widths along Rathgar Road and the impact this would have on pedestrian movement and safety.

Response to Issue Raised

i. Traffic Impact on Highfield Road / Rathmines Road Upper and surrounding roads

As set out in Section 2.1 of EIAR Chapter 2 Need for the Scheme, “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.”

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. Section 6.4.6.2 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR states that:

*Overall, it has been determined that the impact of the reduction in general traffic flows along the Proposed Scheme will be a **Positive, Moderate and Long-term** effect whilst the impact of the redistributed general traffic along the surrounding road network will have a **Negative, Slight and Long-term** effect. Thus, overall, there will be no significant deterioration in the general traffic environment in the study area as a consequence of meeting the scheme objectives of providing enhanced sustainable mode priority along the direct study area.*

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport. It is noted that the modelled forecasts for the 2028 opening year indicate:

- A significant decrease in people travelling to/from the city by car in each peak period with decreases of 30% and 39% in the AM and PM peak periods respectively;
- A significant increase in people travelling by public transport in each peak period with increases of 123% and 145% in the AM and PM peak periods respectively;
- A significant increase in people walking/cycling in each peak period with increases of 79% and 91% in the AM and PM peak periods respectively;

This is summarised in in Figure 2.4.3 and Figure 2.4.4 (reproduced from diagrams 6.6 and 6.7 in Chapter 6).

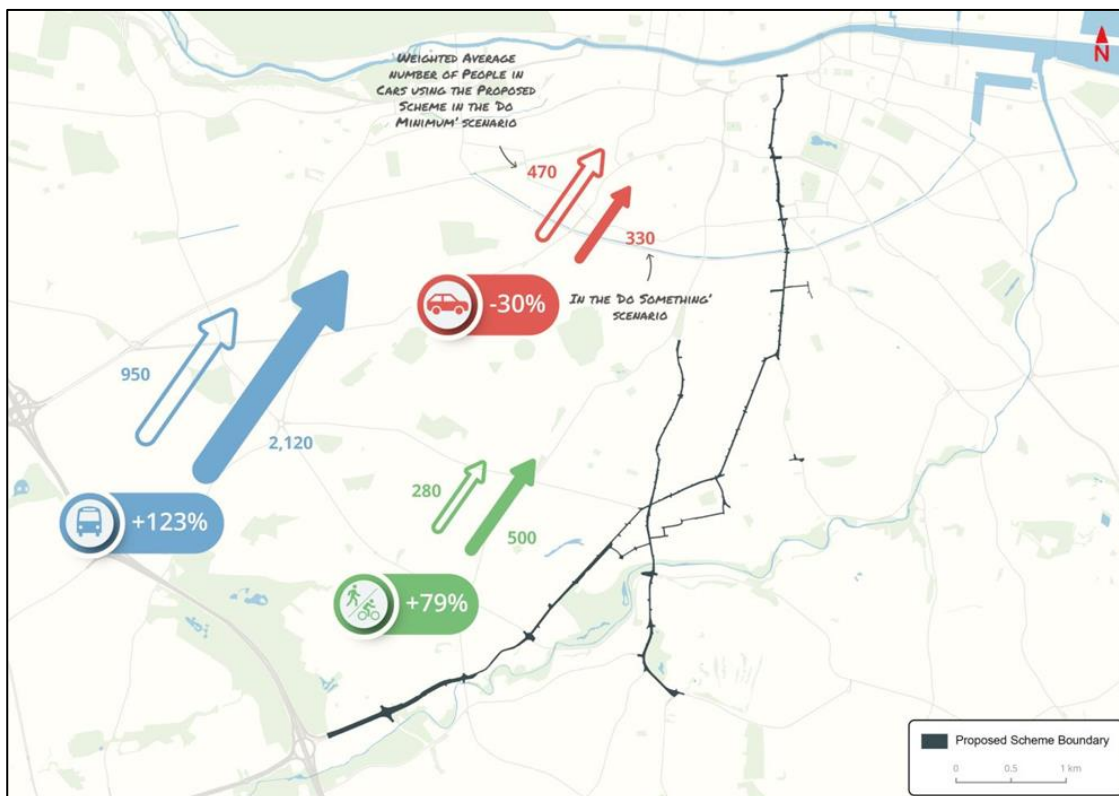


Figure 2.4.3 People Movement by Mode travelling along the Proposed Scheme during 2028 AM Peak Hour (Diagram 6.6 in EIAR Chapter 6)

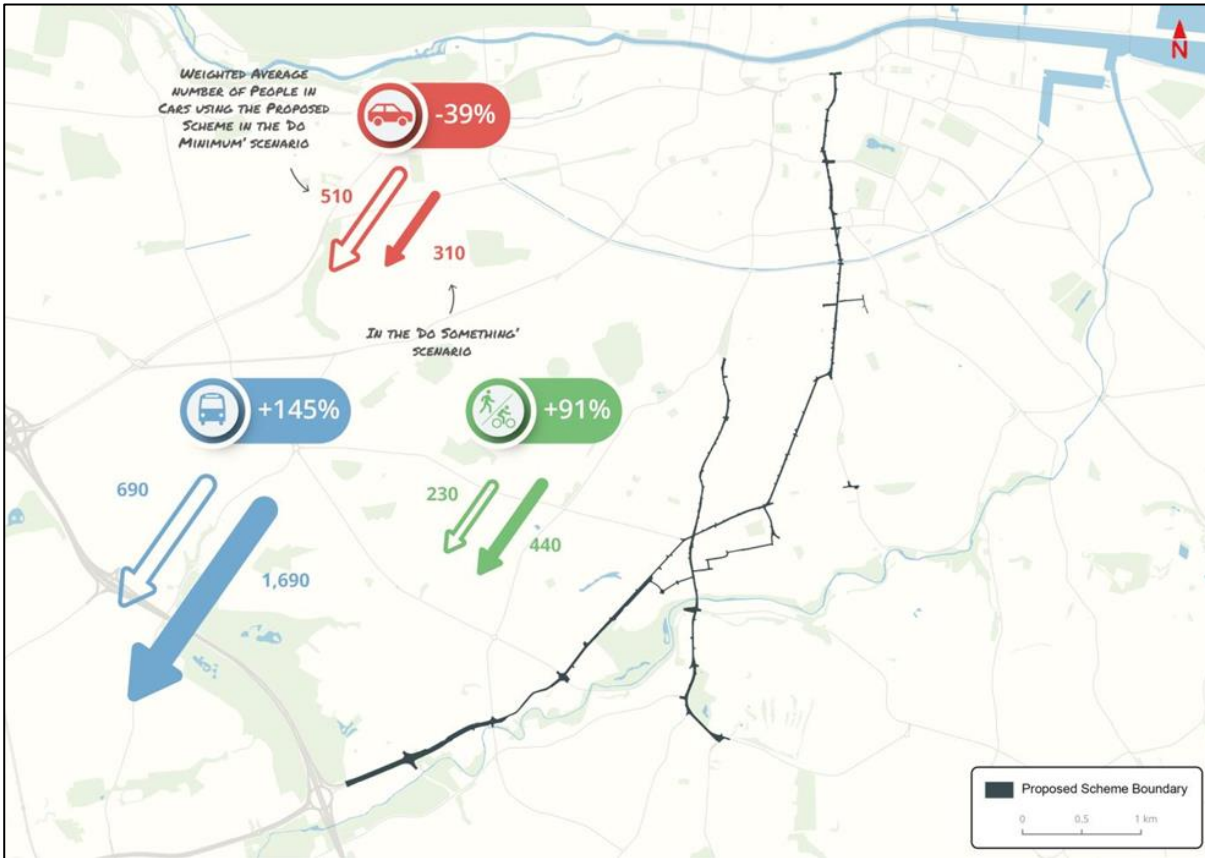


Figure 2.4.4 People Movement by Mode travelling along the Proposed Scheme during 2028 PM Peak Hour (Diagram 6.7 in EIAR Chapter 6)

Section 6.4.6.1.15.3 of EIAR Chapter 6 Traffic and Transport discusses the difference in flow of general traffic in the AM peak hour as a result of the Proposed Scheme. The differences are illustrated in Diagram 6.40 and the road links listed in Table 6.60 where there is a reduction in combined flow of >100 and in Table 6.61 where there is an increase in combined flow of >100. These are shown in Figure 2.4.5 – Figure 2.4.7.

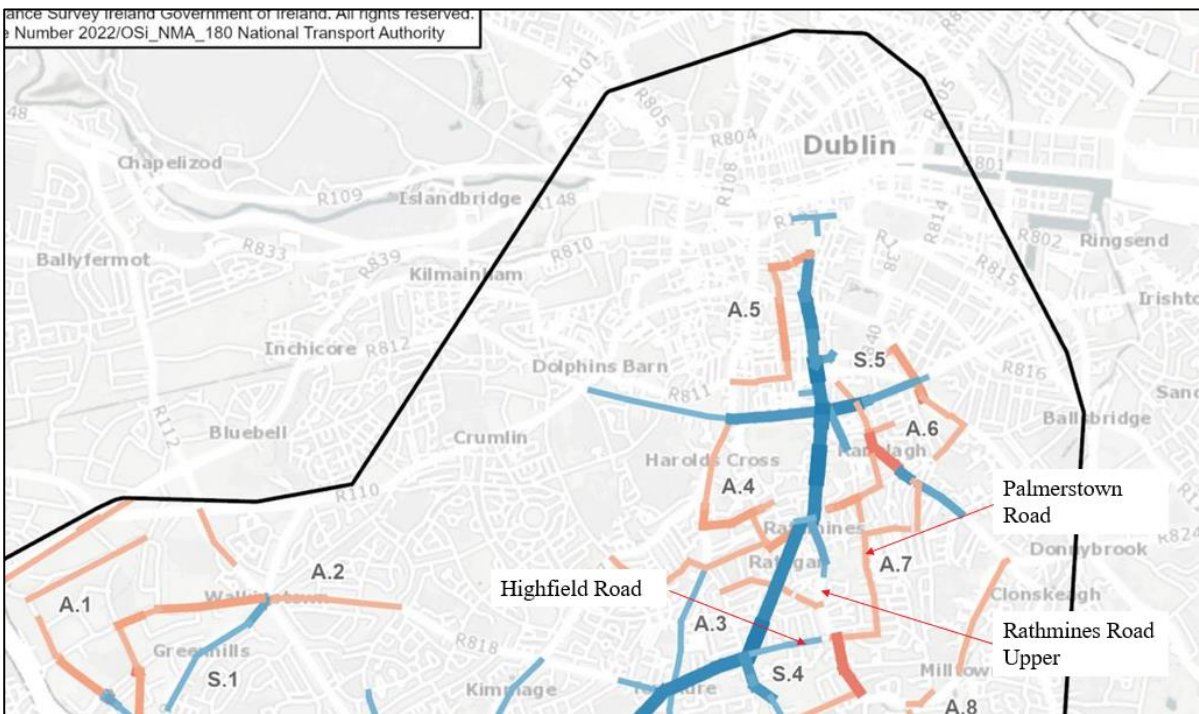


Figure 2.4.5 Extracts from EIAR Chapter 6: Diagram 6.40

Table 6.60: Road Links that Experience a Reduction of ≥ 100 Combined Flows during AM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.2	Cypress Grove Road	1,108	926	-182
		Old Bridge Road	1,333	983	-350
		Tallaght Road	1,675	1,400	-275
		Templeville Road	1,036	689	-348
		Wellington Lane	2,141	1,851	-291
	S.4	Templeogue Road	665	212	-453
		Terenure Place	1,345	759	-586
Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	S.3	Butterfield Avenue	979	822	-158
		Grange Road	606	484	-122
		Nutgrove Avenue	1,275	995	-280
		Rathfarnham Road	1,336	843	-493
		Willbrook Road	798	602	-196
	S.4	Bushy Park Road	441	301	-141
		Rathfarnham Road	950	837	-114
Section 3 - R137 Terenure Road North to Charleville Road	S.4	Highfield Road	633	456	-177
		Orwell Road	1,175	876	-299
		Rathfarnham Road	1,025	875	-150
		Rathgar Road	603	109	-494
		Terenure Road East	838	436	-401
		Terenure Road North	977	824	-153
Section 4 - Charleville Road to R137 Dame Street	S.4	Charleville Road	144	30	-114
		Rathgar Road	817	672	-144
		Rathmines Road Lower	1,225	849	-376
		Rathmines Road Upper	578	328	-249

Figure 2.4.6 Extracts from EIAR Chapter 6: Table 6.60

Table 6.63: Road Links where the 100 Flow Additional Traffic Threshold is Exceeded (AM Peak Hour) (Indirect Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)	
		Belgrave Square East	122	228	+105	
		Belgrave Square North	640	873	+232	
		Castlewood Avenue	619	824	+206	
		Dunville Avenue	357	510	+153	
		Frankfort Avenue	120	311	+191	
		Milltown Road	1,049	1,185	+136	
		Palmerston Park	853	1,028	+175	
		Palmerston Road	108	304	+196	
		A.08	Churchtown Road Lower	764	877	+114
		Dundrum Road	739	849	+111	
	Milltown Road	1,312	1,488	+177		
	A.09	Churchtown Road Lower	741	845	+105	
	Dartry Road	896	1,296	+400		
	Lower Dodder Road	448	556	+108		
	Orwell Park	585	736	+151		
	Orwell Road	1,307	1,507	+201		
	A.10	Butterfield Avenue	788	933	+145	
	Spawell Link Road	833	1,029	+195		
	Taylor's Lane	841	992	+151		
	A.11	Broadford Road	945	1,059	+114	
	Grange Road	1,114	1,299	+185		
	Stonemason's Way	811	948	+137		
	Taylor's Lane	662	837	+175		
	A.12	M50	5,714	6,023	+309	
	M50 On-Ramp	1,352	1,482	+130		

Figure 2.4.7 Extracts from EIAR Chapter 6: Table 6.63

Figure 2.4.6 and Figure 2.4.7 show that, the Proposed Scheme will result in an overall reduction in traffic along Highfield Road (-177 PCUs) and Rathmines Road Upper (-249 PCUs) in the morning peak period.

Figure 2.4.7 shows that traffic volumes along Palmerston Park and Palmerston Road are estimated to increase by 175 and 196 PCUs during the morning peak period. Further junction capacity assessment was undertaken along these road links to determine they have the capacity to cater for the additional traffic volumes as a result of the Proposed Scheme.

The full analysis tables for the AM Peak period, demonstrating the Do Minimum and Do Something Peak Hour traffic flows and maximum V / C ratio for each junction assessed is detailed in Table 16 of Appendix A6.4.4 (General Traffic Assessment) in Volume 4 of the EIAR, extracts for which are presented in Figure .

Road Name	Junction ID	Junction Name	Peak Hour Traffic Flows		Max Volume over Capacity Ratio (%)		Ranges		Description of Impact
			Do Minimum Flow	Do Something Flow	Do Minimum VoC	Do Something VoC	Do Minimum VoC	Do Something VoC	
Belgrave Square North	11357	Belgrave Square East / Belgrave Square North / Charleston Road / Mount Pleasant Avenue Upper	817	1025	56	37	≤85%	≤85%	Negligible
Butterfield Avenue	21132	Butterfield Avenue / Marian Road	834	942	58	66	≤85%	≤85%	Negligible
Churchtown Road Lower	19384	Churchtown Road Lower / Woodlawn Park	930	1016	71	74	≤85%	≤85%	Negligible
Dartry Road	11355	Dartry Road / Sunbury Gardens	993	1378	42	56	≤85%	≤85%	Negligible
Grange Road	21175	Grange Road / Taylors Lane	1105	1306	52	64	≤85%	≤85%	Negligible
Miltown Road	11316	Miltown Road / Dundrum Road	1574	1751	60	68	≤85%	≤85%	Negligible
Palmerston Park	11276	Palmerston Park / Palmerston Road	129	327	5	13	≤85%	≤85%	Negligible
Northbrook Road	11205	Northbrook Road / Cambridge Terrace	282	382	8	12	≤85%	≤85%	Negligible
Orwell Park	11228	Orwell Park / Orwell Road	1468	1611	72	92	≤85%	85%-100%	Low
Taylors Lane	21162	Taylors Ln / Ballyboden Way Rbt	887	890	55	47	≤85%	≤85%	Negligible
M50	9226	M50 Jct 11	3400	3337	100	88	>100%	85%-100%	Low
Ashfield Road	11260	Ashfield Road / Beechwood Road	373	489	20	30	≤85%	≤85%	Negligible
Butterfield Avenue	21121	Butterfield Avenue / Firhouse Road / Old Bridge Road	1982	1728	51	58	≤85%	≤85%	Negligible
Dunville Avenue	11259	Dunville Avenue / Oakiev Road	293	443	13	22	≤85%	≤85%	Negligible
Dunville Avenue	11254	Dunville Avenue / Palmerston Road	353	512	24	53	≤85%	≤85%	Negligible
Firhouse Road	21204	Firhouse Road / Spawell Link Road	1557	1616	54	53	≤85%	≤85%	Negligible
Frankfort Avenue	11269	Garville Road / Frankfort Avenue	96	270	4	18	≤85%	≤85%	Negligible
Braemor Road	11297	Braemor Road / Lower Dodder Road	1238	1215	75	96	≤85%	85%-100%	Low
Broadford Road	19305	Broadford Road / Stonemason'S Way	934	1054	65	75	≤85%	≤85%	Negligible
Canal Road	6316	Canal Road / Charlemont Street / Grand Parade / Ranelagh Road	1676	1400	95	87	85%-100%	85%-100%	Negligible
Castlewood Avenue	11286	Castlewood Avenue / Cambridge Road	626	825	21	26	≤85%	≤85%	Negligible
	40073	Castlewood Avenue / Castlewood Park	549	764	20	25	≤85%	≤85%	Negligible
Charlemont Street	6100	Charlemont Street / Charlemont Mall	783	876	75	82	≤85%	≤85%	Negligible
Charleston Road	11257	Charleston Road / Oxford Road	729	926	27	60	≤85%	≤85%	Negligible
Frankfort Avenue	11270	Frankfort Avenue / Vernon Grove	168	304	6	15	≤85%	≤85%	Negligible
Broadford Road	19215	Barton Road East / Broadford Rd Rbt	924	1031	40	44	≤85%	≤85%	Negligible
Butterfield Avenue	21129	Anne Devlin Road / Butterfield Avenue	991	1095	67	76	≤85%	≤85%	Negligible
	21185	Butterfield Avenue / Fairways	1209	1185	70	98	≤85%	85%-100%	Low
Chelmsford Road	11305	Chelmsford Road / Sallymount Avenue / The Appian Way	791	876	39	44	≤85%	≤85%	Negligible
Beechwood Road	11399	Beechwood Road / Dunville Avenue	335	449	11	17	≤85%	≤85%	Negligible
Churchtown Road Lower	11339	Churchtown Road Lower / Patrick Doyle Road	834	912	25	32	≤85%	≤85%	Negligible
Churchtown Road Upper	19396	Churchtown Road Lower / Churchtown Road Upper	1495	1483	48	56	≤85%	≤85%	Negligible
Dartry Road	11359	Dartry Road / Orwell Park	1393	1657	61	74	≤85%	≤85%	Negligible
Dundrum Road	19385	Bird Avenue / Dundrum Road	665	782	40	44	≤85%	≤85%	Negligible
	19386	Dundrum Road / Farrenboley Park	596	698	36	38	≤85%	≤85%	Negligible
Grand Parade	6301	Grand Parade / Leeson Street Lower / Leeson Street Upper / Mespil Road	2368	2400	60	46	≤85%	≤85%	Negligible
Grange Road	19436	Grange Road / Stonemason'S Way	1595	1744	90	99	85%-100%	85%-100%	Negligible
Leeson Street Upper	11125	Leeson Street Upper / Burlington Road	1376	1510	51	55	≤85%	≤85%	Negligible
	11131	Leeson Street Upper / Dartmouth Road	996	1265	66	85	≤85%	≤85%	Negligible
	11136	Leeson Street Upper / Leeson Street Upper	877	1177	47	64	≤85%	≤85%	Negligible

Map ID	Road Name	Junction ID	Junction Name	Peak Hour Traffic Flows		Max Volume over Capacity Ratio (%)		Ranges		Description of Impact
				Do Minimum Flow	Do Something Flow	Do Minimum VoC	Do Something VoC	Do Minimum VoC	Do Something VoC	
A.7	Northbrook Road	11197	Northbrook Road / Dartmouth Terrace	221	332	8	13	≤85%	≤85%	Negligible
	Orwell Road	11315	Lower Dodder Road / Orwell Road	1340	1492	51	86	≤85%	85%-100%	Low
	Leeson Street Lower	6266	Adelaide Road / Leeson Street Lower / Fitzwilliam Place	1672	1845	73	74	≤85%	≤85%	Negligible
		6265	Adelaide Road / Leeson Street Lower / Wilton Terrace	1775	2005	36	43	≤85%	≤85%	Negligible
		6268	Hatch Street Lower / Leeson Street Lower	1405	1600	37	37	≤85%	≤85%	Negligible
	Leeson Street Upper	11124	Leeson Street Upper / The Appian Way	1800	1864	95	84	85%-100%	≤85%	Low Positive
	Lower Dodder Road	11246	Dodder Road Lower / Dodder Road Lower	444	556	15	21	≤85%	≤85%	Negligible
	Palmerston Park	11311	Palmerston Park / Rathmines Road Upper	1084	1176	51	76	≤85%	≤85%	Negligible
		11329	Palmerston Park / Sunbury Gardens	952	1308	52	76	≤85%	≤85%	Negligible
	Palmerston Road	11290	Cowper Road / Palmerston Road	162	348	9	21	≤85%	≤85%	Negligible
A.8	Ranelagh	11184	Mountpleasant Place / Ranelagh / Ranelagh Road	935	1392	59	91	≤85%	85%-100%	Low
	Rathmines Road Upper	11295	Rathmines Road Upper / Frankfort Avenue	773	781	26	53	≤85%	≤85%	Negligible
	Taylors Lane	21148	Palmer Park / Taylors Lane	827	977	27	31	≤85%	≤85%	Negligible
		21149	Pearse Brothers Park / Taylors Lane	904	1041	25	29	≤85%	≤85%	Negligible
	M50	21225	M50 Jct 12	3941	4023	93	93	85%-100%	85%-100%	Negligible
	Ranelagh	11233	Ashfield Road / Ranelagh	1222	1244	78	79	≤85%	≤85%	Negligible
		11250	Cullenswood Road / Ranelagh	1324	1360	54	64	≤85%	≤85%	Negligible
Ranelagh Road	11185	Northbrook Road / Ranelagh Road	910	1192	51	75	≤85%	≤85%	Negligible	
A.9		11261	Ranelagh Road / Beechwood Avenue Lower	1142	1258	79	92	≤85%	85%-100%	Low
	Leeson Street Upper	6300	Leeson Street Upper / Sussex Road (North)	1314	1597	45	60	≤85%	≤85%	Negligible
		11138	Leeson Street Upper / Sussex Road (South)	716	904	36	47	≤85%	≤85%	Negligible
	Ranelagh Road	11201	Ranelagh Road / Mountpleasant Place	948	1314	58	79	≤85%	≤85%	Negligible
		11338	Ranelagh Road / Mountpleasant Square / Orchard Lane	965	1338	54	77	≤85%	≤85%	Negligible
		11186	Ranelagh Road / Mountpleasant Terrace / Dartmouth Road	788	917	42	55	≤85%	≤85%	Negligible
	Taylors Lane	21153	Taylors Lane / Whitechurch Road	1256	1384	54	66	≤85%	≤85%	Negligible

Figure 2.4.8 Extracts from Appendix A6.4.4 (General Traffic Assessment) in Volume 4 of the EIAR: Table 16

Figure 2.4.8 shows that the Proposed Scheme would result in negligible impact on junctions along Palmerston Road and Palmerston Park as a result of the Proposed Scheme.

Section 6.4.6.1.15.4 of EIAR Chapter 6 Traffic and Transport discusses the difference in flow of general traffic in the PM peak hour as a result of the Proposed Scheme. The differences are illustrated in Diagram 6.41 and the road links listed in Table 6.64 where there is a reduction in combined flow of >100 and in Table 6.65 where there is an increase in combined flow of >100. These are shown in Figure 2.4.9 – Figure 2.4.11.

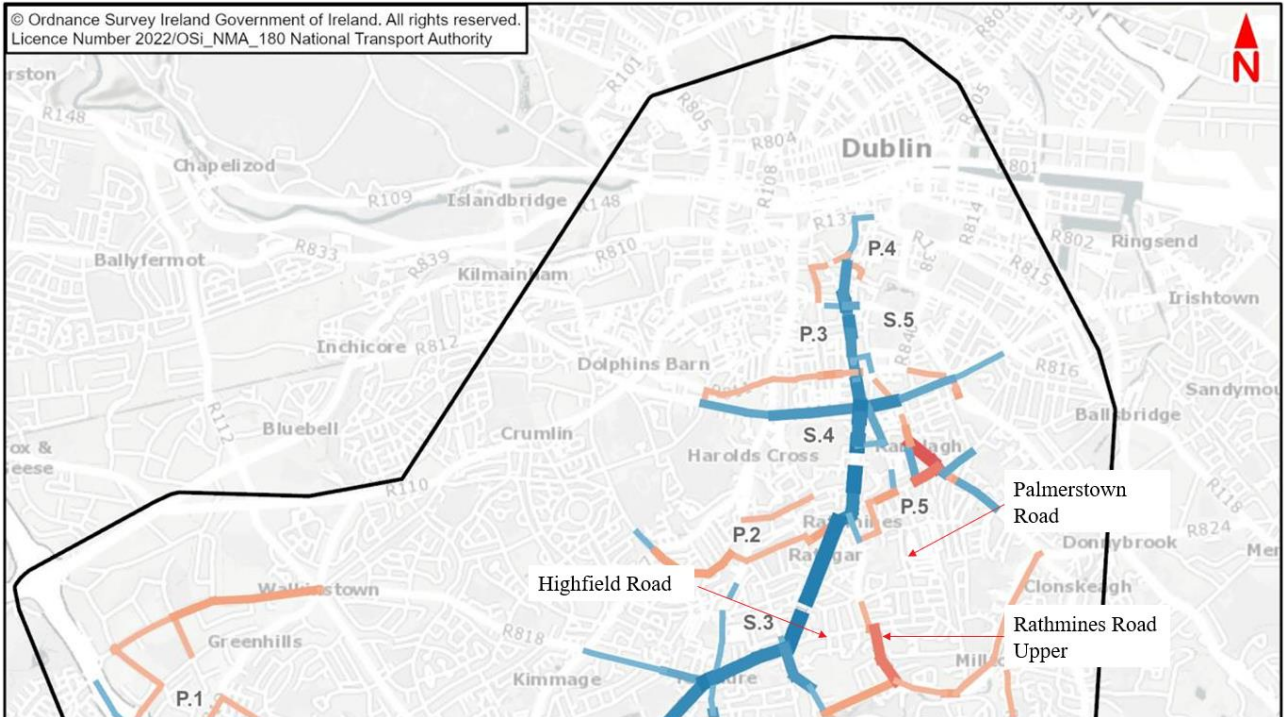


Figure 2.4.9 Extracts from EIAR Chapter 6: Diagram 6.41

Figure shows that no material increase or decrease in traffic is anticipated along Highfield Road, Palmerston Road or Palmerston Park as a result of the Proposed Scheme.

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
		Mountpleasant Avenue Lower	300	58	-242
		Rathgar Road	1,072	581	-491
		Rathmines Road Lower	935	389	-546
		Rathmines Road Upper	521	331	-191
		Richmond Hill	319	149	-170
		Richmond Street South	314	116	-198
	S.5	Aungier Street	391	197	-194
		Camden Street Lower	532	246	-287
		Camden Street Upper	366	200	-166
		Charlotte Way	711	584	-127
		Cuffe Street	1,107	893	-214
		Kevin Street Lower	1,046	932	-113
		Redmond's Hill	837	324	-513
		South Great George's Street	472	366	-105
		Wexford Street	535	171	-364

Figure 2.4.10 Extracts from EIAR Chapter 6: Table 6.64

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
		Cullenswood Road	756	1,114	+358
		Leeson Street Upper	700	931	+232
		Milltown Road	868	1,037	+169
		Ranelagh	837	1,318	+480
		Ranelagh Road	1,227	1,442	+216
	P.6	Dartry Road	901	1,237	+337
		Dundrum Road	435	540	+105
		Lower Dodder Road	381	499	+118
		Milltown Road	1,188	1,448	+260
		Orwell Park	372	575	+204
		Orwell Road	1,326	1,457	+131
		Palmerston Park	802	1,040	+238
		Rathmines Road Upper	621	735	+113
	P.7	Butterfield Avenue	826	952	+126
		Butterfield Park	215	456	+241
		Dodderview Road	1,047	1,166	+119
		Spawell Link Road	885	1,016	+132
		Whitechurch Road	333	441	+108
	P.8	Broadford Road	712	899	+188
		Grange Road	884	1,086	+203
		Stonemason's Way	557	779	+223
		Taylors Lane	617	768	+150
	P.9	M50	4,281	4,567	+286
		M50 On-Ramp	583	710	+127
		Scholarstown Road	776	896	+120
		St Colmcille's Way	1,478	1,614	+136

Figure 2.4.11 Extracts from EIAR Chapter 6: Table 6.65

Figure 2.4.10 and Figure 2.4.11 show the Proposed Scheme will result in an overall reduction in traffic along Rathmines Road Upper (-191 PCUs) in the morning peak period. It is noted that this is along the northern section Rathmines Road Upper. Figure 2.4.11 shows that the majority of Rathmines Road Upper would see no material increase in traffic (+/- 100 PCU). An increase in traffic is projected on the southern part of Rathmines Road Upper (+113 PCUs). An increase in traffic is also projected along Palmerston Park (+238 PCU), although it is noted that this is just the portion in the middle of the Rathmines Road Upper/Palmerston Park/Dartry Road junction. Further junction capacity assessment was undertaken along these road links to determine they have the capacity to cater for the additional traffic volumes as a result of the Proposed Scheme.

The full analysis tables for the PM Peak period, demonstrating the Do Minimum and Do Something Peak Hour traffic flows and maximum V / C ratio for each junction assessed is detailed in Table 17 of Appendix A6.4.4 (General Traffic Assessment) in Volume 4 of the EIAR, extracts for which are presented in Figure 2.4.12.

Map ID	Road Name	Junction ID	Junction Name	Peak Hour Traffic Flow		Max. Volume over Capacity Ratio (%)		Ranges		Description of Impact	
				Do Minimum Flow	Do Something Flow	Do Minimum VoC	Do Something VoC	Do Minimum	Do Something		
P.1	Leeson Street Upper	6300	Leeson Street Upper / Sussex Road (North)	1415	1594	44	46	≤85%	≤85%	Negligible	
	Longford Street Little	6327	Longford Street Little / Noel Purcell Walk	306	489	8	13	≤85%	≤85%	Negligible	
	Mercer Street Lower	6347	Mercer Street Lower / Mercer Street Lower / Glovers Alley	323	414	47	67	≤85%	≤85%	Negligible	
	Milltown Road	11299	Richmond Avenue South / Milltown Road	435	569	24	31	≤85%	≤85%	Negligible	
	Palmerston Park	11311	Palmerston Park / Rathmines Road Upper	920	1098	44	58	≤85%	≤85%	Negligible	
		11329	Palmerston Park / Sunbury Gardens	902	1204	64	96	≤85%	85%-100%	Low	
	Scholarstown Road	21192	Scholarstown Rd Rbt	620	739	104	105	>100%	>100%	Negligible	
	Whitechurch Road	21169	Grange Park / Whitechurch Road	309	417	10	22	≤85%	≤85%	Negligible	
	P.2	Milltown Road	11221	Churchtown Road Lower / Milltown Road	1500	1733	102	102	>100%	>100%	Negligible
			11166	Eglinton Road / Milltown Road / Sandford Road / Clonskeagh Road	1854	1861	92	90	85%-100%	85%-100%	Negligible
		11316	Milltown Road / Dundrum Road	1405	1622	44	50	≤85%	≤85%	Negligible	
		11400	Milltown Road / Milltown Road / Milltown Road	1185	1435	39	46	≤85%	≤85%	Negligible	
Ranelagh		11233	Ashfield Road / Ranelagh	1059	1284	59	66	≤85%	≤85%	Negligible	
		11251	Chelmsford Road / Ranelagh	1443	1219	63	97	≤85%	85%-100%	Low	
Ranelagh Road		11261	Ranelagh Road / Beechwood Avenue Lower	1082	1327	73	97	≤85%	85%-100%	Low	
		11201	Ranelagh Road / Mountpleasant Place	1122	1335	72	76	≤85%	≤85%	Negligible	
		11338	Ranelagh Road / Mountpleasant Square / Orchard Lane	1067	1274	71	69	≤85%	≤85%	Negligible	
		11186	Ranelagh Road / Mountpleasant Terrace / Dartmouth Road	854	926	46	55	≤85%	≤85%	Negligible	
		11303	Church Avenue / Rathmines Road Upper	584	536	17	23	≤85%	≤85%	Negligible	
		11296	Rathmines Road Upper / Cowper Road	651	751	24	26	≤85%	≤85%	Negligible	
P.3		Butterfield Avenue	21141	Butterfield Avenue / Butterfield Park	935	717	59	39	≤85%	≤85%	Negligible
		Lower Dodder Road	11246	Dodder Road Lower / Dodder Road Lower	352	463	10	14	≤85%	≤85%	Negligible
		M50	9226	M50 Jct 11	3354	3312	103	96	>100%	85%-100%	Low
		21225	M50 Jct 12	3481	3664	105	103	>100%	>100%	Negligible	
	Mercer Street Lower	6348	Mercer Street Lower / Noel Purcell Walk	265	380	8	12	≤85%	≤85%	Negligible	
	Noel Purcell Walk	6326	Noel Purcell Walk / Mercer Street Lower	247	431	23	38	≤85%	≤85%	Negligible	
	Ranelagh	11250	Cullenswood Road / Ranelagh	1346	1599	42	89	≤85%	85%-100%	Low	
		11184	Mountpleasant Place / Ranelagh / Ranelagh Road	1046	1258	52	77	≤85%	≤85%	Negligible	
	Ranelagh Road	11185	Northbrook Road / Ranelagh Road	1031	1233	45	60	≤85%	≤85%	Negligible	
	Taylor's Lane	21153	Taylor's Lane / Whitechurch Road	1272	1319	57	56	≤85%	≤85%	Negligible	
	Dartry Road	11359	Dartry Road / Orwell Park	1171	1496	64	75	≤85%	≤85%	Negligible	
	Orwell Park	11355	Dartry Road / Sunbury Gardens	964	1285	41	64	≤85%	≤85%	Negligible	
	11278	Orwell Park / Orwell Road	1360	1493	78	85	≤85%	≤85%	Negligible		

Figure 2.4.12 Extracts from Appendix A6.4.4 (General Traffic Assessment) in Volume 4 of the EIAR: Table 16

Figure 2.4.12 shows that the Proposed Scheme would result in negligible impact on junctions along Palmerston Park and Rathmines Road Upper as a result of the Proposed Scheme. One junction, Palmerston Park/Sunbury Gardens would see a low impact.

In summary, the assessment presented in the Chapter 6 in Volume 2 of the EIAR indicates that while there is some redistribution of traffic as a result of the Proposed Scheme, the traffic impact is considered to be negligible.

It is noted that a number of submissions raise concerns in relation to impact on access to St. Lukes Hospital. As noted above, it is not expected that there will be any increase in traffic along Highfield Road and as a result access to the hospital will not be affected.

ii. Noise Increases on Highfield Road / Rathmines Road and surrounding Roads

Chapter 9 in Volume 2 of the EIAR has considered the potential noise and vibration impacts associated with the Construction and Operational Phases of the Proposed Scheme. During the Operational Phase, the potential noise and vibration impacts associated with altered traffic flows along the Proposed Scheme, realigned traffic lanes and displaced traffic flows are assessed.

Section 9.4.4.1.1.5 of the EIAR presents the results of the assessment as summarised below.

Along the Proposed Scheme, a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact is calculated (Reference to Table 9.17). This is as a result of reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths. The largest increases in traffic noise level are 1 dB along the Proposed Scheme.

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, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr 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.

Further analysis of these roads was undertaken which involved the following:

- *For each identified road above the potential initial significance threshold, the location or presence of noise sensitive buildings was identified and distance from the road confirmed;*
- *The corrected traffic noise level at the closest NSL façade was calculated; and*

- The overall significance rating was determined taking account of the change in noise level during the short-term period and the noise level range, taking account of any distance corrections.

The specific operational noise impacts during the daytime period for these roads are summarised in Table 9.39.

Table 9.39: Summary of Potential Daytime Operational Phase Impacts – Opening Year

Road	Increase above Do Minimum Scenario, dB	DMRB Short term magnitude of Impact	Calculated Road Traffic Noise at Closest NSL, dB L _{Aeq,16hr}	Noise Level Category	Overall Significance Rating	Potential Impact
Grantham Street	+4	Moderate	59	Low - Medium	Slight - Moderate	Indirect, Negative, Slight - Moderate, Short-medium term
Orwell Road	+3	Moderate	53	Negligible - Low	Not Significant - Slight	Indirect, Negative, Not Significant - Slight, Short-medium term
Palmerstown Park	+4	Moderate	58	Low - Medium	Slight - Moderate	Indirect, Negative, Slight - Moderate, Short-medium term
Grove Park	+4	Moderate	59	Low - Medium	Slight - Moderate	Indirect, Negative, Slight - Moderate, Short-medium term
Palmerstown Road	+5	Moderate	57	Low - Medium	Slight - Moderate	Indirect, Negative, Slight - Moderate, Short-medium term
Castlewood Park	+6	Major	56	Low - Medium	Moderate	Indirect, Negative, Moderate, Short-medium term

In the year of opening, 2028, along Orwell Road, the short-term change in traffic noise is defined as moderate with a traffic noise level calculated at the closest NSLs along this road categorised as negligible to low. The overall impact is determined to be indirect, negative, not significant to slight and short to medium-term.

Along Grantham Street, Palmerstown Park, Grove Park and Palmerstown Road, the short-term change in traffic noise is defined as moderate with a traffic noise level calculated at the closest NSLs along these roads categorised as low to medium. The overall impact is determined to be indirect, negative, slight to moderate and short to medium-term.

Along Castlewood Park, the short-term change in traffic noise is defined as major with a traffic noise level calculated at the closest NSLs along this road categorised as low to medium. The overall impact is determined to be indirect, negative, moderate and short to medium-term.

The traffic noise levels of 53 to 59 dB LAeq, 16hr at the closest NSLs along the roads discussed in Table 9.39 are typical of the semi-urban to urban environments in which they are located, and are also in line with road traffic noise levels in the surrounding environment, as discussed in Section 9.3. The operational noise levels will be below and up to 4 dB above the desirable low noise threshold values set within the Dublin Agglomeration NAP 2018 – 2023 (DCC; FCC; SDCC; DL RCC 2018) and are significantly below the Undesirable High noise threshold.

For all other roads off the Proposed Scheme, impacts are determined to be indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term.

In addition to the above, section 9.4.4.1.1.6 comments on the future electric vehicle fleet and the impact this would have on overall noise levels.

For the roads assessed in Table 9.39 and Table 9.40, the majority of the fleet type is comprised of cars and light goods vehicles. Given that 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 a 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 positive to negative and slight along the Proposed Scheme for both 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.

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 a worst case. The overall noise impact remains Positive, Imperceptible to Slight, Long-Term impact to Direct, Negative, Slight, and Long-Term.

d. Reduced footpath widths on Rathgar Road

Section 4.5.3.1 of the EIAR sets out the Proposed Scheme along Rathgar Road

Along Rathgar Road it is proposed to provide bus lanes and 1.5m wide cycle tracks in each direction and a oneway inbound general traffic lane only. Local access for residents on Rathgar Road and adjoining streets will be maintained through the surrounding road network via Rathgar Avenue or Rathmines Road Upper including Frankfort Avenue, Leicester Avenue, Garville Avenue, Garville Road and Highfield Road.

In order to provide the Proposed Scheme cross-section within the existing road boundary, it is necessary to reduce the existing footpath widths slightly at various locations along Rathgar Road. These width reductions have been proposed in line with the BusConnects Preliminary Design Guidance Booklet (PDGB) presented in Appendix A4.1 of the EIAR. Sections 5.6 of the PDGB states the following:

2.0m is the desirable minimum width for a pedestrian footpath. This width should be increased in areas catering for significant pedestrian volumes where space permits. DMURS defines the absolute minimum footway width for road sections as 1.8m based on the width required for two wheelchairs to pass each other (see Figure 10). At specific pinch points, Building for Everyone: A Universal Design Approach, defines acceptable minimum footpath widths as being 1.2m wide.

It is acknowledged in section 4.5.3.1 that some sections of footpath along Rathgar Road have been reduced from published guidance at a number of constrained locations along the Proposed Scheme. These are detailed in Table 4.14 with relevant extracts presented below.

Table 4.14: Reduced Standard Cross Sections on Section 3

Location	Design Element	DMJRS/ NCM	Type	Design	Justification
					the provision of bus lane in both directions and the constraint nature of this section of Rathgar Road. Providing a standard width would require land acquisition of adjacent properties.
Ch. A2700 -A2775	Footway (Outbound)	2m	Relaxation	1.8-1.9m	It is proposed to reduce approximately 75m of footpath width at this location to provide a bus lane and cycle tracks in both directions and reduce impact on adjacent properties. This would reduce the footpath width to a minimum of 1.8m.
Ch. A2700-2725	Footway (Inbound)	2m	Relaxation	1.8-1.9m	It is proposed to reduce approximately 25m of footpath width at this location to provide a bus lane and cycle tracks in both directions and reduce impact on adjacent properties. This would reduce the footpath width to a minimum of 1.8m.
Ch. A2840 -A2860	Footway (Outbound)	2m	Departure	1.8-1.9m	It is proposed to reduce approximately 20m of footpath width at this location to provide a bus lane and cycle tracks in both directions and reduce impact on adjacent properties. This would reduce the footpath width to a minimum of 1.8m.
Ch. A2940 -A3125	Footway (Outbound)	2m	Departure/ Relaxation	1.5-1.95m	It is proposed to reduce approximately 185m of footpath width at this location to provide a bus lane and cycle tracks in both directions and reduce impact on adjacent properties. This would

Location	Design Element	DMURS/ NCM	Type	Design	Justification
					reduce the footpath width to a minimum of 1.5m.
Ch. A3520 -A3625	Footway (Outbound)	2m	Departure/ Relaxation	1.5-1.95m	It is proposed to reduce approximately 130m of footpath width at this location to provide a bus lane and cycle tracks in both directions and reduce impact on adjacent properties. This would reduce the footpath width to a minimum of 1.5m.
Ch. A3350-A3625	Footway	2m	Relaxation	1,8-1.95m	It is proposed to reduce approximately 275m of footpath width to provide a bus lane and cycle track in both directions. Narrowing of the footpath results in minimising impact on adjacent properties.
Ch. A2560-A2575	Footway (Inbound)	2m	Relaxation	1.8-1.95m	Approximately 15m of footpath width is retained.
Ch. H30 – H60	Cycle Track (Outbound)	2m	Departure	1.3m	Approximately 30m of narrowed cycle track. Providing a standard width would require narrowing the existing footpath at this location.

Figure 2.4.13 Extracts from EIAR Chapter 4: Table 4.14

Chapter 6 of the EIAR presents an assessment of pedestrian impacts of the Proposed Scheme. This is summarised in Table 6.32.

Table 6.32: Section 3 – Significance of Effects for Pedestrian Impact during Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R114 Terenure Road East / Heathfield Road / Greenmount Road priority junction	A2050	D	B	Medium	Low	Positive Moderate
R114 Terenure Road East / Ferrard Road priority junction	A2150	D	B	Medium	Low	Positive Moderate
R114 Terenure Road East / Brighton Road priority junction	A2250	C	A	Medium	Low	Positive Moderate
R114 Terenure Road East / Rathgar Park priority junction	A2450	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Orwell Road / R114 Terenure Road East / Rathgar Avenue signalised junction	A2500	B	A	Low	Moderate	Positive Moderate
R114 Rathgar Road / Highfield Road priority junction	A2550	F	A	High	Medium	Positive Very Significant
R114 Rathgar Road / Wesley Road priority junction	A2725	D	A	Medium	Low	Positive Moderate
R114 Rathgar Road / Winton Avenue priority junction	A2775	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Auburn Villas priority junction	A2825	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Garville Mews priority junction	A2875	D	B	Medium	Low	Positive Moderate
R114 Rathgar Avenue / Belleville Avenue priority junction	A2950	C	B	Low	Low	Positive Slight
R114 Rathgar Avenue / Garville Avenue priority junction	A2975	D	B	Medium	Low	Positive Moderate
R114 Rathgar Avenue / Garville Road priority junction	A2975	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Frankfort Avenue / Leicester Avenue signalised junction	A3150	C	A	Medium	Low	Positive Moderate
R114 Rathgar Road / Grosvenor Road priority junction	A3200	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Spire View Lane priority junction	A3550	D	B	Medium	Medium	Positive Significant

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R114 Rathgar Road / Rathgar Place junction	A3375	D	B	Medium	Low	Positive Moderate
R114 Rathgar Road / Rathmines Park priority junction	A3500	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Grosvenor Road / Charleville Road signalised junction	A3650	F	A	High	Medium	Positive Very Significant
R137 Terenure Road North / Yewlands Terrace priority junction	H050	C	B	Low	Low	Positive Slight
R137 Terenure Road North / Elm Park Terrace priority junction	H150	C	B	Low	High	Positive Moderate
R137 Terenure Road North / Rathmore Villas priority junction	H175	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / Eaton Road priority junction	H225	D	B	Medium	High	Positive Very Significant

Figure 2.4.14 Extracts from EIAR Chapter 6: Table 6.32

Table 6.32 of the EIAR shows, the Proposed Scheme along Rathgar Road will result in positive impacts on pedestrian infrastructure along Rathgar Road.

2.4.2.3 Removal of parking/loading in Rathgar Village

Summary of Issue Raised

A number of submissions raised concerns about the loss of car parking and loading bays within Rathgar Village and the impact this would have on businesses in the village.

Response to Issue Raised

As noted in section 6.4.6.1.1.4 of Chapter 6 of Volume 2 of the EIAR, the potential impacts of the Proposed Scheme on parking and loading provision have been assessed through a comparison of the availability of spaces or lengths of bay in the Do Minimum and Do Something scenarios. The assessment considers the impact of any changes on the general availability of parking and loading in the vicinity of the Proposed Scheme. 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.

As noted in section 6.4.6.1.6.4 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR:

*The removal of three pay and display and one loading bay space (three vehicles) on Rathgar Road, at Highfield Road. There are a large number of on-street spaces in the vicinity, this is considered to have a **Negligible and Long-term impact.***

The contents of Table 6.36 present a summary of the proposed changes to parking along Section 1 of the Proposed Scheme.

Table 6.36: Section 3 – Overall Changes in Parking / Loading Spaces

Location	Parking Type	Number of Parking Spaces		
		Do Minimum	Do Something	Change
R137 Terenure Road East (Northern Side);	Pay & display: commercial	6	6	0
	Disabled Bay	1	1	0
Terenure Road North between Terenure Place and Yewland's Terrace	Loading Bay	1 loading bay (2 spaces)	1 loading bay (2 spaces)	0
	Pay & display: commercial	2	2	0
Terenure Road North between Yewland's Terrace and Rathmore Villas	Pay & display: commercial	9	9	0
	Loading Bay	1 loading bay (2 spaces)	0	-1 loading bay (-2 spaces)
Terenure Road North between West Hampton Place and Ashdale Road	Permit Parking Pay & display	6	2	-4
Harold's Cross Road between Ashdale Road and Mount Tallant	Permit Parking Pay & display	15	0	-15
Harold's Cross Road between Kenilworth Lane West and Leinster Road	Pay & display	8	8	0
Terenure Road North between Eagle Hill Avenue and Whitton Road	Loading Bays	1 loading bay (2 spaces)	1 loading bay (2 spaces)	0
	Pay & display: commercial	2	2	0
Between Rathmore Villas and Eagle Hill Ave	Taxi Rank	4	4	0
	Pay & display	5	0	-5
Rathgar Road (between Rathgar Avenue and Rathmines Road Upper)	Permit Parking Pay & display	6	3	-3
	Loading Bays	2 loading bays (6 spaces)	1 loading bay (3 spaces)	-1 loading bay (-3 spaces)
Total		76	44	-32

As shown in Table 6.36, there are approximately 76 current parking spaces affected within the area of the Section 1 of the Proposed Scheme. Under the proposals, 32 parking spaces will be lost, mainly commercial parking spaces. This change is considered to have a **Negligible and Long-term** effect due to the presence of a large number of similar types of spaces within proximity to the affected locations. This 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.

Commercial Accessibility

Section 10.4.4.2.2 of Chapter 10 Population of Volume 2 of the EIAR notes:

Commercial accessibility relates to the ability of users and employees to access commercial businesses. The nature of the proposed works means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

Chapter 6 (Traffic and Transport) assessed that people movement would significantly increase along the Proposed Scheme. It is therefore expected that all businesses along the Proposed Scheme will, to some extent, benefit from the increase in passing trade. Commercial businesses located along the Proposed Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

In terms of the impact on commercial accessibility in Rathgar, the assessment is summarised in Table 10.15 and notes a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term on cyclists, a Positive, Moderate to Very Significant and Long-Term on Bus Users and a Positive, Moderate and Long-Term on private vehicles.

Further extracts from section 10.4.4.2.2.2. of Chapter 10 Population of Volume 2 of the EIAR states:

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from the redistribution of traffic in the surrounding road network.

Chapter 6 (Traffic and Transport) did not identify any localised capacity impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The impact on private vehicles passing through Terenure and Rathmines community area is considered Negative, Not Significant to Slight and Long-Term, this is due to the proposed introduction of the bus gates at Fergus Road on Templeogue Road and Lissenfield on Rathmines Road. The bus gates on are not expected to have a significant impact on private vehicles accessing commercial businesses along these stretches of roads due to the lack of on-street parking provision, however they will impact accessibility in terms of lengthened and re-routed journeys.

The impact on access to commercial businesses along the Proposed Scheme for private vehicles is considered to be Positive, Moderate and Long-Term. The community areas that are expected to experience this impact this are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

The impact on access to commercial businesses in the surrounding road network, a result of redistributed traffic, is considered to be Negative, Slight and Long-Term. The community areas that are expected to experience this impact as a result of changes in access to commercial businesses during the Operational Phase of the Proposed Scheme are those situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

A parking assessment has been undertaken in Chapter 6 (Traffic & Transport). No Significant impacts on parking were identified along the Proposed Scheme.

This should be considered in conjunction with the positive impacts to pedestrians, cyclists and bus users from the Proposed Scheme which will facilitate greater capacity along the corridor for users of sustainable modes of transport to access the commercial properties. Furthermore, an overall assessment of 'The Economic Impact of the Core Bus Corridors' is included in Appendix A10.2 in Volume 4 of the EIAR. The assessment indicates that evidence from case studies suggests that, in some cases, businesses overestimate the number of people arriving by car whilst the proposed enhancements to the walking, cycling and bus infrastructure along the route will increase use of sustainable transport and may positively impact on footfall to the business.

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.

2.4.2.4 Removal of parking/loading in Terenure Village

Summary of Issue Raised

A number of submissions raised concerns about the loss of car parking and loading bays within Terenure Village and the impact this would have on businesses in the village.

Response to Issues Raised

As noted in section 6.4.6.1.1.4 of Chapter 6 of Volume 2 of the EIAR, the potential impacts of the Proposed Scheme on parking and loading provision have been assessed through a comparison of the availability of spaces or lengths of bay in the Do Minimum and Do Something scenarios. The assessment considers the impact of any changes on the general availability of parking and loading in the vicinity of the Proposed Scheme. 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.

The impact on parking in Terenure Village is covered in two scheme sections being Section 2 (R821 Nutgrove Avenue to R137 Terenure Road North) and Section 3 (R137 Terenure Road North to Charleville Road).

The impact on parking in Section 2 is described in Section 6.4.6.1.3.4 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR:

The removal of seven pay and display and permit spaces out of 14 on the R114 Rathfarnham Road between Cormac Terrace and Terenure Road East to provide a cycle lane for northbound traffic.

Table 6.31 presents a summary of the proposed on-street changes along Rathfarnham Section 2 of the Proposed Scheme. In addition to the above there will be changes to the car park at Grange Road adjacent to the R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction. Four off street parking spaces including two disabled bays and a set down area will be provided.

Table 6.31: Section 2 – Overall Changes in Parking / Loading Spaces

Location	Parking Type	Do Minimum	Do Something	Change
Grange Road/ Rathfarnham Road (between Grange Road and Dodder Park Road)	Permit Parking Pay & display: residential	7	7	0
R114 Rathfarnham Road: Between Cormac Terrace and R137 Terenure Road East	Permit Parking Pay & display: commercial	14	7	-7
	Disabled Bay	1	1	0
Total		22	15	-7

*As shown in Table 6.31 there are approximately 22 current on-street parking spaces affected within the area of the Section 2 of the Proposed Scheme. Under the proposals, seven parking spaces will be lost, all commercial spaces. This change is considered to have a **Negligible and Long-term effect**, due to the low numbers of spaces lost and the presence of a large number of similar types of spaces on side roads along Section 2. This 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.*

The impact on parking in Section 3 is described in Section 6.4.6.1.4.4 of Chapter 6 Traffic and Transport of Volume 2 of the EIAR with the section relevant to Terenure Village summarised as follows:

*There are five pay and display parking spaces and four taxi rank spaces on Terenure Road North between Rathmore Villas and Eagle Hill Avenue. It is proposed that all five of the pay and display parking spaces are removed due to the presence of a bus stop and cycle lane. Due to the availability of parking on various side streets in the vicinity, this is considered to have a **Negligible and Long-term impact**.*

Table 6.36: Section 3 – Overall Changes in Parking / Loading Spaces

Location	Parking Type	Number of Parking Spaces		
		Do Minimum	Do Something	Change
R137 Terenure Road East (Northern Side);	Pay & display: commercial	6	6	0
	Disabled Bay	1	1	0
Terenure Road North between Terenure Place and Yewland's Terrace	Loading Bay	1 loading bay (2 spaces)	1 loading bay (2 spaces)	0
	Pay & display: commercial	2	2	0
Terenure Road North between Yewland's Terrace and Rathmore Villas	Pay & display: commercial	9	9	0
	Loading Bay	1 loading bay (2 spaces)	0	-1 loading bay (-2 spaces)
Terenure Road North between West Hampton Place and Ashdale Road	Permit Parking Pay & display	6	2	-4
Harold's Cross Road between Ashdale Road and Mount Tallant	Permit Parking Pay & display	15	0	-15
Harold's Cross Road between Kenilworth Lane West and Leinster Road	Pay & display	8	8	0
Terenure Road North between Eagle Hill Avenue and Whitton Road	Loading Bays	1 loading bay (2 spaces)	1 loading bay (2 spaces)	0
	Pay & display: commercial	2	2	0
Between Rathmore Villas and Eagle Hill Ave	Taxi Rank	4	4	0
	Pay & display	5	0	-5
Rathgar Road (between Rathgar Avenue and Rathmines Road Upper)	Permit Parking Pay & display	6	3	-3
	Loading Bays	2 loading bays (6 spaces)	1 loading bay (3 spaces)	-1 loading bay (-3 spaces)
Total		76	44	-32

As shown in Table 6.36, there are approximately 76 current parking spaces affected within the area of the Section 1 of the Proposed Scheme. Under the proposals, 32 parking spaces will be lost, mainly commercial parking spaces. This change is considered to have a **Negligible and Long-term** effect due to the presence of a large number of similar types of spaces within proximity to the affected locations. This 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.

Commercial Accessibility

Section 10.4.4.2.2 of Chapter 10 Population of Volume 2 of the EIAR notes:

Commercial accessibility relates to the ability of users and employees to access commercial businesses. The nature of the proposed works means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

Chapter 6 (Traffic and Transport) assessed that people movement would significantly increase along the Proposed Scheme. It is therefore expected that all businesses along the Proposed Scheme will, to some extent, benefit from the increase in passing trade. Commercial businesses located along the Proposed Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

In terms of the impact on commercial accessibility in Terenure, the assessment is summarised in Table 10.15 and notes a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term on cyclists, a Positive, Moderate to Very Significant and Long-Term on Bus Users and a Positive, Moderate and Long-Term on private vehicles.

Further extracts from section 10.4.4.2.2.2. of Chapter 10 Population of Volume 2 of the EIAR states:

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from the redistribution of traffic in the surrounding road network.

Chapter 6 (Traffic and Transport) did not identify any localised capacity impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The impact on private vehicles passing through Terenure and Rathmines community area is considered Negative, Not Significant to Slight and Long-Term, this is due to the proposed introduction of the bus gates at Fergus Road on Templeogue Road and Lissenfield on Rathmines Road. The bus gates on are not expected to have a significant impact on private vehicles accessing commercial businesses along these stretches of roads due to the lack of on-street parking provision, however they will impact accessibility in terms of lengthened and re-routed journeys.

The impact on access to commercial businesses along the Proposed Scheme for private vehicles is considered to be Positive, Moderate and Long-Term. The community areas that are expected to experience this impact this are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

The impact on access to commercial businesses in the surrounding road network, a result of redistributed traffic, is considered to be Negative, Slight and Long-Term. The community areas that are expected to experience this impact as a result of changes in access to commercial businesses during the Operational Phase of the Proposed Scheme are those situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

A parking assessment has been undertaken in Chapter 6 (Traffic & Transport). No Significant impacts on parking were identified along the Proposed Scheme.

This should be considered in conjunction with the positive impacts to pedestrians, cyclists and bus users from the Proposed Scheme which will facilitate greater capacity along the corridor for users of sustainable modes of transport to access the commercial properties. Furthermore, an overall assessment of 'The Economic Impact of the Core Bus Corridors' is included in Appendix A10.2 in Volume 4 of the EIAR. The assessment indicates that evidence from case studies suggests that, in some cases, businesses overestimate the number of people arriving by car whilst the proposed enhancements to the walking, cycling and bus infrastructure along the route will increase use of sustainable transport and may positively impact on footfall to the business.

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.

2.4.2.5 Removal of trees on Terenure Road East

Summary of Issue Raised

A number of submissions raised concerns about the removal of trees along Terenure Road East and the impact that this would have on the streetscape. Many of these submissions also noted concern over potential for other trees in the vicinity to be impacted during the construction works.

Response to Issue Raised

Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the Proposed Scheme. The survey was undertaken between the 10th and 13th August 2020. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame street, including the Terenure Road North / Harold's Cross Road section and the of the Proposed Scheme. The below impact assessment report is based on the British standard BS 5837:2012 Trees in relation to design, demolition and construction recommendations. This standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the Proposed Scheme to identify trees that may be impacted on by the proposed development based on the proposed design.

Section 6 of Appendix A17.1 states: *This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.*

In Chapter 17 Landscape (Townscape) and Visual in Volume 2 of the EIAR, Section 17.1 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. In relation to the Terenure Road East, the following sections of Chapter 17 are relevant and demonstrate that a detailed and comprehensive assessment has been undertaken of the impacts associated with the Proposed Scheme.

Figure 2.4.15 and Figure 2.4.16 are extracts from the Landscaping 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 which shows the proposed landscaping along Terenure Road East.

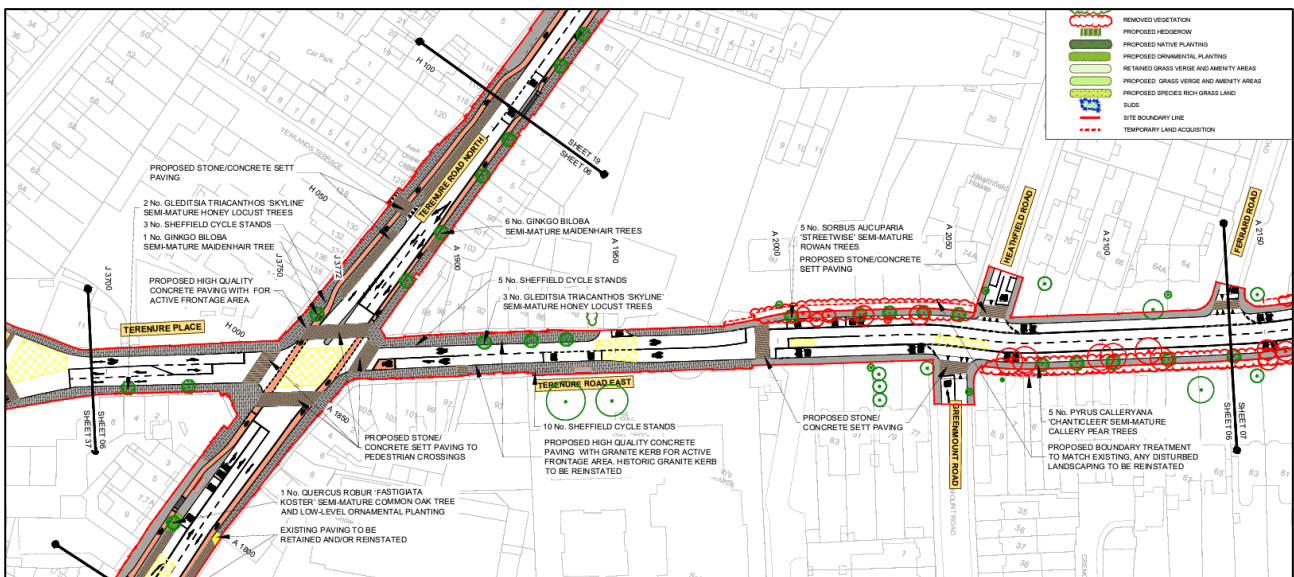


Figure 2.4.15 Extract from Landscaping General Arrangement Drawings (Sheet 6)

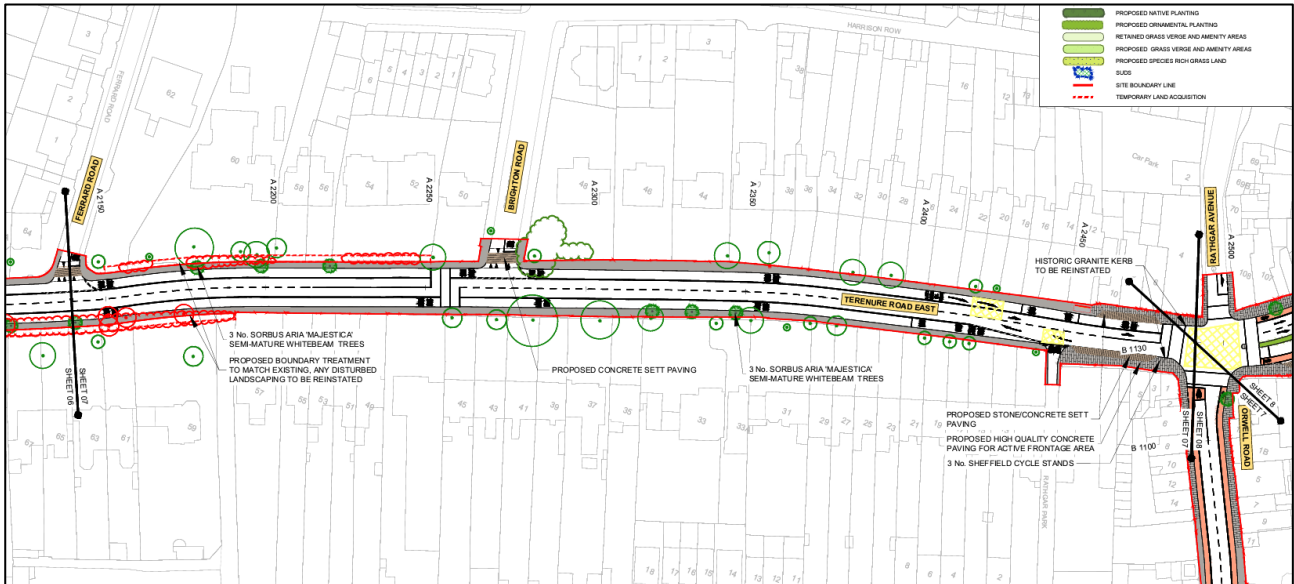


Figure 2.4.16 Extract from Landscaping General Arrangement Drawings (Sheet 7)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal.

Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme. As shown on the Landscape General Arrangement drawings in Volume 3 of the EIAR, it is noted that approximately 19 street trees are proposed along Terenure Road East between the Rathfarnham Road/Terenure Place/Terenure Road North junction and the Rathgar Road/Orwell Road junction, with the proposed removal of approximately 18 street trees, resulting in a net gain of approximately 1 tree along this section of the Proposed Scheme. Approximately 107 trees are being retained along this section.

Section 17.4.3.1 of the EIAR sets out the assessment of the impact on Townscape and Streetscape Character, with section 17.4.3.1.3 setting out the impact on Terenure Road East.

*The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimise through design iteration, Terenure Road East will be widened in parts which will requires permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.*

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

*The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.*

Section 17.4.4.2 of the EIAR presents an assessment of the impact on Streetscape Elements and Visual Impacts, with 17.4.4.2.9 presenting the impact on trees.

The design of the Proposed Scheme has sought to avoid impacts on trees as far as practicable, however, some trees will have been removed during the Construction Phase. The most significant loss occurs from sections of streets and gardens of residential properties. In some locations the loss will be particularly evident such as on Terenure Road East, where trees are mature and visually prominent in the streetscape. The Operational Phase of the Proposed Scheme will not impact directly on additional trees but there will be continuing effects resulting from the loss of trees lost during construction. The effect will become positive over the long-term as proposed tree planting matures resulting in a net gain in tree canopy coverage. The sensitivity **high** and the magnitude of change is **medium**.

The townscape and visual impact of the Operational Phase on trees and plantings is assessed to be **Negative, Moderate and Short-Term** becoming **Positive, Moderate and Long-Term**.

As noted in section 17.5.2.1 Review of Photomontages of Chapter 17 Landscape and Visual of Volume 2 of the EIAR, photomontages have been prepared from key or illustrative viewpoints to give an indication of changes and potential effects resulting from the Proposed Scheme during the Operational Phase after the implementation of the scheme. The proposed views are shown with proposed planting at approximately 10 – 15 years post completion of the Construction Phase. This below text describes the Proposed Scheme changes as illustrated in the photomontage. The Photomontages are as included in Figure 17.2 in Volume 3 of the EIAR.



Figure 2.4.17 View 8 Existing: Terenure Road East at St. Joseph's Terenure



Figure 2.4.18 View 8 Photomontage as Proposed: Terenure Road East at St. Joseph's Terenure

Figure 2.4.18 shows the proposed view from Terenure Road East at St. Joseph's Church looking east. Section 17.5.2.1.8 states:

The primary change to the view is the widening of the road to the north, with land take from the residential properties, setting back of boundary alignment, like-for-like reinstatement of property boundaries and the loss of several trees. New street trees are provided within the footpath at similar location and size to those lost. The bus stop has been moved slightly along the road, and a new pedestrian crossing has been provided across the street in the foreground and surfaced with block paving. A small portion of the proposed paving scheme to Terenure centre is visible to the footpath in the bottom right of the view. There is a neutral change to the visual amenity of the view.



Figure 2.4.19 View 9 Existing: Terenure Road East at Healthfield Road



Figure 2.4.20 View 9 Photomontage as Proposed: Terenure Road East at Healthfield Road

Figure 2.4.20 shows the proposed view from Terenure Road East at Healthfield Road. Section 17.5.2.1.9 states:

The primary change to the view is the widening of the road to the south, with land take from the residential properties, setting back of boundary alignment, like-for-like reinstatement of property boundaries and the loss of several large mature trees. New street trees are provided at similar location to those lost but there is an overall loss of tree canopy volume in the view. A raised pedestrian crossing surfaced with sett paving is provided to the junction with Healthfield Road. There is a notable reduction to the visual amenity of the view, however, this will be negated through growth of the street trees over time.



Figure 2.4.21 View 10 Existing: Road East at Ferrard Road looking east



Figure 2.4.22 View 10 Photomontage as Proposed: Terenure Road East at Ferrard Road looking east

Figure 2.4.22 shows the proposed view from Terenure Road East at Ferrard Road. Section 17.5.2.1.10 states:

The primary change is the widening of the road corridor, land take from residential properties on the far (south) side of the road, with setting back and reinstatement of boundaries and removal of the large mature beech tree and other trees in the adjacent garden. There is a notable reduction in visual amenity of the view.

In relation to submissions which claimed that further trees would be impacted as a result of construction works, Section 17.5.1 in Chapter 17 in Volume 2 of the EIAR contains a series of mitigation and management measures to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. This includes the following:

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 by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*
- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g. Cellweb or equivalent), installed without excavation using no dig techniques.*

- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*
- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*
- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

In terms of biodiversity, Section 12.4.2.5.1.1 acknowledges the loss of hedgerow habitat along Terenure Road East and states:

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 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 Castle Golf Club, Milltown Golf Club, Bushy Park, Tymon Park, Dodder Riverbank Park, Orwell Park, Terenure College, Templeville Park, St. Mary's College RFC, Harold's Cross Park, Mount Argus Park, Eamonn Ceannt Park, Kenilworth Square, Palmerstown Park, Templeogue Synge Street GAA Club, Iveagh Gardens and St. Stephens Green;
- Woodland such as that present along the River Dodder at Bushy Park, Dodder Riverbank Park and Orwell Park;
- Wildfowl and waterbird habitat within the Upper Liffey Estuary, Lower Liffey Estuary and wider Dublin Bay area; and,
- Sections of the River Dodder 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.

2.4.2.6 Impact on Heritage properties along Terenure Road East

Summary of Issue Raised

A number of submissions highlight that the Proposed Scheme will have impacts on properties of significant heritage and architectural significance. Submissions reference the impact on properties, and in particular the relocation of boundary walls/railings along Terenure Road East and state that the Proposed Scheme will have a significant impact on the character of the street.

Response to Issue Raised

Chapter 16 in Volume 2 of the EIAR has considered the potential architectural heritage impacts associated with the Construction and Operational Phases of the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme).

During the Construction Phase, the potential architectural heritage impacts associated with the development of the Proposed Scheme have been assessed. This includes impacts on the boundary treatments of Protected Structures and other architectural heritage features including street furniture and historic paving, as a result of land take, road resurfacing and road realignments.

During the Operational Phase, the potential architectural heritage impacts associated with changes to the physical layout of the street as a result of road resurfacing and road realignments, the installation of new street furniture, changes to the urban realm and the impact on character and setting and vistas of architectural heritage features and streetscapes have been assessed.

In terms of the Construction Phase on Terenure Road East, section 16.4.3.1 Protected Structures states the following:

Land take at 74a to 80 Terenure Road East will result in the removal of the boundary treatments to 74, 76 and 78 Terenure Road East (DCC RPS 8118, 8119, 8121) Protected Structures of Medium Sensitivity. The boundary to 76 consists of a cement rendered wall with dressed granite capping. The entrance piers are similarly constructed. Railings are reproduction electric gates. The boundary to 78 is like that to 76 except that it retains its original entrance gates. Boundary treatments to 74 and 74a have been replaced with a 20th century yellow brick boundary and reproduction railings. The magnitude of Impact is High. The potential Construction Phase impact will be Direct, Negative, Significant, Temporary.

The boundary treatments to 59 to 69 Terenure Road East (odd number only) will be directly impacted by the proposed land take. 59, 61, 63, 65, 67 and 69 to 71 Terenure Road East are Protected Structures (DCC RPS 8106, 8107, 8109, 8111, 8113, 8116) of Medium Sensitivity. Features which will be affected by the proposal include the boundary treatment to 59 including the tree, boundaries to 61 and 63, boundary to 67 and 69 including the tooled granite pier, and the trees to be removed as they contribute to the vista down the road and the character of the streetscape. The boundary to No. 65 has been rebuilt in modern red brick, and has been rendered and painted at some point in the past. The magnitude of Impact is High. The potential Construction Phase impact will be Direct, Negative, Significant, Temporary.

The boundaries to the Protected Structures at 50 to 62 Terenure Road East (DCC RPS 8097, 8099, 8101, 8103, 8105, 8108) will be impacted by the proposed land acquisition. The houses are of Medium Sensitivity. Significant features which will be affected by the proposal are as follows, the boundary to No. 50, 52, 54, 58. The boundary treatment and piers to 56 has been rebuilt and consists of a modern brick wall with concrete plinth and capping. It is a poor replacement and not in keeping with its neighbours. The boundary treatment to No. 62 is also a reconstructed boundary treatment as evident from the concrete capping, pointing, reproduction railings, and modern brick to piers. The magnitude of Impact is High. The potential Construction Phase impact will be Direct, Negative, Significant and Temporary.

Section 16.4.3.4 discusses the impact of the Proposed Scheme in terms of Designed Landscapes:

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. Six designed landscapes of Medium sensitivity were identified in the study area where there is potential for damage during the construction phase, these include the Demesne wall (CBC1012BTH389) to Beaufort House/ Loreto House, Grange Road (NIAH 2350), Cremorne 69 Terenure Road East (DCC RPS 8116, CBC1012BTH147), Spawell House (SDCC RPS 260), Cheeverstown House (SDCC RPS 242), Templeogue House (NIAH 2313), and Terenure House (NIAH 2332). They are listed in Table: 16.10 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The magnitude of impact is Medium. The potential Construction Phase impact is Indirect, Negative, Moderate and Temporary.

Indirect Construction Phase impacts are anticipated where there is potential for damage to the designed landscapes or their surviving features or where an adverse visual impact is anticipated during construction. Three designed landscapes of Low sensitivity were identified in the study area where there is potential for damage during the construction phase, these include demesne walls or lodges associated with Westbourne House, 1 to 2 Westbourne Road (CBC1012BTH043) Greenmount House, 85 Terenure Road East (CBC1012BTH145) and Templeogue Lodge, 231 Templeogue Road (CBC1012BTH003) They are listed in Table: 16.10 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The magnitude of impact is Medium. The potential Construction Phase impact is Indirect, Negative, Slight and Temporary.

Section 16.4.3.6 discusses the impact of the Proposed Scheme in terms of Other Structures:

The proposed land take on Terenure Road East will directly impact the boundary treatments to 74a (CBC1012BTH143) and 80 Terenure Road East (CBC1012BTH144) both houses are of medium sensitivity. The boundary treatments to 74 and 74a have been replaced with a 20th century yellow brick boundary and reproduction railings. The boundary wall to number 80 has been radically altered in the 20th century. The removal of these boundaries has the potential to have a negative impact. the magnitude of which is low. The potential Construction Phase impact is Direct, Negative, Slight Temporary.

The proposed land take on Terenure Road East will directly impact the boundary treatments to 60 Terenure Road East (CBC1012BTH148). Number 60 Beaumont House is a 20th century apartment block which replaced a house of the same name. The boundary treatment survives, however and is of medium sensitivity It consists of a randomly coursed granite rubble wall with a cut granite plinth and dressed granite capping. An iron milestone plaque is located in the wall. The boundary treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries has the potential to have a negative impact. The magnitude of Impact is High. The potential Construction Phase impact is Direct, Negative, Moderate and Temporary.

Section 16.4.3.7 discusses the impact of the Proposed Scheme in terms of Street Furniture, with sections relevant to Terenure Road East quoted below:

The cast iron pillar style post box at 50 Terenure Road East (CBC1012PB007) will be directly impacted necessitating its temporary removal. The post boxes will be reinstated. There is the potential for loss or damage to the post boxes during removal, transportation, storage, and reinstatement. The magnitude of impact is High. The potential Construction Phase impact is Direct, Negative, Significant and Temporary.

Land take will directly impact on a vent pipe on Terenure Road East (CBC1012BTH146) necessitating its removal and relocation. The vent pipe 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.

A Mile Stone at 69 Terenure Road East (CBC1012MS002) will be directly impacted by the proposed land take. 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.

The boundaries to 50-62 Terenure Road East will be impacted by the proposed land take. Number 60 Beaumont House is a 20th century apartment block which replaced a house of the same name. An iron milestone plaque (CBC1012MS04) located in the wall of 60 Terenure Road East will be directly impacted by the proposed land take. 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.

Section 16.5.1.1 presents mitigation measures for Protected Structures:

Three locations were identified where the Proposed Scheme will directly impact on the boundaries of Protected Structures during the Construction Phase. These include the boundaries to 74, 76 and 78 Terenure Road East (DCC RPS 8118, 8119, 8121), 59 to 69 Terenure Road East (DCC RPS 8106, 8107, 8109, 8111, 8113, 8116) and 50 to 62 Terenure Road East (DCC RPS 8097, 8099, 8101, 8103, 8105, 8108). The boundaries are to be repositioned to facilitate the proposed bus and cycle lanes. The pre-mitigation Construction Phase impact will be Direct, Negative, Significant, Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 High to Low. The predicted residual impact is Direct, Negative, Slight, Temporary.

Section 16.5.1.5 presents mitigation measures for Designed Landscapes:

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. Six designed landscapes of Medium sensitivity were identified in the study area where there is potential for damage during the construction phase, these include the Demesne wall (CBC1012BTH389) to Beaufort House/ Loreto House, Grange Road (NIAH 2350), Cremorne 69 Terenure Road East (DCC RPS 8116, CBC1012BTH147), Spawell House (SDCC RPS 260), Cheeverstown House (SDCC RPS 242), Templeogue House (NIAH 2313), and Terenure House (NIAH 2332). They are listed Section 16.3.1.6 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. The pre-mitigation Construction Phase impact is Indirect, Negative, Moderate and Temporary.

The proposed mitigation is the recording, protection and monitoring of demesne features such as boundaries and entrance features 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 risk to Low. The predicted residual Construction Phase Impact is Indirect, Negative, Slight and Temporary.

Indirect Construction Phase impacts are anticipated where there is potential for damage to the designed landscapes or their surviving features or where an adverse visual impact is anticipated during construction. Three designed landscapes of Low sensitivity were identified in the study area where there is potential for damage during the construction phase, these include demesne walls or lodges associated with Westbourne House, 1 to 2 Westbourne Road (CBC1012BTH043) Greenmount House, 85 Terenure Road East (CBC1012BTH145) and Templeogue Lodge, 321 Templeogue Road (CBC1012BTH003) They are listed Section 16.3.1.6 and described in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR The pre-mitigation Construction Phase impact is Indirect, Negative, Slight and Temporary. The proposed mitigation is the recording, protection and monitoring of demesne features such as boundaries and entrance features 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 risk to Low. The predicted residual Construction Phase Impact is Indirect, Negative, Not Significant and Temporary.

Section 16.5.1.6 presents mitigation measures for Other Structures:

The proposed land take on Terenure Road East will directly impact the boundary treatments to 74a (CBC1012BTH143) and 80 Terenure Road East (CBC1012BTH144) both houses are of medium sensitivity. The boundary treatments to 74 and 74a have been replaced with a 20th century yellow brick boundary and reproduction railings. The boundary wall to number 80 has been radically altered in the 20th century. The removal of these boundaries would have a negative impact. The pre-mitigation Construction Phase impact will be Direct, Negative, Slight, Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which faithfully reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 to Low. The predicted residual impact is Direct, Negative, Not Significant and Temporary.

The proposed land take on Terenure Road East will directly impact the boundary treatments to 60 Terenure Road East (CBC1012BTH148). Number 60 Beaumont House is a 20th century apartment block which replaced a house of the same name. The boundary treatment survives, however and is of medium sensitivity. It consists of a randomly coursed granite rubble wall with a cut granite plinth and dressed granite capping. An iron milestone plaque is located in the wall. treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries would have a negative impact. The premitigation Construction Phase impact will be Direct, Negative, Moderate Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstates the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 to Low. The predicted residual impact is Direct, Negative, Slight and Temporary.

Section 16.5.1.7 discusses the impact of the Proposed Scheme in terms of Street Furniture, with sections relevant to Terenure Road East quoted below:

The cast iron pillar style post box at 50 Terenure Road East (CBC1012PB007) will be directly impacted by a proposed land take necessitating its temporary removal. It is envisaged that the post boxes will be reinstated. There is the potential for loss or damage to the post boxes during removal, transportation, storage, and reinstatement. The pre-mitigation Construction Phase impact is Direct, Negative, Significant and Temporary. The proposed mitigation is the recording of the post box in position prior to the works, the labelling of the affected fabric prior to its careful removal to safe storage, and its reinstatement in a new position in close proximity (within 20m) of its existing position. 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. The works to the 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 kerb alterations and the proposed cycle lanes will mean that the relocated post box will be set back from the traffic helping to protect it into the future. With mitigation, the magnitude of impact is reduced from High to Low. The predicted residual impact is Direct, Negative, Slight and Temporary.

Land take will directly impact on a vent pipe on Terenure Road East (CBC1012BTH146) necessitating its removal and relocation. The Vent Pipe is of Regional Importance and Medium Sensitivity. 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 pre-mitigation Construction Phase Impact is Direct Negative, Significant and Temporary.

The proposed mitigation is the recording of the Vent Pipe 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 Vent Pipe. 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 residual Construction Phase impact is Direct, Negative, Slight and Temporary.

A Mile Stone at 69 Terenure Road East (CBC1012MS002) will be directly impacted by the proposed land take. 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 pre-mitigation Construction Phase Impact is Direct Negative, Significant and Temporary. The proposed mitigation is the recording of the milestone plaque 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 residual Construction Phase impact is Direct, Negative, Slight and Temporary.

The boundaries to 50-62 Terenure Road East will be impacted by the proposed land take Number 60 Beaumont House is a 20th century apartment block which replaced a house of the same name. An iron milestone plaque (CBC1012MS04) located in the wall of 60 Terenure Road East will be directly impacted by the proposed land take. There is potential for damage of the sensitive fabric during its removal, transport, storage, and reassembly. The pre-mitigation Construction Phase Impact is Direct Negative, Significant and Temporary. The proposed mitigation is 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 residual Construction Phase impact is Direct, Negative, Slight and Temporary.

Table 16.17 summarises the residual construction phase impacts which generally notes the impact to heritage features along Terenure Road east as Direct, Negative, Slight, Temporary.

In terms of the Operational Phase on Terenure Road East, section 16.4.4.1 Protected Structures states the following:

“The proposed cantilever signal pole at the junction of the Rathfarnham Road and Terenure Road North and Terenure Road East will have a negative, visual impact on a bank at 1 Rathfarnham Road (DCC RPS 7020) which is of Regional importance and Medium sensitivity. There are no cantilevers in this location currently. The magnitude of impact is Low. The potential Operational Phase impact is Indirect, Negative, Slight, Long-term.

Bus shelters are proposed at:

- 12 Terenure Road East (DCC RPS 8063);
- 78 Rathgar Road (DCC RPS 7072);
- 153 Rathgar Road (DCC RPS 7120); and
- 46 Rathgar Road (DCC RPS 7046).

All four buildings are Protected Structures of Regional importance and of Medium sensitivity. The magnitude of impact of the Bus shelters will be low as in each case the Protected Structures are set back from the road behind existing, or in the case of 78 Rathgar Road (DCC RPS 7072) a reinstated boundary treatment, limiting the visual impact of the proposed bus shelters. The potential Operational Phase impact is Indirect, Negative, Slight, Long-term visual impact.”

Section 16.6.2 states:

“There will be no Significant Negative impacts on the architectural heritage as a result of the Operational Phase of the Proposed Scheme.”

2.4.2.7 Existing bus priority signal on Terenure Road East is adequate

Summary of Issue Raised

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

Response to Issue Raised

Terenure Road East consists of c.615m of road between the junction with Rathfarnham Road/Terenure Road North and the junction with Rathgar Avenue/Orwell Road. Currently a general traffic lane is provided in each direction along its length. A 150m inbound bus lane is provided on approach to the Rathgar Avenue junction, with the remaining 430m shared with general traffic. A 210m outbound bus lane is provided on the exit from the Rathgar junction as far as 55 Terenure Road East. A bus priority signal is in place at this location which is used to provide further outbound bus priority along Terenure Road East over the 340m where buses share with general traffic. Advisory cycle lanes are provided on sections where no bus lane is provided. The existing arrangement is presented in Figure 2.4.23.



Figure 2.4.23 Existing Arrangement on Terenure Road East

As outlined in Section 3.3.2.2.1 and Section 3.4.1.1.3 of Chapter 3 of the EIAR a large number of options were considered along Terenure Road East. Given the physical constraints along the road, particularly on the western end, full physical priority was not possible.

As such it is proposed to deploy a system of Signal Controlled Bus Priority. This is defined in the BusConnects Preliminary Design Guidance Booklet provided in Appendix A4.1 of the EIAR as follows:

Bus priority traffic signals providing queue relocation should be considered in areas where physical constraints cannot be overcome, and physical bus priority cannot be provided through the delivery of a bus lane such as village centre areas where the built form is close to the carriageway edge. Bus Priority Traffic Signals allow the bus to achieve virtual priority through a section where the bus shares a lane with general traffic through the management of queues within this section and providing priority to the bus on approach.

The scenarios in which a bus priority traffic signals can operate effectively requires assessment on a case-by-case basis, however, designers should consider the following factors:

- *The corridor length through which the bus will share the lane with general traffic should be reasonably clear from potential disruption. A bus priority traffic signal is not likely to operate effectively over a long distance with a large number of accesses for instance, or where a major junction is contained within this area.*

- *The availability and appropriateness of stacking space for traffic upstream should be considered as queues will be relocated to this area.*
- *Downstream queue detection will be used to ensure a clear route for the bus through the section without a bus lane.*

Giving consideration to the above criteria, as well as the interaction with upstream and downstream measures, the optimum design arrangement for a Signal Controlled Bus Priority solution was determined. It is worth noting that given the physical constraints at Terenure Cross, the reduction in length over which signal controlled priority is required to be maintained is important to the successful maintenance of journey times and reliability through this area.

This layout would provide a general traffic lane in each direction along its length. A 480m inbound bus lane would be provided on approach to the Rathgar Avenue junction, with the remaining 120m shared with general traffic. A bus priority signal is proposed on Rathfarnham Road to provide inbound priority over this section where a bus lane is not present.

A 425m outbound bus lane is provided on the exit from the Rathgar junction as far as 85 Terenure Road East. A bus priority signal is in place at this location which is used to provide further outbound bus priority along Terenure Road East over the 120m where outbound buses share with general traffic. The proposed arrangement is presented in the General Arrangement Drawings in Appendix B of the EIAR and reproduced below with notes highlighting the proposed infrastructure elements.

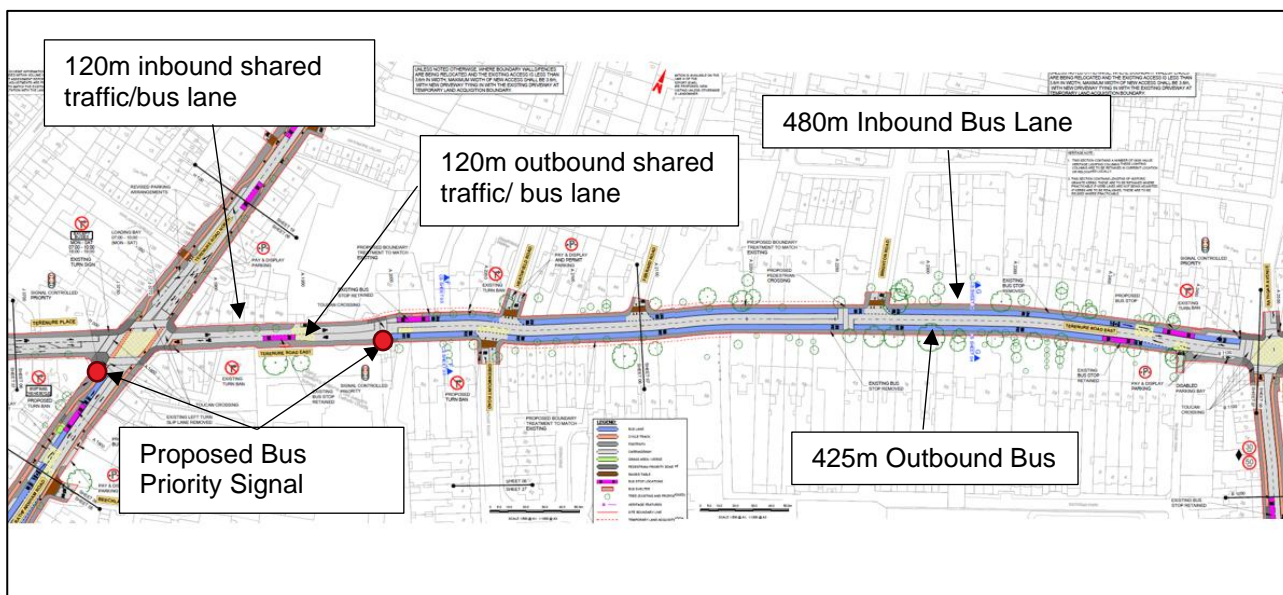


Figure 2.4.24 Proposed Scheme on Terenure Road East

Comparing the existing and Proposed Scheme arrangements, the Proposed Scheme better meets the scheme objectives for the following reasons:

1. Significant increase in physical inbound priority of 330m (+220% on Terenure Road East) and an increase in physical outbound priority of 215m (+200% on Terenure Road East);
2. Reduction in the distance over which signal controlled bus priority operates by 310m inbound (-350%) and 220m outbound (-280%). Combined with the increased bus lane provision, this will improve bus speeds and journey time reliability through this area;
3. The increase in bus lane provision results in an increased length over which cyclists will not be required to share with general traffic, instead sharing with buses and taxis only. This proposal is complemented by a reduced speed limit of 30kph. This provides further resilience to the cycle network in the area in combination with the proposed alternative cycle route along Harolds Cross Road and as well as the alternative east-west route via Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road, linking back to the CBC at Rathgar Village.

In terms of traffic volumes, Table 6.60 and 6.64 of Chapter 6 of the EIAR present the road links that would experience a reduction of ≥ 100 Combined Flows during AM and PM peak hours respectively. These tables show that along Terenure Road East, traffic volumes would reduce to 436 PCU and 386 PCU in the AM and PM Peak hours respectively. While this does represent a reduction in traffic volumes compared to the existing situation, this level of traffic would still provide considerable interference to the movement of buses along Terenure Road East should the existing arrangement be retained.

2.5 Proposed Scheme at Rathmines

2.5.1 Overview of Submissions Received

A number of issues were raised, and these are listed below:

1. Impact on access to Rathmines Village as a result of the proposed bus gate
 - a. Need for the proposed bus gate and alternative options
 - b. Impact on access to / egress from other areas north of Lissenfield, Church of Mary Immaculate Refuge of Sinners, Blackberry Lane and Grove Road
 - c. Impact on businesses as a result of bus gate, including impact on deliveries.
 - d. Suggestion to reduce bus gate hours of operation to 6-9am and 4-8pm

2.5.2 Common Issues Raised and Responses

2.5.2.1 Impact on access to Rathmines Village as a result of the proposed bus gate

Summary of Issues Raised

A number of submissions raised concerns around the proposed bus gate in Rathmines Village which would be located between Richmond Hill and Lissenfield.

- a. Need for the proposed bus gate and alternative options

A number of submissions raised queries over the need for the bus gate and suggests alternative options including alternative locations for the bus gate (such as LaTouche Bridge) and technology solutions.

- b. Impact on access to / egress from other areas north of Lissenfield, Church of Mary Immaculate Refuge of Sinners, Church Blackberry Lane and Grove Road

Local residents raised a number of concerns around the impact of the proposed bus gate on local access routes, in particular to/from areas north of the bus gate. Of particular concern was access to and from the Church of Mary Immaculate Refuge of Sinners and the impact the bus gate would have on access to the Church from the parish.

Residents in Lissenfield, Blackberry Lane and Grove Road. Submissions noted that the bus gate would detach them from the village and impact on vehicular routes for tasks not possible by public transport, on foot or by bike.

Some submissions suggest that access through the bus gate would be permitted for residents through the use of technology, e.g., number plates registered and added to a safe list for passage through the bus gate.

- c. Impact on businesses as a result of bus gate, including impact on deliveries.

A number of submissions raised concerns about the impact the bus gate would have on businesses in Rathmines village noting that inability to drive to these businesses would reduce activity for them. It was further noted that the bus gate would restrict access to loading bays and therefore further impact on business activity.

- d. Suggestion to reduce bus gate hours of operation to 6-9am and 4-8pm

A number of submissions requested that the hours of operation of the bus gate were reduced to peak times only. Many of these submissions suggested hours of operation from 6-9am and 4-8pm.

Response to Issues Raised

- a. Need for the proposed bus gate and alternative options

Need for the bus gate

At present, bus priority along Rathmines Road is intermittent as described in section 6.3.5.3.1 of Chapter 6 Traffic and Transport in Chapter 6 of Volume 2 of the EIAR:

Bus lanes are intermittent along this route, but are present at the following locations:

- *Northbound from Swanville Place to Lennox Street, operating Monday to Saturday between 07:00 – 10:00 and 12:00 – 19:00;*
- *Southbound between the R114 Harcourt Road and Camden Place, operating Monday to Saturday between 07:00-10:00 and 12:00-19:00;*
- *Northbound between Grantham Street and Camden Row, operating Monday to Saturday between 07:00-10:00 and 12:00-19:00;*
- *Southbound between the R110 Cuffe Street and Longford Street Lower, operating Monday to Saturday between 07:00 – 19:00; and*
- *Northbound between Stephen Street Upper and the R137 Dame Street, operating Monday to Saturday between 07:00 – 19:00.*

Given the intermittent nature of the bus priority measures in each direction, as well as the absence of safe, segregated cycle facilities, it is considered that the existing situation will not deliver the aim and objectives to provide enhanced walking, cycling and bus infrastructure on this key corridor, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.

As such, options were developed and evaluated using a sifting process and multi-criteria assessment (MCA), with the route and scheme along Rathmines Road identified as the preferred option to deliver the aim and objectives of the scheme. Alternative options considered could not meet the objectives to enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through provision of bus lanes and other measures to provide priority to bus movements over general traffic movements, and to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.

A comprehensive options assessment process was undertaken for the scheme and is summarised in Section 3.3.2.2.2 of Chapter 3 Consideration of Reasonable Alternatives in Volume 2 of the EIAR as presented below:

Following the Stage 1 sifting process, seven viable route options for Section 2 were taken forward for assessment and further refinement:

- *Route Option CB1 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound traffic only on Rathgar Road, Outbound traffic only Rathmines Road);*
- *Route Option CB2 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound traffic only on Rathgar and Rathmines Road);*
- *Route Option CB3 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Outbound traffic only on Rathgar and Rathmines Road);*
- *Route Option CB4 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Parallel cycle route via Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks);*

- Route Option CB5 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Inbound bus lane provided on Rathmines Road Lower from Rathmines Road Upper to Military Road junction and outbound bus lane provided from Grove Road to Military Road junction);
- Route Option CB6 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Outbound traffic only on Rathmines Road Lower); and
- Route Option CB7 - A route option via Rathfarnham Road, Terenure Road East, Rathgar Road, Rathmines Road Lower (Bus lanes via Highfield Road/Rathmines Road Upper) (Parallel cycle route).

These routes are presented in Image 3.13.

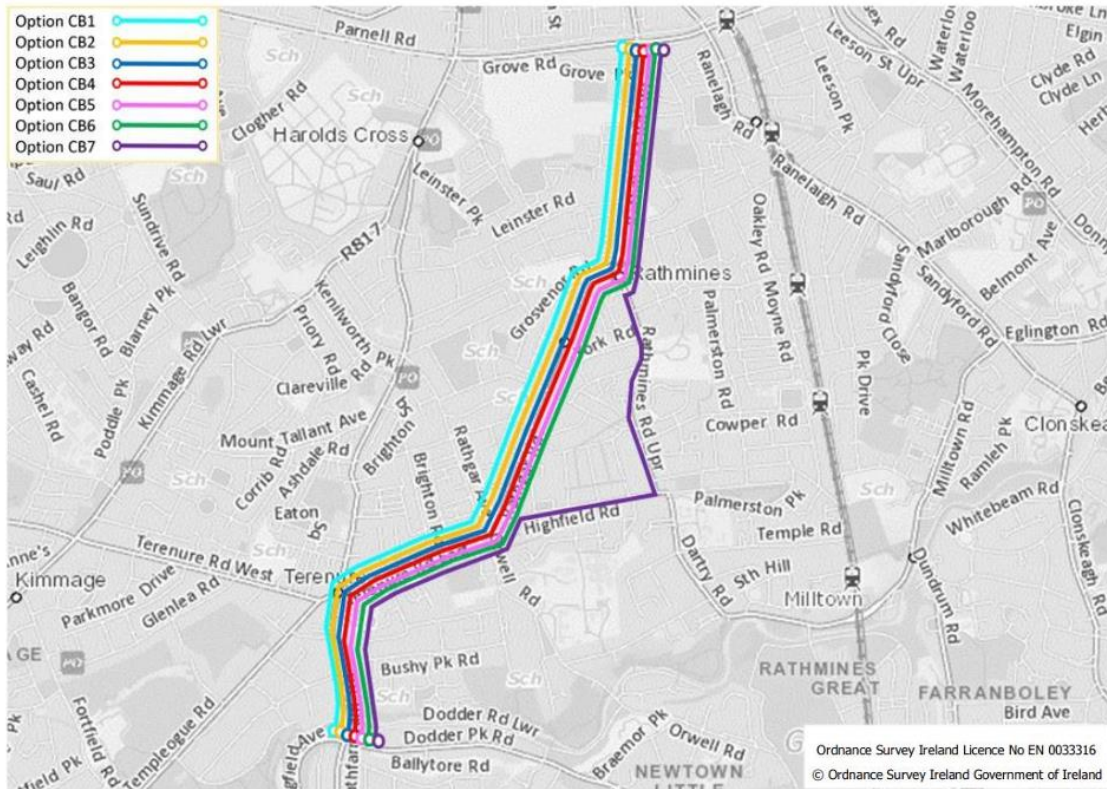


Image 3.13: Section 2 Route Options extracted from 'Rathfarnham to City Core Bus Corridor CBC Feasibility Study and Options Assessment Report'

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above. One of these subsections explored alternative cycle route options between Bushy Park Road junction and Grand Canal – as indicated on Figure 2.5.1 below which is included in Chapter 3 of the EIAR as Image 3.15.

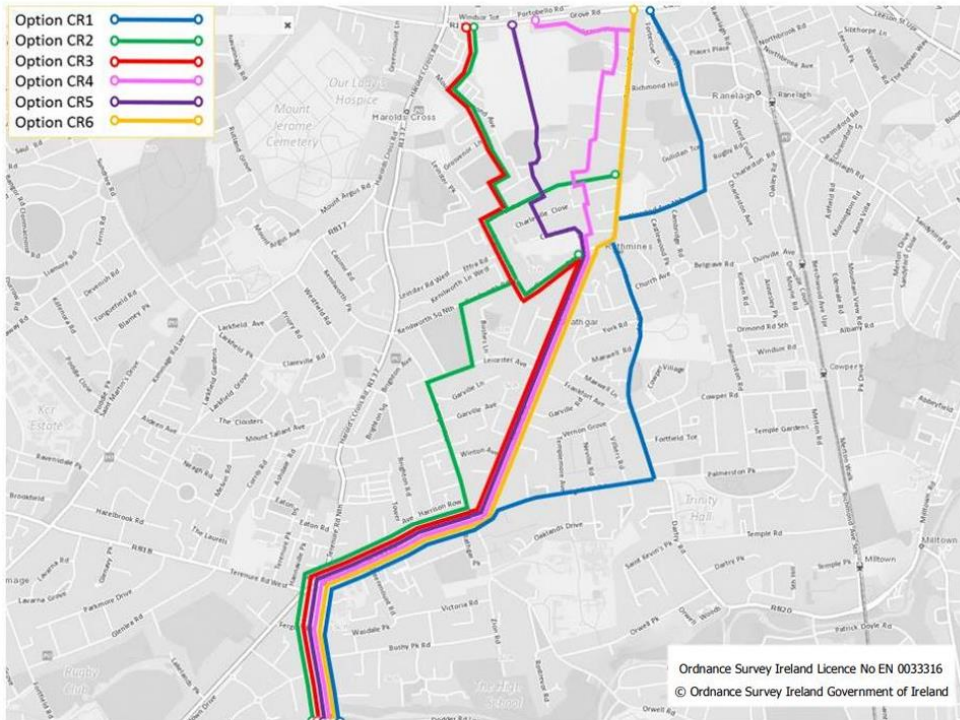


Image 3.15: Section 2 constrained sub-section Parallel Cycle Route Options between the Dodder Crossing and the Grand Canal extracted from 'Rathfarnham to City Core Bus Corridor CBC Feasibility Study and Options Assessment Report'

Figure 2.5.1 Parallel Cycle Route options between the Dodder and Grand Canal (Image 3.15 in EIAR Chapter 3)

As set out in section 3.3.2.2.2 in Chapter 3 there were six scheme sub-options (CR1 to CR6) considered for the section between the Bushy Park junction on Rathfarnham Road to the Grand Canal Crossing via Rathmines Village:

- *Sub-option CR1: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Highfield Road, Rathmines Road Upper, Castlewood Avenue and Mount Pleasant Avenue. The route would also include a new cycle bridge crossing the Grand Canal;*
- *Sub-option CR2: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Rathgar Avenue, Kenilworth Square, Grosvenor Square, Mount Drummond Avenue, and O'Hara Avenue. The route would also include a new cycle bridge crossing the Grand Canal;*
- *Sub-option CR3: This route sub-option would include the provision of a cycle route via Rathfarnham Road, Terenure Road East, Rathgar Road, Grosvenor Road, Grosvenor Square, Mount Drummond Avenue, and O'Hara Avenue. The route would also include a new cycle bridge crossing the Grand Canal;*
- *Sub-option CR4: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road, Charleville Road, Wynnefield Road, Prince Arthur Terrace, Leinster Square, Louis Lane, Ardee Road, Lissenfield, and Grove Park. The route would also include a new cycle bridge crossing the Grand Canal;*
- *Sub-option CR5: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road, Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks. The route would also include a new cycle bridge crossing the Grand Canal; and*
- *Sub-option CR6: This route sub-option would include the provision of a cycle route via Terenure Road East, Rathgar Road and Rathmines Road Lower. Due to width constraints on La Touche Bridge a new cycle bridge is proposed to the west of the bridge, connecting with Martin Street.*

A specific set of criteria were used to assess the relative merits of each of the cycle routes outlined above. The 'Five Needs of a Cyclist' outlined in the National Cycle Manual Guidelines along with Capital Cost and Environmental Impacts were the criteria used to compare the cycle routes. Further detail on the assessment methodology relating to alternative cycle facilities is included in Table 3.1.

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Road Safety, Coherence, Directness, Attractiveness, Comfort, and Environment. Sub-option CR5 was identified as having significant benefits over other sub-options in relation to Attractiveness and Comfort, and some benefits over other sub-options in relation to Road Safety, Coherence and Directness. Following an MCA, sub-option CR5 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

Following the assessment of the two constrained sub-sections as outlined above, an MCA has been undertaken of the principal route options along this section of the scheme in order to determine the most appropriate scheme for this section of the Proposed Scheme. These options are briefly summarised below.

- Option CB1 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Outbound traffic would be removed from Rathgar Road and, inbound traffic would be removed from Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB2 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Outbound traffic would be removed from Rathgar Road and Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB3 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross and a 70m section along Rathmines Road Lower between Rathmines Road Upper and Castlewood Avenue). Inbound traffic would be removed from Rathgar Road and Rathmines Road. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB4 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). It is proposed to provide segregated cycle facilities on Rathfarnham Road, Terenure Road East and Rathgar Road. Cyclists would be catered for via a parallel cycle route along Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks;
- Option CB5 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and Rathmines Village (with exception of a 100m section at Terenure Cross). An inbound bus lane would be provided on Rathmines Road Lower from Rathmines Road Upper to the Military Road junction, whilst an outbound bus lane provided from Grove Road to the Military Road junction. Segregated cycle facilities would be provided along the majority of the CBC route;
- Option CB6 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). It is proposed to remove general traffic in the northbound (inbound) direction along Rathmines Road Lower between Castlewood Avenue and Grove Road. It is also proposed to provide segregated cycle facilities along the majority of the CBC route; and
- Option CB7 would include the provision of segregated bus facilities between the Dodder River crossing at Pearse Bridge and the Grand Canal crossing at La Touche Bridge (with exception of a 100m section at Terenure Cross). This option would be routed via Highfield Road and Rathmines Road Upper. It is proposed to provide segregated cycle facilities along Rathfarnham Road and Terenure Road East. Cyclists would also be catered for via parallel cycle routes via Rathgar Road, Charleville Road, Grosvenor Lodge and Cathal Brugha Barracks.

Section 3.3.2.2.2 concludes:

Option CB4 was identified as having significant benefits over other options in relation to Transport Quality and Reliability, Traffic Network Integration, Road Safety and Land Use Character. Option CB4 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route.

It is noted that subsequent to the preparation of the 'Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report', it was decided that an option which provided online bus and cycle lanes along the route and one-way traffic outbound through Rathmines should be given further consideration. As a result, both Option CB4 and Option CB6 were presented for consideration by the public in the first non-statutory public consultation.

As set out in Section 3.4.1, following the completion of the public consultation process 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.

Section 3.4.1.1.4 sets out the subsequent optioneering carried out at this stage as summarised below.

As noted in Section 3.3.2.2.2, the EPR Option identified two potential options for Rathmines Village, both taken forward to public consultation and for more detailed assessment as part of this process. Option A proposed keeping cyclists on Rathmines Road Lower with bus lanes provided in each direction and only a single traffic lane to accommodate outbound traffic. Option B proposed diverting cyclists to an alternative cycle route to the west of Rathmines Road Lower with bus and traffic lanes provided in each direction along Rathmines Road Lower. The responses to the public consultation showed a clear preference for Option A on the basis that the cycle route proposed in Option B was indirect and unattractive compared to Option A. However, a review of Option A showed that this option would require reductions to footpath width along Rathmines Road Lower that could impact on the public realm within Rathmines Village. More detailed alternative design solutions have therefore been explored in this area in determining a draft PRO.

These options are briefly outlined below:

- *Option RM1: Two Bus lanes, one outbound traffic lane and two 1.5m wide cycle tracks through Rathmines Village. (Previously EPR Option A);*
- *Option RM2: Two Bus lanes and two general traffic lanes through Rathmines Village with an alternative offline cycle route provided. The offline route commences by directing cyclists down Charleville Road and Wynnefield Road. It is proposed to run a cycleway access through Wynnefield Park connecting to Prince Arthur Terrace and on to Leinster Square. The cycle route would cross Leinster Road and down Louis Lane through a proposed entry point to the lands at the rear of DIT Conservatory of Music and Drama into William Park and Ardee Road. The proposed cycleway would then cross Military Road and across the sports ground in front of St. Mary's College Rathmines Senior School. The cycle lane would then be routed through Cathal Brugha Barracks around the boundary with the Lissenfield Development and the rear of the Grove Park properties. The proposed cycle route then crosses Grove Road onto a new canal crossing and continues on other streets to the city centre. (Previously EPR Option B); and*
- *Option RM3: Two general traffic lanes and two 2m wide cycle tracks through Rathmines Village with a bus gate located between Richmond Hill and Military Road.*

Option RM3 – the provision of two general traffic lanes and two 2m wide cycle tracks through Rathmines Village with a bus gate located between Richmond Hill and Military Road – was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing the appropriate level of bus priority and fully segregated cycle tracks throughout this section of the Proposed Scheme, while acknowledging the urban village function of Rathmines Village through proposed footpath widening.

In terms of the sub-criteria under the Environment criterion, the preferred option performed marginally better than other options in terms of Flora and Fauna due to the reduced impacts on trees along Rathmines Road. In terms of Air Quality and Noise and vibration the preferred option performed marginally better than other options due to the fact that traffic would be redirected away from the CBC. The preferred option performed equally to other options under all other environmental criteria.

As noted in section 3.4.2, a number of changes to the design were made based on feedback received during the second round of public consultation and dialogue with stakeholders. This included the positioning of the Bus Gate in Rathmines just north of Richmond Hill, instead of south of it. The primary reason for this was to facilitate better access to Richmond Hill and provide an alternative route for local traffic to travel to/from south/east via Mount Pleasant Avenue.

Alternative options

A number of submissions suggest alternative locations for the bus gate with a suggestion to move the bus gate further north to the junction of Rathmines Road Lower / Grove Road. A variation of this proposes two sets of bus gates, one at the current location and one at the alternative suggested location at Grove Road, the premise of which is that local traffic could pass the first bus gate to access local properties, but not pass through the second bus gate hence restricting access to local traffic only.

Careful consideration has been given to the location of the bus gate such that it meets the objectives of the Proposed Scheme while balancing this with vehicular access and egress to Rathmines Village. Of particular importance to the environment around the bus gate, is the provision of an opportunity for traffic to divert away from the bus gate in close proximity to the restriction. This minimises the risk of vehicles reaching the bus gate and not having an appropriate and safe means to turn around to divert away from the bus gate. The identified location provides this turn around opportunity via Richmond Hill and Military Road to the south, and Lissenfield to the north. Locating the bus gate at the suggested location at the junction with Grove Road would not provide an appropriate opportunity for vehicle turnaround when approaching from the south. Furthermore, Grove Park would need to be closed to traffic in order to remove the potential for traffic to continue northbound along Rathmines Road Lower and bypass the bus gate by travelling along Grove Park onto Grove Road. This could severely impact on inbound bus journey times.

Some other submissions, including that on behalf of Lissenfield, suggested moving the bus gate to south of Richmond Hill. This proposal would likely require the closure of Mount Pleasant Avenue Upper to through traffic to remove the potential for traffic to use this route to bypass the bus gate. This would therefore not provide any improved accessibility to/from the south compared to the Proposed Scheme.

In terms of the variation on the location suggested, and the use of technology to permit local access north of the bus gate but not through traffic, it is noted that the above commentary is equally valid to this option.

- b. Impact on access to / egress from other areas north of Lissenfield, Church of Mary Immaculate Refuge of Sinners, Blackberry Lane and Grove Road

Chapter 10 Population of Volume 2 of the EIAR has considered the potential community and economic impacts on the human population associated with the Construction and Operational Phases of the Proposed Scheme as summarised in the following sections.

Community Accessibility

Section 10.4.4.1.2.2 of Chapter 10 Population of Volume 2 of the EIAR notes:

Community accessibility relates to the ability of users to access community facilities, recreational resources, and residential properties. The nature of the Proposed Scheme means that accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

The significant improvements 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 (The Economic Impact of the Core Bus Corridors) (EY 2021) in Volume 4 of this EIAR.

In terms of the impact on commercial accessibility in Rathmines, the assessment is summarised in Table 10.15 and notes a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term on cyclists, a Positive, Moderate to Very Significant and Long-Term on Bus Users and a Positive, Moderate and Long-Term on private vehicles.

Further extracts from section 10.4.4.1.2.2. of Chapter 10 Population of Volume 2 of the EIAR states:

Private Vehicles Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic in the surrounding road network. Chapter 6 (Traffic and Transport) did not identify any localised impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The two bus gates in the community areas of Terenure and Rathmines are designed to restrict access to private vehicles and prioritise buses. The impact on private vehicles passing through Templeogue Road at Fergus Road in an inbound direction and Rathmines Road Lower at junction with Lissenfield will require minor local rerouting but will not change the ability to access community facilities in the area.

Access Routes

It is noted that while the proposed bus gate may result in an inconvenience for those seeking to access businesses, community or residential premises in Rathmines by car, vehicular access will be retained via routes from all directions. The following figure presents a sample of the alternative routes available from origins to the north of the proposed bus which would currently travel straight through Rathmines demonstrating that variety of alternative routes will continue to exist to provide vehicular access to these streets from all directions.

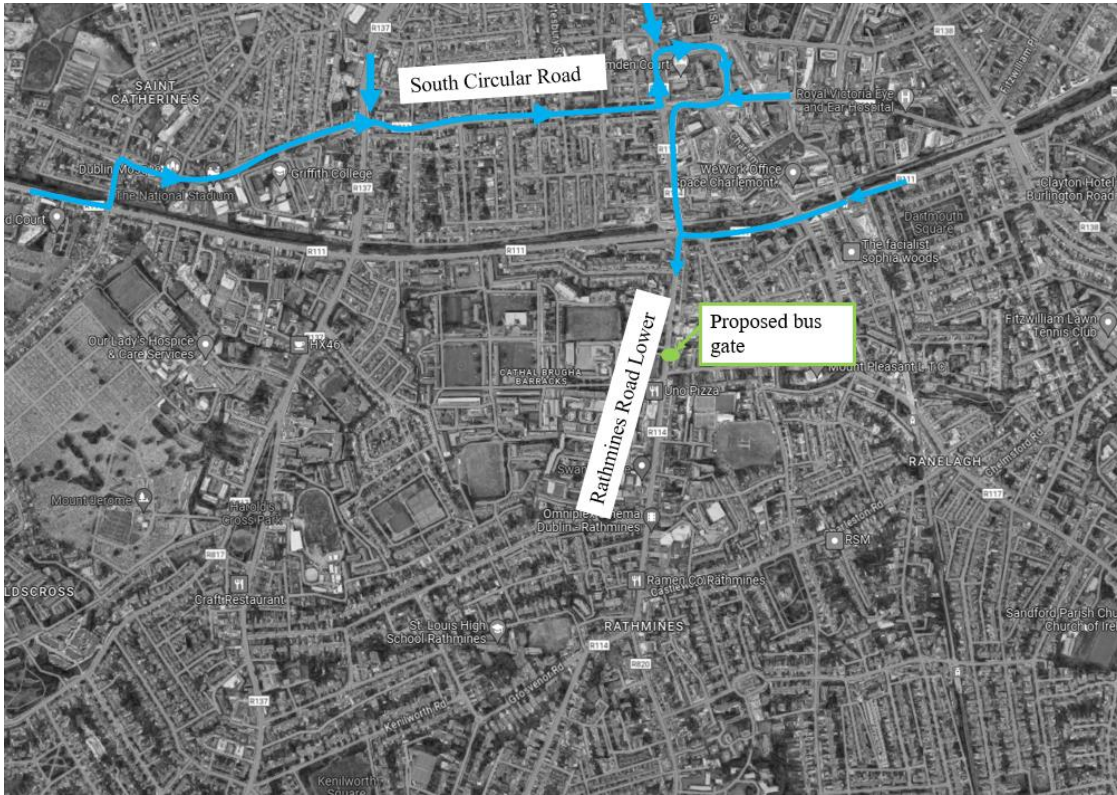


Figure 2.5.2 Alternative access routes to north of the bus gate from the east, west or north

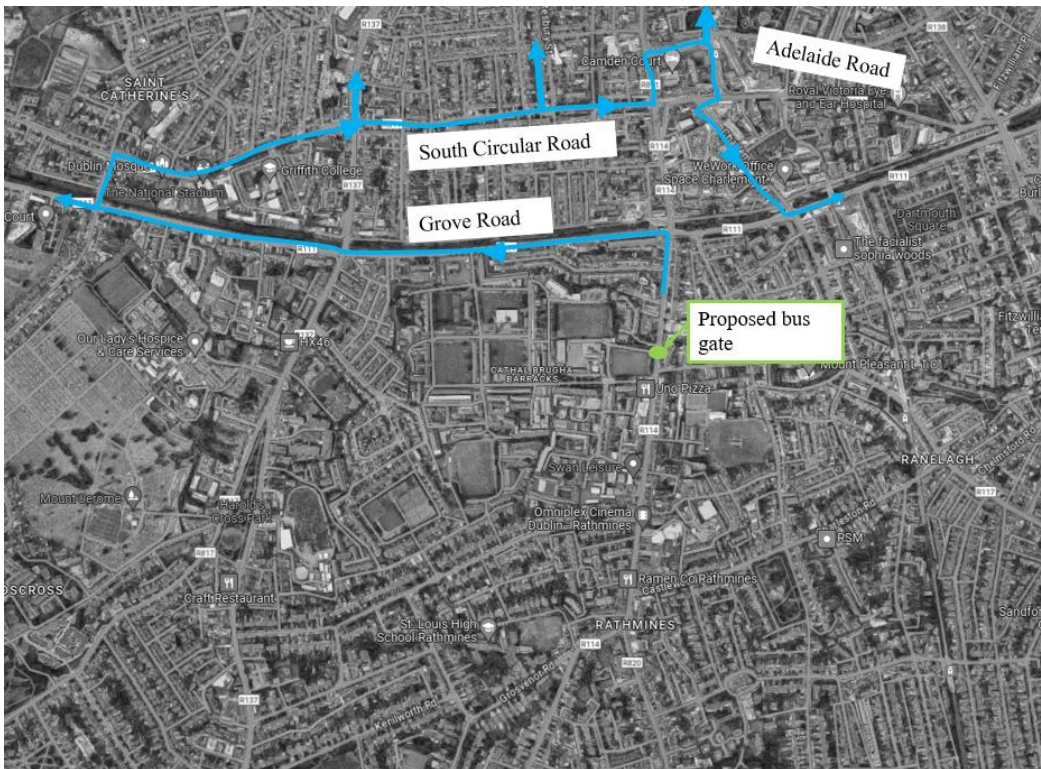


Figure 2.5.3 Alternative egress routes from north of the bus gate to the east, west or north

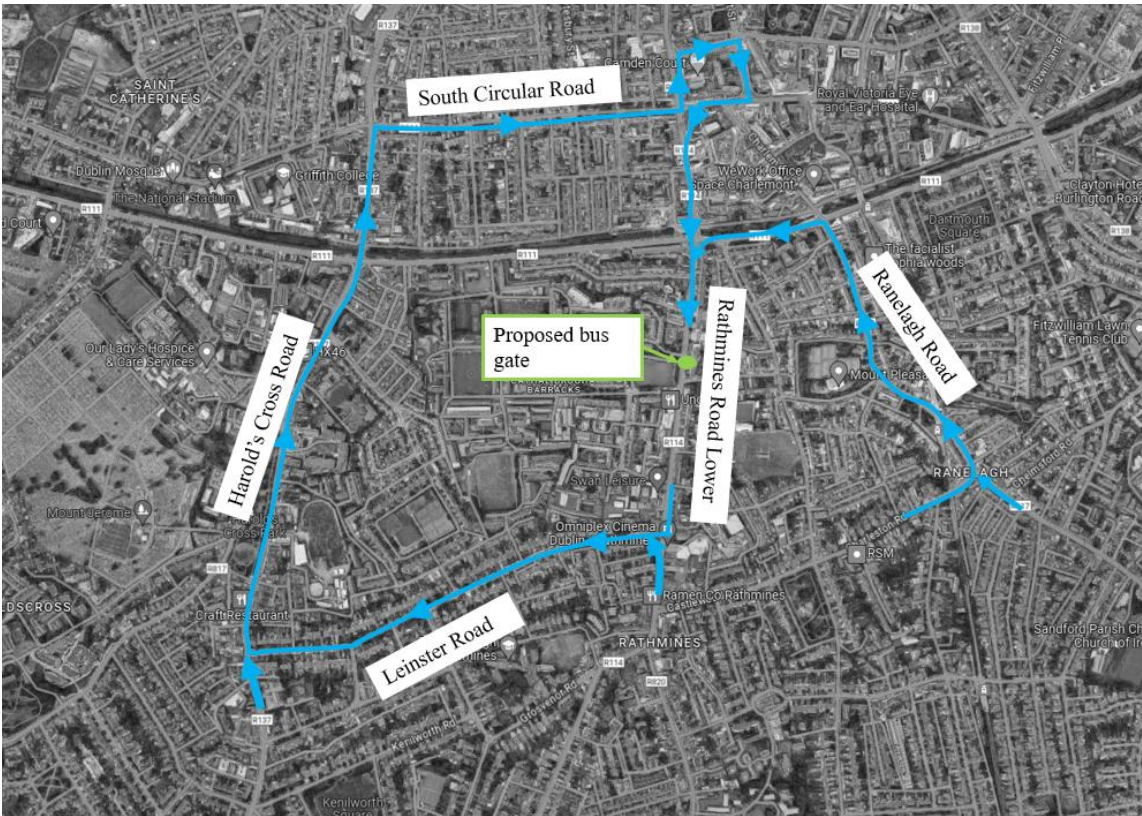


Figure 2.5.4 Alternative access routes to north of the bus gate from the south

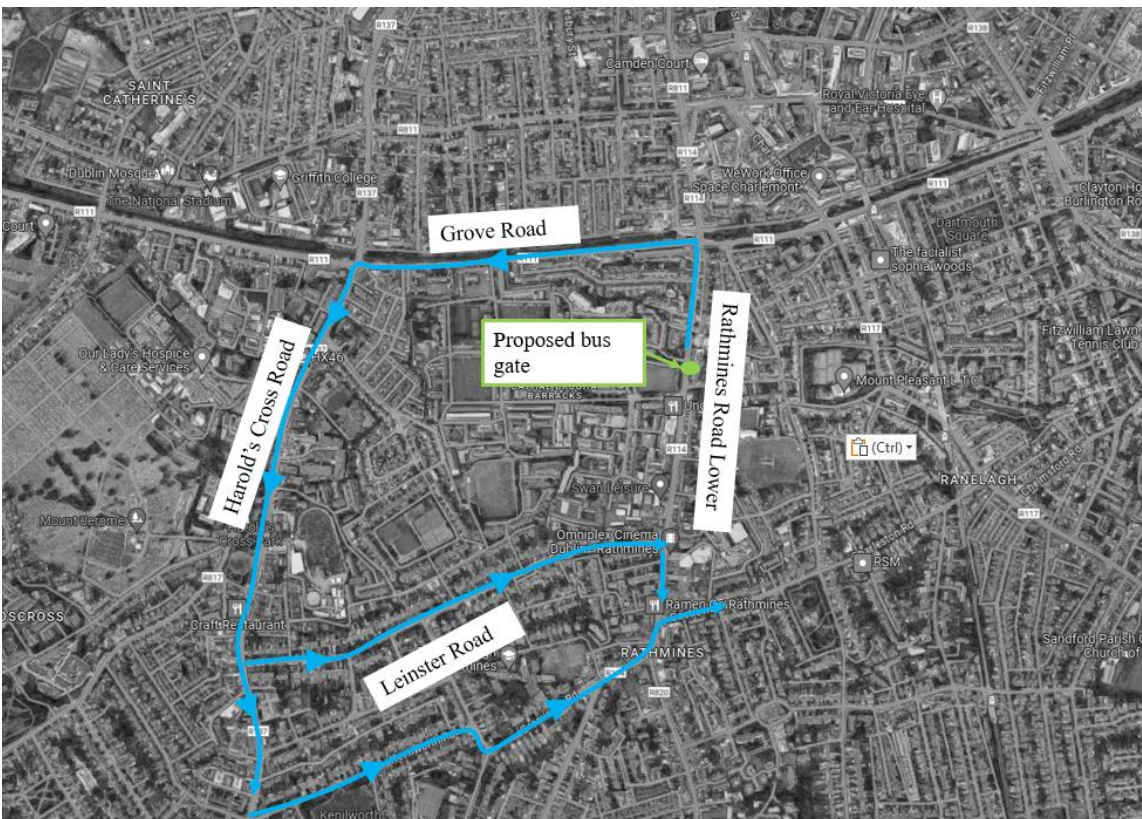


Figure 2.5.5 Alternative egress routes from north of the bus gate to the south

In terms of access to the Church of Mary Immaculate Refuge of Sinners, it is noted that the primary car park associated with the church is accessed off Richmond Hill. Access/egress to this car park from the south will remain as per the existing situation. Access to the smaller car park (c. 8 spaces) in front of the church on Rathmines Road Lower will be accessible from north of the bus gate.

- c. Impact on businesses as a result of bus gate, including impact on deliveries.

Chapter 10 Population of Volume 2 of the EIAR has considered the potential community and economic impacts on the human population associated with the Construction and Operational Phases of the Proposed Scheme as summarised in the following sections.

Commercial Accessibility

Section 10.4.4.2.2.2 of Chapter 10 Population of Volume 2 of the EIAR notes:

Commercial accessibility relates to the ability of users and employees to access commercial businesses. The nature of the proposed works means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles.

Chapter 6 (Traffic and Transport) assessed that people movement would significantly increase along the Proposed Scheme. It is therefore expected that all businesses along the Proposed Scheme will, to some extent, benefit from the increase in passing trade. Commercial businesses located along the Proposed Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

In terms of the impact on commercial accessibility in Rathmines, the assessment is summarised in Table 10.15 and notes a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term on cyclists, a Positive, Moderate to Very Significant and Long-Term on Bus Users and a Positive, Moderate and Long-Term on private vehicles.

Further extracts from section 10.4.4.2.2.2. of Chapter 10 Population of Volume 2 of the EIAR states:

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from the redistribution of traffic in the surrounding road network.

Chapter 6 (Traffic and Transport) did not identify any localised capacity impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The impact on private vehicles passing through Terenure and Rathmines community area is considered Negative, Not Significant to Slight and Long-Term, this is due to the proposed introduction of the bus gates at Fergus Road on Templeogue Road and Lissenfield on Rathmines Road. The bus gates on are not expected to have a significant impact on private vehicles accessing commercial businesses along these stretches of roads due to the lack of on-street parking provision, however they will impact accessibility in terms of lengthened and re-routed journeys.

The impact on access to commercial businesses along the Proposed Scheme for private vehicles is considered to be Positive, Moderate and Long-Term. The community areas that are expected to experience this impact this are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

The impact on access to commercial businesses in the surrounding road network, a result of redistributed traffic, is considered to be Negative, Slight and Long-Term. The community areas that are expected to experience this impact as a result of changes in access to commercial businesses during the Operational Phase of the Proposed Scheme are those situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

A parking assessment has been undertaken in Chapter 6 (Traffic & Transport). No Significant impacts on parking were identified along the Proposed Scheme.

This should be considered in conjunction with the positive impacts to pedestrians, cyclists and bus users from the Proposed Scheme which will facilitate greater capacity along the corridor for users of sustainable modes of transport to access the commercial properties. Furthermore, an overall assessment of 'The Economic Impact of the Core Bus Corridors' is included in Appendix A10.2 in Volume 4 of the EIAR. The assessment indicates that evidence from case studies suggests that, in some cases, businesses overestimate the number of people arriving by car whilst the proposed enhancements to the walking, cycling and bus infrastructure along the route will increase use of sustainable transport and may positively impact on footfall to the business.

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 compensate 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.

Access routes

It is noted that while the proposed bus gate may result in an inconvenience for those seeking to access businesses, community or residential premises in Rathmines by car, vehicular access will be retained via routes from all directions. Similar routes to those presented in f

Figure 2.5.4 to Figure 2.5.5 above, are available to/from areas south of the bus gate and as such access to loading facilities within Rathmines will be accessible from all directions. It is further noted that as set out in section 4.5.4.1 of Chapter 4 in Volume 2 of the EIAR, the bus gate will restrict general traffic movements during the hours of operation of the Bus Gate (06:00 – 20:00 - 7 days a week). Outside of these hours, access to and from Rathmines Village will be similar to the existing situation.

Parking and loading

Section 6.4.6.1.5.4 of Chapter 6 in Volume 2 of the EIAR assesses the impact of changes to parking and loading facilities in Rathmines Village as a result of the Proposed Scheme. The overall changes in the Rathmines area are presented in Table 6.41, an extract of which is presented below.

Table 6.41: Section 4 – Overall Changes in Parking / Loading Spaces

Location	Parking Type	Number of Parking Spaces		
		Do Minimum	Do Something	Change
Rathmines Road Lower, between Rathmines Road Upper and Grove Road.	Loading Bay	4 loading bays (14 spaces)	6 loading bays (20 spaces)	+ 2 loading bays (+6 spaces)
Military Road	Loading Bay	1	1	0
	Informal Parking: pay and display residential	21	17	-4

Figure 2.5.6 Extract from Chapter 6 of the EIAR Table 6.41

In terms of loading facilities, it is proposed to increase the number of loading bays in Rathmines from 4 to 6 bays, an increase of 2 loading bays. In terms of parking, it is proposed to reduce the number of spaces by 4 on Military Road. The impact of the proposed changes is summarised in section 6.4.6.1.5.4:

- a) *Increase from four loading bays (14 spaces) to six loading bays (20 parking spaces) on Rathmines Road Lower, between Rathmines Road Upper and Grove Road. Therefore, the impact of this increase in parking is considered to have a **Positive, Slight and Long-term effect**.*
- b) *Removal of four spaces on Military Road, out of 21 residential pay and display spaces. There are a number of side streets which can be used by local residents. The removal of four spaces is minor and is therefore considered to have a **Negligible and Long-term effect**.*
- d. Suggestion to reduce bus gate hours of operation to 6-9am and 4-8pm

The Proposed Scheme along the Rathmines Road Lower proposes a bus gate which will be operational between 06:00 and 20:00 seven days a week. An analysis of existing traffic flow levels on the corridor do not show a significant reduction in traffic volumes through the day (relative to peak hours), and hence bus gate operation during the hours noted above is necessary to provide fast, reliable bus journey times for all services.

3. Response to Individual Objections to the CPO

3.1 CPO-01 – Aidan Neill – 65 Rathfarnham Road

3.1.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.3m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.1.1.

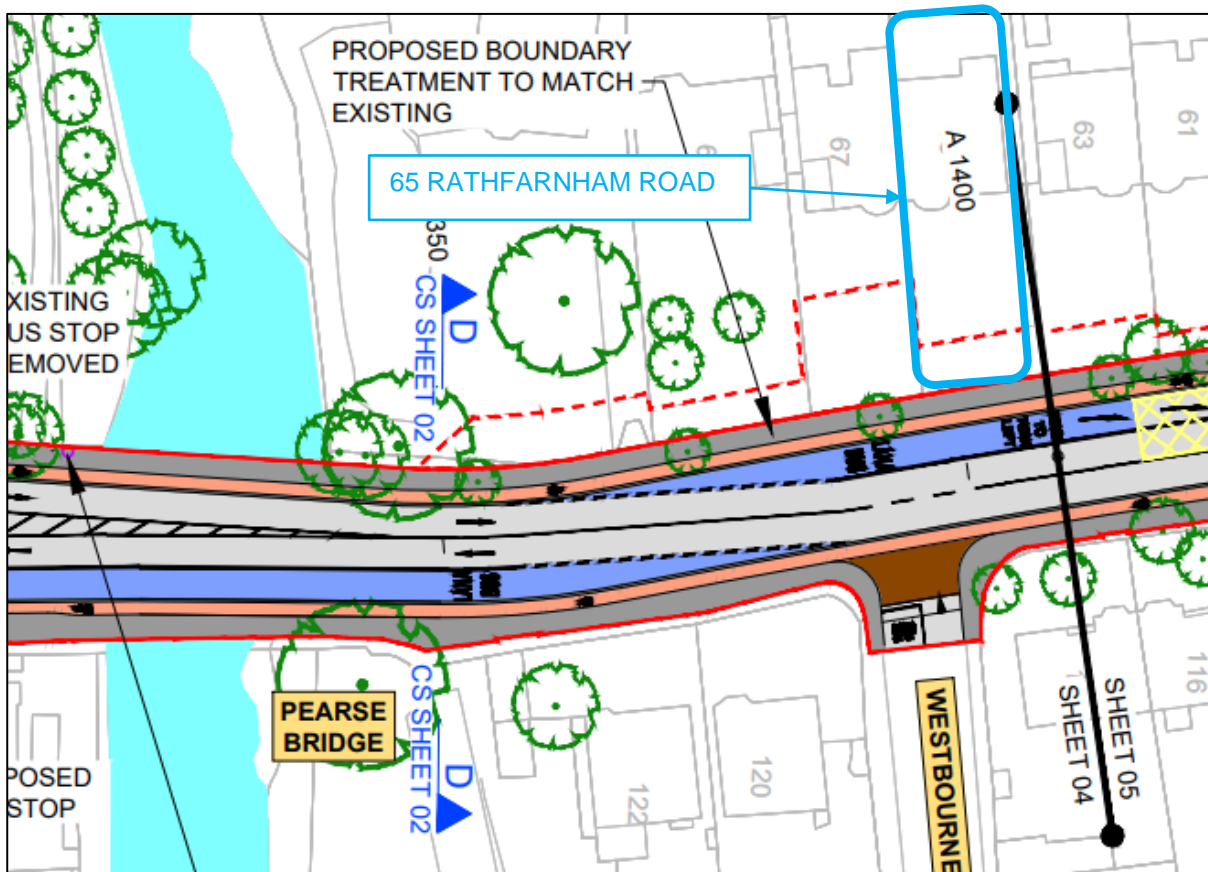


Figure 3.1.1 General Arrangement of Proposed Scheme adjacent to 65 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.1.2.

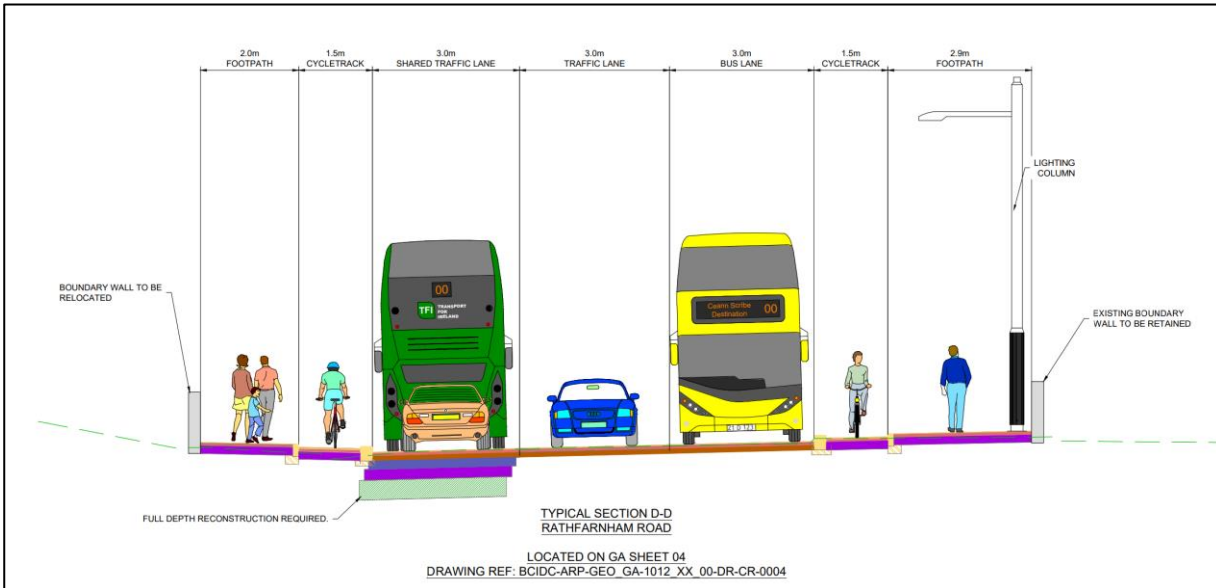


Figure 3.1.2 Typical Cross-Section adjacent to 65 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 65 Rathfarnham Road is shown in Figure 3.1.3.

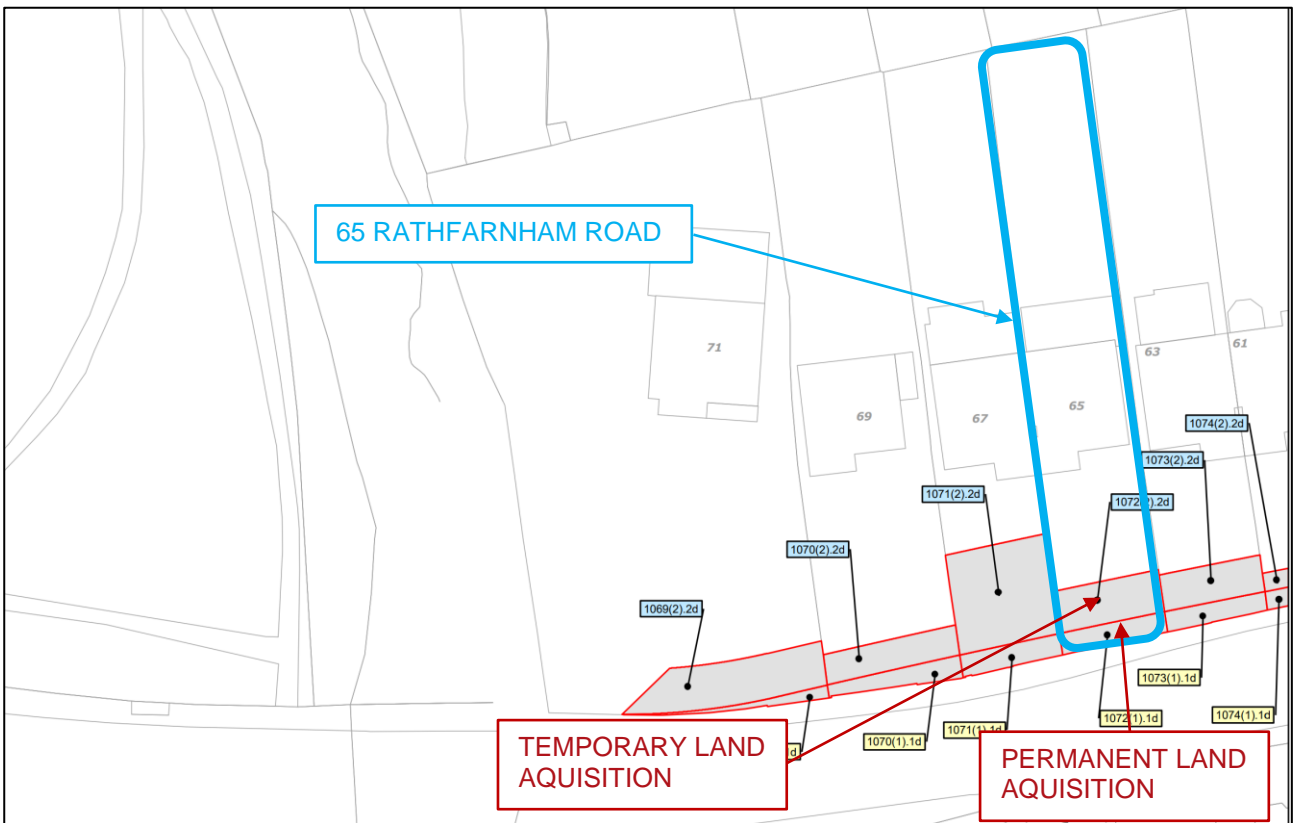


Figure 3.1.3 Extract from CPO Deposit Maps adjacent to 65 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.1.4.



Figure 3.1.4 Proposed Land Acquisition lines adjacent to 65 Rathfarnham Road

The existing property frontage is shown in Figure 3.1.5.



Figure 3.1.5 Existing frontage of 65 Rathfarnham Road (Image source: Google)

3.1.2 Summary of the Points of Objection to the CPO by Aidan Neill

This submission objected to CPO for the reasons summarised in the following section.

i. Driveway Gradients

The submission raised a concern that the Proposed Scheme will result in increased driveway gradients resulting in unsafe gradients.

ii. Necessity of road widening

The submission questions the necessity of CPO at this section of Rathfarnham Road, suggesting that there are no environmental differences between the section outside No 51-71 Rathfarnham Road and 91-129 Rathfarnham Road, where a shared bus and cyclists' space is proposed.

iii. Benefits do not outweigh the impacts/costs of the Proposed Scheme

The submission suggests that there is little bus service improvement and a reduction in the number of bus stops as part of the proposals.

iv. Impact on property value

v. Impact to noise levels and privacy

The submission states that the proximity of buses to their property will result in loss of privacy and increase noise pollution.

vi. Combined impact of BusConnects Schemes

The submission suggests that the impact assessment for the Proposed Scheme was completed in isolation and did not consider the knock-on effects from other BusConnects Schemes.

vii. Implications of traffic management on Rathfarnham Road.

The submission raised a concern regarding the turning ban from Rathdown onto Templeogue Road, suggesting that it will force traffic to find alternative routes through Dodder View and Rathfarnham Road contributing towards congestion in the area.

3.1.3 Responses to the Points of Objection

i. Driveway Gradients

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3d road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

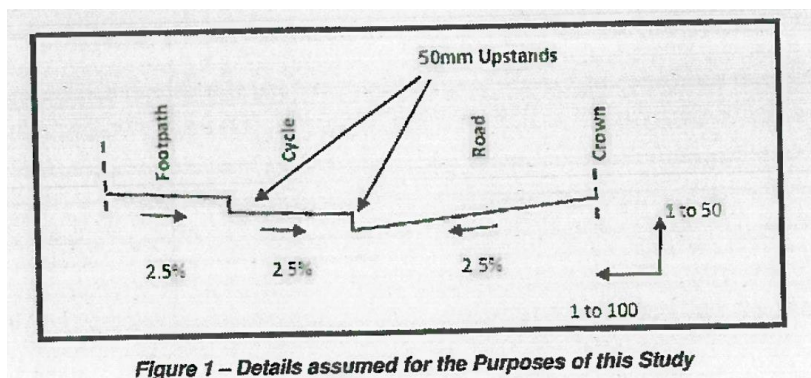
This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

It is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.14m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Retaining existing footpath gradient at this location;
- Some minor regrading within the property over a distance of 2.6m which would result in a gradient no greater than the maximum existing gradient within the property. It is noted that this is incorporated into the temporary land acquisition presented in the Deposit Maps.

It is noted that the submission from Mr. Neill refers to a report prepared by NRB Consulting Engineers which although not submitted in full with his specific submission, is appended to submissions made by Mr Neill's neighbours and has been used to inform this response. It terms of the submission calculations prepared by NRB, it is important to note that these have been based on an assumed road cross-section as set out below in figure 1 of their submission - *Details assumed for the Purpose of this Study*.



As noted earlier, in order to minimise impacts on adjacent properties, existing footpath gradients are being retained (which are significantly greater than the above in some cases) so the underlying assumption above is incorrect.

It is further noted the NRB calculations also used the proposed centreline level of 42.491, taken at chainage A 1400 from the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR. While the chainage A 1400 is adjacent to 65 Rathfarnham Road it is located to the south of the property plot, rather than at the driveway location which is to the north which is of most relevance to the points being raised. The proposed centreline level at chainage A 1405 is 42.640, some 0.149m higher than the value used by NRB in their assessment.

Furthermore, as part of the assessment, the calculation used the existing centreline level at chainage A 1405 of 42.52.

So in summary, the assessment is based on an existing road level at the driveway and a proposed level at chainage A 1400 which is 5m away from the driveway.

The factors outlined above contribute to an inaccurate estimate of the proposed level at the back of the new footpath and therefore misrepresents the effect of the Proposed Scheme on the driveway gradients.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate no increase to the maximum gradients within these properties.

ii. Necessity of road widening – alternative layout more appropriate

A detailed response to this item is presented in Section 2.3.2 where the optioneering carried out along Rathfarnham Road North and South of the Dodder is described.

The Preferred Route Option Report also explains the rationale for the reconsideration of options on Rathfarnham Road south of the Dodder (where the EPR proposed a bus lane and traffic lane in each direction).

Between Brookvale Road and Dodder Park Road, the cross-section is particularly constrained. Widening into properties within this section of the scheme would require the road to be raised in order to maintain driveway gradients at existing grades, which is a requirement of Part M Building Regulations. The potential impacts of the construction works would include:

- Potential temporary closure of vehicular access to some properties during construction works;
- Potential need to undertake significant utility works including raising of manhole covers / gullies, and potentially utility ducts;
- Potential temporary closure of Rathfarnham Road to traffic during construction to facilitate works;
- Extended construction period when compared to sections where works are less complex.

Upon review, the collective and individual impact of the required construction works were not considered to be practicably feasible due to significant disruption caused by the unique construction works required to deliver this option.

While raising the road is required on the section north of the River Dodder, the extent to which it is required south of the Dodder is more significant due to the gradients within these adjacent properties and the length of these driveways which are considerably shorter than north of the River Dodder (thereby reducing the potential for regrading works within the limits of Part M).

iii. Benefits do not outweigh the impacts/costs of the Proposed Scheme

A detailed summary of the scheme benefits is presented in Section 2.1.1

iv. Impact on property value

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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: "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." and "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 on Rathfarnham 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.

v. Impact to noise levels and privacy

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

The permanent acquisition of 2.3m of land is to allow for the construction of the Proposed Scheme cross-section at this location. The acquisition of the land is particularly required to construct the northbound segregated cycle track and a footpath on the western side of Rathfarnham Road. Currently, there is an existing northbound bus lane adjacent to 65 Rathfarnham Road, which as part of the proposals will shift between 0.4 and 0.6m towards the property. Therefore, it is expected that the increase in noise levels from the Proposed Scheme will be negligible.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”* Table 9.39 lists these roads and Rathfarnham Road is not included, indicating that there are no potential significant noise impacts envisaged along Rathfarnham Road.

Reinstatement of property frontage at this location will be on a like for like basis will be prepared in consultation with the landowner in line with any formal agreements and in accordance with any mitigations identified in the EIAR or conditions / modifications from An Bord Pleanála in relation to the Proposed Scheme application.

vi. Combined impact of BusConnects Schemes

A detailed response to this item is presented in Section 2.1.1.

vii. Implications of traffic management on Rathfarnham Road.

A detailed response to this item is presented in Section 2.3.2.

3.2 CPO-02 – Allision Dwyer– 71 Camden Street Lower

3.2.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Camden Street Lower between Charlotte Way and Cuffe Street it is proposed to provide bus lanes in each direction and a single outbound general traffic lane on Camden Street/Wexford Street. The outbound bus lane will not commence until just south of Montague Street due to the proximity of existing built form to the carriageway. Bus priority will be achieved by signal-controlled priority over this section. Under this proposal, inbound traffic will reroute to Harcourt Street to access Cuffe Street and beyond. 1.5m wide cycle tracks are proposed in this section in order to provide sufficient footpath space in this area of significant pedestrian activity

In order to achieve the desired design for the Proposed Scheme, permanent land acquisition is proposed at this property, with a maximum width of land to be acquired of approximately 0.6m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.2.1.

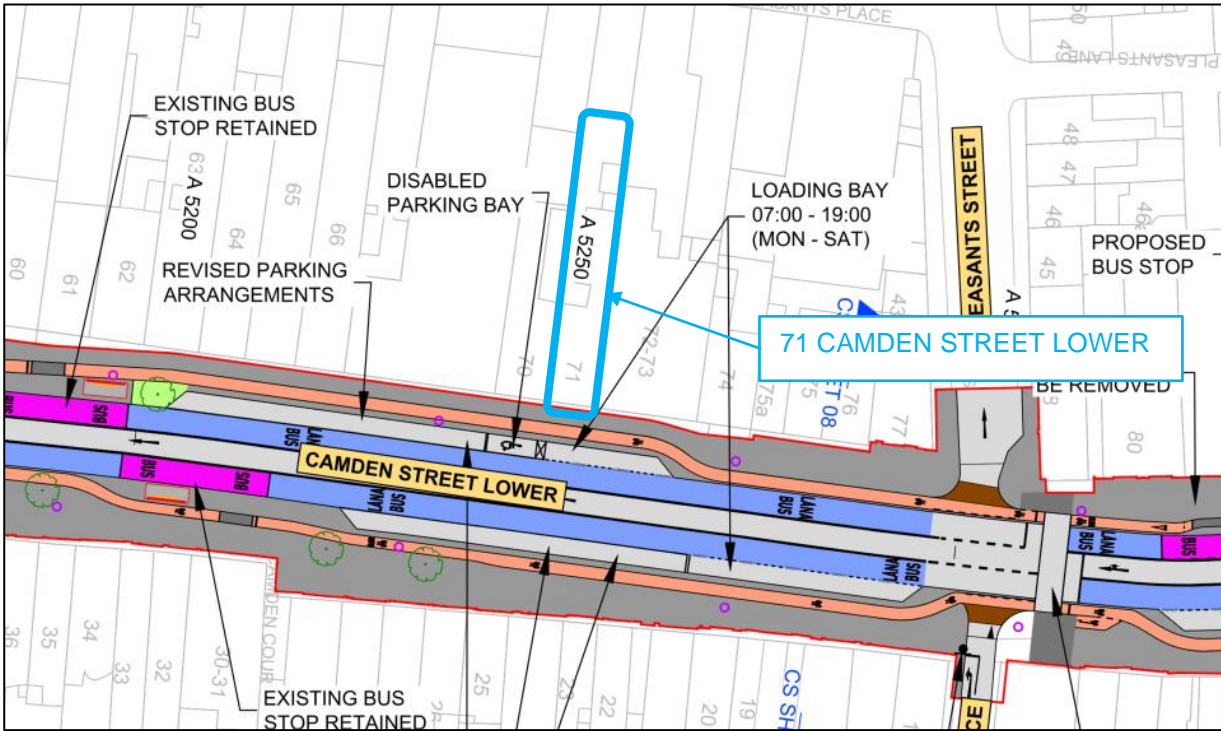


Figure 3.2.1 General Arrangement of Proposed Scheme adjacent to 71 Camden Street Lower (Sheet 16)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.2.2.

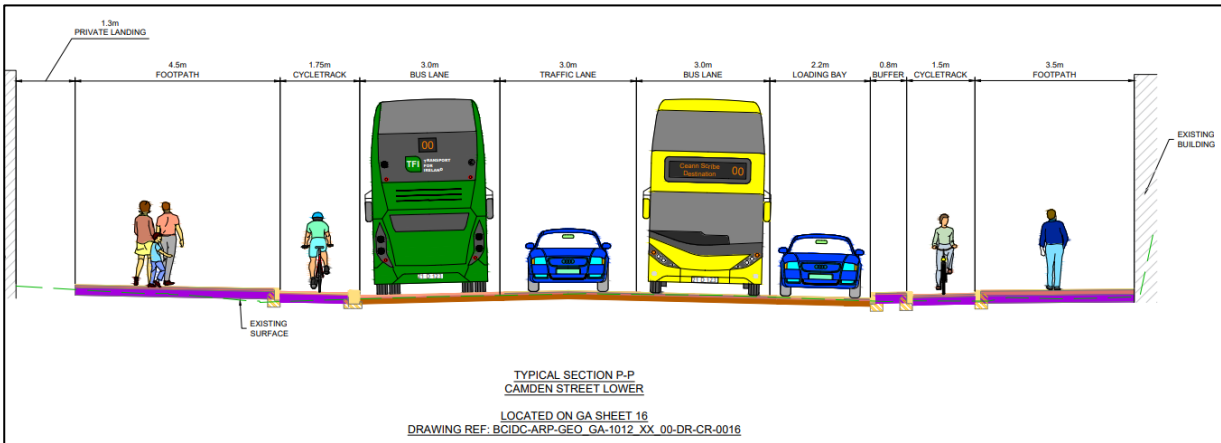


Figure 3.2.2 Typical Cross-Section adjacent to 71 Camden Street Lower

The relevant extract from the CPO Deposit Maps showing the proposed permanent land acquisition areas at 71 Camden Street Lower is shown in Figure 3.2.3.

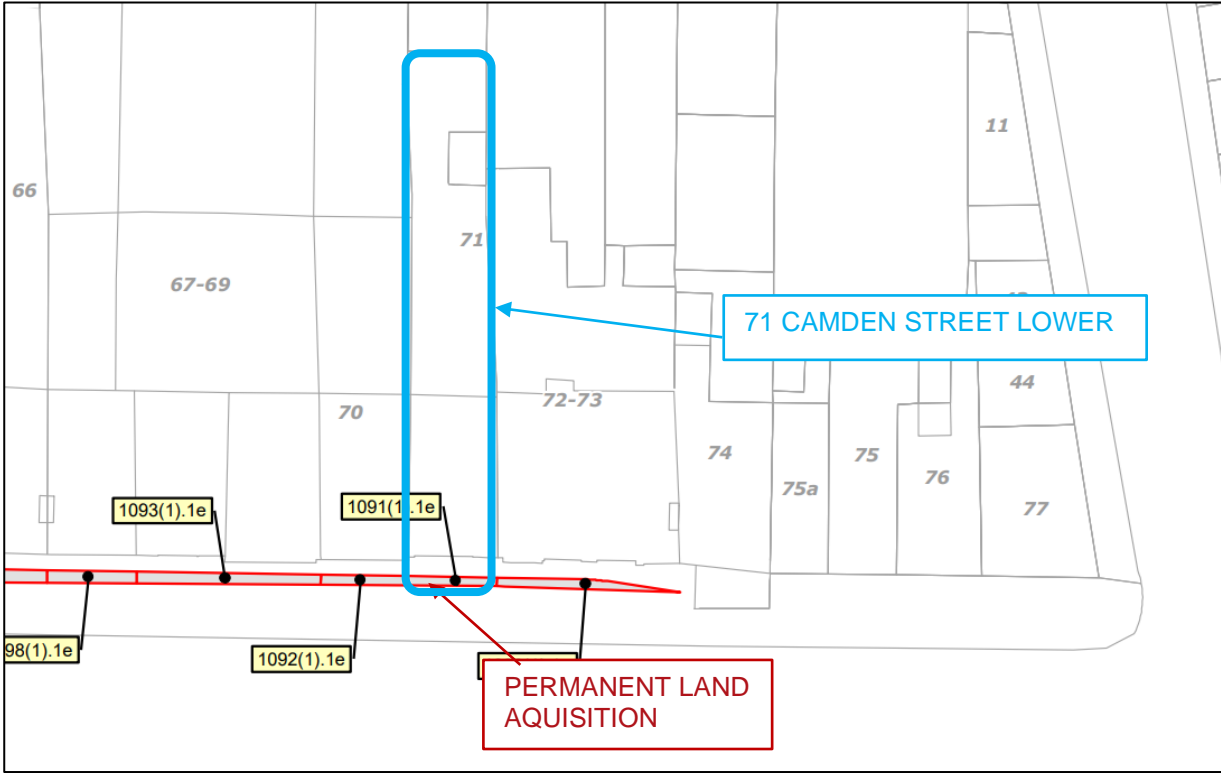


Figure 3.2.3 Extract from CPO Deposit Maps adjacent to 71 Camden Street Lower

The proposed permanent land acquisition lines overlain on aerial photography are shown in Figure 3.2.4.

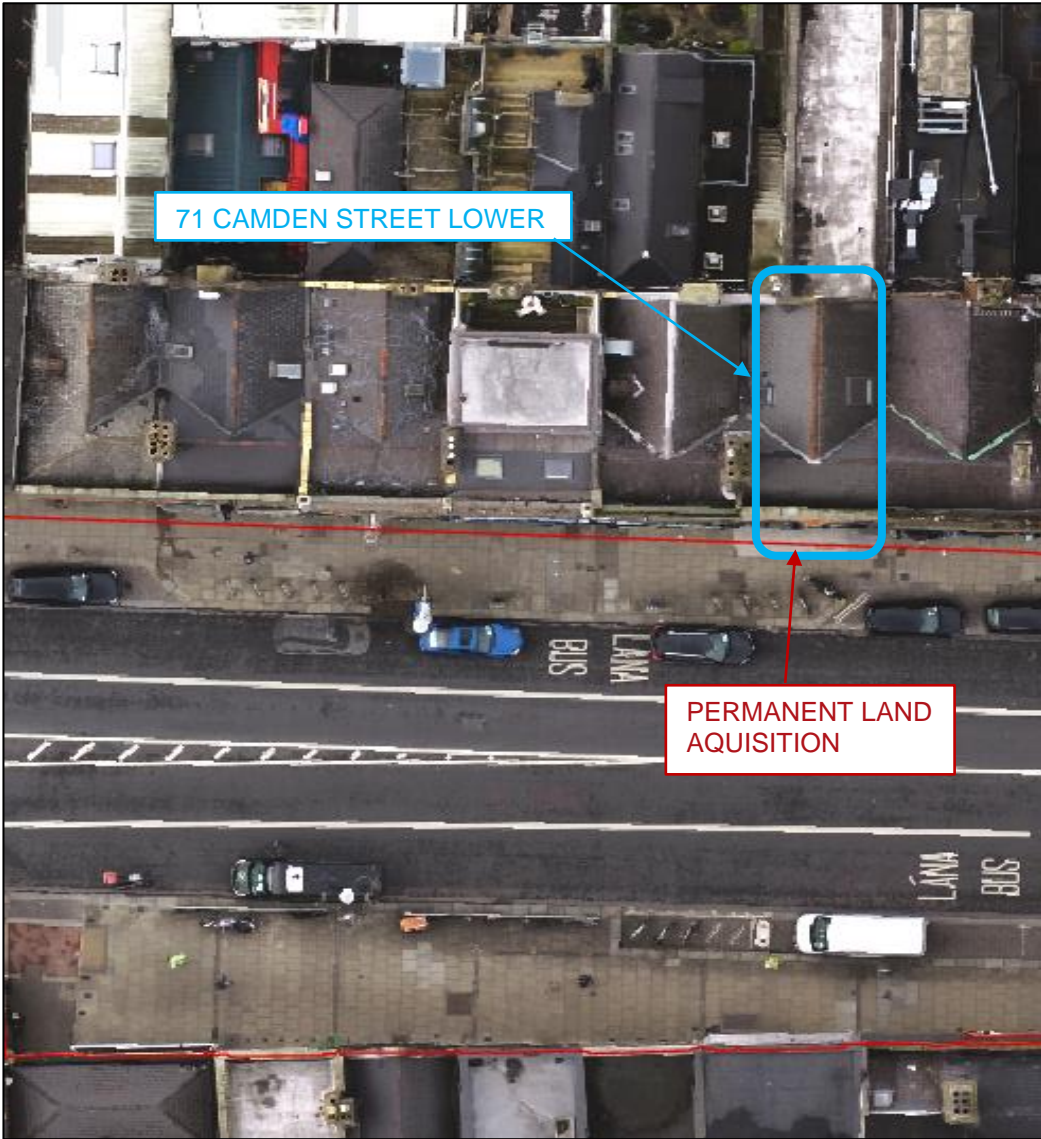


Figure 3.2.4 Proposed Land Acquisition lines adjacent to 71 Camden Street Lower

The existing property frontage is shown in Figure 3.2.5.



Figure 3.2.5 Existing frontage of 71 Camden Street Lower (Image source: Google)

3.2.2 Summary of the Points of Objection to the CPO by Allison Dwyer

This submission objected to the CPO for the reasons summarised in the following section.

i. CPO Brought under Inappropriate Provisions

The submission notes that the Proposed Scheme should be characterised as a busway for the purposes of the Roads Act 1993 and that in such circumstances the proposal should have been brought under section 49 of the Roads Act 1993 (as amended) (the “1993 Act”). It goes on to suggest that the CPO has been “brought under the incorrect and inappropriate statutory provisions and cannot be further considered by An Bord Pleanála”, and that it is “ultra vires for the Board to further consider the application”.

ii. The Proposed Scheme and CPO cannot be considered/approved at the same time.

The submission suggests that the Board must address whether in fact to approve the Proposed Scheme and that exercise must be undertaken first, before consideration of the CPO.

iii. Scale of mapping

The submission notes that the maps and documentation accompanying the application are at a scale and drawn in such a manner that it is not possible to identify precisely and accurately the full extent of the land being acquired.

iv. Incorrect information in Schedule to CPO

The submission takes issue with the characterisation of the Plot 1091(1).1e as being occupied by Dublin City Council, suggesting that Dublin City Council have not and have never occupied these Lands and they request that the record be amended appropriately.

v. Extinguishment of Rights

The submission notes that it is not intended to extinguish any rights over the property comprised in Plot No. 1091(1).1e and sets out an assumption that there will be no interference with or no impact on the existing established use for the commercial use of this area.

vi. Precise Proposals in respect of the land being acquired & Impact to retained land.

The submission suggests that there are no detailed proposals as to how the Proposed Scheme is to be reflected on the lands being acquired i.e., Plot 1091(1).1e., and further that there is no analysis identified in the EIAR in respect of the impacts upon the retained lands.

vii. Impact during construction

The submission notes that during construction access will be restricted to their property and it is alleged that it will be impossible to operate a business during the works which it suggests will take 3-5 years. Noise and dust were noted as particular concerns.

viii. Air Quality and noise during operation

The submission notes concern about increased noise and emissions following completion of the scheme as there will be buses close to the building.

3.2.3 Responses to the Points of Objection

i. CPO Brought under Inappropriate Provisions

The submission/objection lodged by Reddy Charlton LLP Solicitors, on behalf of Allison Dwyer suggests that the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme should have been characterised as a “busway” and that accordingly the Scheme has been brought under the incorrect and inappropriate statutory provisions.

As the Board is aware, the NTA has applied under section 51(2) of the 1993 Act for approval in relation to a proposed road development consisting of the construction of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (the “Proposed Scheme”).

Section 1.5.4 of Chapter 1 of the EIAR for the Proposed Scheme clearly sets out the legislative basis for the application under section 51 of 1993 Act, as follows:

“Section 50 of the Roads Act 1993 is concerned with the requirement for EIA of road development. Section 50(1)(a) states that: ‘A road development that is proposed that comprises any of the following shall be subject to an environmental impact assessment:

(i) the construction of a motorway;

(ii) the construction of a busway;

(iii) the construction of a service area;

(iv) any prescribed type of road development consisting of the construction of a proposed public road or the improvement of an existing public road’.

Under Article 8 of S.I. No. 119/1994 - Road Regulations 1994 (as amended) the prescribed type of road development for the purposes of section 50(1)(a)(iv) of the Roads Act are:

‘(a) The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area’; and

‘(b) The construction of a new bridge or tunnel which would be 100 metres or more in length.’ The Proposed Scheme meets the threshold as set out in Article 8 of the Road Regulations 1994, as amended, in that it includes the realignment and / or widening of an existing road so as to provide four or more lanes, where such realigned and / or widened road is more than 500 metres in length and is in an urban area.

The Proposed Scheme meets the threshold as set out in Article 8 of the Road Regulations 1994, as amended, in that it includes the realignment and / or widening of an existing road so as to provide four or more lanes, where such realigned and / or widened road is more than 500 metres in length and is in an urban area.”

Further, the associated application for confirmation of the compulsory purchase order has been correctly made under section 76 of, and the Third Schedule to, the Housing Act 1966 (as amended), and Part XIV of the Planning and Development Act 2000 (as amended) (the “**2000 Act**”). As set out in Section 1.4 of Chapter 1 of the EIAR for the Proposed Scheme, the NTA made a decision under section 44(2)(b) of the Dublin Transport Authority Act 2008 (as amended) (the “**2008 Act**”) on 18 October 2019 that it considered it to be more convenient, more expeditious, more effective or more economical that the functions in relation to the provision of public transport infrastructure be performed by it in relation to this Proposed Scheme among others.

Section 44(6) of the 2008 Act provides: -

“(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 functions 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 or other statutory body entitled to exercise the function is named, and...”

Therefore, the NTA has the power to acquire lands by means of a compulsory purchase order in accordance with Part XIV of the 2000 Act and the procedures by which the NTA is required to make an application for confirmation of such a compulsory purchase order are set out under section 76 of and the Third Schedule to the Housing Act 1966 (as amended) and the NTA has applied in accordance with the appropriate procedures. Any suggestion to the contrary in the submission/objection lodged by Reddy Charleton is entirely misplaced.

While section 49 of the 1993 Act is mentioned in the submission/objection lodged by Reddy Charleton, it is of no relevance to the Proposed Scheme given that the Proposed Scheme is not a “*motorway scheme*”, a “*service area scheme*”, a “*busway scheme*”, or a “*protected road scheme*” as defined in the 1993 Act. In particular, the submission/objection suggests that the Proposed Scheme “*can only be characterised as a busway for the purposes of the Roads Act 1993*”. This is simply not the case.

The Proposed Scheme is not a “*busway*” within the meaning of section 44 of the 1993 Act, which defines “*busway*” as meaning “*a public road or proposed public road specified to be a busway in a busway scheme approved by the Minister under section 49*”. Section 44 of the 1993 Act goes on to provide that save in a limited circumstance, “*a person shall not have or be entitled to direct access from any land adjoining a busway to the busway, or from the busway to such land nor shall a right to such direct access be granted at any time*”. Subsection (3) of section 44 contemplates the making of regulations by the Minister to prescribe the classes of vehicles which shall be permitted to use a busway and conditions in relation to the use of busways generally. Further, save in limited circumstances, pedestrians and pedal cyclists are prohibited from using a busway.

The above is clearly not what is contemplated by the Proposed Scheme, which involves the provision of bus priority (through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements) as well as improved pedestrian and cycling infrastructure. Having regard to the nature of the development the subject matter of the NTA's applications (broadly described above), it is clear that in no way can the Proposed Scheme be construed as a "busway" within the meaning of section 44 of the 1993 Act (which means a public road or proposed public road rather than specific bus lanes for example), and that therefore the provisions of section 44 of the 1993 Act (and accordingly section 49 of the 1993 Act) are just not relevant to the development concerned.

Therefore, any suggestion by Reddy Charleton in its submission/objection that the Board must reject the proposed development or that it is ultra vires for the Board to further consider the NTA's applications with respect to the Proposed Scheme, are simply misplaced.

Further and in light of the above, there is simply no basis for a preliminary hearing into the statutory basis for the NTA's application for confirmation of the compulsory purchase order (as appears to be suggested in the submission/objection) given that the legislative basis for the application for confirmation of the compulsory purchase order under section 76 of and the Third Schedule to the Housing Act 1966 (as amended) and Part XIV of the 2000 Act, is clear.

- ii. The Proposed Scheme and CPO cannot be considered/approved at the same time.

The submission/objection made by Reddy Charlton on behalf of Mrs Allison Dwyer indicates that the "Board must address whether in fact to approve the scheme and that exercise must be undertaken first" and "[i]t is only following a consideration of the scheme as approved that the impact upon our client's property for the purpose of Section 76 of the Housing Act 1966 an then be determined".

As the Board will be aware, section 51(7)(b) of the Roads Act provides as follows:

"(7) (b) Where an application for approval under this section [being section 51 of the Roads Act 1993 (as amended) which is what has occurred here in relation to the Proposed Scheme] relates to a proposed road development, and

- i. *a scheme submitted to the Minister [now An Bord Pleanála] for approval under section 49, or*
- ii. *an application submitted to the Minister [now An Bord Pleanála] for a bridge order under the Act of 1946, or*
- iii. *a compulsory purchase order submitted to the Minister [now An Bord Pleanála] for confirmation [which is what has occurred here with this CPO],*

*relate wholly or partly to the same proposed road development, the Minister [now An Bord Pleanála] shall make a decision on such approval and on the approval of such scheme or the making of such bridge order or the confirmation of such compulsory purchase order **at the same time.**" (emphasis added)*

As the NTA's application for approval of the Proposed Scheme under section 51 of the Roads Act and the CPO submitted to the Board for confirmation "relate wholly or partly to the same proposed road development", the Board is therefore statutorily required to make its decisions at the same time. Therefore, it is not open to the Board to accede to the request made on behalf of the objector to first make a decision in relation to the application for approval of the Proposed Scheme under section 51.

Further, there are very many practical reasons including in relation to the efficient use of the decision maker's resources as to why it is entirely appropriate to deal with the section 51 application and the related application for confirmation of the CPO together. Indeed, this is also in ease of those who may wish to make an objection and/or submission both in writing and/or at any oral hearing that may be held in relation to the section 51 application and the application for confirmation of the CPO.

- iii. Scale of mapping

The requirements with respect to the CPO are set out in Section 76 of and the Third Schedule to 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). There is no express legislative requirement dictating what scale of mapping is to be used with respect to the CPO maps (i.e., deposit and server maps).

The NTA has proceeded on the basis that all of the mapping is of a suitable size and scale and it is noted that the drawing scales selected are in line with the scale adopted on other major infrastructural projects.

While it appears that the complaint with respect to the scale of mapping relates to the CPO maps, it is noted that with respect to the NTA's application under section 51 of the 1993 Act, that section 51(3)(aa) of the 1993 Act requires a map of a scale of not less than 1:1000 in a built-up area and 1:2500 in any other area and the NTA has complied with those requirements for all scheme design drawings.

iv. Incorrect information in Schedule to CPO

In preparing the schedule to the CPO a comprehensive property referencing exercise has been undertaken by the NTA. At the time of making the CPO on 18 April 2023, DCC were included in the occupiers column in relation to plot no. 1091(1).1e as they may well have been accessing this area. They were not included in the owners/reputed owners column or the lessees/reputed lessees column. Further, the purpose of including persons/entities in the CPO schedule is to ensure that all potentially relevant persons are notified. However, ultimately, in the event that the CPO is confirmed by the Board, and the NTA exercise its powers of acquisition pursuant to such a confirmed CPO, Notices to Treat will be served on all those included in the confirmed CPO and it will then be for persons to make a claim for compensation and establish that they have a compensable interest in the land in question.

v. Extinguishment of Rights

It is noted that it in the immediate vicinity of the 71 Camden Street Lower, it is proposed to provide a 2m public footpath, a 1.5m cycle track and on street parking/loading bays. This will require c. 0.6m of the private landing to be permanently acquired to provide a public footpath 2m in width in this particularly busy area for pedestrians. It is noted that c. 1.4m of private landing will be retained in front of 71 Camden Street Lower following completion of the works. It is noted that the owner can continue to utilise the retained portion of private landing for commercial purpose if so desired (c. 1.4m of private landing retained).

If the CPO is confirmed by the Board, this permanently acquired area will no longer be capable of being used by its current owners/lessees/occupiers as it is being currently used. Further, there is no requirement for the compulsory purchase order to provide for the extinguishment of the current use of Plot 1091(1).1e (as the submission/objection seems to suggest).

vi. Precise Proposals in respect of the land being acquired & Impact to retained land.

The scheme proposals in this area are defined in both the General Arrangement Drawings and Landscaping General Arrangement Drawings included in Volume 3 of the EIAR. Extracts of both drawings adjacent the property referred in this submission are presented below.

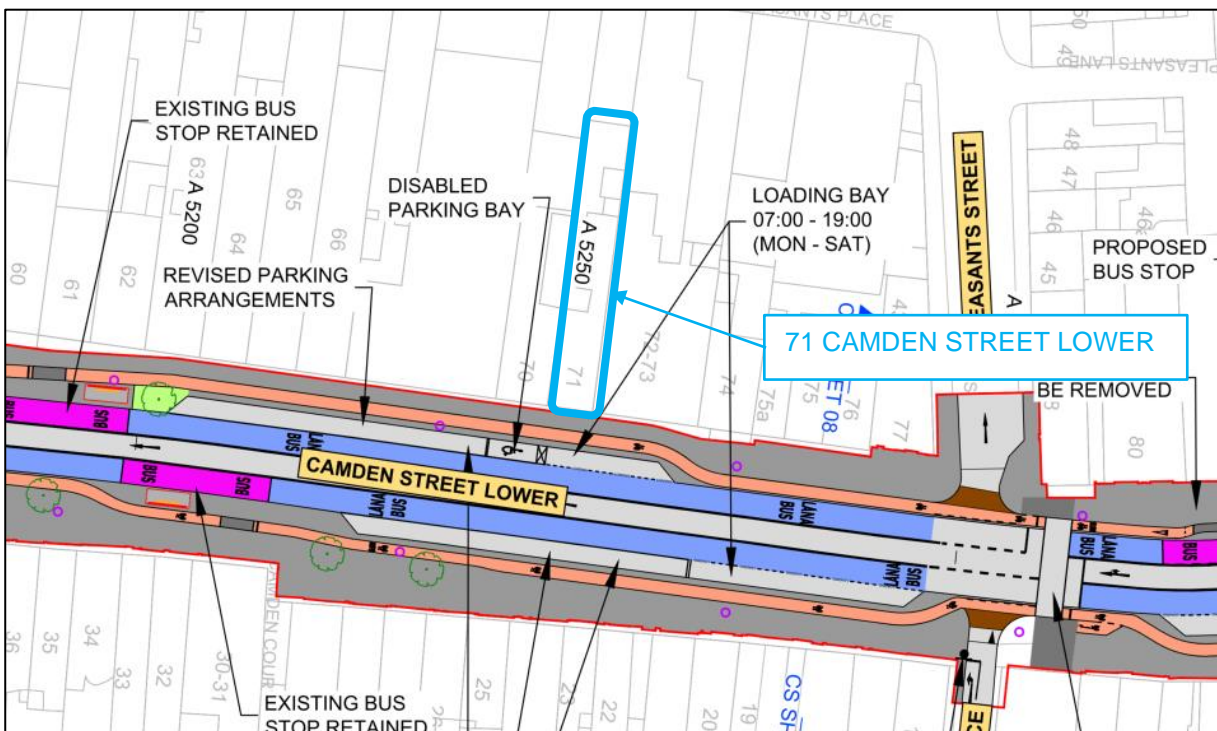


Figure 3.2.6 General Arrangement of Proposed Scheme adjacent to 71 Camden Street Lower (Sheet 16)

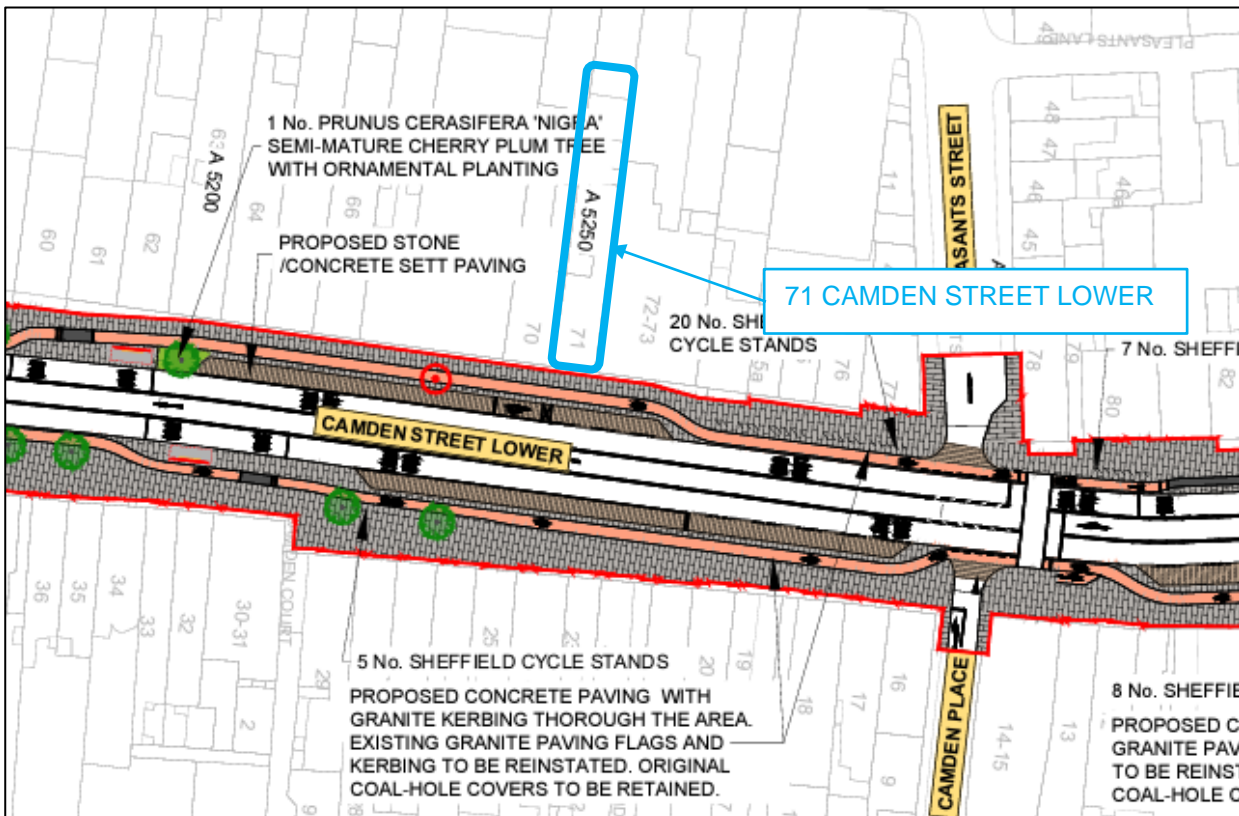


Figure 3.2.7 Landscaping General Arrangement of Proposed Scheme adjacent to 71 Camden Street Lower (Sheet 16)

The Proposed Scheme on Camden Street is described in section 4.5.4 of Chapter 4 of the EIAR:

On Camden Street Upper between Harcourt Road and Charlotte Way, one bus lane in each direction and one inbound general traffic lane is proposed, with a cycle track provided in each direction.

Between Charlotte Way and Cuffe Street it is proposed to provide bus lanes in each direction and a single outbound general traffic lane on Camden Street/Wexford Street. The outbound bus lane will not commence until just south of Montague Street due to the proximity of existing built form to the carriageway. Bus priority will be achieved by signal-controlled priority over this section. Under this proposal, inbound traffic will reroute to Harcourt Street to access Cuffe Street and beyond. 1.5m wide cycle tracks are proposed in this section in order to provide sufficient footpath space in this area of significant pedestrian activity.

It is noted that in the immediate vicinity of the 71 Camden Street Lower, it is proposed to provide a 2m public footpath, a 1.5m cycle track and on street parking/loading bays. This will require c. 0.6m of the private landing to be permanently acquired to provide a public footpath 2m in width in this particularly busy area for pedestrians. It is noted that c. 1.4m of private landing will be retained in front of 71 Camden Street Lower following completion of the works. For clarity, it is noted that the proposed works will not result in any impact on access to the property upon completion of the Proposed Scheme.

It is noted that the impact on businesses has been considered in the EIAR in Chapter 10 Population. The basis of the assessment in terms of land take is set out in section 10.2.4.1.2.

10.2.4.2.2.1 Land Take

This assessment considers direct land take on commercial properties / land and designated car parking. The impact on private landings, which can be used for a variety of reasons by businesses, has also been considered. This assessment has only considered commercial properties within the Proposed Scheme boundary that would be expected to experience direct land take. This assessment has followed the same approach as set out for community land take (Section 10.2.4.1.2.1). This assessment has only considered commercial businesses identified through a site walkover and desktop research (including businesses operating from residential properties where visible) and has not considered people choosing to work from home.

Large areas of commercial land, such as a business park or shopping centre, were assigned a high sensitivity. Derelict land or unoccupied buildings were assigned a low sensitivity. The magnitude of impact on commercial land has been determined by the degree of loss of the resource as per DMRB Guidance (Highways England 2020).

Where there will be substantial permanent land take from a commercial land holding, a high magnitude has been assigned. A low magnitude would be assigned where there will be minimal disruption to non-operational land or a car park.

The nature, significance, and duration of effect for each receptor has been assigned using the DMRB Guidance and EPA Guidelines (EPA 2022).

10.2.4.2.2.2 Accessibility

Commercial accessibility relates to the ability of users and employees to access commercial businesses. Changes in access to commercial business (i.e., changes in traffic flow, public transport services and walking and cycling provision) can significantly affect the level of usage experienced by commercial receptors, which may affect the ability of a business to operate successfully. The accessibility assessment has considered the commercial properties along the Proposed Scheme as well as those areas that are expected to experience positive and negative changes in traffic flows in the adjacent road network. Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR provides a list of all commercial businesses located along the Proposed Scheme and any businesses in the surrounding road network that are located on a road that is expected to experience a moderate or greater traffic impact from displaced traffic in the AM and PM peak hours (as identified in Chapter 6 (Traffic & Transport)) and has been referred to in the assessment section, where appropriate.

During the Construction Phase, temporary diversions may be required for short periods of time with designated detour routes in place and local access accommodated as required. Lane closures will be required during different Construction Phases which will reduce traffic capacity. Chapter 6 (Traffic & Transport) has qualitatively assessed the potential impacts on pedestrians, cyclists, bus users and private vehicles as a result of construction activity. The residual impacts assigned to each user type within Chapter 6 (Traffic & Transport) informs the accessibility assessment in this Chapter. As such, the impact on access to community receptors during construction has been reported by each user type and for each community area, in line with EPA Guidelines (EPA 2022).

Changes in access to commercial receptors as a result of the Operational Phase of the Proposed Scheme were considered in respect to the outcomes of a changed walking environment for pedestrians, cycling provision for cyclists, bus infrastructure for bus users, and changes to general traffic for private vehicles.

The community accessibility assessment has therefore drawn on the outcomes of the qualitative assessment metrics identified in the Chapter 6 (Traffic & Transport). These qualitative assessments were considered collectively in order to assess the significance of impacts on access during the Operational Phase. The assessment has been reported by community area and by different user types (bus users, cyclists, pedestrians, and private vehicles). However, where a road is expected to experience an impact to accessibility, moderate or above, this has been reported individually, alongside the commercial receptors that are likely to be impacted as a result. The nature, significance, and duration of effect for each receptor has been assigned using EPA Guidelines (EPA, 2022).

It is noted that businesses along Camden Street fall into the Harrington Street community areas which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). Section 10.2.1.1 of the EIAR sets this out in more detail.

The results of the assessment are presented in Section 10.4.4.2.2.

10.4.4.2.2.1 Land Take

The assessment of commercial land take during the operational phase assesses the permanent land take acquired and the potential impacts this has on commercial businesses. A total of 23 commercial receptors require permanent land take as result of the Proposed Scheme. Table 10.13 summarises the findings of the commercial land take assessment for the Proposed Scheme during the operational phase.

Table 10.13: Land Take Impacts on Commercial Receptors during the Operational Phase

Community Area	Nature of Effect / Number of Commercial Receptors Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Rathfarnham	0	0	2	0
Terenure	0	0	2	0
Harrington Street	0	0	19	0
Total	0	0	23	0

Table 10.13 shows that no commercial receptors are significantly impacted by permanent land take. 21 commercial receptors are expected to experience moderate land take impacts as a result of the Proposed Scheme, the majority of these are located in the Harrington Street Community Area. Overall, no permanent significant adverse land take effects have been identified on commercial businesses as result of the Proposed Scheme during the operational phase. Overall, the impact of land take across the impacted community areas Rathfarnham, Terenure and Harrington Street as a whole is considered Negative, Not Significant and Long-Term during the Operational Phase. All other community areas are predicted to have a Neutral, Not Significant and Long-Term impact by land take during the Operational Phase.

10.4.4.2.2 Accessibility

Commercial accessibility relates to the ability of users and employees to access commercial businesses. The nature of the proposed works means accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles. Chapter 6 (Traffic and Transport) assessed that people movement would significantly increase along the Proposed Scheme. It is therefore expected that all businesses along the Proposed Scheme will, to some extent, benefit from the increase in passing trade. Commercial businesses located along the Proposed Scheme are listed in Appendix A10.1 (Schedule of Commercial Businesses) in Volume 4 of this EIAR.

Pedestrians, Cyclists and Bus Users

The positive impacts of improved accessibility to pedestrians, cyclists and bus users will predominantly be experienced by community areas located along the length of the Proposed Scheme as these will be the locations of improved footpaths and cycle paths. The community areas that are expected to experience a Positive, Significant and Long-Term impact on pedestrians, a Positive, Moderate to Significant and Long-Term impact on cyclists and a Positive, Moderate to Very Significant and Long-Term impact on bus users, as a result of changes to access are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

A Neutral, Long-term impact is anticipated in the community areas of Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street as they are situated away from the Proposed Scheme, where no changes to pedestrian, cyclist or bus infrastructure is proposed.

Private Vehicles

Chapter 6 (Traffic and Transport) identified a Positive, Moderate and Long-Term impact from the reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from the redistribution of traffic in the surrounding road network. Chapter 6 (Traffic and Transport) did not identify any localised capacity impacts during the AM and PM peak period at any junctions in the surrounding network of the Proposed Scheme as a result of displaced traffic.

The impact on private vehicles passing through Terenure and Rathmines community area is considered Negative, Not Significant to Slight and Long-Term, this is due to the proposed introduction of the bus gates at Fergus Road on Templeogue Road and Lissenfield on Rathmines Road. The bus gates on are not expected to have a significant impact on private vehicles accessing commercial businesses along these stretches of roads due to the lack of on-street parking provision, however they will impact accessibility in terms of lengthened and re-routed journeys.

The impact on access to commercial businesses along the Proposed Scheme for private vehicles is considered to be Positive, Moderate and Long-Term. The community areas that are expected to experience this impact this are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

The impact on access to commercial businesses in the surrounding road network, a result of redistributed traffic, is considered to be Negative, Slight and Long-Term. The community areas that are expected to experience this impact as a result of changes in access to commercial businesses during the Operational Phase of the Proposed Scheme are those situated away from the Proposed Scheme, namely Knocklyon, Firhouse, Tallaght Tymon, Ballyroan, Churchtown and Francis Street.

A parking assessment has been undertaken in Chapter 6 (Traffic & Transport). No Significant impacts on parking were identified along the Proposed Scheme.

Furthermore it is noted that if the CPO is confirmed by An Bord Pleanála, 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.

vii. Impact during construction

Construction Programme

The submission suggested a construction duration of 3-5 years. Section 5.4 of Chapter 5 of the EIAR presents an indicative programme for the Proposed Scheme. This indicates an overall programme of c. 24 months to complete the scheme. To undertake the works, the scheme has been split into a number of sections as outlined in section 5.2 of the EIAR. Camden Street Lower is in Section 4b Grove Road to Cuffe Street. As presented in Table 5.2 of the EIAR, which is reproduced below, the estimated construction duration for this section is 8 months.

Table 5.2: Proposed Scheme Construction Programme

Section No.	Estimated Construction Duration	Approximate Length (m)	Year 1				Year 2			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	2 months	480								
Section 1b	6 months	Roundabout								
Section 1c	3 months	700								
Section 1d	7 months	735								
Section 1e	3 months	635								
Section 1f	6 months	915								
Section 1g	3 months	1490								
Section 2a	8 months	850								
Section 2b	9 months	460								
Section 2c	9 months	630								
Section 2d	6 months	710								
Section 2e	8 months	830								
Section 3a	6 months	630								
Section 3b	9 months	1275								
Section 4a	8 months	920								
Section 4b	8 months	880								
Section 4c	6 months	720								
Section 4d	3 months	400								

Access

The submission raises a concern about the safety while entering / exiting the property during construction. Within EIAR Volume 2 Chapter 5 Construction, Section 5.5.3 sets out that the Proposed Scheme “will be constructed in a manner which will minimise, as much as practicable, any disturbance to residents, businesses, and road users.”

In respect of the construction impact on parking and access, Section 5.5.3.2 sets out that “*When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and 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. 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.*”

Air Quality

Chapter 7 ‘Air Quality’ of Volume 2 of the EIAR considers the potential air quality impacts associated with both the Construction and Operational Phases of the Proposed Scheme. Section 7.1 ‘Introduction’ briefly outlines the assessment process and noted the following:

During the Construction Phase, the potential air quality impacts associated with the development of the Proposed Scheme have been assessed. This included construction activities such as utility diversions, road carriageway / cycleway / footway resurfacing and kerb road realignments. Construction traffic construction access routes are also assessed as part of the study area for this phase of the works.

In terms of construction impacts, section 7.4.2.3 of Chapter 7 provides the construction phase predicted change in and impact on pollutant concentrations. The significance of the changes in the concentration of each of the ambient receptors has been determined in the context of the TII significance criteria (TII 2011).

- As shown on figure 7.6 of Volume 3 of the EIAR, the receptors along Camden Street Lower will experience a negligible to moderate beneficial impact in terms of the annual mean NO₂ concentration.
- As shown on figure 7.7 of Volume 3 of the EIAR, the receptors along Camden Street Lower will experience a negligible impact in terms of the annual mean PM₁₀ concentrations.
- As shown on figure 7.8 of Volume 3 of the EIAR, the receptors along the Camden Street Lower will experience a negligible impact in terms of the annual mean PM_{2.5} concentration.

Overall, Section 7.4.2.3 states that in accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Construction Phase traffic emissions are overall neutral and short-term.

Section 7.5.1.1 of Chapter 7 outlines the dust mitigation measures during the construction phase 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 works will be regularly inspected for soiling associated with the construction activities and cleaned as necessary;
- Material handling systems and 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 7.5.1.2 also outlines the following in relation to construction traffic:

In terms of construction traffic impacts, the Proposed Scheme will have a generally neutral impact on air quality, with some slight beneficial impacts. Due to worst-case scenario modelling where in reality the works will be short-term and temporary in nature, the impact on air quality will not be significant. Therefore, no specific Construction Phase mitigation or monitoring measures are required.

Noise

Chapter 9 of the EIAR considers the Noise and Vibration impacts of the Proposed Scheme in the construction and operation stages.

Table 9.1 of EIAR Chapter 9 Noise and Vibration specifically identifies Camden Street as a noise sensitive location: *“The key NSLs are predominately residential NSLs, which are located between 5m and 20m east and west of the Proposed Scheme as it travels between R114 Rathmines Road Lower, R114 Richmond Street South, R114 Camden Street and R114 Aungier Street.”*

Section 9.6.1 of Chapter 9 (Noise & Vibration) sets out the residual noise and vibration impacts of the Proposed Scheme stating that: *“Once the various mitigation measures are put in place, noise impacts associated with the Construction Phase will be Negative, Not Significant to Slight to Moderate and Temporary during all key Construction Phases during daytime periods.”*

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 in Volume 2 of the EIAR (and are also summarised in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR).

Section 9.5.1.1 of EIAR Volume 2 Chapter 9 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. The mitigation measures outlined below for the Construction Phase have also been included in the Construction and Environmental Management Plan (CEMP) in Appendix A5.1 in Volume 4 of this EIAR.

These measures will ensure 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); and
- The best means practicable, including proper maintenance of plant and equipment, will be employed to minimise the noise produced by on site operations.

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 EIAR Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 of Chapter 9 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. 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 9.30), other construction activities will be scheduled to not result in significant cumulative noise levels.

In summary the NTA is satisfied that 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.

Impact on business

As set out in Chapter 5 Construction of the EIAR, the Proposed Scheme will be constructed in a manner which will minimise, as much as practicable, any disturbance to residents, businesses, and road users. Section 5.5.3.2 states:

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on street and off-street parking provision, and 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. 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.

It is noted that the impact on businesses during construction has been considered in the EIAR in Chapter 10 Population.

It is noted that businesses along Camden Street fall into the Harrington Street community areas which are informed by the Central Statistics Office (CSO) 2016 Census parish boundaries (CSO 2016a). Section 10.2.1.1 of the EIAR sets this out in more detail.

The results of the assessment are presented in Section 10.4.3.2.2.

The assessment of commercial land take during the construction phase assesses the temporary land take acquired and the potential impacts this has on commercial businesses. This assessment also considers the impact on private landings, this is the area in front of businesses that may be used for a variety of reasons including outdoor seating, selling produce or parking. A total of 23 commercial receptors are impacted by temporary land take as a result of the Proposed Scheme. Table 10.10 summarises the findings of the commercial land take assessment for the Proposed Scheme.

Table 3.2.1 Land Take Impacts on Commercial Receptors during the Construction Phase (Table 10.10 from EIAR Chapter 10)

Community Area	Nature of Effect / Number of Commercial Receptors Affected			
	Imperceptible / Not Significant	Slight	Moderate	Significant
Rathfarnham	0	0	2	0
Terenure	0	0	2	0
Harrington Street	0	0	19	0
Total	0	0	23	0

Table 10.10 shows no commercial receptors are expected to experience a significant land take impact during the construction phase. 23 commercial receptors, the majority, located in Community Area of Harrington Street (Camden Street Lower), are expected to experience moderate temporary land take impacts.

During construction, the existing footpath and some green space along the north-west extents of Bushy Park will be temporarily required to facilitate construction. This area of Bushy Park is used on a weekly basis for the Bushy Park Market. This has been included in the assessment of Bushy Park, which is expected to experience and Negative, Moderate and Short-Term impact.

Overall, the impact of land takes across the impacted community areas as a whole (Rathfarnham, Terenure and Harrington Street) is considered Negative, Not Significant and Short-Term during the Construction Phase. All other community areas are predicted to have a Neutral, Not Significant and Short-Term impact by land take during the Construction Phase.

10.4.3.2.2 Accessibility

Commercial accessibility relates to the ability of users to access commercial businesses as customers or employees. The nature of the Proposed Scheme means that accessibility impacts will differ based on the mode of travel used. The assessment, similar to the community accessibility assessment (Section 10.4.3.1) has separately assessed accessibility impacts on pedestrians and cyclists, bus users and private vehicles. As the Construction Phase mitigation measures presented in Chapter 5 (Construction) and the residual impacts presented in Chapter 6 (Traffic & Transport) are the same for each mode of travel, the impacts on commercial accessibility are the same as those reported in Section for community accessibility.

A parking assessment has been undertaken in Chapter 6 (Traffic and Transport). No significant impacts on parking along the Proposed Scheme route were identified.

viii. Air Quality and noise during operation

Air Quality

In terms of operational impacts, section 7.4.3.3 of Chapter 7 provides the operational phase predicted change in and impact on pollutant concentrations in 2028 as a result of the Proposed Scheme. The significance of the changes in the concentration of each of the ambient receptors has been determined in the context of the TII significance criteria (TII 2011).

- As shown on figure 7.3 of Volume 3 of the EIAR, the receptors along Camden Street Lower will experience a negligible to substantial beneficial impact in terms of the annual mean NO₂ concentration.
- As shown on figure 7.4 of Volume 3 of the EIAR, the receptors along Camden Street Lower will experience a negligible impact in terms of the annual mean PM₁₀ concentrations.
- As shown on figure 7.5 of Volume 3 of the EIAR, the receptors along the Camden Street Lower will experience a negligible impact in terms of the annual mean PM_{2.5} concentration.

Overall, it is noted in section 7.4.3.3 that in accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Operational Phase traffic emissions pre-mitigation are overall neutral and long-term.

It is noted in section 9.4.4.1.4 of Chapter 9 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. Section 7.5.2 of Chapter 7 outlines the following regarding mitigation measures during the Operational Phase: As the Proposed Scheme will have a generally neutral impact on air quality, no specific Operational Phase mitigation measures are recommended.

Noise

The submission raises a concern about the proximity of traffic resulting in an increase in noise.

The submission notes that it is concern that buses will be very close to the premises. However, the Proposed Scheme at this location proposes the installation of a new cycle track facility between the footpath and parking/traffic lanes. This would in fact mean that proposed bus lane would be 2.3m further away from 71 Camden Street Lower than in the current situation.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 for significant impacts as a result of traffic redistribution onto the surrounding road network due to temporary traffic management measures. These are defined as roads with a traffic noise level above a daytime noise level of 55 dB LAeq,16hr and an increase in noise level greater than 3 dB.

Table 9.37 lists these roads and Camden Street Lower is not included in Table 9.37.

Section 9.5.2.1 summarises the change in road traffic noise in the operation phase as follows: *“The impact assessment has determined that traffic noise impacts across the study area for the Proposed Scheme results in a positive to neutral imperceptible to slight short and long-term direct impacts along the Proposed Scheme and negative imperceptible to moderate short- and long-term indirect impacts along the surrounding road network. 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.”*

While specific noise mitigation measures are not required, as discussed in Section 7.2.3.1 of the Preliminary Design Report (provided as part of the Supplementary Information), during future design stages, the selection of appropriate pavement materials will take a number of factors in to account including consideration of the most appropriate materials for noise, permeability, colour, texture, and best value for money in terms of environmental impact, durability, maintainability, repairability, recyclability and cost.

Furthermore, as discussed in Section 9.4.4.1.1.4 of Chapter 9, 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 airborne noise 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.

3.3 CPO-03 – Anita Mac Aleavey– 53 Terenure Road East

3.3.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the laneway west of 53 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 1.4m and a maximum width of temporary acquisition of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.3.1.

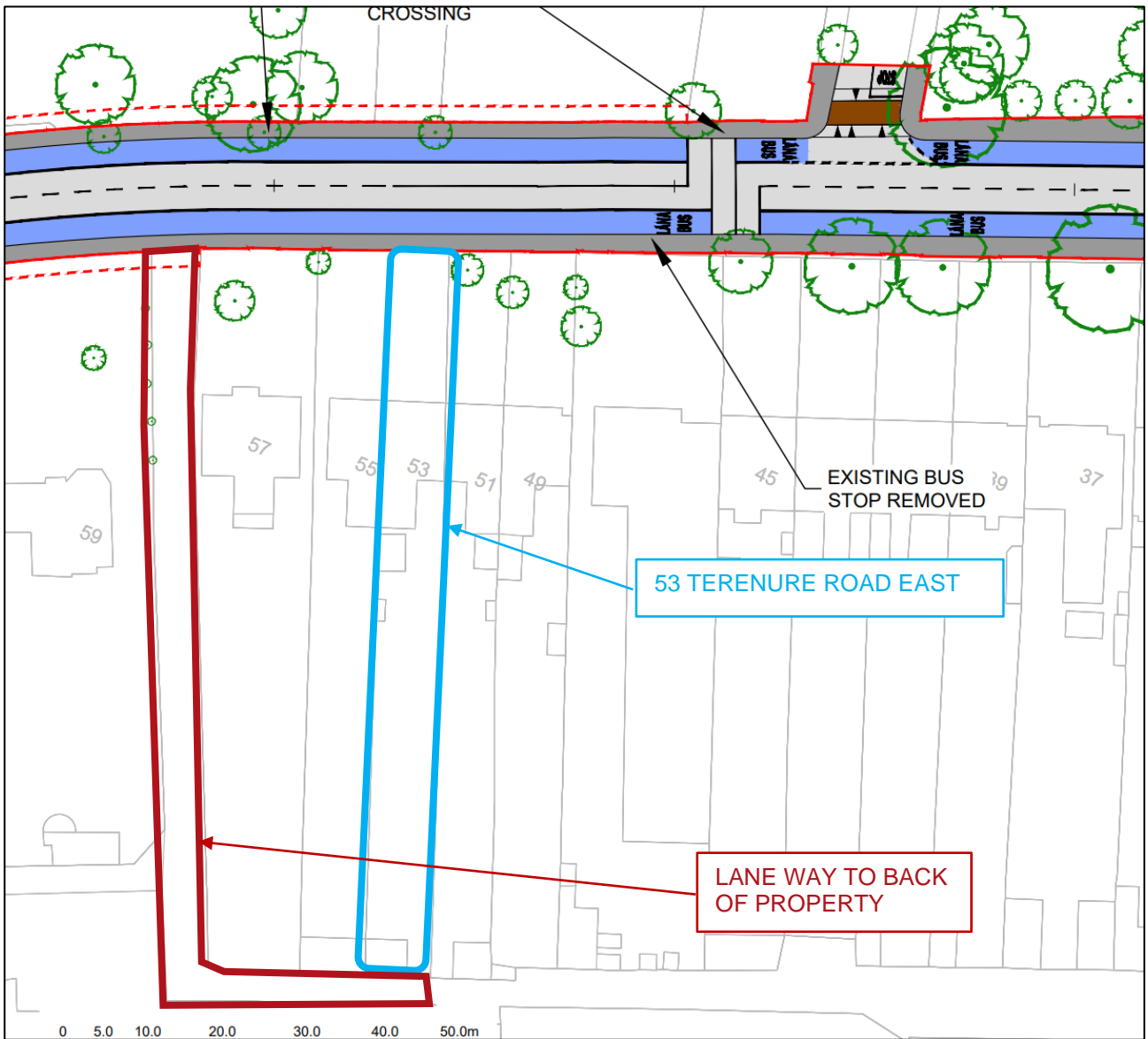


Figure 3.3.1 General Arrangement of Proposed Scheme at laneway adjacent to 53 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.3.2.

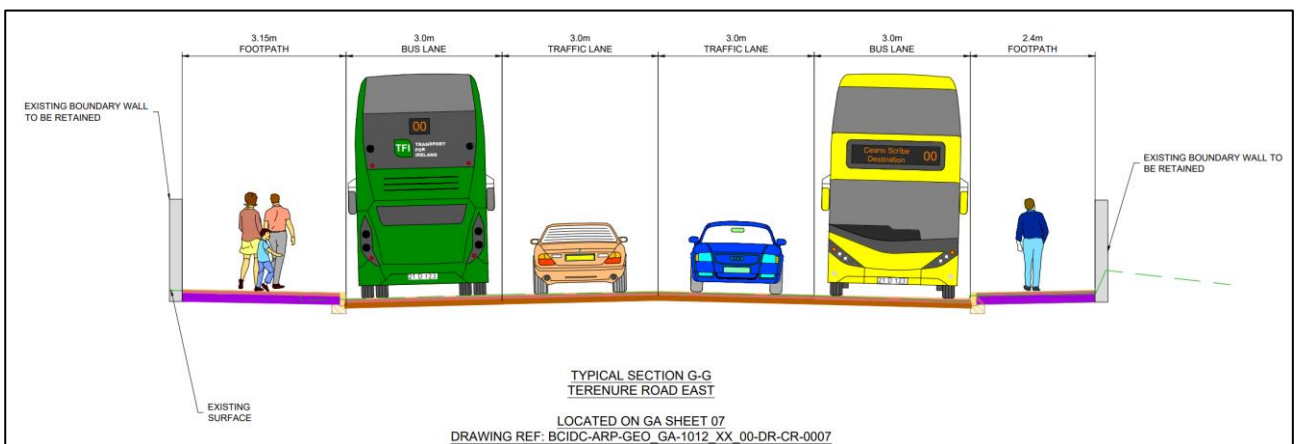


Figure 3.3.2 Typical Cross-Section at laneway adjacent to 53 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at the laneway west of 53 Terenure Road East is shown in Figure 3.3.3.

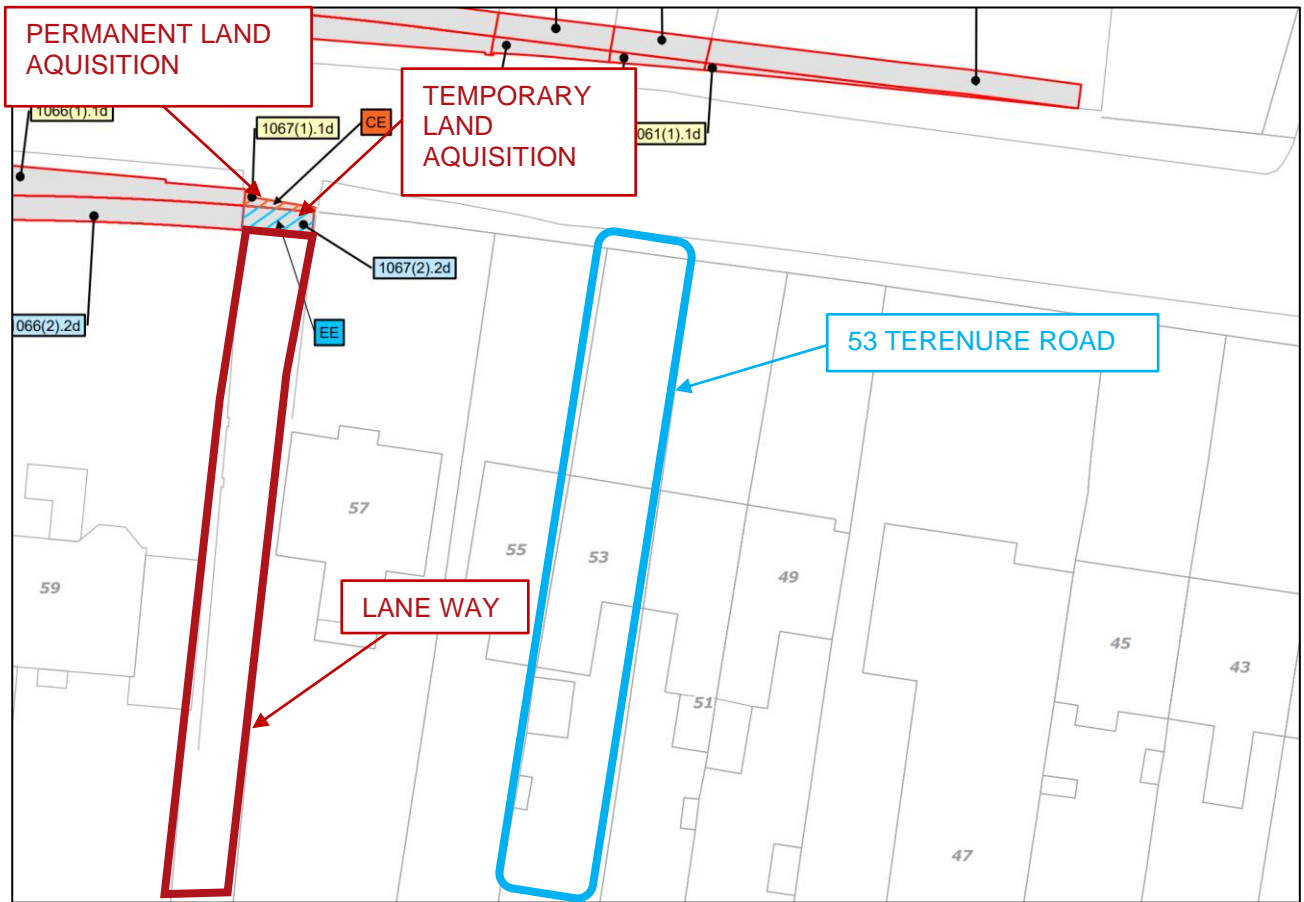


Figure 3.3.3 Extract from CPO Deposit Maps at laneway adjacent to 53 Terenure Road East



Figure 3.3.4 Proposed Land Acquisition lines at laneway adjacent to 53 Terenure Road East

The existing laneway frontage is shown in Figure 3.3.5.



Figure 3.3.5 Existing frontage at laneway and 53 Terenure Road East (Image source: Google)

3.3.2 Summary of the Points of Objection to the CPO by Anita Mac Aleavey

This submission objected to CPO for the reasons summarised in the following section.

- i. Removal of trees

The submission raised concerns about the implications on wildlife from the proposed tree removal on Terenure Road East.

- ii. Increase in noise pollution

The submission is concerned that the proposed CPO on Terenure Road East will bring the road closer to residential properties, in combination with removal of trees it will contribute towards an increase in noise pollution.

- iii. Removal of bus stop

The submission queried the reasoning behind relocation of bus stop number 1165 on Terenure Road East.

3.3.3 Responses to the Points of Objection

- i. Removal of trees

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.

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. Section 3.3.2.2.2.1 assessed eight scheme sub-options (TVR 1 to TVR 8) for the section along Rathfarnham Road and Terenure Road East to Rathgar Village. A Multi-Criteria Analysis (MCA) which evaluated the route options under the assessment criteria of; Economy; Integration; Accessibility & Social Inclusion; Safety and Environment was undertaken for the eight scheme sub-options. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section.

The MCA concluded that sub-option TVR3 “was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character.”

Impacted trees have been presented on the Volume 3 – Figures, 5. Landscaping General Arrangements and further described Appendix A17.1 Arboricultural Impact Assessment. The Proposed Scheme has been specifically designed to retain mature trees where practicable.

The impact of the Proposed Scheme on habitat loss and loss of breeding / resting site has been assessed and are reported in Chapter 12 Biodiversity of Volume 2 of EIAR. Section 12.4.3.5.1.1 states that “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”.

ii. Increase in noise pollution

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.” Table 9.39 lists these roads and Terenure Road East is not identified, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

iii. Removal of bus stop

As noted in Section 4.6.5.5 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 position and number of bus stops have been evaluated as part of a bus stop assessment.

- The 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 bus interchange stops;
- Where ideally there is space for a bus shelter;
- Location in pairs, ‘Tail to Tail’ opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footpath 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 of route, dropping 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 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.

The Bus Stop Review Report notes the following in relation to the existing bus stops on Terenure Road East at this section of the Proposed Scheme:

Bus Stop 1165

Stop to be amended? Yes - stop to be moved 70m East. Closer to Junction

Reason for decision: This location brings the stop closer to Rathgar Village thus providing better access to the village and improving potential for interchange with Route 80

The proposal to relocate bus stop 1165 aligns with the bus stop location principles namely:

- It is located closer to the Rathgar Village and the junction with Rathgar Avenue, Orwell Road and Highfield Road increasing accessibility from the large residential catchment along, and accessed off, these roads as well as providing more direct access to the village centre. It is noted that while there is a preference for a bus stop to be located on the exit side of a junction, as there is no bus lane on the exit side in this instance it is preferable to locate the stop at it's proposed location;
- It is located closer to pedestrian crossings (30m) facilitating safe access to the southern side of Terenure Road East – the existing stop is c. 110m from the nearest controlled crossing point;
- It minimises distance for a passenger interchanging between the A Spine and Route 80.
- It facilitates better stop spacing with 415m between it and the prior stop, 350m between it and the subsequent bus stop – existing distance between stops is 367m (between stop 1164 and 1165) and 362m (between stop 1165 and 1166);
- The footpath width is available at proposed location is approximately 0.7m greater than at the current location.

3.4 CPO-04 – Ann Kennedy– 62 Terenure Road East

3.4.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 62 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 0.5m and temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.4.1.

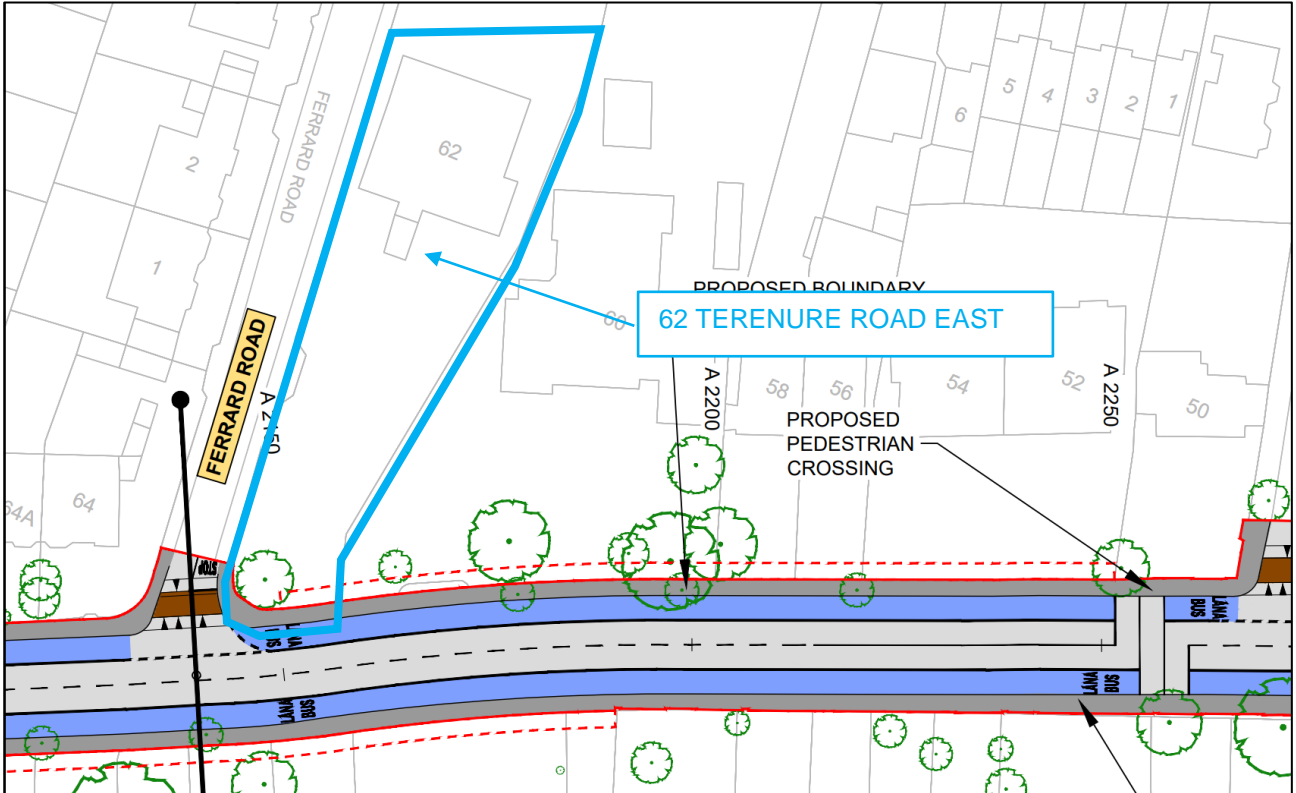


Figure 3.4.1 General Arrangement of Proposed Scheme adjacent to 62 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIA, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.4.2.

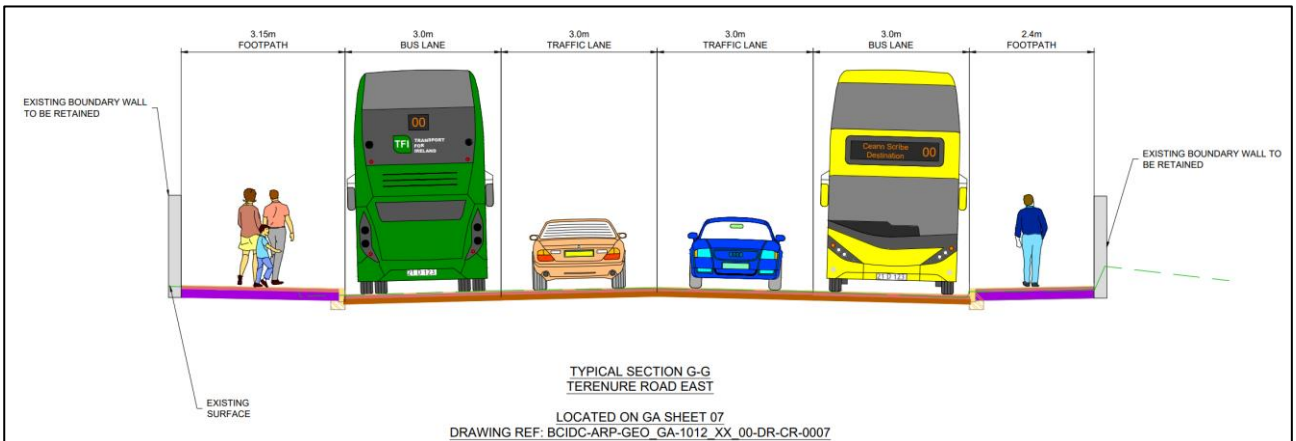


Figure 3.4.2 Typical Cross-Section adjacent to 62 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 62 Terenure Road East is shown in Figure 3.4.3.

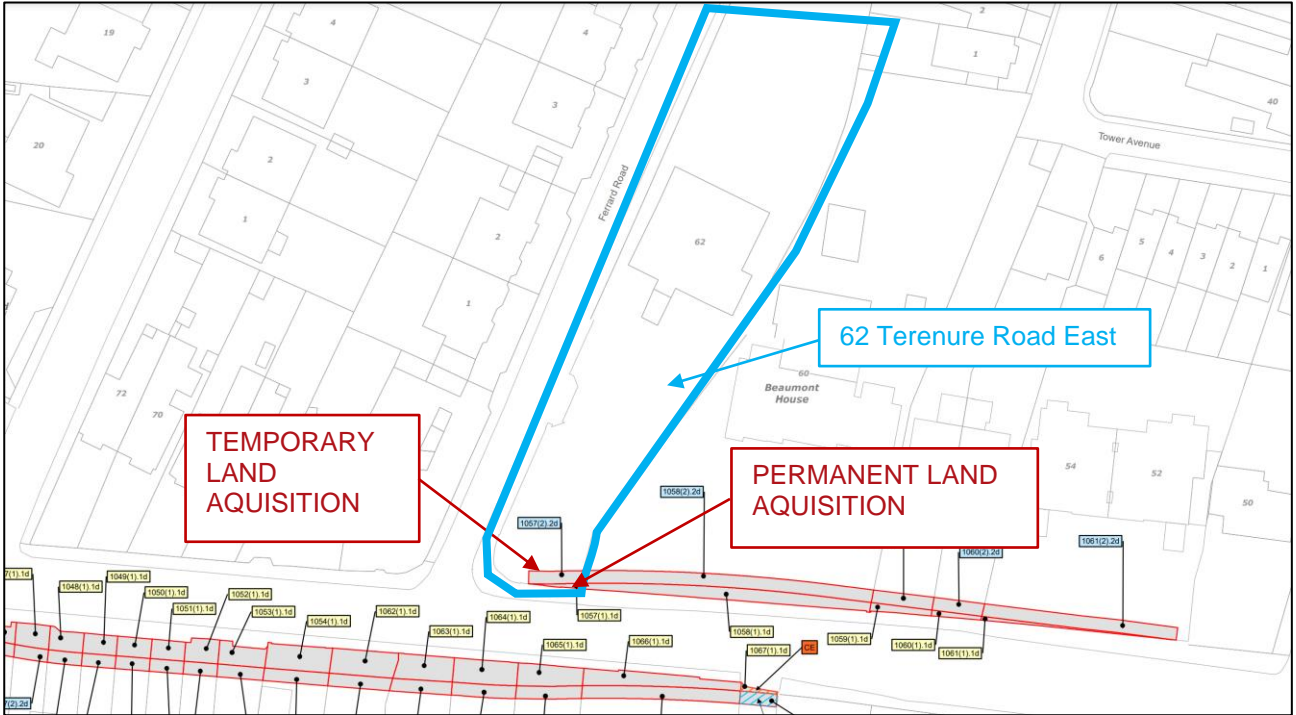


Figure 3.4.3 Extract from CPO Deposit Maps adjacent to 62 Terenure Road East



Figure 3.4.4 Proposed Land Acquisition lines adjacent to 62 Terenure Road East

The existing property frontage is shown in Figure 3.4.5.



Figure 3.4.5 Existing frontage of 62 Terenure Road East (Image source: Google)

3.4.2 Summary of the Points of Objection to the CPO by Ann Kennedy

This submission objected to CPO for the reasons summarised in the following section.

- i. Deterioration of visual appeal of front garden

The submission raises a concern about the deterioration of the visual appeal of the front garden outside 62 Terenure Road East, resulting from the temporary and permanent acquisition. The particular concern relates to the proposed modification of the granite stone wall and metal gate, increase in air pollution and removal of vegetation.

- ii. Existing bus priority signal is adequate

The submission suggests that bus priority can be achieved by using bus priority signals at pinch points. Stating that bus priority signals are already in place on Templeogue and Terenure Road East outbound.

3.4.3 Responses to the Points of Objection

- i. Deterioration of visual appeal of front garden

The proposed permanent acquisition will result in the loss of between 0m to 0.9m at the roadside of the front garden, with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. Upon completion of the permanent works, the temporary land take area will be handed back to the property owner. The edge of the proposed carriageway (bus lane) will be 1.5m to 2.3m closer to the residence than the edge of the existing general traffic lane.

Reinstatement of property frontage including boundary walls, gates, railings 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.

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report, which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there are no trees proposed to be removed at 62 Terenure Road East.

Chapter 17 of the EIAR has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme.

Section 17.4.4.1.2 presents the assessment for the Terenure Road North to Charleville Road Section:

*The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimised through design iteration, Terenure Road East will be widened in parts which will require permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.*

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

*The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.*

EIAR Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality as a result of the Proposed Scheme's operation are neutral and long-term.

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 EIAR Volume 2 Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

- ii. Existing bus priority signal is adequate

A detailed response to this item is presented in Section 2.4.2.

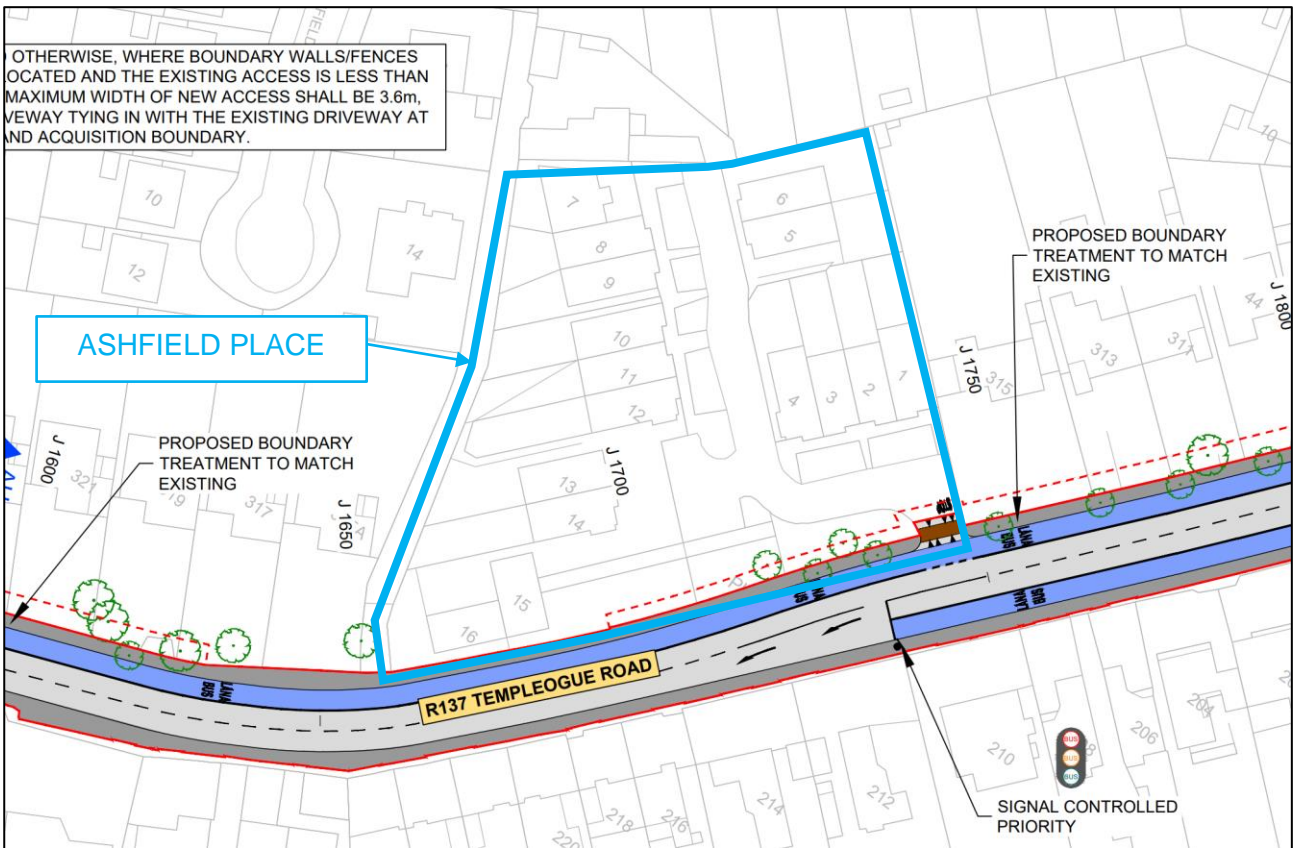
3.5 CPO-05 – Ashfield Place Management CLG – Ashfield Place, Templeogue Road

3.5.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus priority and pedestrian facilities along the corridor.

Between Ashfield Place and the Templeogue Tennis Club, it is proposed to provide a bus lane and a general traffic lane in each direction. It is proposed to utilise a limited amount of land-take within this section to achieve the desired cross-section. Immediately in front of Ashfield Place and to the east, it is proposed to manage outbound priority through the use of signal-controlled priority due to physical constraints. To accommodate this cross-section, land acquisition will be required along the Templeogue Road. Land acquisition is proposed on the northern side of the Templeogue Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at Ashfield Place, with a maximum width of land to be permanently acquired of approximately 2m. The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.5.1.



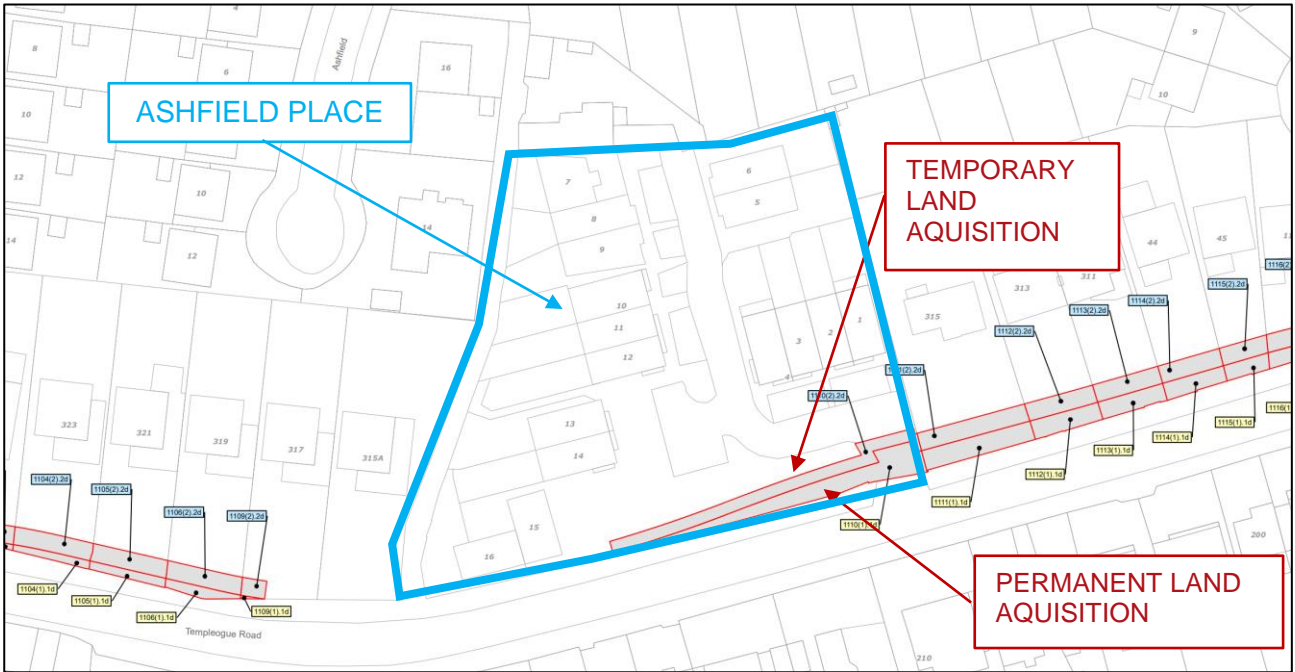


Figure 3.5.3 Extract from CPO Deposit Maps adjacent to Ashfield Place



Figure 3.5.4 Proposed Land Acquisition lines adjacent to Ashfield Place

The existing property frontage is shown in Figure 3.5.5.



Figure 3.5.5 Existing frontage of Ashfield Place (Image source: Google)

3.5.2 Summary of the Points of Objection to the CPO by Ashfield Place CLG

This submission objected to CPO for the reasons summarised in the following section.

- i. Yellow box outside entrance to Ashfield Place

The submission raised a concern that there is no yellow box shown in the design outside the entrance to Ashfield Place suggesting that this may hinder access to the residential area.

- ii. Adherence to 30km/h

The submission raised a concern that drivers will not observe the proposed 30km/h speed limit proposed for the section of Templeogue Road outside Ashfield Place and have requested that a speed camera is installed to enforce the speed limit.

- iii. Survey of services under the playground

The submission highlighted that there may be pipes and an attenuation tank under the playground and request that an appropriate survey is complete prior to commencing any work.

- iv. Boundary replacement

The submissions requests further clarity on the proposed boundary wall / fence replacement at Ashfield Place.

- v. Accessibility to amenities and impact on local business.

The submission raised a concern that the Proposed Scheme may negatively impact accessibility to local villages and damage local businesses.

- vi. Noise and air pollution

The submission raised a concern that slower traffic through Templeogue Road may contribute to noise and air pollution in the area.

3.5.3 Responses to the Points of Objection

- i. Yellow box outside entrance to Ashfield Place

It is noted that there is currently no yellow box provided at the entrance to Ashfield Place. While a bus priority signal is proposed nearby, it is not considered necessary to include a yellow box at this location. However, should an issue with access be identified in future, a yellow box may be considered appropriate and could be installed by the local authority. It is noted that the Proposed Scheme would not preclude this being introduced.

ii. Adherence to 30km/h

The NTA acknowledges the comments raised in relation to adherence to the proposed reduced speed limit. Enforcement of road traffic laws, including speed limits is a matter for An Garda Síochána.

iii. Survey of serviced under the playground

The NTA acknowledges the comment made with respect to the presence of underground infrastructure within the Ashfield Place grounds. As noted in Section 5.5.1 of Chapter 5 Construction the EIAR, prior to commencement of construction works the preparations will *include the need for additional investigative survey works (such as ground investigation and slit trenching to confirm the location of existing utilities) to supplement the information in the Construction Contract documents. Any such additional investigative survey works that could be deemed to be construction activities will follow the requirements of the CEMP, where necessary.*

Additionally, as set out in 5.5.2.1, *Condition surveys of properties adjacent to the Proposed Scheme that the works have the potential to affect will be undertaken prior to works commencing. Liaison with impacted landowners will be carried out in advance of commencement of boundary works to properties.*

iv. Boundary replacement

Reinstatement of property frontage including boundary walls, gates, railings and landscaping will be on a like-for-like basis, meaning that the current boundary treatment will be reinstated as it currently is. 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.

v. Accessibility to amenities and impact on local businesses

The aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on Templeogue Road and surrounding area, 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, including on Templeogue Road, by providing significantly improved sustainable transport options. It is therefore expected that the improvements to the sustainable transport options on Templeogue Road and surrounding areas will promote more frequent local trips to nearby amenities, such as Templeogue and Terenure Village.

EIAR Volume 4 Chapter 9 Appendix A10.2 The Economic Impact of the Core Bus Corridors, concludes that businesses along the corridors are not likely to see reduction in footfall, desire likely reductions in general traffic along the Proposed Scheme. Section 2 states that *“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”.*

Section 3 of the Economic Impact Report states that there is likely to be increased commercial opportunities and improved sales for the majority of impacted businesses. Section 3 states *“Evidence suggests that those travelling to shops via car spend on average more per trip, as can be seen in the graph to the left. However due to the frequency of visits by bus, bike or walking, the average total spend is much higher for this cohort. As such, local businesses could benefit financially from greater access to customers through these modes of transport.”*

vi. Noise and air pollution

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.” Table 9.39 lists these roads and Templeogue Road is not included, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

3.6 CPO-06 – Bernard Colman and Mary Muldoon– 48 Rathfarnham Road

3.6.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing Rathfarnham carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. This will require localised land acquisition on the eastern boundaries to the existing carriageway.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.8m and temporarily acquired of 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.6.1.

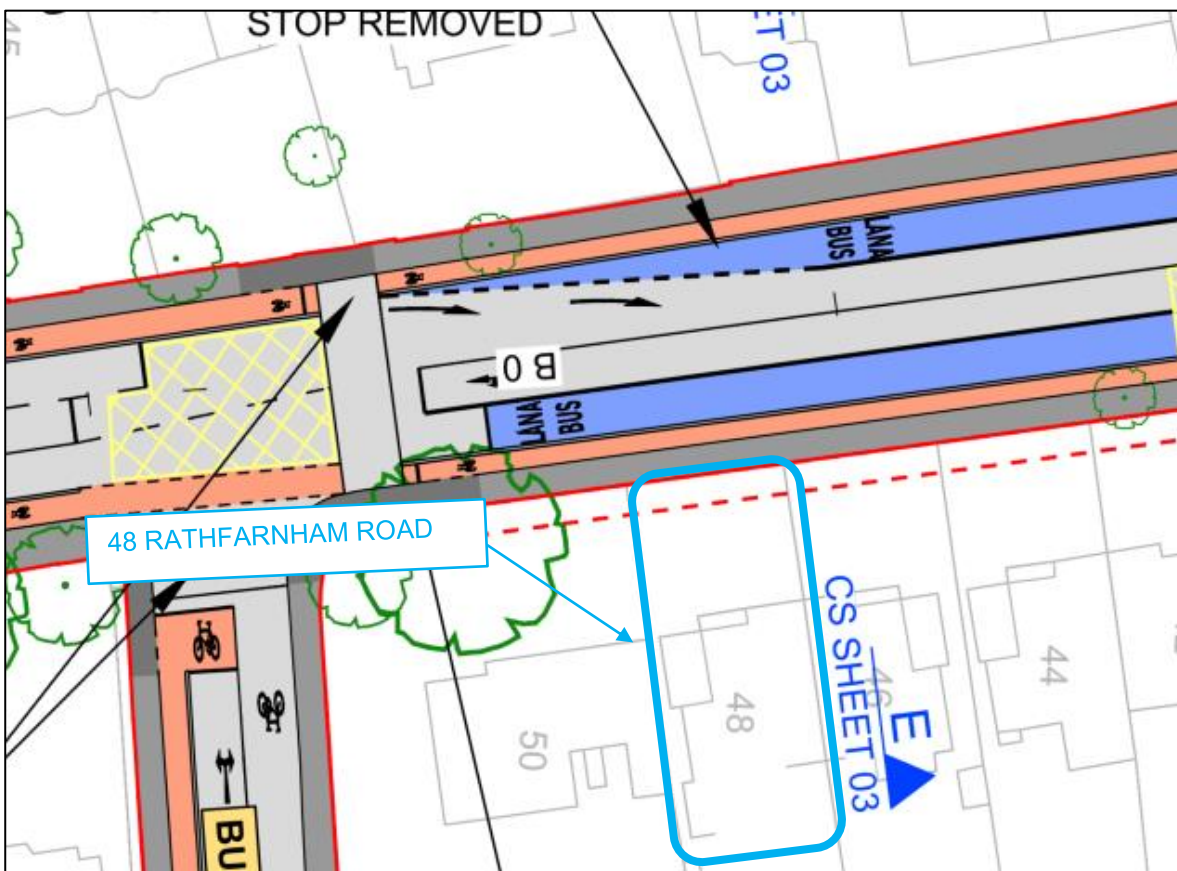


Figure 3.6.1 General Arrangement of Proposed Scheme adjacent to 48 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.6.2.

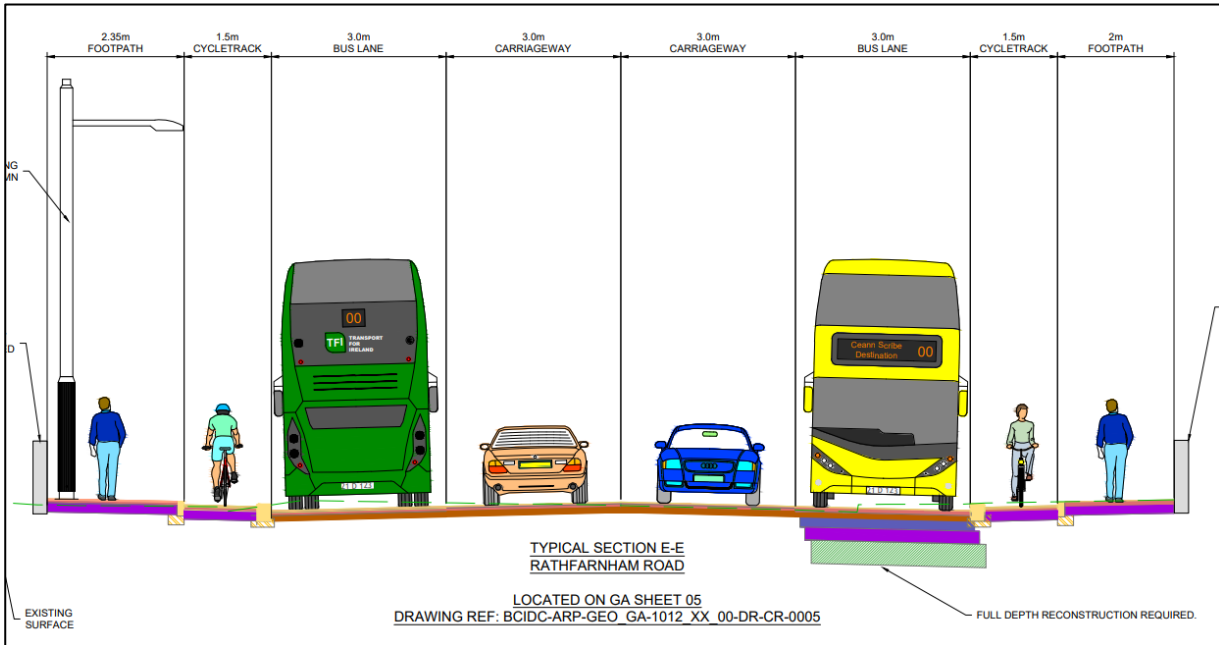


Figure 3.6.2 Typical Cross-Section adjacent to 48 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 48 Rathfarnham Road is shown in Figure 3.6.3.

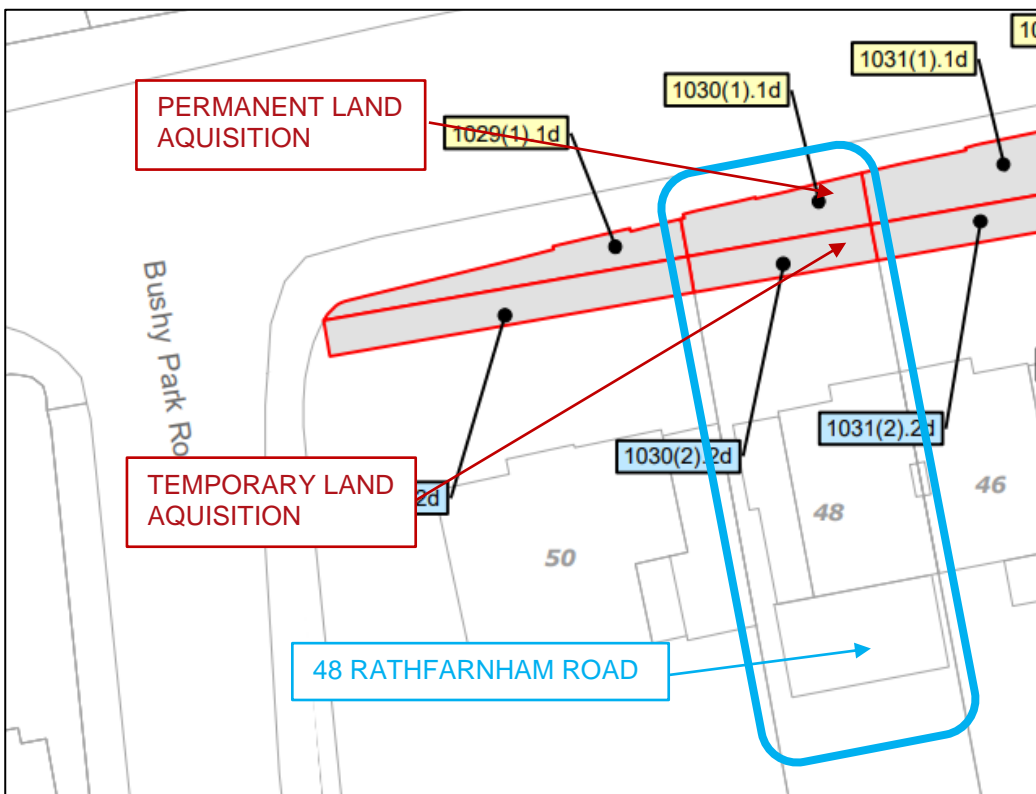


Figure 3.6.3 Extract from CPO Deposit Maps adjacent to 48 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.6.4.



Figure 3.6.4 Proposed Land Acquisition lines adjacent to 48 Rathfarnham Road
The existing property frontage is shown in Figure 3.6.5.



Figure 3.6.5 Existing frontage of 48 Rathfarnham Road (Image source: Google)

3.6.2 Summary of the Points of Objection to the CPO by Bernard Colman and Mary Muldoon

This submission objected to CPO for the reasons summarised in the following section.

i. Inadequate Cumulative Impact Assessment

The submission noted that the cumulative impact of the Proposed Scheme and the broader BusConnects project are insufficiently described and assessed in the EIAR. It stated that the Proposed Scheme should be considered in conjunction with the other BusConnects projects, in particular the Kimmage to City Centre Bus Corridor Scheme and the Belfield/Blackrock to City Centre Core Bus Corridor Scheme.

ii. Legal principles related to compulsory acquisition

The submission suggests that the NTA has not complied with the legal requirements to the compulsory acquisition of private property as identified by the Supreme Court in *Rein v Industrial Development Agency* [2015], stating that the proposed road layout as presented, and the proposed compulsory acquisition has not been justified or necessitated by the need for improved public transport infrastructure.

iii. Benefits of proposals in this area do not justify the CPO

The submission states that the savings represented by the 300-meter section between Bushy Park Road to Terenure Road North represents a fraction of the expected time savings and does not warrant the acquisition of land in this area. The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications acquiring the land. The submission noted that the Proposed Scheme will contribute towards noise and air pollution and deprive the residents of the use and enjoyment of land proposed for temporary and permanent acquisition.

iv. Changes to work patterns due to the COVID-19 pandemic

The submission states that the modelled data did not take into account adjusted hybrid working practices following the COVID-19 epidemic.

v. Inability to turn a car within the driveway

Shortening the driveway will inhibit the resident's ability to turn their car around in the driveway and will require them to reverse across into the new road cross-section.

- vi. Proposed Scheme Out of Character for Urban Village

The submission suggests that the Proposed Scheme is unsuitable for an urban village.

3.6.3 Responses to the Points of Objection

- i. Inadequate Cumulative Impact Assessment

A detailed response to this item is presented in Section 2.1.1.

- ii. Legal principles related to compulsory acquisition

The submission raises concerns regarding the NTA's compliance with the legal prerequisites for the compulsory acquisition of private property, as delineated by the Supreme Court in the case of *Rein v Industrial Development Agency* [2015]. It contends that the proposed road layout and the intended compulsory acquisition lack justification or necessity in light of the requirements for enhanced public transport infrastructure. In 2015, the Supreme Court articulated the following principles for the exercise of statutory powers related to land acquisition:

- a) That the authority 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.

Regarding principles a and b, the NTA is empowered by section 44 of the Dublin Transport Authority Act 2008 (as amended) to compulsorily acquire land for the purpose of establishing public transport infrastructure. Thus, the NTA possesses the requisite statutory authority to execute the Compulsory Purchase Order (CPO).

Regarding principal c, the NTA has delineated the necessity of the Proposed Scheme in EIAR Volume 2 Chapter 2 Need for the Proposed Scheme. This section elaborates on the transport requirements of the Proposed Scheme at both regional and local levels. Furthermore, in Section 2.3 of Chapter 2, the document expounds on how the Proposed Scheme aligns with various national and regional policies, including but not limited to the National Development Plan (2021-2030), the Transport Strategy for the Greater Dublin Area (2016-2035), the Climate Action Plan (2023), and the Climate Action and Low Carbon Development (Amendment) Act 2021, often referred to as the 2021 Climate Act.

Section 2.1 outlines the need for the Proposed Scheme stating that:

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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks.

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.

Section 2.2.1.4 of Chapter 2 states:

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.

Rathfarnham Road was identified as a primary cycle route (9A), in the GDA Cycle Network Plan 2013, this is further described in the extract below from section 2.2.1.4:

Extracts from the GDA Cycle Network Plan 2013 are shown in Image 2.1 and Image 2.2, which highlights the Proposed Scheme in the context of the planned cycle network. In the GDACNP 2013, there were two primary cycle routes (Cycle Route 9A and Cycle Route 10) and a number of secondary cycle routes (including Routes 9B, S04 and 10) identified along the Proposed Scheme

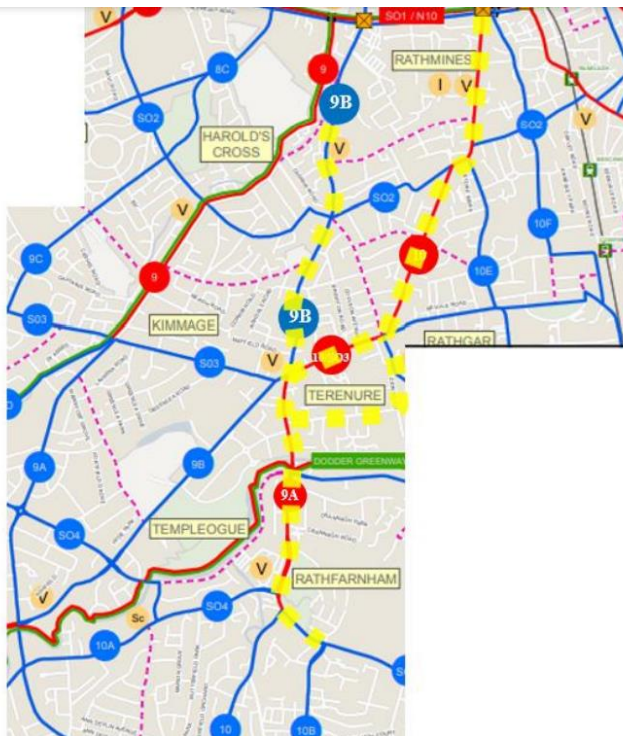


Figure 3.6.6 Extract from 2013 GDA Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

In preparing the GDA Transport Strategy (2022 – 2042) the NTA 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). The Proposed Scheme, including the section along Rathfarnham Road is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network is needed to address the deficiencies in the very limited segregated cycling infrastructure currently available on this corridor.



Figure 3.6.7 Extract from 2022 Greater Dublin Area Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

EIAR Volume 2 Chapter 2 Need for the Proposed Scheme, Section 2.2.1.4 states:

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 Core Bus Network Report focused on the overall existing bus service network and identified locations where the bus network is operating sub-optimally. The network is dominated by a radial network to/from the Dublin City Centre, supplemented by low frequency orbital and local bus routes serving larger destinations outside of the City Centre core.

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.

The Core Bus Network study included a recommended route from Terenure/Rathfarnham to the City Centre on the basis of the need to serve significant demand along this entire corridor, and the need to address service deficiencies (lack of bus priority and associated journey time reliability) for a high level of scheduled bus services already operating along this corridor.

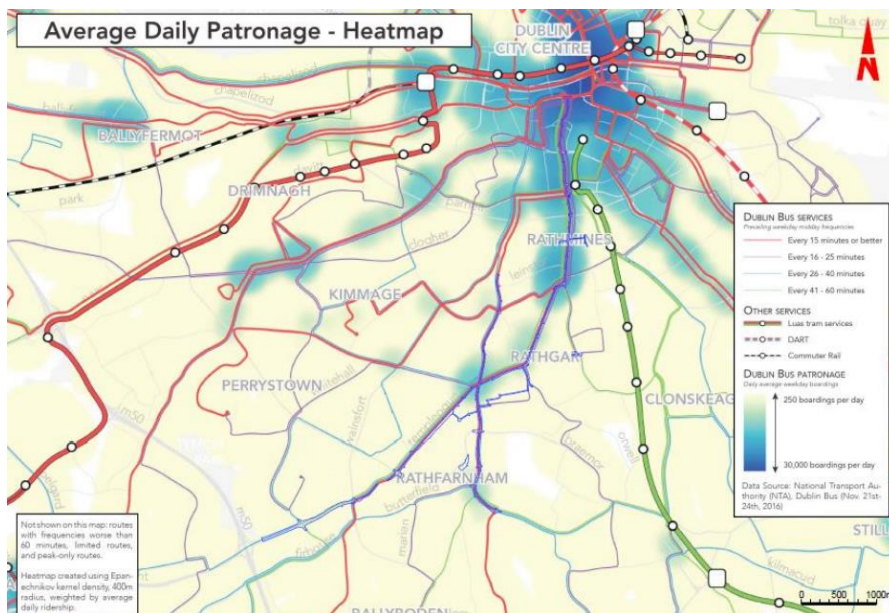


Figure 3.6.8 Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal ((NTA 2019)). Proposed Scheme Highlighted in Blue for Information

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.

Article 5(1)(d) of Directive 2011/92/EU as amended by Directive 2014/52/EU (“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’.

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;

2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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
7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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 Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 of the Rathfarnham to City Centre Corridor (Rathfarnham Road – Terenure Road East – Rathgar Road – Rathmines Road Lower) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR and illustrated in Image 3.13 (reproduced below).

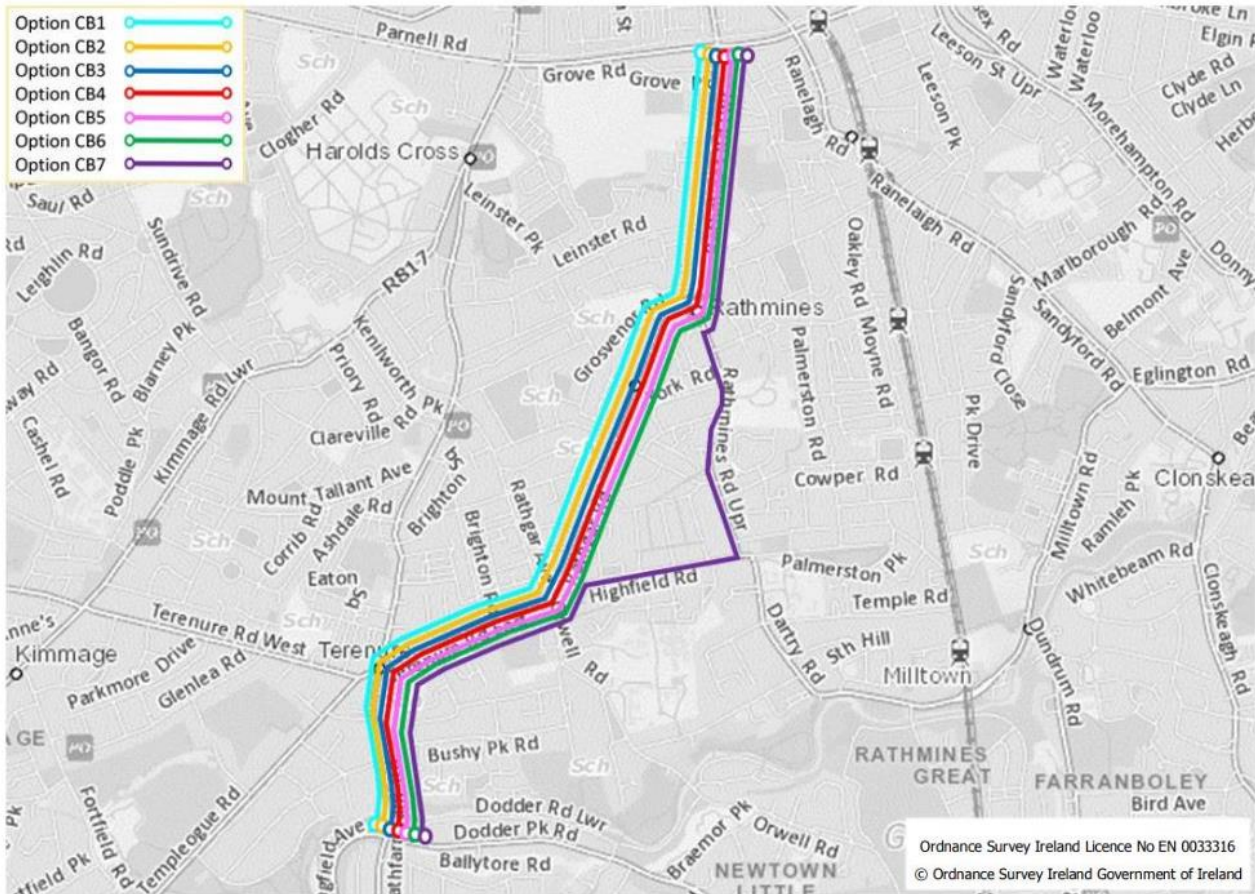


Image 3.13: Section 2 Route Options extracted from 'Rathfarnham to City Core Bus Corridor CBC Feasibility Study and Options Assessment Report'

Figure 3.6.9 Extract from EIAR Chapter 3 Image 3.13

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above.

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village);*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

Section 4.5.2.1 of the EIAR describes the general overview of the Proposed Scheme at Section 2: *Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road*. At the section adjacent to 48 Rathfarnham Road, between Bushy Park Road and Terenure Road North it is proposed to provide 1.5m wide cycle tracks, bus lanes and traffic lanes in both directions. To accommodate these new bus lanes on this section of Rathfarnham Road, it is proposed to acquire land from adjacent properties on the eastern side of Rathfarnham Road.

Further details on the options assessment carried out in this area is presented in Section 2.3.2 of this report.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

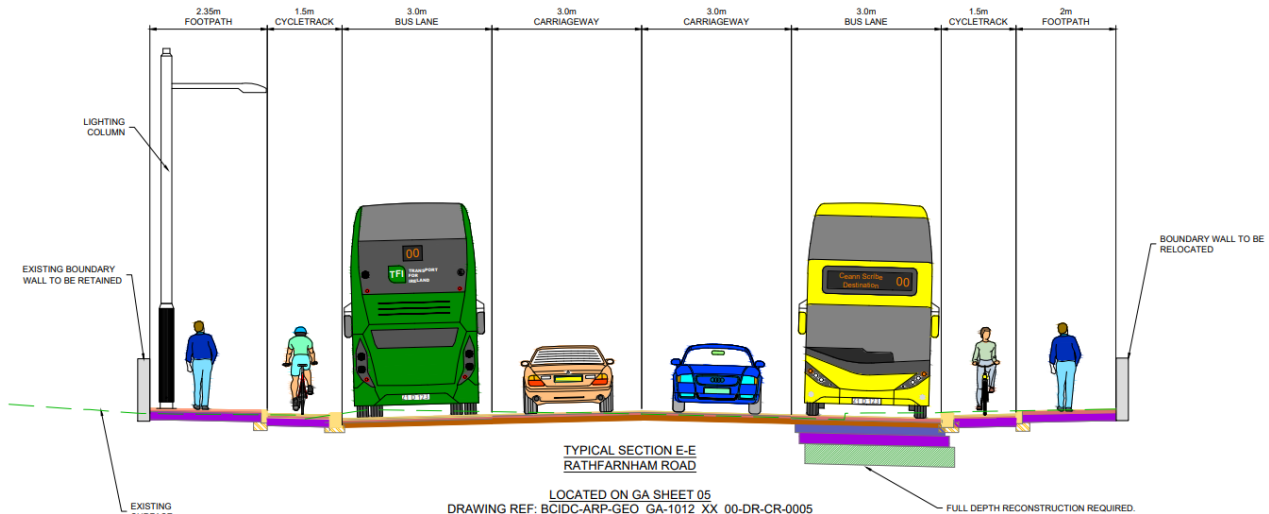


Figure 3.6.10 Typical Cross-section of Proposed Scheme between Bushy Park Road and Terenure Cross

Concerning principle d, at the specific area outside 48 Rathfarnham Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the absolute minimum width of 1.8m for footpaths and desirable width of 2m for cycle tracks. At this location a 2m footpath has been provided. However, as noted in table 4.3 of Chapter 4 of the EIAR, a reduced width cycle track of 1.5m is provided through this area in order to minimise impacts on adjacent properties while also meeting the scheme objectives. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

iii. Benefits of proposals in this area do not justify the CPO

The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications of acquiring land.

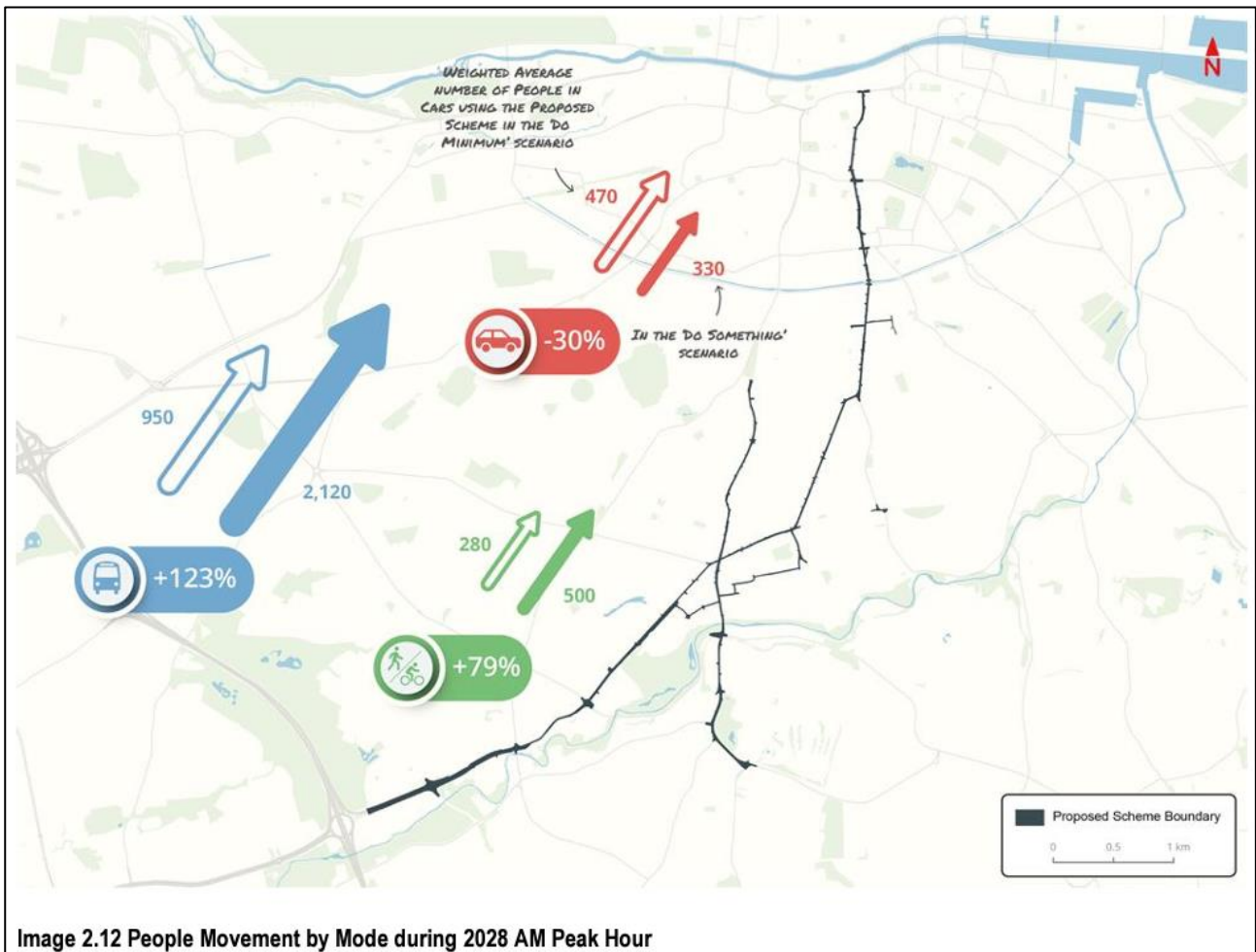
As stated in Section 2.1 of Chapter 2 of the EIAR, the Proposed Scheme aims to meet growth demand by:

“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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.”

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.



In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.

In terms of bus journey time savings, Section 6.4.6.3 of Chapter 6 of Volume 2 of the EIAR notes the following:

*A micro-simulation model assessment has been developed and network performance indicators established for bus operations along Proposed Scheme. The results of the assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 12% 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, 7.4 hours of savings in 2028 and 6.2 hours in 2043, when compared to the Do Minimum combined across all buses. Overall it is anticipated that the improvements to the network performance indicators for bus users along the Proposed Scheme will have a **Positive, Very-Significant and Long-term effect**.*

In relation to Air Quality, EIAR Volume 2 Chapter 7, section 7.5.3 states that the Proposed Scheme will have a generally neutral impact on air quality. Noting that vehicle emissions technology will improve, and the Irish vehicle fleet will continue to evolve to the extent that vehicle emissions impacts associated with the Proposed Scheme are anticipated to be short-term. City wide traffic management measures and proactive encouragement of low emissions vehicle uptake would accelerate these improvements.

Assessment Topic	Potential Impact (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
Road traffic impacts on local human receptors	Neutral, Long-term	Neutral, Long-term
Road traffic impacts on local ecological receptors	Positive, Slight, Long-term	Positive, Slight, Long-term
Regional air quality	Neutral, Long-term	Neutral, Long-term

Figure 3.6.11 Summary of Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring (EIAR Volume 2 Chapter 7 Table 7.38)

In relation to Noise and Vibration, EIAR Volume 2 Chapter 9 Noise and Vibration, section 9.5.2.1 states that:

The impact assessment has determined that traffic noise impacts across the study area for the Proposed Scheme results in a positive to neutral imperceptible to slight short and long-term direct impacts along the Proposed Scheme and negative imperceptible to moderate short- and long-term indirect impacts along the surrounding road network. 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 relation to noise and vibration occurring from the construction phase, section 9.6.1 states that:

During evening periods, noise impacts associated with the Construction Phase will be Negative, Moderate to Significant and Temporary for the majority of scheduled works within 15m of the works and Negative, Not Significant beyond 15m. At distances between 15m to 20m from road widening / utility diversion works, there is the potential for Negative, Moderate to Significant and Temporary impacts. At distances within 10m of road widening / utility diversion works, the noise impact will be Negative, Significant to Very Significant and Temporary. As per DMRB Noise and Vibration (UKHA 2020), in cases of moderate to major magnitude of impacts, the duration of works determines the overall significance rating.

As part of the mitigation measures, the durations advised in the DMRB Noise and Vibration will be followed, where feasible, to reduce overall significance effects (i.e. scheduling works to occur for periods of less than 10 days / nights over 15 consecutive day / night periods and less than 40 days over six consecutive months where significant effects are identified). Once the CNL and duration of works is considered in line with the DMRB Noise and Vibration, all key Construction Phase residual noise levels will be Not Significant, whilst meeting the scheme objectives set out in Chapter 1 (Introduction).

EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling, pedestrian, and bus infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawm Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.6.12 Significance of Effects for Pedestrians Impact during Operational Phase (EIAR Chapter 6 table 6.27)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.6.13 Cycling Impact during Operational Phase (EIAR Chapter 6 Table 6.28)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Bus Infrastructure

Table 6.29, in section 6.4.6.1.3.3 of Chapter 6 outlines the changes to bus stop infrastructure along Section 2 of the Proposed Scheme, with reference to the number and percentage of bus stops that provide each facility in the Do Minimum and Do Something scenarios.

Bus Stop Facility	Do Minimum		Do Something		Comment
	No. of Stops	Percentage of Stops	No. of Stops	Percentage of Stops	
RTPi	2	11%	15	100%	RTPi added to all bus stops.
Timetable information	15	83%	15	100%	It is proposed that all bus stops provide real-time information.
Shelter	11	61%	12	80%	Shelter to be provided at all but three bus stops which are limited by spatial constraints.
Seating	10	55%	12	80%	Seating to be provided at all but three bus stops which are limited by spatial constraints.
Accessible Kerbs	16	89%	15	100%	Full provision.
Indented Drop Off Area	0	0%	0	0%	All proposed bus stops will be located inline within bus lanes.
Total Stops	18		15		Three fewer than the Do Minimum.

Figure 3.6.14 Section 2 - Overview of Change in Bus Facilities (EIAR Chapter 6 Table 6.29)

As set out in 6.4.6.1.3.2:

The contents of Table 6.29 indicate that there are significant improvements to the bus stop facilities along Section 1 of the Proposed Scheme. It is proposed that all bus stops will be provided inline within dedicated bus lanes along the entirety of the corridor, meaning that buses will not incur delay when setting off after picking up passengers. Improvements in the provision of real-time information, shelters, seating, and accessible kerbs at the bus stops throughout Section 2 of the Proposed Scheme are assessed as providing an overall positive impact for bus passengers.

All proposed facilities have been designed in accordance with BusConnects Preliminary Design Guidance which has been developed with cognisance to the relevant accessibility guidance. Taking into account the provision of bus lanes, pedestrian accessibility and bus stop facilities outlined within this section, Table 6.30 below outlines the bus qualitative assessment along Section 2 of the Proposed Scheme.

Table 6.30: Section 2 – Bus Qualitative Impact during Operational Phase

Section	Chainage	Description of Impact	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Avenue to R137 Terenure Road North	A000 - A1850	<ul style="list-style-type: none"> Three fewer stops than in the Do Minimum. Bus stops are located in more convenient locations for communities and access to signalised crossings. Slight improvements to bus stop facilities throughout. 	Medium	Medium	Positive Significant

As indicated in Table 6.30, the Proposed Scheme improves the quality of existing bus infrastructure along Section 2 of the Proposed Scheme, which will provide long term benefits for bus users. The impact for this section of the Proposed Scheme is Medium Positive. The sensitivity of environment rating is predominately categorised as 'medium.' This results in a **Positive, Significant and Long-term** effect on this section.

Further detail on the benefits of the Proposed Scheme are presented in Section 2.1.1.

- iv. Change to work patterns due to the COVID-19 Pandemic

A detailed response to this item is presented in Section 2.1.1.

- v. Inability to turn a car within the driveway

The permanent acquisition will result in the loss of up to approximately 2.8m of lands with an additional 2m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be approximately 1.5m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including pillars and entrance between the pillars will be at least 8.5m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar to the current scenario and that this should not hinder the ability to park within the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

vi. Proposed Scheme Out of Character for Urban Village

Chapter 17 of the EIAR has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme.

17.4.4.1 presents an assessment of the Proposed Scheme in terms of Impact on Townscape and Streetscape Character. Section 17.4.4.1.2 presents the assessment for the Nutgrove to Terenure Road North Section:

*The sensitivity of this section is **high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used.*

*There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is **very high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Very Significant and Short-Term** becoming Neutral, Moderate and Long-Term.*

Section 17.4.4.1.2 presents the assessment for the Terenure Road North to Charleville Road Section:

*The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimised through design iteration, Terenure Road East will be widened in parts which will require permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.*

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.

The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.

3.7 CPO-07 – Brendan Timbs– 63 Rathfarnham Road

3.7.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.2m and a maximum width of land to be temporarily acquired of approximately 6.2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.7.1.

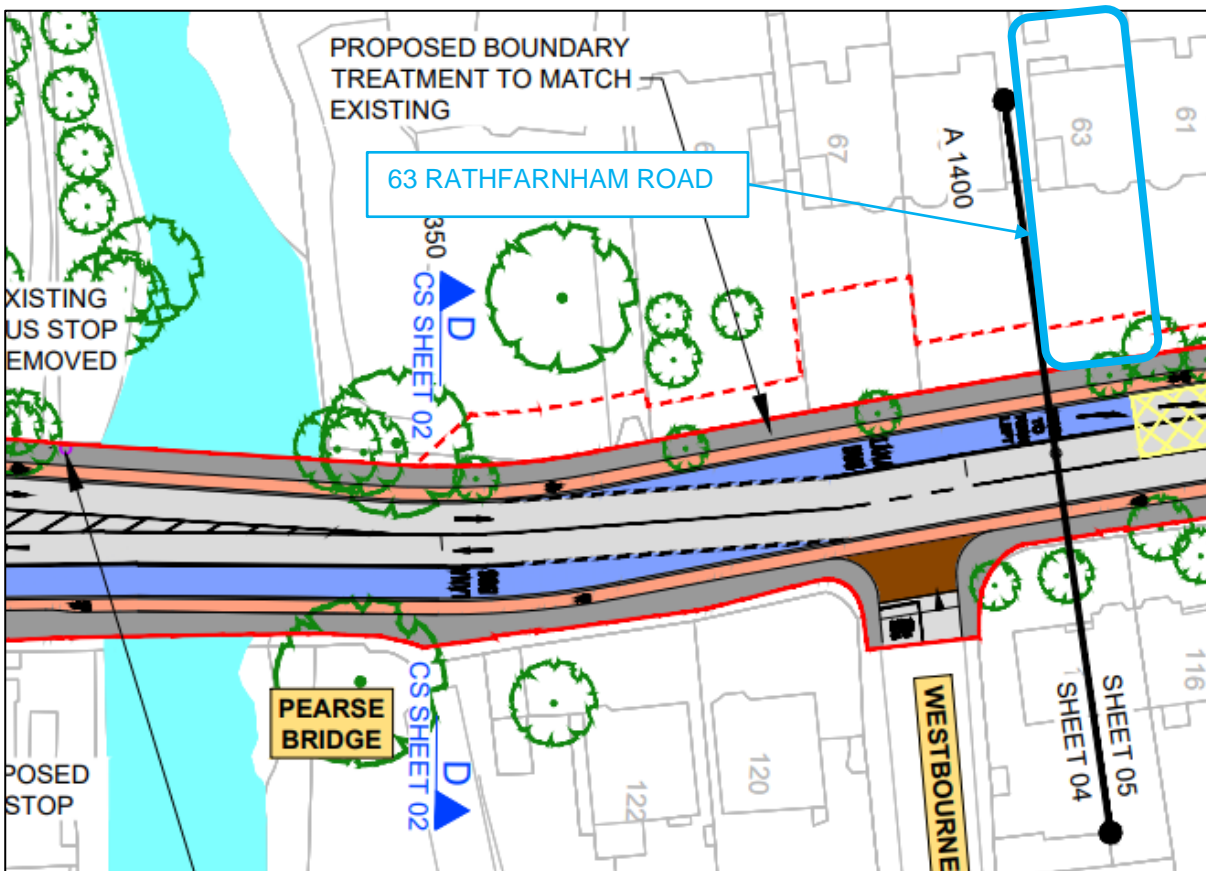


Figure 3.7.1 General Arrangement of Proposed Scheme adjacent to 63 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.7.2.

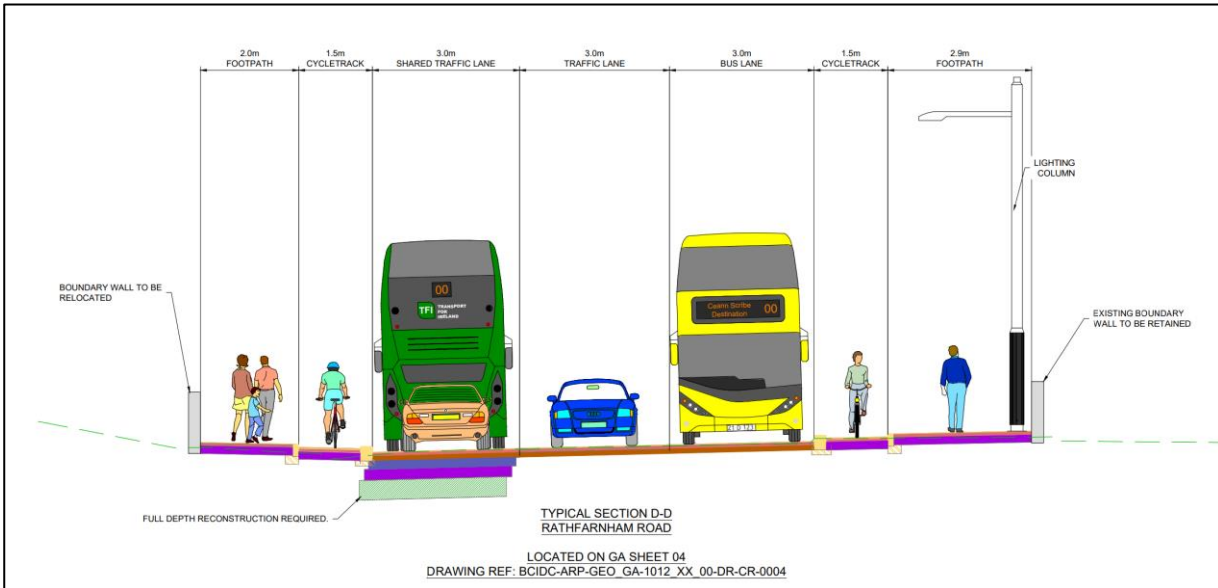


Figure 3.7.2 Typical Cross-Section adjacent to 63 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 63 Rathfarnham Road is shown in Figure 3.7.3.

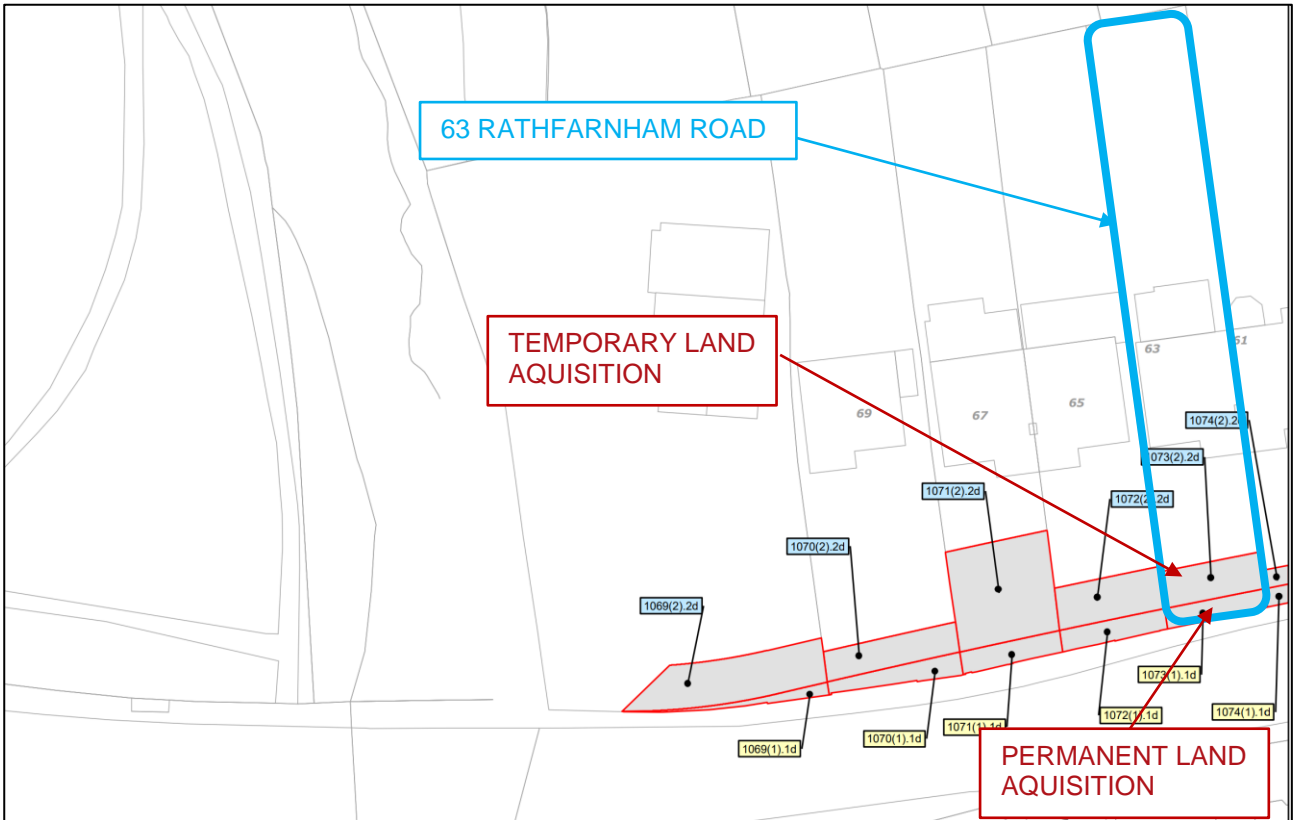


Figure 3.7.3 Extract from CPO Deposit Maps adjacent to 63 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.7.4.

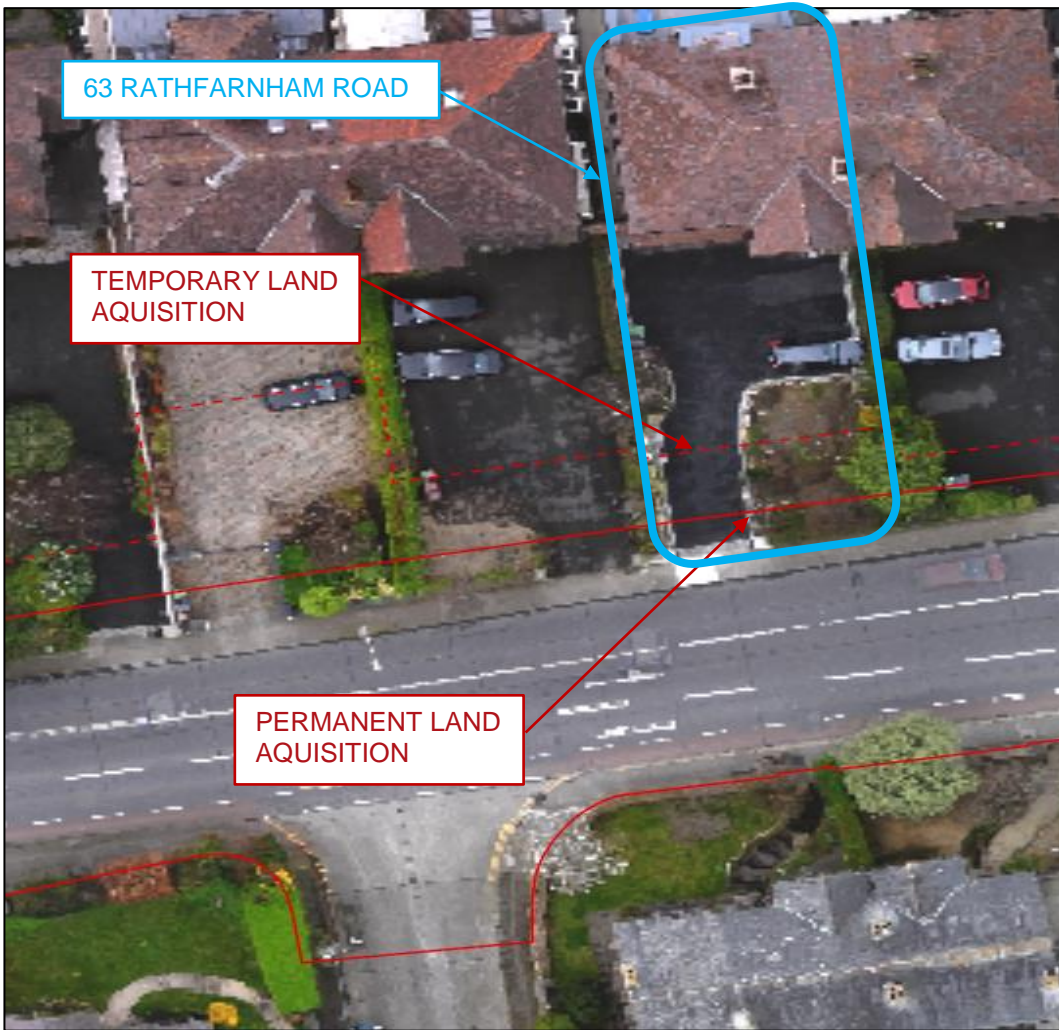


Figure 3.7.4 Proposed Land Acquisition lines adjacent to 63 Rathfarnham Road
The existing property frontage is shown in Figure 3.7.5.



Figure 3.7.5 Existing frontage of 63 Rathfarnham Road (Image source: Google)

3.7.2 Summary of the Points of Objection to the CPO by Brendan Timbs

i. Impact on Driveway Gradients

The submission raised a concern that the Proposed Scheme will result in increased driveway gradients resulting in unsafe gradients. The submission also noted that this a direct breach of building regulations Part M.

ii. Clarification on Temporary Acquisition

iii. Cumulative Traffic Assessment

The submission noted that an integrated traffic modelling of immediately adjacent BusConnects routes should be included in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

iv. Impact of traffic diversions on surrounding road network

The submission states that the proposed traffic restrictions and diversions will cause rerouting of traffic through residential streets, that have either not been designed to accommodate anything other than residential traffic or are already operating at full capacity. The submission gave Springfield Avenue and Dodder View Road as an example. It also noted that the proposed traffic restrictions along the Proposed Scheme will result in drivers using residential streets as short cuts.

v. Congestion from bus priority on Rathfarnham Road

The submission noted that the bus priority measures at Dodder Park Road and Rathdown Park are only 260m apart and are likely to cause significant traffic congestion. It also noted that the need for bus priority measures is not clear. The submission referenced the RW Nowlan & Associates Report which recommends a longer green time at the Rathdown Park junction instead of the bus priority, stating that it will benefit buses while alleviating congestion.

vi. Environmental Impact Assessment on Bushy Park and the Dodder River

The submission noted that the NTA has not considered environmental impacts on the Dodder River and Bushy Park arising from the redirected traffic on Dodder View Road. This includes a concern around the impact of the scheme on bats at Pearse Bridge.

vii. Necessity of road widening

The submission questions the necessity of CPO at this section of Rathfarnham Road, suggesting that there are no environmental differences between the section outside No 51-71 Rathfarnham Road and 91-129 Rathfarnham Road, where a shared bus and cyclists' space is proposed.

viii. Footpath Width

The submission states that the NTA are proposing larger than necessary footpath widths for the cross-section adjacent to 51-71 Rathfarnham Road. It notes that the NTA has proposed footpath widths between 2.35m and 2.9m.

ix. Contravention of the development plan zoning objective

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

x. Removal and Replacement of trees

The submission expressed their concern in relation to the proposed removal of trees along the Proposed Scheme, stating that it will negatively impact the environment. It also notes that the proposed removal of trees will result in increased air and noise pollution.

The submission notes that the NTA has not provided sufficient detail around the replacement of trees at Rathfarnham Road.

xi. Air Quality Impacts as a Result of Increase in Traffic

The submission raised a concern regarding an increase in air pollutants, such as nitrogen oxides, particles, carbon monoxide and hydrocarbons associated with combustion engine vehicles. In addition, the submission notes concern regarding fine friction particles associated with tyre and brake wear and tear.

xii. Inadequate Consultation

The submission notes that the consultation process was neither fair nor inclusive. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have they consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

xiii. Safety Concerns at the Terenure Cross Junction

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create safety concerns. The submission notes that there isn't sufficient space for large vehicles to take this turn and, that the introduction of this turn will cause safety concerns for pedestrians using the junction.

xiv. Implementation of other less intrusive measures

The submission outlines several alternatives that should be considered as part of the Proposed Scheme:

- Metro
- Bus priority at all junctions

- Deploying more buses at peak time on the existing bus routes
- Implementing cashless fares
- Introducing city centre congestion chargers
- Manage and police current road usage rules
- Counter flow initiatives
- Off route cycle lanes for cyclists
- Independent traffic flow assessment
- Park and ride facilities

xv. Impact of Covid-19

The submission expressed concerns that the traffic modelling complete in the traffic impact assessment for the Proposed Scheme is flawed due to the impact of Covid 19 on society and developments of hybrid working. It also notes that the assessment did not consider any localised impacts highlighting increases in traffic and congestion.

xvi. Routing of orbital route services

The submission noted that there is no consideration in the Proposed Scheme for orbital bus routes that will connect suburban villages in Dublin. It continues to note that if orbital routes are not provided, people will choose to drive rather than taking multiple buses to get to their destination.

xvii. Impact on heritage streetscape

The submission expressed concerns relating to the impact on heritage, environment and village/community fabric. It noted that the Proposed Scheme doesn't align with the objectives outlined in DMURS in relation to providing streets with a social function, that place sustainability, multimodal movement, pedestrians, and accessibility at the centre of the design. It continues to note that the Proposed Scheme will negatively impact the heritage streetscape in Rathfarnham, Terenure and Rathgar. It highlights that there are several protected structures along the Proposed Scheme, such as Pearse Bridge, Memorial Hall, and properties along Terenure Road East.

xviii. Impact on Local Business

The submission expressed concerns about the potential impact of the Proposed Scheme on local traders and businesses.

xix. Park and Ride Facilities

The submission notes that park and ride facilities should be provided along the Proposed Scheme to encourage more bus journeys into the city.

xx. Bus Service

The submission notes that the Proposed Scheme will result in a reduced bus service.

xxi. Cyclists Safety

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about cyclists' safety due to the proposals for a shared cyclists and bus facility.

xxii. Alternative Solution - Metro

The submission suggested that a Metro is more appropriate for this corridor.

xxiii. Cost / Benefit Analysis

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'. It also adds that the assessment of the Proposed Scheme should be done against a metro system.

3.7.3 Responses to the Points of Objection

i. Impact on Driveway Gradients

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3d road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

Notwithstanding the above, it is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.14m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Reducing footpath gradient but retaining it above the gradient typically provided for new built schemes;

The submission refers to the NRB Consulting Engineers which was used to inform this response. In terms of the submission calculations prepared by NRB, it is important to note that these have been based on an assumed road cross-section as set out below in figure 1 of their submission - *Details assumed for the Purpose of this Study*.

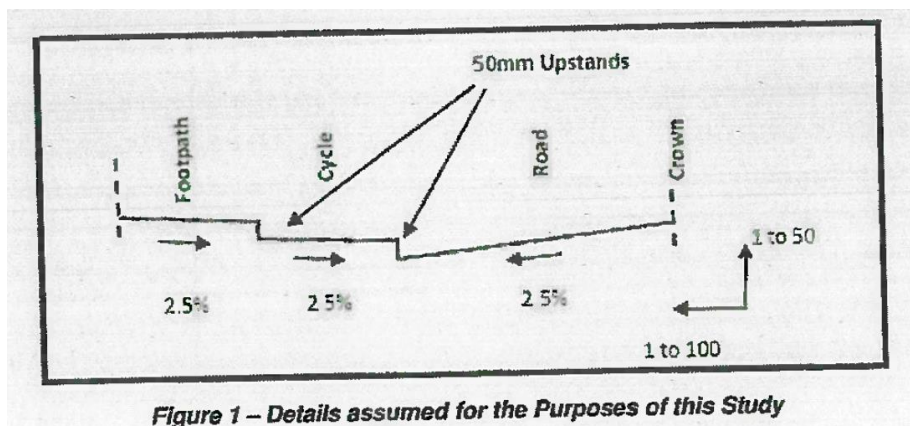


Figure 1 – Details assumed for the Purposes of this Study

As referenced earlier, in order to minimise impacts on adjacent properties the existing footpath gradient at No. 63 is being reduced (which is still significantly greater than the above in some cases), so the underlying assumption is incorrect.

It is further noted the NRB calculations also used the proposed centreline level of 42.582, taken at chainage A 1403 from the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR. Chainage A 1403 is adjacent to the centre of plot at No. 65, rather than at the driveway location at No. 63 which is of most relevance to the points being raised. The proposed centreline level at chainage A 1413 is 42.833 (Interpolated between chainage A 1410 and A 1420), some 0.250m higher than the value used by NRB in their assessment.

Furthermore, as part of the assessment, the calculation used the existing centreline level which was taken from outside No. 61. As can be seen in the extract from the NRB Assessment submitted to the NTA as part of the Emerging Preferred Route (EPR) consultation, the existing centreline level of 43.05 which was used in the assessment is some 16m away from the driveway which is of relevance to the points being raised.

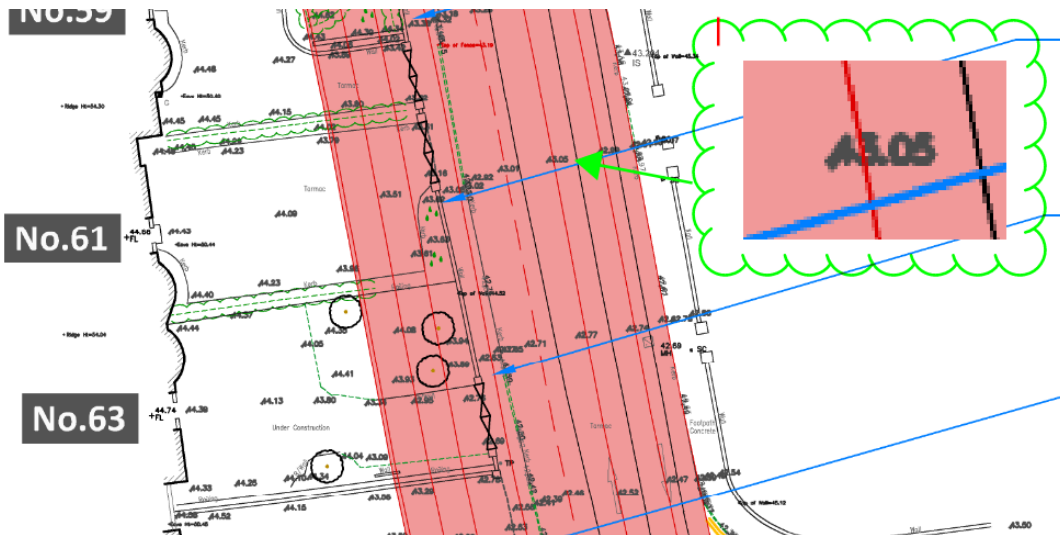


Figure 3.7.6 Extract from NRB Assessment submitted to the NTA during the EPR Consultation

So, in summary, the assessment is based on an existing road level some 16m north of the driveway at No. 63 and a proposed level at chainage A 1403 which is 10m south from the driveway.

The factors outlined above contribute to an inaccurate estimate of the proposed level at the back of the new footpath and therefore misrepresents the effect of the Proposed Scheme on the driveway gradients.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate no increase to the maximum gradients within these properties.

ii. Clarification on temporary acquisition

Both permanent and temporary land acquisition is required at this property, the extents of which are outlined in the Deposit Maps replicated in Figure 3.7.4 above. In terms of the temporary acquisition, 4 meters from the proposed boundary wall will be required for the duration 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. If the CPO is confirmed by An Bord Pleanála, 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.

It is noted the entire area identified for temporary acquisition will not be required for the duration of the works. It is acknowledged that during the construction of the works there will be inconveniences for all users, but this will be managed to minimise impacts for all affected parties. The duration of the works will vary from property to property, but access and egress will be always maintained.

For clarity, the temporary acquisition at this location is required to facilitate boundary works and accommodation works including minor regrading of the driveway.

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 EIAR Volume 2 Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

iii. Cumulative Impact Assessment

A detailed response to the cumulative traffic assessment is presented in Section 2.1.1.

iv. Impact on traffic diversion on surrounding road network

The submission states that the proposed traffic management in the area will cause rerouting of traffic through Rathfarnham Road causing additional flow of traffic. The submission notes the reintroduction of the right turn from Templeogue Road to Springfield Avenue as the main reason for this.

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

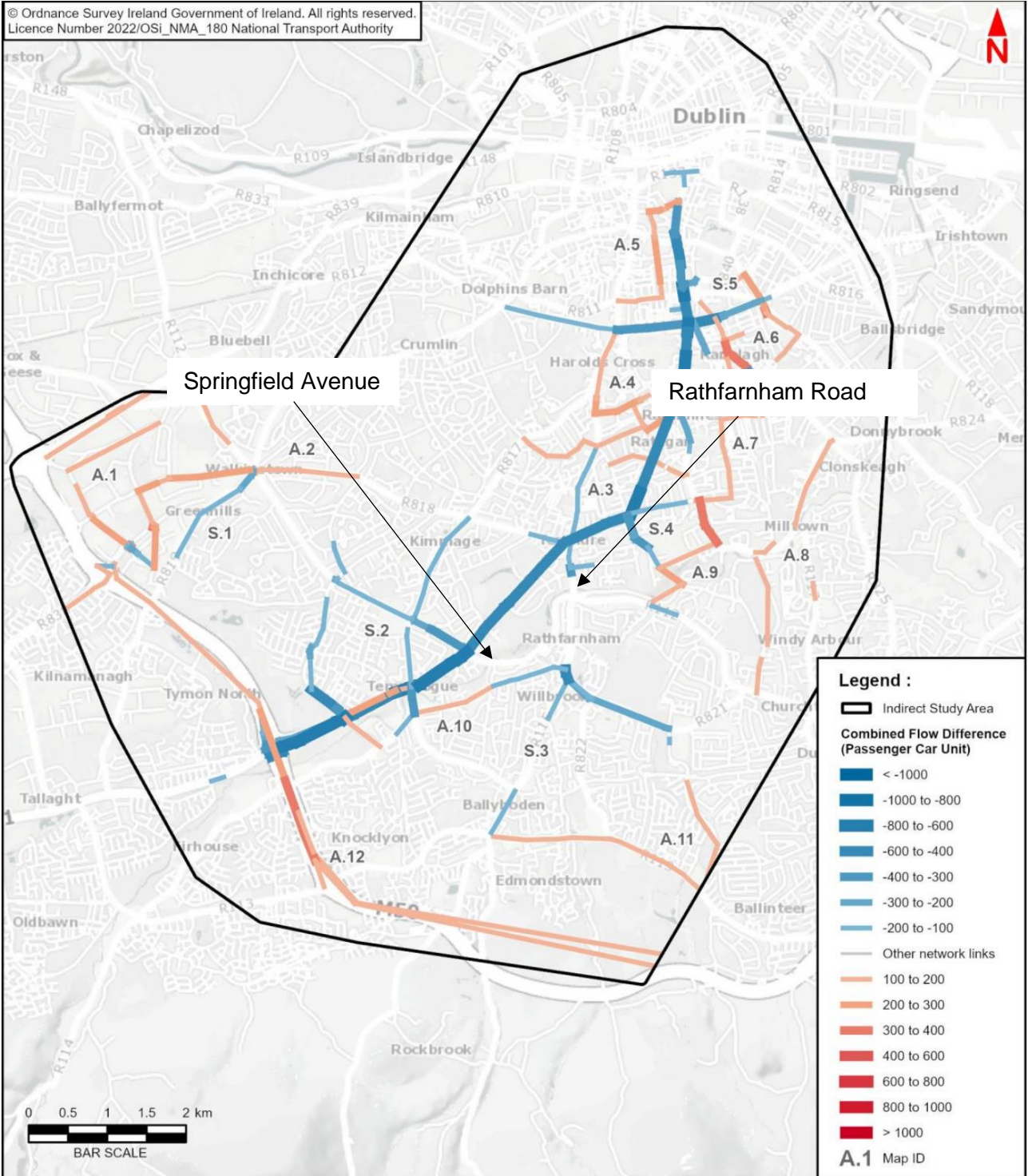


Figure 3.7.7 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

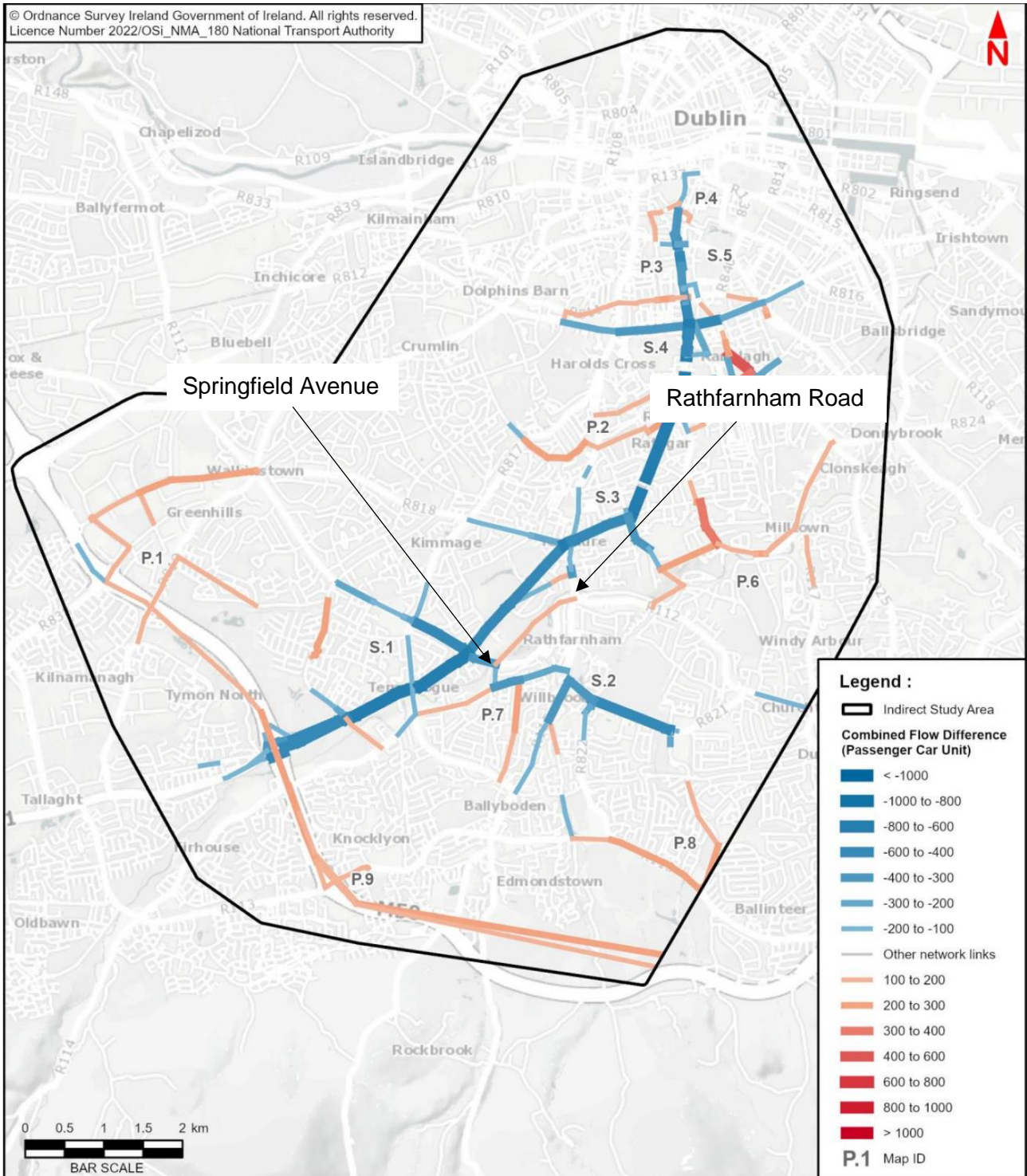


Figure 3.7.8 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

As can be seen in these figures, the traffic modelling undertaken does not identify any material change in traffic volumes along Springfield Avenue and on Rathfarnham Road during the AM peak as a result of the Proposed Scheme i.e. any changes in traffic volumes along Springfield Avenue and Dodder View Road are less than 100 passenger car units per hour. During the PM peak there is a reduction of traffic on Springfield Avenue and Rathfarnham Road and an increase of 119 PCU on Dodder View Road (as presented in Table 6.65).

Further details on the traffic impact in this area are presented in Section 2.3.2 of this report.

v. Congestion from bus priority on Rathfarnham Road

As set out in Section 4.1 of Appendix 4.1 of the EIAR:

Signal control bus 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. This typically arises where the bus lane cannot continue due to obstructions on the roadway. An example might be where a road has pinch-points where it narrows due to existing buildings or structures that cannot be demolished to widen the road to make space for a bus lane. It works through the use of traffic signal controls (typically at junctions) where the bus lane and general traffic lane must merge ahead and share the road space for a short distance until the bus lane recommences downstream. The general traffic will be stopped at the signal to allow the bus pass through the narrow section first and when the bus has passed the general traffic will then be allowed through the lights.

In terms of Rathfarnham Road, signal control bus priority is utilised to achieve the BusConnects objective of improving bus speeds, reliability, and punctuality.

Section 4.4.1.2.3 of the Preferred Route Option Report, which is part of the supplementary information, evaluated various choices for the BusConnects route between Grange Road and Terenure Cross. *Numerous submissions received as part of the public consultation raised concerns about the impact of land acquisition along this section of the route. In addition, upon review of the EPR Option proposals with the benefit of topographical survey, it was evident that portions of the EPR Option proposals, namely the Brookvale Downs parallel cycle route as well as the impact on steep driveways on Rathfarnham Road, required further consideration.' For these reasons, alternative options have been considered in this area.'* Consequently, alternative options were explored for this area. In this evaluation, 9 options (RF1-9) were considered.

Section 4.4.1.2.5 of the report summarises the assessment process and concludes that Option RF5 offers more advantages compared to the other options.

Option RF5: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross.

The submission also referred to sections 4.1 and 4.2 of the RW Nowlan & Associates Report, which was appended to the submission. Section 4.1 states that the proximity of the signal control bus priority at the Dodder View Road junction and Rathdown Park Junction may lead to congestion along Rathfarnham Road. While the issue of traffic congestion was already addressed earlier in this response, for additional context, Figure 3.7.7 and Figure 3.7.8 demonstrate an overall reduction in combined traffic flow on Rathfarnham Road in the 2028 Opening Year scenario of the Proposed Scheme

In reference to the recommendation presented in section 4.2 of the submission, which suggests that a more suitable alternative to the signal control bus priority for inbound buses at Rathdown Park is the implementation of longer green traffic light cycles, it is emphasised that this change could offer benefits for buses and effectively alleviate congestion.

The proposed road configuration for the section of Rathfarnham Road between Rathdown Park and Bushy Park Road maintains the northbound traffic lane and a right-turn filter lane into Bushy Park Road. Without the inclusion of bus priority at the entrance to Rathdown Park, a scenario could emerge in which buses and general traffic both converge in an uncontrolled manner into the straight-ahead traffic lane, exacerbating congestion and safety concerns. Therefore, a bus priority signal measure is essential at this location to effectively regulate the traffic flow into the straight-ahead lane, while also ensuring priority for buses is maintained.

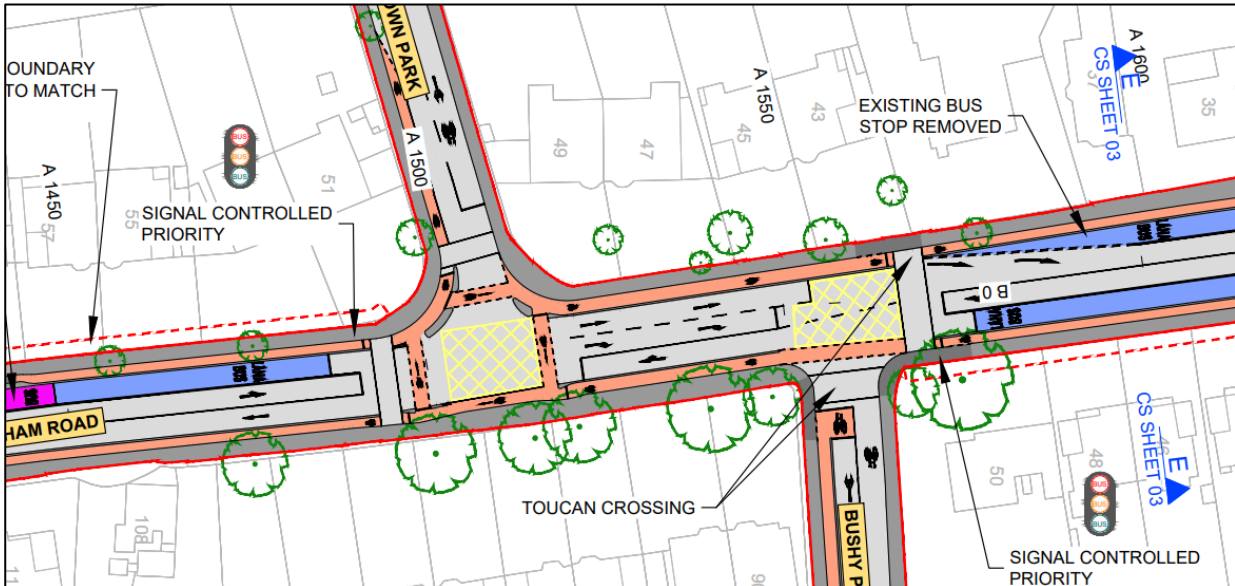


Figure 3.7.9 General Arrangement at Rathfarnham Road

vi. Environmental Impact Assessment on Bushy Park and the Dodder River

The submission noted that the NTA has not considered environmental impacts on the Dodder River and Bushy Park arising from the redirected traffic on Springfield Avenue and Dodder View Road.

As described in response to issue raised iv. Traffic diversions there is no substantial changes to traffic volumes on Springfield Avenue and Dodder View Road. This is further detailed in Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken.

Notwithstanding the above, the EIAR has assessed the environmental impacts associated with altered traffic flows along the Proposed Scheme. Section 7.1 of EIAR Volume 2 Chapter 7 Air Quality states:

During the Construction Phase, the potential air quality impacts associated with the development of the Proposed Scheme have been assessed. This included construction activities such as utility diversions, road carriageway / cycleway / footway resurfacing, construction of minor structures and kerb road realignments. Construction traffic access routes are also assessed as part of the study area for this phase of the works. During the Operational Phase, the potential air quality impacts associated with altered traffic flows along the Proposed Scheme, realigned traffic lanes and displaced traffic flows have been assessed.

EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

With respect to biodiversity, and in particular bats, Chapter 12 presents the output of the biodiversity assessment and contains information regarding, inter alia, the biodiversity baseline scenario, the potential impacts on biodiversity, the mitigation measures and the predicted residual effects of the Proposed Scheme.

In terms of bats, as set out in Section 12.2.3.6.1:

Walked bat activity transect surveys were conducted along preselected transect routes at seven locations along the Proposed Scheme. Transect routes were located at La Touch Bridge, Portobello, referred to as CBC1012BT001, Pearse Bridge Rathfarnham referred to as CBC1012BT002, along the River Dodder within Bushy Park referred to as CBC1012BT003, adjacent to Rathfarnham Castle, referred to as CBC1012BT004, Owendore Crescent referred to as CBC1012BT005, adjacent to Terenure College, referred to as CBC1012BT006 and adjacent to Dodder Valley Park, referred to as CBC1012BT007. The walked transect routes are shown on Figure 12.1.1 in Volume 3 of this EIAR.

As such, the impact of the scheme on bats throughout the scheme, including at Pearse Bridge were considered.

Section 12.4.3.4.1 sets out the impact of the Proposed Scheme on bats during the construction stage.

12.4.3.4.1 Bats

12.4.3.4.1.1 Roost Loss

There are no confirmed bat roosts located within the footprint of the Proposed Scheme. Twelve trees with Potential Roosting Features (PRFs) were identified within the footprint of the Proposed Scheme as detailed in Section 12.3.8.1.8. Four of these trees, two sycamores, one oak and one yew, will be removed to facilitate the construction of the Proposed Scheme. 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 potential roost sites in the form of the above mentioned four 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 effect on the conservation status of bats at the local geographic level.

12.4.3.4.1.2 Habitat Loss as a result of Fragmentation of Foraging / Commuting Habitat and Commuting Routes

Bats rely on suitable semi-natural habitats which support the insect prey upon which they feed. The Proposed Scheme will result in the loss of such habitats used for feeding by all bat species recorded in the study area.

Suitable habitat for foraging and / or commuting bats within the footprint of the Proposed Scheme includes hedgerows and treelines, mixed broadleaved woodland, rivers, areas of parkland, and open grassland. The area of the habitats which will be lost as a result of the Proposed Scheme is provided in Table 12.14 and shown in the Landscape General Arrangement drawings (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001 to 0037) in Volume 3 of the EIAR. This is not deemed significant, considering the extent of habitat loss, their location (adjacent to existing artificially lit roads in a generally highly disturbed urban environment) and the presence and relative abundance of other similar habitats in the wider locality, which will not be impacted by the Proposed Scheme. The Proposed Scheme will not result in any loss along the water courses. In assessing the impacts of habitat loss as a result of fragmentation of foraging / commuting habitat on bat populations, consideration was given to a species Core Sustainance Zone (CSZ). A CSZ refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the 'resilience and conservation status' of the colony using the roost. Bat Conservation Trust Guidance (Bat Conservation Trust 2016) states that:

"With reference to planning and development the core sustainance zone is: The area surrounding the roost within which development work can be assumed to impact the commuting and foraging habitat of bats using the roost, in the absence of information on local foraging behaviour. This will highlight the need for species-specific survey techniques where necessary; and; The area within which mitigation measures should ensure no net reduction in the quality and availability of foraging habitat for the colony, in addition to mitigation measures shown to be necessary following ecological survey work."

There is evidence of bats foraging and commuting within the study area of the Proposed Scheme, particularly along the River Dodder at Pearse Bridge in Rathfarnham (CBC1012BT002) and adjacent Bushy Park (CBC1012BT003). All parts of the Proposed Scheme which contain suitable habitat are likely to be within the CSZ of at least one bat roost. Considering the type of works proposed (e.g., upgrading of existing infrastructure for the most part), there is limited potential for the Proposed Scheme to act as a barrier to flight paths for bat species, as there will be no major changes to pre-existing habitats along most of the route.

The Proposed Scheme will result in loss and / or fragmentation of existing habitat used by local populations of commuting / foraging bats. Fragmentation of feeding habitat has the potential to disturb normal bat behavioural patterns, and thus adversely affect the ability of local bat populations to persist and reproduce, impacting on their local distribution and/or abundance. The barrier effect can manifest itself as soon as the site clearance phase commences and the barrier itself is in the form of the cleared lands. The Proposed Scheme will result in the removal/ fragmentation of small areas / strips of woodland, amenity grassland, scattered trees and parkland, treelines and hedgerows which could all be used by local bats. These habitats constitute a landscape feature which could be used by foraging / commuting bats and their loss, will result in a reduction of foraging / commuting habitat for local bats in this area.

Proposed works along the boundary of Rathfarnham Castle, comprising the relocation of the boundary wall, will result in the removal of the outermost section of mixed woodland (WD1) at this location. Habitats such as mixed woodland, may be used by foraging and commuting bats in the area. Given the peripheral nature of the section of woodland to be removed here and considering the extent of this habitat which will be retained, this will not result in any significant impact on local bat species.

Removal of suitable habitat for foraging and/commuting bats within the footprint of the Proposed Scheme is calculated as approximately 2.6ha. Habitat removal is within a highly disturbed urban environment with low numbers of species records, and, as such is not deemed to provide significant contributions to core sustenance zones of roosts outside of the footprint of the Proposed Scheme. The effect of habitat fragmentation and barrier effect associated with the construction of the Proposed Scheme is therefore considered to be significant at the local level only.

12.4.3.4.1.3 Installation of Temporary Working and Construction Compound Lighting which May Cause Direct / Indirect Disturbance of Flight Patterns

Construction Compounds are proposed in the following six locations:

- Construction Compound TR1 will be located south of the Spawell roundabout, at the Tallaght Road / Spawell Link Road junction;
- Construction Compound TR2 will be located north-west of Terenure Road North, between Eaton Road and Eagle Hill Avenue;
- Construction Compound TR3 will be located along Dodder View Road, across the road from Bushy Park, in the greenfield area between Dodder View Road, Woodview Cottages and Church Lane; • Construction Compound TR4 will be located on Military Road, perpendicular to Rathmines Road Lower, south of St Marys College;
- Construction Compound TR5 will be located on Richmond Street South, on the slip road between Richmond Street South and Harcourt Road; and;
- Construction Compound TR6 will be located on Spawell Link Road, between Spawell Roundabout and Firhouse Road.

Security lighting will be installed in these compounds for the duration of construction (i.e., 24 months), thereby temporarily increasing the level of artificial lighting in this area. Artificial lighting within suitable habitat may result in avoidance behaviour by bats and could prevent bats from accessing foraging areas or roosts and / or result in bats taking more circuitous routes to get to foraging areas and hence potentially depleting energy reserves and abandonment of nearby roosts. Given the urban - suburban setting of these proposed Construction Compounds, bats in the area would be habituated to some level of artificial lighting. Provided security lighting does not involve high intensity lighting (e.g., floodlighting) the impact of increased artificial lighting at Construction Compounds is considered to be significant at the local level only.

The bulk of the construction works along the Proposed Scheme will typically be undertaken during normal daylight working hours, although it is recognized that some elements of night-time work may be required. 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.

The impact on bats during operation is Section 12.5.2.4.1:

The Operational Phase of the Proposed Scheme is not predicted to result in any significant effects to populations of bats in the vicinity of the Proposed Scheme. Therefore, no mitigation is proposed.

vii. Necessity of road widening

A detailed response to the optioneering carried out in this area is presented in Section 2.3.2.

The Preferred Route Option Report also explains the rationale for the reconsideration of options on Rathfarnham Road south of the Dodder (where the EPR proposed a bus lane and traffic lane in each direction).

Between Brookvale Road and Dodder Park Road, the cross-section is particularly constrained. Widening into properties within this section of the scheme would require the road to be raised in order to maintain driveway gradients at existing grades, which is a requirement of Part M Building Regulations. The potential impacts of the construction works would include:

- *Potential temporary closure of vehicular access to some properties during construction works;*
- *Potential need to undertake significant utility works including raising of manhole covers / gullies, and potentially utility ducts;*
- *Potential temporary closure of Rathfarnham Road to traffic during construction to facilitate works;*
- *Extended construction period when compared to sections where works are less complex.*

Upon review, the collective and individual impact of the required construction works were not considered to be practicably feasible due to significant disruption caused by the unique construction works required to deliver this option.

While raising the road is required on the section north of the River Dodder, the extent to which it is required south of the Dodder is more significant due to the gradients within these adjacent properties and the length of these driveways which are considerably shorter than north of the River Dodder (thereby reducing the potential for regrading works within the limits of Part M).

viii. Footpath Width

The submission states that the NTA are proposing larger than necessary footpath widths for the cross-section adjacent to 51-71 Rathfarnham Road. It notes that the NTA has proposed footpath widths between 2.35m and 2.9m.

As seen on the General Arrangement Drawings in Volume 1 Non-Technical Summary, sheet 04 and 05, there is only one cross-section displayed at the section of Rathfarnham Road adjacent to Nos 51-71. This cross-section (Typical Section D-D) is located in EIAR Volume 3 Chapter 4 Typical Cross-section (reproduced as Figure 3.7.9 above). This cross-section identifies a footpath width of 2m on the western side of Rathfarnham Road and of 2.9m on the eastern side. The 2.9m footpath width on the eastern side of Rathfarnham Road represents an existing localised footpath widening outside 122 Rathfarnham Road where the boundary wall is set back slightly further over a short distance. Elsewhere along this section of the scheme, a footpath width of 2m is proposed.

ix. Contravention of the development plan zoning objective

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

Section 16.3.1.5 of EIAR Volume 2 Chapter 16 Architectural Heritage describes Conservation Areas in the context of the Dublin City Development Plan 2022-2028 (DCC (2022)).

Conservation Areas are areas which, while not to be confused with ACAs, do afford some protection to the architectural heritage under the Dublin City Development Plan 2022-2028 (DCC 2022), specifically under Policy BHA9:

'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. Development within or affecting a Conservation Area must contribute positively to its character and distinctiveness and take opportunities to protect and enhance the character and appearance of the area and its setting, wherever possible. Enhancement opportunities may include:

1. Replacement or improvement of any building, feature or element which detracts from the character of the area or its setting.
2. Re-instatement of missing architectural detail or important features.
3. Improvement of open spaces and the wider public realm and reinstatement of historic routes and characteristic plot patterns.
4. Contemporary architecture of exceptional design quality, which is in harmony with the Conservation Area.
5. Retention of buildings and features that contribute to the overall character and integrity of the Conservation Area.
6. Changes of use will be acceptable where in compliance with the zoning objectives and where they make a positive contribution to the character, function and appearance of the Conservation Area and its setting. The Council will consider the contribution of existing uses to the special interest of an area when assessing change of use applications and will promote compatible uses which ensure future long-term viability'.

Policy BHA10 states: 'There is a presumption against the demolition or substantial loss of a structure that positively contributes to the character of a Conservation Area, except in exceptional circumstances where such loss would also contribute to a significant public benefit'.

A review of the Dublin City Development Plan 2016 to 2022 (DCC 2016a) indicates that the Proposed Scheme traverses through four CAs. These areas contain structures of Local to National importance and of Low to High Sensitivity. They are described briefly in Table: 16.8 and Section 16.3.1.5.1 to Section 16.3.1.5.4. Further information on each CA is provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIA. There are no equivalent Conservation Areas in the South Dublin or in Dún Laoghaire-Rathdown.

The status of the buildings in this area is acknowledged and assessed in the EIA.

The proposed land takes on the west side of the Rathfarnham Road will directly impact the boundary treatments to 51 to 71 Rathfarnham Road (CBC1012BTH039, CBC1012BTH040) which are of low sensitivity. These largely consist of cement rendered walls and piers with concrete capping's. Although some interventions have occurred in the past such as the widening of gateways, the boundary treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries would have a negative impact. The pre-mitigation Construction Phase impact will be Direct, Negative, Slight Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 EIA. With mitigation, the impact magnitude is reduced to Low. The predicted residual impact is Direct, Negative, Not Significant, Temporary.

- x. Removal and Replacement of trees

A detailed response to the optioneering carried out in this area is presented in Section 2.1.1.

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIA. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 9.4.4.1.5 states that “Along the majority of roads of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”

Landscaping 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 show the proposed landscaping along the Proposed Scheme. As can be seen in Figure 3.7.10, there are 7 No. Prunus Avium ‘PLENA’ Semi-Mature wild Cherry Trees proposed along the section of Rathfarnham Road between Nos 51-71.

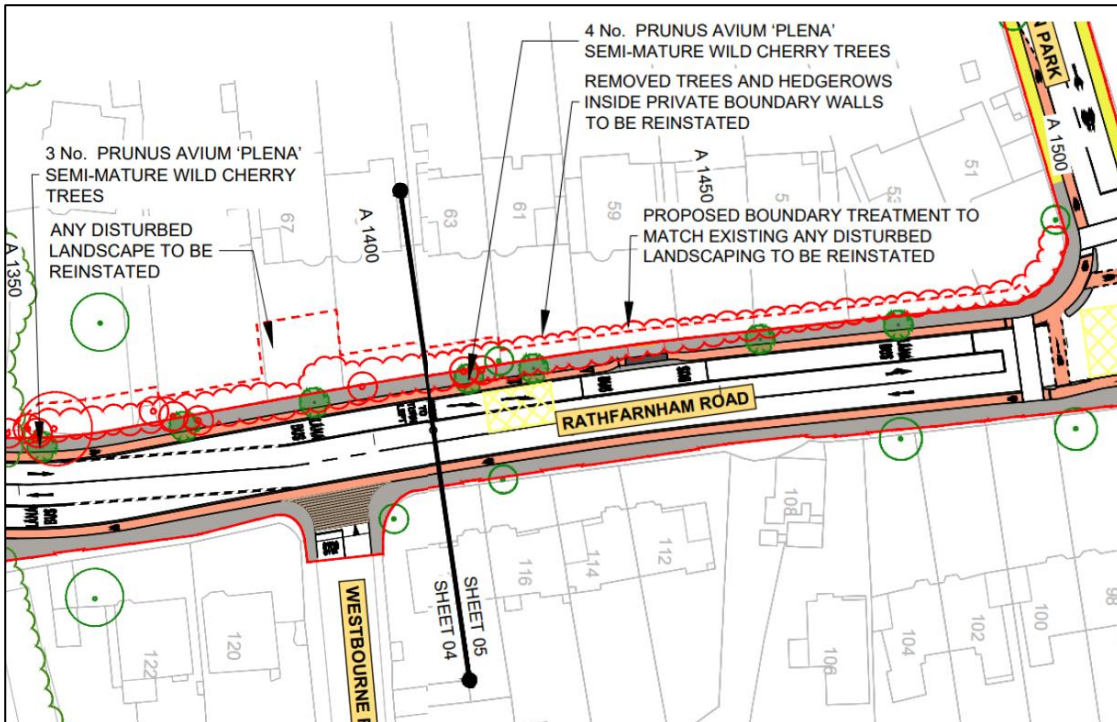


Figure 3.7.10 Extract from Landscaping General Arrangement Drawings (Combined Sheet 4 and 5)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

xi. Air Quality Impacts as a Result of Increase in Traffic

The submission raised a concern regarding an increase in air pollutants, such as nitrogen oxides, particles, carbon monoxide and hydrocarbons associated with combustion engine vehicles. In addition, the submission notes concern regarding fine friction particles associated with tyre and brake wear and tear.

EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Emissions from brake and tyre wear in the form of particulate matter (as PM10 and PM2.5) have been included in the air dispersion modelling assessment through the use of the emissions factor toolkit (EFT,v10.1), which takes into account vehicle exhaust, brake wear, tyre wear and road abrasion for both PM10 and PM2.5. Details of the use of EFT and modelling methodology can be found in Section 7.2.4.1.2. The assessment of air quality impacts due to PM therefore includes both exhaust and non-exhaust emissions. Regarding quantification of emissions associated with electric vehicles, a proportion of electric vehicles in the fleet has been included in the assessment of both 2028 and 2043 emissions (see Table 7.5 in Chapter 7 Air Quality).

The subject of the submission, namely the residential property at 63 Rathfarnham Road, has been included in the air dispersion model as receptor AQ108. Modelled annual mean concentrations of NO₂, PM₁₀, PM_{2.5} are all well below the relevant ambient air quality standards for all modelled scenarios (existing baseline, construction stage and operational phase). A reduction in concentrations of all modelled pollutants at receptor AQ108 due to the Proposed Scheme was observed in both the construction and operational phase scenarios; full modelling results can be found in Appendix A7.1 Air Quality. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value.*

However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

xii. Inadequate Consultation

A detailed response to this item is presented in Section 2.1.1.

In addition to the public consultation, as outlined in Section 1.6 of the EIAR and the Public Consultation Report 2018 – 2022 included with the Supplementary Information, the BusConnects Infrastructure team undertook consultation on the EIAR with certain prescribed bodies and relevant non-statutory consultees including South Dublin County Council, Dublin City Council.

The submission notes that there is no access to preplanning meeting held between the NTA and ABP. However, it is noted that these are available on the ABP website at the following link <https://www.pleanala.ie/en-ie/case/309584>.

xiii. Safety Concerns at the Terenure Cross Junction

Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets traffic management measures which will be implemented on the route to facilitate the proposed scheme. An extract from this table is presented in Figure 3.7.11.

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Rathfarnham Road/Castleside Drive/Main Street Junction	Bus Priority Signals at Rathfarnham Road/Castleside Drive/Main Street Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Dodder Park Road Junction	Bus Priority Signals at Rathfarnham Road/Dodder Park Road Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Rathdown Park Junction	Inbound Bus Priority Signal at Rathfarnham Road/Rathdown Park	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Terenure Road East/Terenure Road West Junction	Right turn for buses from Rathfarnham Road to Terenure Road East introduced through bus priority signal	To allow for bus movements in this direction as per the A spine in the New Dublin Area Bus Network	Buses allowed to turn right from Rathfarnham Road onto Terenure Road East.
Terenure Road East/Greenmount Road Junction	No Right turn allowed from Greenmount Road onto Terenure Road East	To mitigate against inbound traffic bypassing right turn ban at Terenure Cross	No right turn from Greenmount Road onto Terenure Road East for general traffic.
Rathgar Road/Highfield Road Junction	Inbound Bus Priority Signal	To allow for bus priority on Rathgar Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.

Figure 3.7.11 Extract from Table 4.25 of the Preliminary Design Report

The submission notes that the reintroduction of this right turn movement would introduce safety issues. However, as can be seen in the Junction System Design drawings included in Volume 3 of the EIAR, it is proposed that buses turning right from Rathfarnham Road would do so in its own stage therefore removing any potential safety issues. An extract from the staging diagrams is presented below with the relevant stage highlighted.

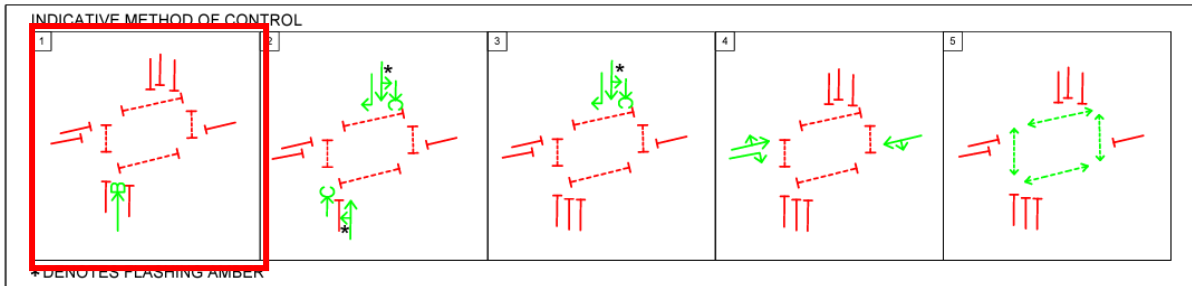


Figure 3.7.12 Extract from Junction System Design Drawings (Sheet 8)

In relation to the statement made about insufficient space at Terenure Cross for large vehicles, such as buses, to take the right turn Section 4.9 of the Preliminary Design Report outlines the swept path analysis that was complete to inform junction design along the Proposed Scheme.

It is noted that an independent Stage 1 Road Safety Audit was complete by PMCE on the Proposed Scheme, the report is available in the Supplementary Information, Appendix M2 Stage 1 Road Safety Audit. The independent auditor did not identify a hazard associated with the right-turn on pedestrians and cyclists.

- xiv. Implementation of other less intrusive measures

A detailed response to this item is presented in Section 2.1.1.

- xv. Changes to work/travel patterns due to the COVID-19 pandemic

A detailed response to this item is presented in Section 2.1.1.

- xvi. Routing of orbital route services

The provision and improvement of the bus services in the GDA is constantly under review by the NTA. However, the provision, or removal, of bus services, as well as the routes of these services, is not part of the scope of the Proposed Scheme planning application.

EIAR Volume 2 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 2.2.1.4 notes the following:

To inform the preparation of the GDA Transport Strategy, 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.

Section 2.2.2 of Chapter 2 notes that: *The Proposed Scheme will facilitate the ongoing Dublin Area Bus Network Redesign which will see continued investment in bus services into the future, which will improve journey-time reliability for all bus services, and therefore improve their attractiveness as an alternative to private car usage.*

Section 4.1 of the Preferred Route Option Report included as part of the Supplementary Information highlights that: *In 2017, the NTA began work on reviewing the Dublin Area Bus Network, in collaboration with Bus Operators and other stakeholders (including local authorities). It goes on to explain that “The “Dublin Area Bus Network Redesign” project was launched by the NTA in 2017 and looked at the existing bus network and the radial Core Bus Network identified in the GDA Transport Strategy. The output from the Bus Network Review was published and available for public comment in August 2018 and again in October 2019.*

The NTA published the final version of the Dublin Area bus network in 2020, resulting from previous redesign proposals and with consideration given to issues raised by over 72,000 submissions. Figure 3.7.13 and Figure 3.7.14 presents Diagram 2.9 and 2.10 of the EIAR Volume 2 Chapter 2 Need for the Proposed Scheme showing the routing of bus services along the Proposed Scheme.

The Proposed Scheme will serve the A Spine bus services. Figure 3.7.13 and Figure 3.7.14 show the A-Spine interface with the Proposed Scheme between Templeogue Road and Rathfarnham Road (A1, A3, A2 and A4), and from Terenure Road, the City Centre (A1, A3, A2 and A4). In addition to the Spine networks being proposed in the Dublin Area Bus Network, there are also several orbital routes proposed for the revised bus network that interact with the Proposed Scheme (S6, S4, S2).

They serve the purpose of enabling commuters to travel between neighbourhoods, suburbs, and key destinations outside of the city centre.

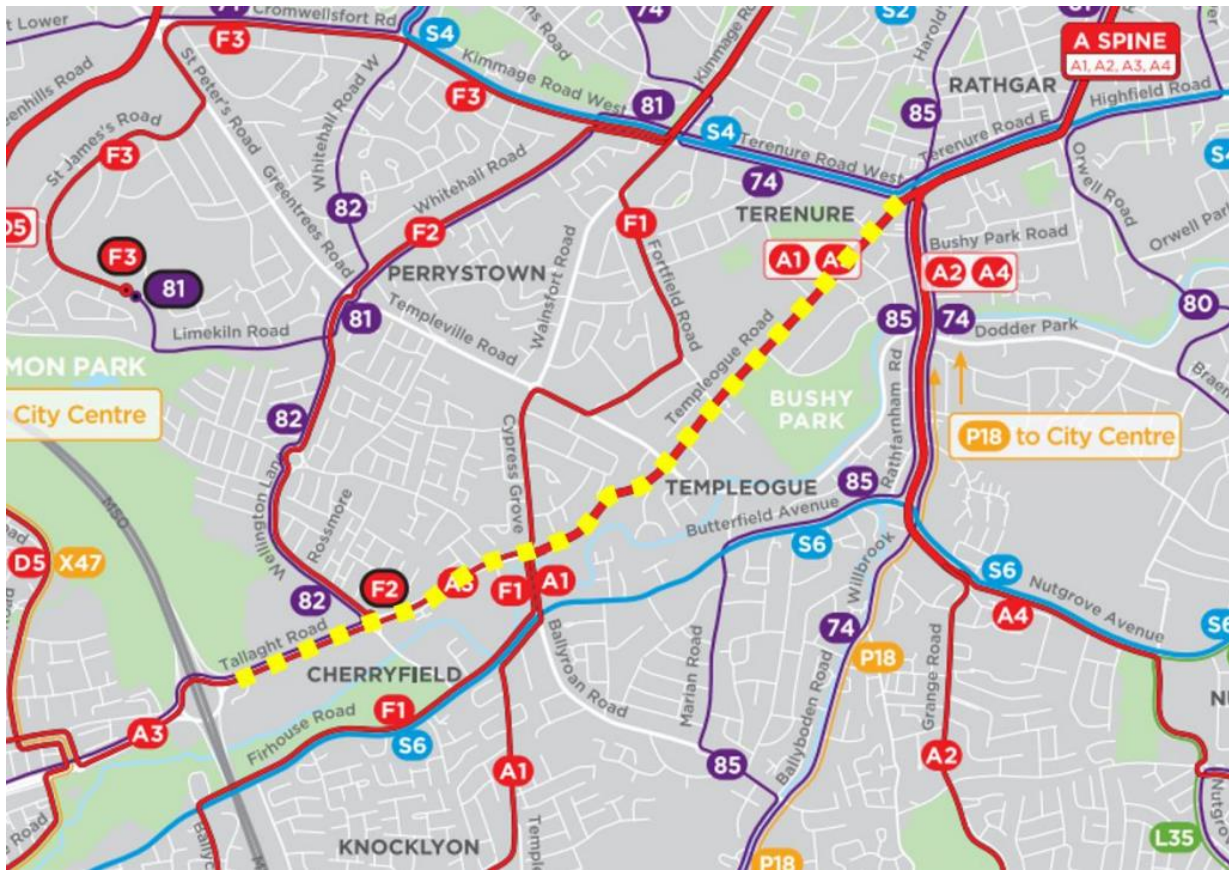


Figure 3.7.13 Extract from New Dublin Area Bus Network Maps (Image 2.9 from EIAR)

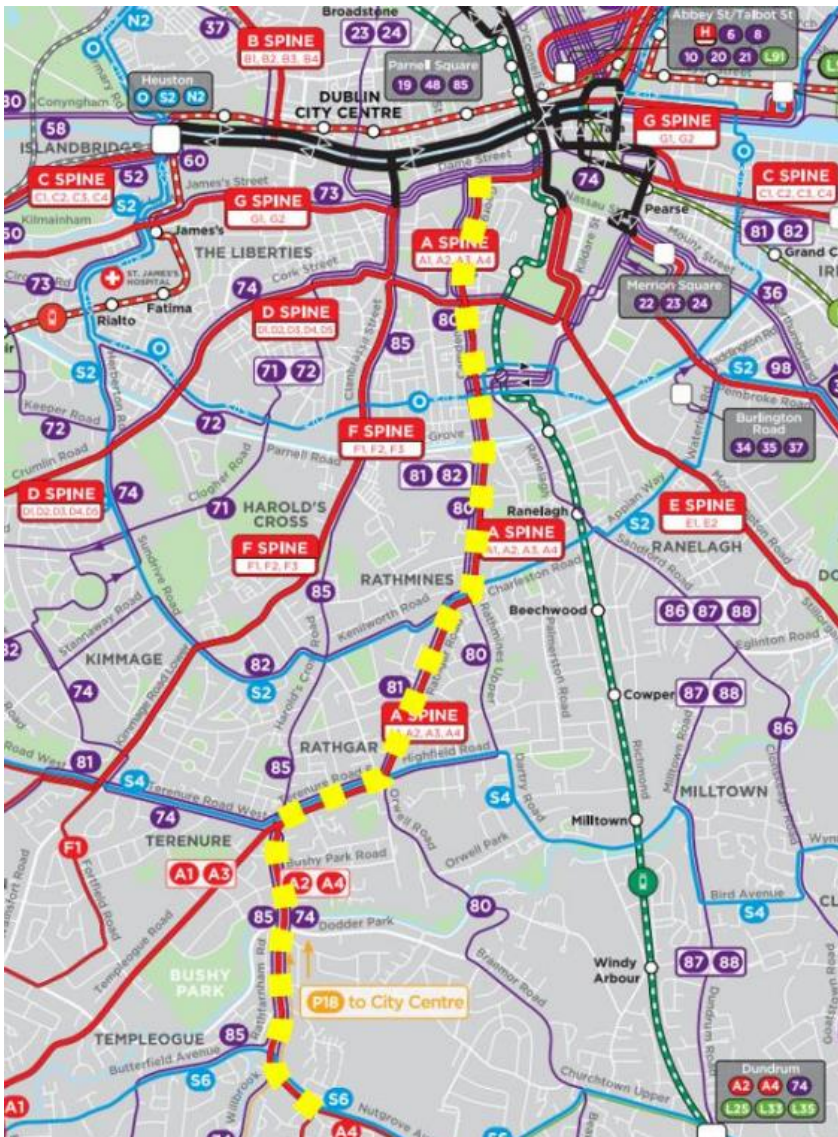


Figure 3.7.14 Extract from New Dublin Area Bus Network Maps (Image 2.10 from EIAR)

xvii. Impact on heritage streetscape

In relation to the impact on heritage streetscape along the Proposed Scheme, EIAR Volume 2 Chapter 16 Architectural Heritage considers the potential architectural heritage impact associated with the construction and operational phases of the Proposed Scheme. Section 16.2.6 states:

This assessment methodology has regard to the EPA Guidelines assessment criteria (EPA 2022), the NRA Architectural Guidelines (NRA 2005a) and the NRA Archaeological Guidelines (NRA 2005b). In undertaking this assessment, regard was also had to other relevant assessments including archaeology and cultural heritage and landscape and visual, which are outlined in Chapter 15 (Archaeological & Cultural Heritage) and Chapter 17 (Landscape (Townscape) & Visual), respectively. The impact assessment was carried out by:

- Determining and rating the sensitivity of baseline features within the baseline environment;
- A review of the Proposed Scheme drawings, in order to identify the locations of potential impacts both direct and indirect; and
- Determining the nature, magnitude, duration, and extent of these impacts

Architectural heritage buildings, features and landscapes are a non-renewable resource, and such assets are generally considered to be location sensitive. In this context, any change to their environment either directly through construction activity or indirectly could adversely affect these sites, their settings or vistas of these sites.

Section 16.5.1.6 of Chapter 16 describes the architectural heritage impact to No 51 to 71 Rathfarnham Road:

The proposed land takes on the west side of the Rathfarnham Road will directly impact the boundary treatments to 51 to 71 Rathfarnham Road (CBC1012BTH039, CBC1012BTH040) which are of low sensitivity. These largely consist of cement rendered walls and piers with concrete capping's. Although some interventions have occurred in the past such as the widening of gateways, the boundary treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries would have a negative impact. The pre-mitigation Construction Phase impact will be Direct, Negative, Slight Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 to Low. The predicted residual impact is Direct, Negative, Not Significant, Temporary

The submission noted that the Proposed Scheme will impact the Memorial Hall and Pearse Bridge in the context of heritage streetscape, noting that the project will reduce the frontage of the memorial hall. As can be seen in the EIAR Volume 1 General Arrangement Drawings and Deposit Maps submitted as part of the CPO documents, there is no land acquisition proposed at either of those locations.

See section 2.4.2 for response to queries on heritage impact on properties along Terenure Road East.

EIAR Volume 2 Chapter 17 Landscape (Townscape) & Visual, section 17.4.4.2.10 states:

Where the landscape measures incorporated in the design of the Proposed Scheme there is potential for a beneficial effect to the fabric and character of the receiving landscape / townscape. Measures include for improvements to the streetscape in several locations along the Proposed Scheme, including new or improved footpath and cycle routes, improved or more visually appealing hard surfacing, street furniture, improvement to the setting of heritage features, and new tree / ornamental planting. In some cases, this will create a short-term net benefit compared to the baseline landscape, such as along the Tallaght Road to Rathfarnham Road and Charleville Road to Dame Street sections of the scheme, as well as for open spaces and visual amenity of adjacent properties generally across the scheme. There will also be long-term benefits to the Terenure Road North to Charleville Road section. Over the long-term, the negative effects associated with the removal of mature trees along many sections of the scheme will be reduced with the growth of replacement planting, and there will be an overall positive effect for trees across the entire route of the Proposed Scheme.

Numerous enhancements are being undertaken across various destinations within the Proposed Scheme, including Rathfarnham, Terenure, and Rathgar. The primary objective of these improvements to the urban environment is to establish inviting and welcoming public spaces where individuals can convene and engage socially. These improvements involve the strategic reallocation of road space, wherever feasible, from vehicular use to pedestrian and cyclist-friendly areas. For a comprehensive overview of the streetscape design, refer to the EIAR Volume 3, Chapter 4 Landscaping General Arrangement.

Chapter 17 of EIAR has considered the potential landscape (townscape) and visual impacts associated with the construction and operational phases of the Proposed Scheme. Section 17.4.4.1 outlines the impacts of Townscape and streetscape Characters for sub-divided townscape / streetscape character areas. The assessment relevant to the areas of concern in this submission are summarised below.

Nutgrove Avenue to Terenure Road North

*The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is **very high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Very Significant and Short-Term** becoming **Neutral, Moderate and Long-Term**.*

Terenure Road North to Charleville Road

The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is medium / high.

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.*

xviii. Impact on Local Business

The Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on Templeogue Road and surrounding area, 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, including on Templeogue Road, by providing significantly improved sustainable transport options. It is therefore expected that the improvements to the sustainable transport options on Templeogue Road and surrounding areas will promote more frequent local trips to nearby amenities, such as Templeogue and Terenure Village.

EIAR Volume 4 Chapter 9 Appendix A10.2 The Economic Impact of the Core Bus Corridors, concludes that businesses along the corridors are not likely to see reduction in footfall, desire likely reductions in general traffic along the Proposed Scheme. Section 2 states that “*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*”.

Section 3 of the Economic Impact Report states that there is likely to be increased commercial opportunities and improved sales for the majority of impacted businesses. Section 3 states “*Evidence suggests that those travelling to shops via car spend on average more per trip, as can be seen in the graph to the left. However due to the frequency of visits by bus, bike or walking, the average total spend is much higher for this cohort. As such, local businesses could benefit financially from greater access to customers through these modes of transport.*”

With regard to the loss of parking and loading, Section 6.4.6.2 summarises the impact across the scheme as follows:

*A qualitative impact assessment has been undertaken of the Proposed Scheme impacts on the 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 54 parking spaces and five loading bay spaces within the redline boundary of the Proposed Scheme (-7 spaces in Section 2, -32 (including 5 loading bay spaces) in Section 3 and -20 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 have a **Negligible and Long-term effect** in Section 2 and Section 3 and a **Negative, Slight and Long-term effect** in Section 4 of the Proposed Scheme.*

xix. Park and ride facilities

A detailed response to this item is presented in Section 2.1.1.

xx. Bus service

The Proposed Scheme will facilitate opportunities to change bus network capacity operating along the corridor due to the extensive priority provided. This will allow increases in service provision as demand increases.

As noted in 6.4.6.1.14 Increased Bus Frequency – Resilience Sensitivity Analysis of Chapter 6 states the following:

For the purposes of this EIAR and the transport modelling undertaken in support of the EIAR, no increase in bus service frequency beyond that planned under the current Bus Connects Network redesign proposals was assessed. The bus frequencies used in the modelling are based on the proposed service rollout as part of the BusConnects Network Redesign and are the same in both the Do Minimum and Do Something scenarios.

This rollout is currently underway. The rationale for undertaking this approach was that the planning consent being sought and which this EIAR supports is solely for the infrastructural improvements associated with providing bus priority and other sustainable modes measures along the Proposed Scheme.

This analysis, however, is conservative as the bus priority infrastructure improvements and indeed the level of protection it will provide to bus journey time consistency and reliability will provide a significant level of resilience for bus services that will use the Proposed Scheme from implementation into the future. The resilience provided by the Proposed Scheme will allow the service pattern and frequency of bus services to be increased into the future to accommodate additional demand without having a significant negative impact on bus journey time reliability or the operation of cycle and pedestrian facilities. In order to assess this resilience and the potential impacts of this resilience on carbon emissions, an additional analysis has been undertaken.

xxi. Cyclist safety

One of the objectives of the Proposed Scheme outlined in Chapter 1, Introduction of Volume 2 of the EIAR is to *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.*

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. Following initial public consultation events, as well as a review of topographical information, a number of parallel cycle route options were considered off Rathfarnham Road in order to minimise the impact on adjacent properties. A total of 10 options were considered in this regard as set out in section 3.4.1.1.2.1

Following the identification of the preferred bridge option, as outlined above, 10 alternative parallel cycle route options were developed along this section of the Proposed Scheme. These options are briefly summarised below:

- *Option PC1 (EPR Option) – Parallel cycle route via Brookvale Downs using laneway north of Texaco Station and crossing River Dodder via a new boardwalk at Pearse Bridge;*
- *Option PC2 - Parallel cycle route via Brookvale Downs using laneway north of Texaco Station and crossing River Dodder via a new pedestrian/cycle bridge to Rathdown Park;*
- *Option PC3 - Parallel cycle route via Brookvale Downs using Brookvale Road and crossing the River Dodder via a new boardwalk at Pearse Bridge;*
- *Option PC4 - Parallel cycle route via Brookvale Downs using Brookvale Road and crossing River Dodder via a new pedestrian/cycle bridge to Rathdown Park;*
- *Option PC5 - Parallel cycle route along Butterfield Avenue and the Owendoher River connecting to the Dodder Greenway and crossing the River Dodder via a new boardwalk at Pearse Bridge;*
- *Option PC6 - Parallel cycle route along Butterfield Avenue and Owendoher River connecting to the Dodder Greenway and a new bridge to Rathdown Park;*
- *Option PC7 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to the Dodder Greenway and a new boardwalk via a new boardwalk at Pearse Bridge;*
- *Option PC8 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to the Dodder Greenway and new bridge to Rathdown Park;*
- *Option PC9 - Parallel cycle route along Butterfield Avenue and the Owendoher River connecting to Bushy Park utilising the proposed Dodder Greenway bridge; and*
- *Option PC10 - Parallel cycle route along St Mary's Avenue and the Owendoher River connecting to Bushy Park utilising the proposed Dodder Greenway bridge.*

These options were comparatively assessed in order to determine the draft preferred route option for a parallel cycle route in this section. This assessment was based on the same methodology presented in the 'Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report' for cycle route options considered in Rathgar/Rathmines. Further detail on the assessment methodology and criteria used in the assessment of these alternative cycle facilities is included in Section 3.3.3 and Table 3.1.

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Road Safety, Coherence, Directness, Attractiveness, Comfort, and Environmental. Sub-option PC8 was identified as having significant benefits over other sub-options in relation to Road Safety and Attractiveness. Following a detailed MCA, sub-option PC8 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

3.4.1.1.2.2 Grange Road to Rathdown Park - Principal Route Options

Following the initial assessment of Parallel Cycle Route options, a number of principal route options for the delivery of the CBC scheme from Grange Road to Rathdown Park were developed. These are briefly described below:

- Option RF1: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of the Dodder with cyclists diverted to Brookvale Downs. Two bus lanes, two general traffic lanes and two cycle tracks provided on Rathfarnham Road north of the Dodder. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey, namely the existing steep driveway gradients on Rathfarnham Road;
- Option RF2: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of the Dodder with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process;
- Option RF3: One-way inbound general traffic on Rathfarnham Road between Castleside Drive and Dodder Park Road with two bus lanes and online cycle tracks on the CBC. A combination of bus lanes and signal controlled priority two general traffic lanes and two cycle tracks provided north of the Dodder;
- Option RF4: One-way inbound general traffic on Rathfarnham Road between Castleside Drive and Dodder Park Road with two bus lanes on the CBC with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process;
- Option RF5: A combination of bus lanes and signal controlled priority provided on Rathfarnham Road south of the Dodder, with two-way general traffic and online cycle tracks on the CBC. A combination of bus lanes and signal controlled priority, two general traffic lanes and two cycle tracks provided north of the Dodder; and
- Option RF6: A combination of bus lanes and signal controlled priority provided on Rathfarnham Road south of the Dodder, with two-way general traffic and with cyclists diverted to the draft preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process.

Option RF2 – the provision of two bus lanes and two general traffic lanes Rathfarnham Road south of the Dodder with cyclists diverted to the draft preferred parallel route - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing full physical bus priority throughout the section and minimising the impact on residential properties with steep existing driveways on Rathfarnham Road through the provision of an alternative cycle route linking to Rathdown Park. This option would provide bus priority, and while cycle facilities would not be provided along a short section of the CBC, the proposal included an attractive and safe alternative.

In terms of the sub-criteria under the Environment criterion, the preferred option performed marginally better than other options in terms of Archaeology and Cultural Heritage as fewer recorded monuments were present in the study area. In terms of Architectural Heritage, the preferred option again performed better than other options fewer protected structures would be impacted. In terms of flora and fauna the preferred option performed significantly worse than other options due to the impacts on existing trees along the river Dodder. In terms of Landscape and Visual, the preferred option performed slightly worse than other options due to the impacts associated with the construction of a new bridge over the river Dodder. In terms of Air Quality and Noise and vibration the preferred option performed marginally worse than other options due to the fact that traffic would not be redirected from the CBC. In terms of land Use Character, the preferred option performed equally to other options.

Notwithstanding that the preferred option scored marginally lower under the environmental criteria compared to Option RF3 (and equal to the other options) it was taken forward as on balance, it best met the Proposed Scheme objectives when compared to the other options.

Table 4.1 of EIAR Volume 4 Proposed Scheme Description provides a summary of changes as a result of the Proposed Scheme. The table notes that in the existing scenario along the Proposed Scheme, 28% of cycling facilities, covering 11km in both directions, are segregated. However, under the Proposed Scheme, 85.4% of cycling facilities will be segregated, totalling 23.3km. This represents a substantial 112% increase in segregated cycling facilities along the proposed route.

An independent Stage 1 Road Safety Audit was complete by PMCE on the Proposed Scheme, the report is available in the Supplementary Information, Appendix M2 Stage 1 Road Safety Audit. The independent auditor did not identify shared cycle and bus facilities as a potential safety concern. It should be noted that where cyclists and buses share space the speed limit is reduced to 30km/h.

xxii. Alternative solutions – Metro

A detailed response to this item is presented in Section 2.1.1.

xxiii. 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 \(www.gov.ie\)](http://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 keys 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 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)*

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

3.8 CPO-08 – Brian & Ethna Healy– 11 Rathfarnham Wood

3.8.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to 4.6m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.8.1.

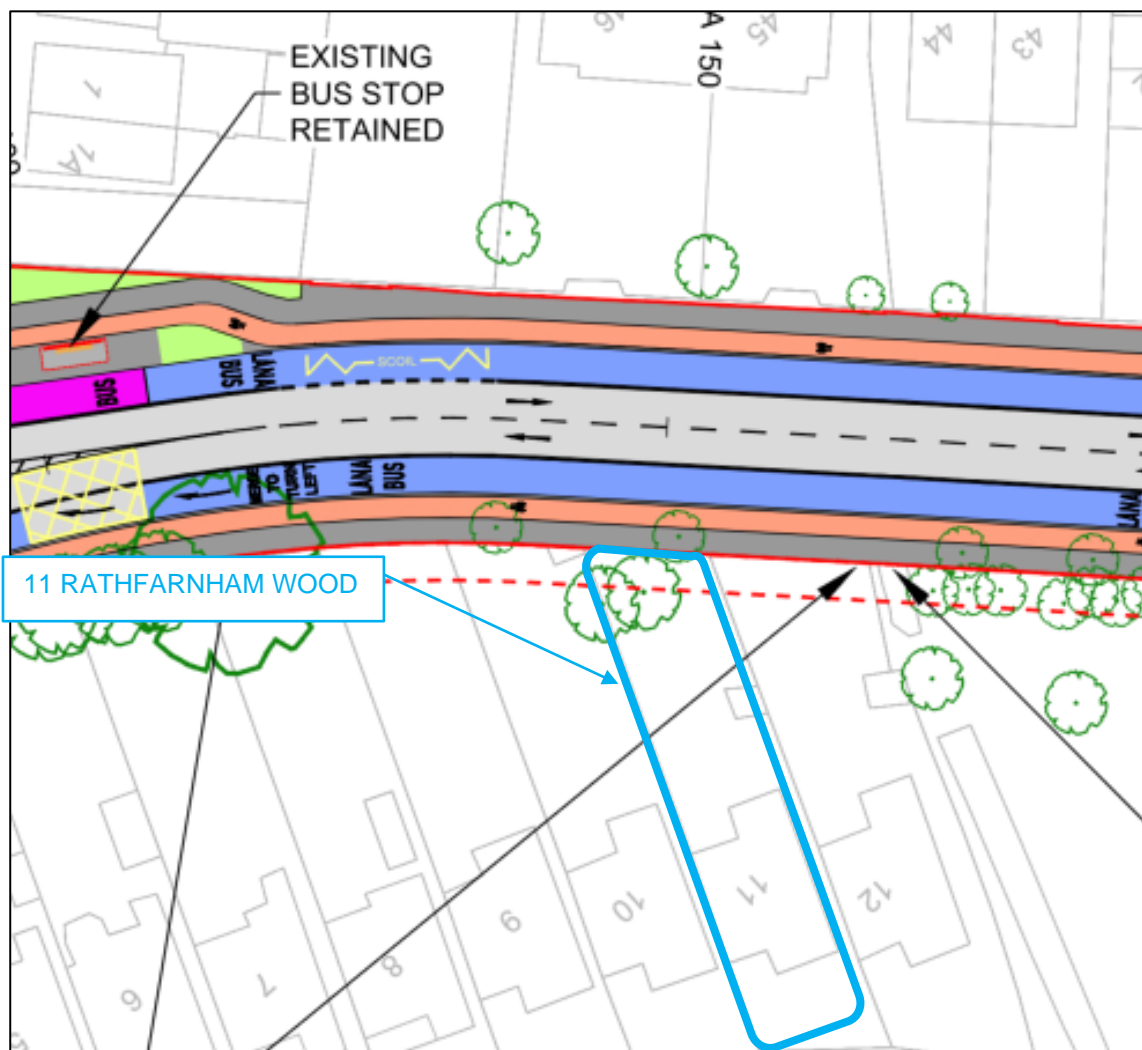


Figure 3.8.1 General Arrangement of Proposed Scheme adjacent to 11 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.8.2.

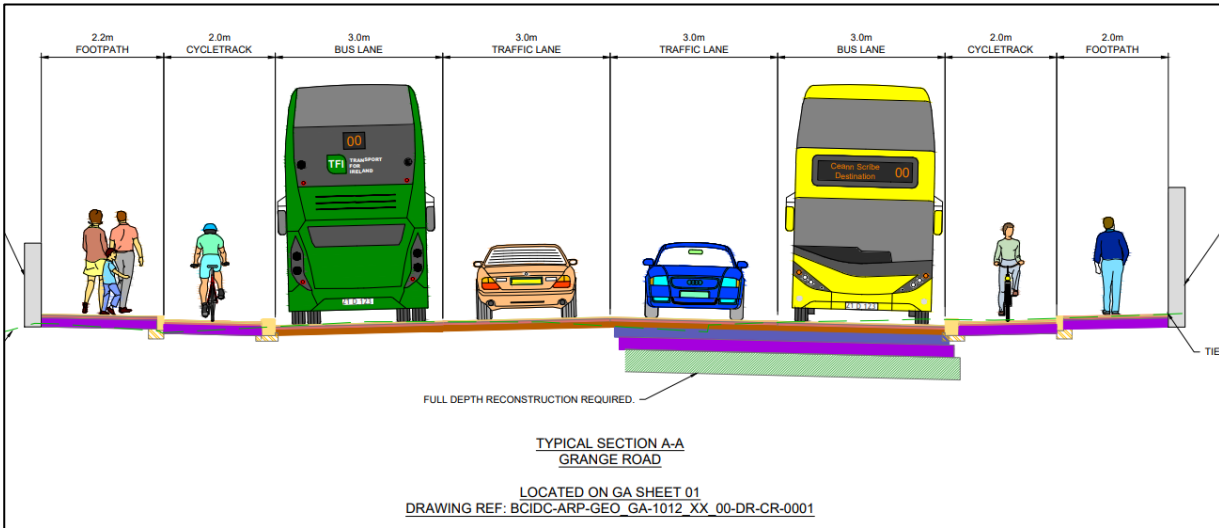


Figure 3.8.2 Typical Cross-Section adjacent to 11 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 11 Rathfarnham Wood is shown in Figure 3.8.3.

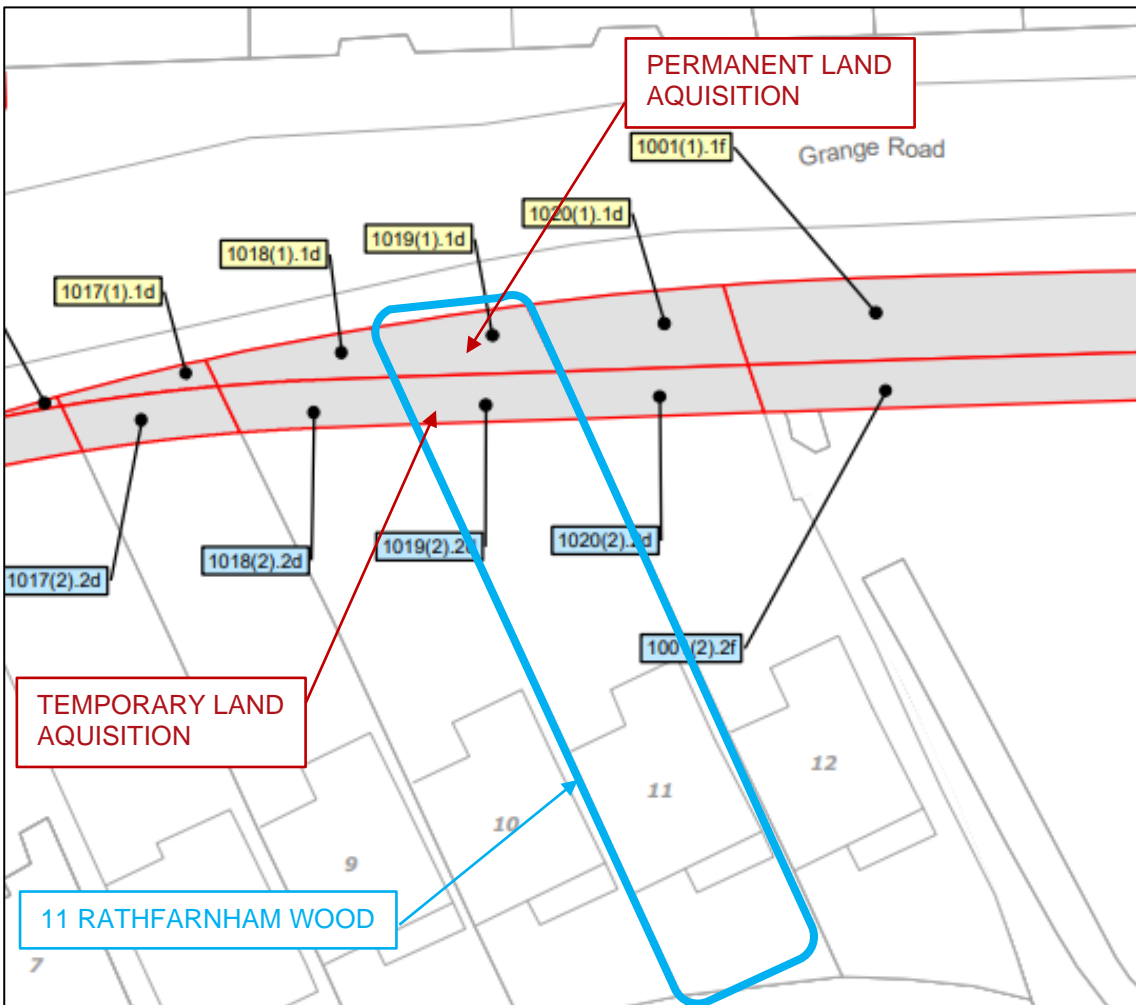


Figure 3.8.3 Extract from CPO Deposit Maps adjacent to 11 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.8.4.

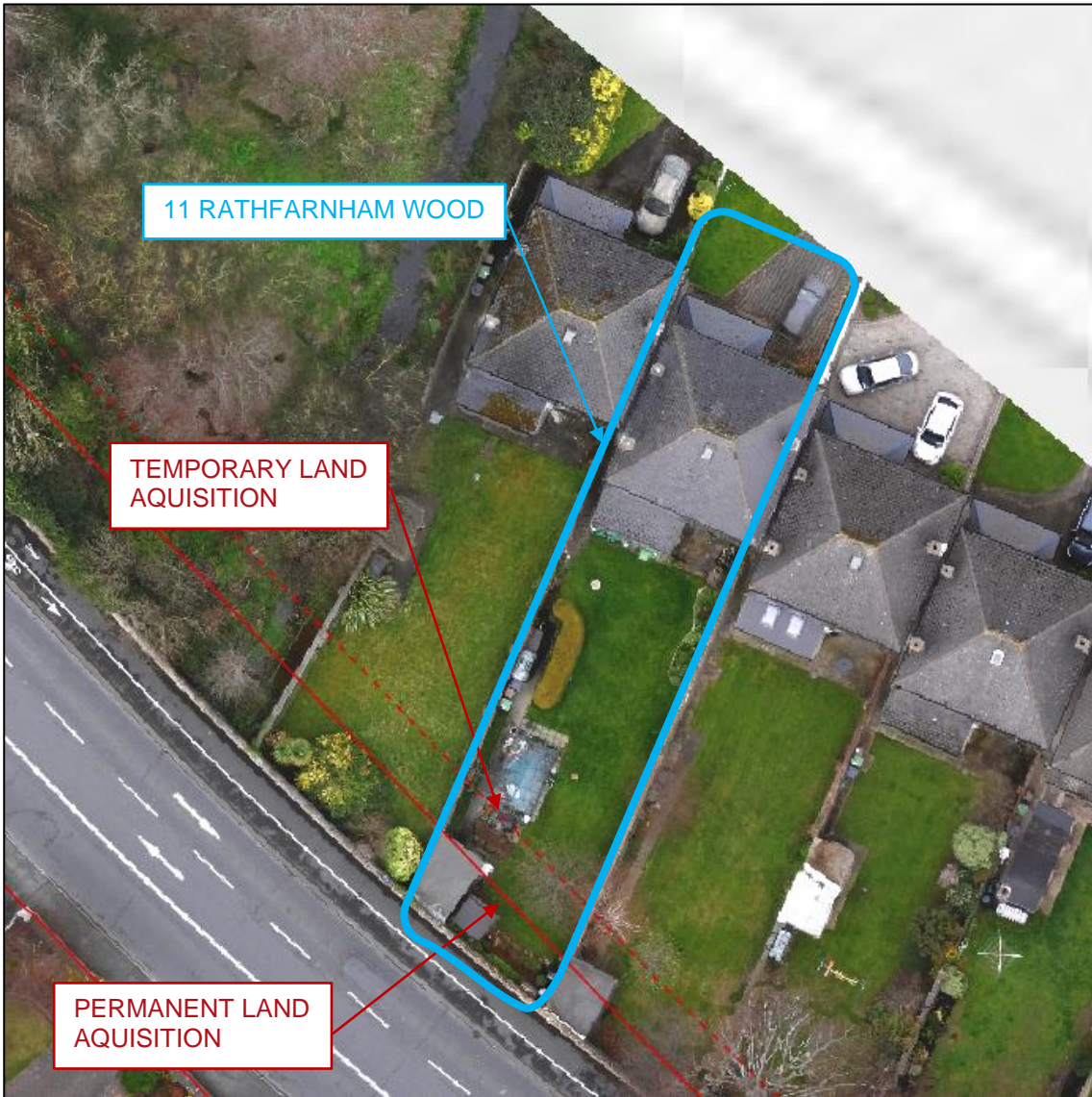


Figure 3.8.4 Proposed Land Acquisition lines adjacent to 11 Rathfarnham Wood

The existing property rear boundary is shown in Figure 3.8.5.



Figure 3.8.5 Existing property rear boundary of 11 Rathfarnham Wood (Image source: Google)

3.8.2 Summary of the Points of Objection to the CPO by Brian & Ethna Healy

This submission objected to CPO for the reasons summarised in the following section.

i. Necessity of road widening

The submission states that the level of disruption and environmental impact involved are unnecessary and disproportionate. Adding that the proposed acquisition will result in impact to the granite wall, shed and greenhouse located at the rear of the garden.

ii. Trees not picked up on the Arboricultural Impact Assessment

The submission noted that several trees found in the back garden of 11 Rathfarnham Wood have not been picked up in the Arboricultural Impact Assessment.

iii. No consideration of Glin River

The submission notes that the Environmental Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin river to the area.

iv. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, The submission goes on to suggest using bus priority as an alternative to reduce land take need. In addition the following options are suggested:

- i. Terminate Proposed Scheme at Butterfield Avenue – the submission suggests stopping the scheme at the Butterfield Avenue junction to avoid impacting the Rathfarnham Castle Park

- ii. Acquire land from the houses on the southern side of Grange Road
- iii. Cyclists share bus lanes as proposed elsewhere on the scheme
- v. Climate Impact of Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

- vi. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

- vii. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use.

- viii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife.

- ix. Replacement of the Castle Wall

The submission contends that proposed roughcast render wall will be aesthetically inferior to the existing granite wall. It also goes on suggest that the EIAR is misleading in the description of this.

- x. Impact on woodland playground

It also notes the impact on the Woodland playground close to the boundary wall along Grange Road which particularly important resource for children with autism.

- xi. Request to improve Nutgrove Avenue cycle facilities

A number of concerns in relation to the poor quality of the existing Nutgrove Avenue cycle facilities and a request to upgrade them as part of the scheme

- xii. Bus Stops

The submission notes that there is a reduction in the number of bus stops along in the area. The submission states that the Proposed Scheme proposes to reduce the number of bus stops from 18 to 15 according to Table 6.29 and is considered a regressive step.

- xiii. Courtyard/stables redevelopment

The submission notes that there are other proposals for the northern area of the Rathfarnham Castle Park by others. It notes that this development has been mooted for some time and is not considered by the BusConnects project. The submission contends that cumulative effects of the courtyard development and BusConnects proposal is too significant an incursion into the park.

- xiv. Nutgrove Avenue/Grange Road Junction Signals

The submission notes that Section 6.4.6.1.3.1 of EIAR states as an advantage of BusConnects that a signalised crossing would be added to the western arm of the R821 Nutgrove Avenue/R821 Grange Road/R822 Grange Road signalised junction, the submission notes that the scheme documentation states that this is a benefit when in fact it is already in existence.

3.8.3 Responses to the Points of Objection

- i. Necessity of road widening

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

For the section between adjacent to 11 Rathfarnham Road, three options (SA1 to SA3) have been developed during the development of the Emerging Preferred Route (EPR). The assessment process of three options is described in section 5.4 of the Rathfarnham to City Centre Core Bus Corridor Feasibility Study and Options Assessment (FSOA), included in appendix I2 of the supplementary documents submitted alongside the planning application.

Following the review of the EPR and submissions received as part of the public consultation within the section between Nutgrove Avenue to Willbrook Road, it was decided that alternative options could be feasible within this section of the Proposed Scheme. For this reason, two alternative options (RC1 and RC2) have been developed. The alternative options are described in detail in section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application.

A detailed response to the optioneering process complete for Grange Road and Rathfarnham Road is provided in response to item *iv. Consideration of Alternatives*.

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the desirable width of 2.0m for footpaths and desirable width of 2m for cycle tracks. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

Providing the optimum cross-section described in the above paragraphs achieves the project objectives of enhancing the potential for cycling and walking by providing safe infrastructure. EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling and pedestrian infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate

R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.8.6 Section 2- Significance of Effects for Pedestrian Impact during Operational Phase (table 6.27 of EIAR Chapter 6)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.*

Cycling Infrastructure

Table 6.28 (Figure 3.8.7 below), in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.8.7 Section 2 - Cycling Impact during Operational Phase (Table 6.28 of EIAR Chapter 6)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Further details on the significant benefits of the Proposed Scheme are presented in Section 2.1.1.

- ii. Trees not picked up on the Arboricultural Impact Assessment

In order to assess the impact of the Proposed Schemes on trees, a tree survey was undertaken in August 2020. The survey and resulting assessment of the impact of the scheme is presented in the Arboricultural Impact Assessment Report, which is included as Appendix A17.1 of EIAR. The methodology for the survey is set out in section 1.2 of Appendix A17.1

“An initial tree survey and visual condition assessment was undertaken on the 24th and 25th of August 2020. As part of this report and in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction - recommendations, only trees with diameters of 75mm or greater were surveyed. Also, in accordance with section 4.4.2.3 of the British standard document, where trees formed obvious groups, these were assessed and recorded as groups. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold’s Cross Road section and the Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road section of the Proposed Scheme.

The survey concentrated primarily on the significant trees/hedgerows and groups located within 20m of any development works which could impact on the tree (this could include excavation, resurfacing, utility installation, new signage/lighting etc) within and adjacent to the Proposed Scheme and has been based on the topographical survey plan provided. The objective of this survey was to gather information regarding the trees along the Proposed Scheme and to assess the impact the Proposed Scheme may have on the trees. Refer to Appendix A for the tree survey schedule.”

While the submission does not identify trees that have been omitted from the assessment, it is understood that it is referring to a tree that is located close to the boundary wall on Grange Road at the eastern side of the property as indicated in the Streetview image below.



Figure 3.8.8 Streetview image of trees at boundary to 11 Rathfarnham Wood

While these trees have not been captured in the Arboricultural Impact Assessment Report or on the Landscape General Arrangement Drawings, they have been captured on the Proposed Surface Water Drainage drawings included in Volume 3 as presented below. As can be seen in the extract it is not intended to remove any trees from the back garden of 11 Rathfarnham Wood.

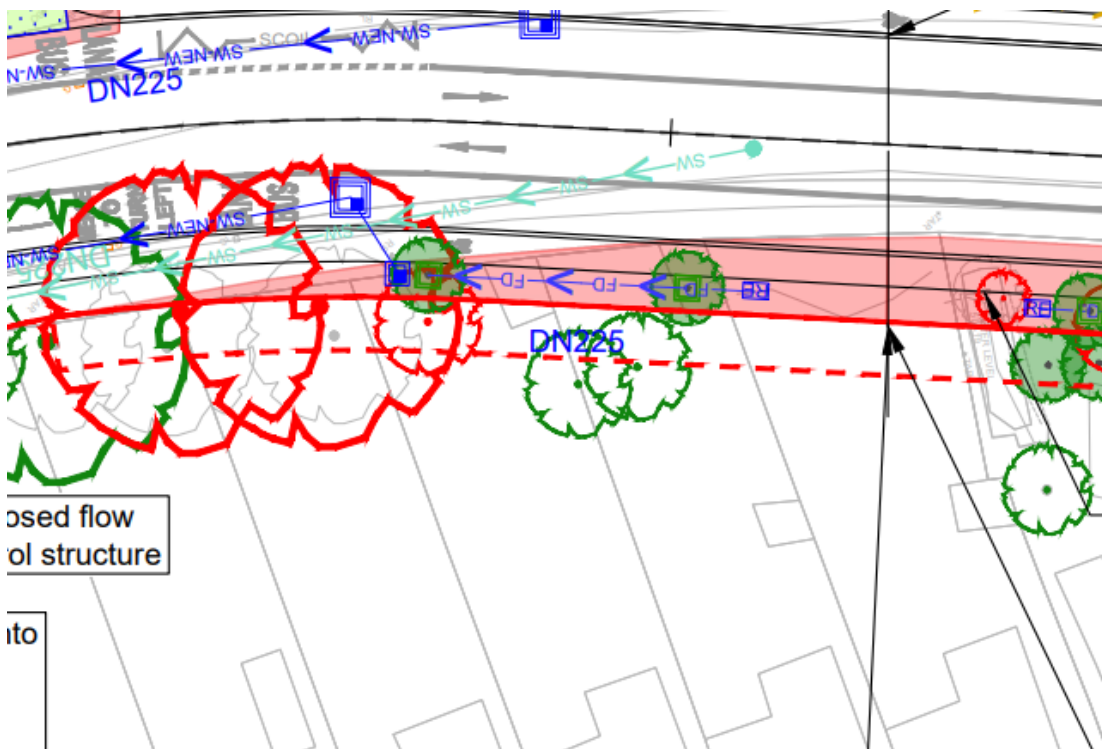


Figure 3.8.9 Extract from Proposed Surface Water Drainage Drawings (Sheet 1)

It is important to note that the impact assessment of the Proposed Scheme on trees has included the loss of the tree noted and that the number of trees to be removed across the scheme (169 trees) includes this particular tree. As such the assessment presented in the EIAR remains valid.

iii. No consideration of Glin River

A detailed response to this item is presented in section 2.3.2 of this report.

iv. Consideration of alternative options

A detailed response to this item is presented in section 2.3.2 of this report.

In relation to the additional alternatives put forward in the submission please note the following specific additional responses.

a) Terminate Proposed Scheme at Butterfield Avenue

As stated in Chapter 3 of the EIAR Consideration of Alternatives “*the Rathfarnham to City Centre Core Bus Corridor CBC Feasibility Study and Options Assessment Report, it was determined that the route should stop at the junction of Nutgrove Avenue and Grange Road, as south of this point generally there are three principal routes between Marley Park and the Dodder crossing namely via Stone Mason’s Way, Grange Road and Ballyboden Road which currently carry less frequent bus services and which converge at Nutgrove Avenue in the vicinity of the junction with Grange Road.*”

In addition the network redesign map below demonstrates how the A2, A4 and S6 services split at the Nutgrove junction which further supports the rationale to extend the scheme as far as Nutgrove junction.

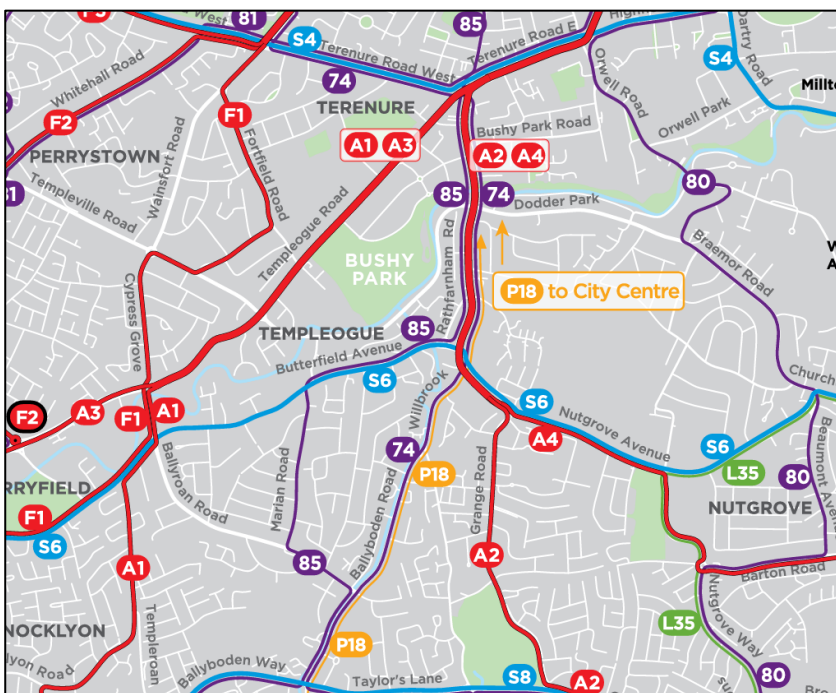


Figure 3.8.10 Extracts from the Dublin Area Bus Network Redesign Revised Proposal (2020)

b) Acquire Land from the properties on the southern side of Grange Road

The consideration of options along Grange Road is described in section 2.3.2 of this report. With regards to the option of acquiring land from properties on the southern side of Grange Road between Butterfield Avenue/Rathfarnham Road junction and Nutgrove/Grange Road junction the landtake would have impacted significantly more properties and as such was not considered.

c) Cyclists to share bus lanes as proposed elsewhere

While it is proposed that cyclists share bus lanes at other locations on the scheme there are specific reasons for this. The 2 locations where cyclists share with bus lanes are along Terenure Road East and Rathfarnham Road.

In the case of Terenure Road East, additional alternative cycle facilities are proposed on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road in lieu of facilities along Terenure Road East. Additionally, alternative cycle facilities are also proposed on Terenure Road North and Harold's Cross Road connecting to the Kimmage to City Centre CBC at Harold's Cross. This provides an alternative north-south route for cyclists who do not wish to stay on the CBC, in particular along Terenure Road East where it is not practically feasible to provide segregated cycle facilities. Given the presence of feasible alternative routes which have been incorporated into the scheme, no cycle facilities are proposed on Terenure Road East so as to minimise the impact on trees and properties on Terenure Road East whilst maintaining a high level of service for cyclists travelling to and from the city centre. The optioneering associated with this is presented in Chapter 3 of the EIAR and the Preferred Route Option Report presented in the Supplementary information.

In the case of Rathfarnham Road, an inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. The rationale for the shared cycle approach is set out in Section 4.3.3.1.3 of the Preferred Route Options Report:

Between Brookvale Road and Dodder Park Road, the cross-section is particularly constrained. Widening into properties within this section of the scheme would require the road to be raised in order to maintain driveway gradients at existing grades, which is a requirement of Part M Building Regulations. The potential impacts of the construction works would include:

- *Potential temporary closure of vehicular access to some properties during construction works;*
- *Potential need to undertake significant utility works including raising of manhole covers/gullies, and potentially utility ducts;*
- *Potential temporary closure of Rathfarnham Road to traffic during construction to facilitate works;*
- *Extended construction period when compared to sections where works are less complex.*

Upon review, the collective and individual impact of the required construction works were not considered to be practicably feasible due to significant disruption caused by the unique construction works required to deliver this option. Alternative design solutions have therefore been explored in this area in determining the PRO, as described in Section 4.4.1.2.3 of this report.

v. Climate impact of tree removal

A detailed response to this item is presented in section 2.3.2 of this report.

vi. Biodiversity Impact

A detailed response to this item is presented in section 2.3.2 of this report.

vii. Landscape and Visual

A detailed response to this item is presented in section 2.3.2 of this report.

viii. Noise, Vibration and Air Quality

The impact of Construction on the woodland playground within in the park is described in the response to Item viii below. The impact of the construction of the Proposed Scheme on Noise, Vibration and Air Quality on the wildlife within the park is described below.

Noise and Vibration

In overall terms the impact of noise and vibration during construction is described in Chapter 9 Noise and Vibration. As per Table 9.1 of Chapter 9 the Noise Sensitive Locations (NSL) between Nutgrove Avenue to Terenure Road North are as follows : *"The key NSLs are predominately residential NSLs, which bound the east and west of the Proposed Scheme within 10m to 30m, of the Proposed Scheme including Rathfarnham Wood, Beaufort Downs, Brookvale and the residential receptors lining R821 Grange Road / R114 Rathfarnham Road. Education NSLs in the zone include St. Mary's Boys National School Rathfarnham and Little Smarties Montessori and After School, within 15m to 100m of the Proposed Scheme. Rathfarnham Castle and Park, Rathfarnham Church of the Annunciation and Orthodox Synagogue are community NSLs within 5m to 35m of the road edge."*

At the location of Rathfarnham Castle Park there will be road widening, road reconstruction, utility diversion works as well as boundary wall construction. The associated predicated construction phase impacts following the implementation of mitigation and monitoring is set out in Table 9.42 of Chapter 9 as set out below.

Assessment Topic	Period over which Criterion Applies	Potential Impacts (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
General Road Works, Quiet Street Treatment and Urban Realm Landscaping	Monday to Friday: Daytime (07:00hrs – 19:00hrs)	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary in the absence of noise mitigation at NSLs within 15m distance from the proposed works; 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. 	<ul style="list-style-type: none"> Negative, Slight to Moderate and Temporary at NSLs within 15m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 15m from the proposed works.
	Monday to Friday: Evening: (19:00hrs – 23:00hrs) or Saturdays (08:00hrs – 16:30hrs)	<ul style="list-style-type: none"> 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 40m from the proposed works; Negative, Slight to Moderate and Temporary at NSLs at distances between 40m and 50m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 50m from the proposed works. 	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary at NSLs within 15m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 15m from the proposed works.
Road Widening, Road reconstruction, Utility Diversion Works, retaining walls	Monday to Friday: Daytime (07:00hrs – 19:00hrs)	<ul style="list-style-type: none"> Negative, Significant to Very Significant and Temporary at NSLs within 10m of the proposed works; Negative, Moderate to Significant and Temporary at NSLs between 15m to 25m from the proposed works; Negative, Slight to Moderate and Temporary at NSLs at distances between 25m to 60m from the proposed works; and Negative, Not Significant at NSLs at distances greater than 60m from the proposed works. 	<ul style="list-style-type: none"> Negative, Slight to Moderate and Temporary at NSLs within 20m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 20m from the proposed works.
	Monday to Friday: Evening: (19:00hrs – 23:00hrs) or	<ul style="list-style-type: none"> Negative, Significant to Very Significant and Temporary at 	<ul style="list-style-type: none"> Negative, Significant to Very Significant and Temporary at NSLs within 10m from the proposed works; and

Figure 3.8.11 Extract from Table 9.42 in Chapter 9 of the EIAR

Assessment Topic	Period over which Criterion Applies	Potential Impacts (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
	Saturdays (08:00hrs – 16:30hrs)	<ul style="list-style-type: none"> NSLs within 40m of the proposed works. Negative, Moderate to Significant and Temporary at NSLs within 40m to 75m from the proposed works; Negative, Slight to Moderate and Temporary at NSLs at distances within 75m and 80m from the proposed works; and Negative, Not Significant at NSLs at distances greater than 80m from the proposed works. 	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary at NSLs within 10m to 20m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 20m from the proposed works.
Boundary Wall, and structures	Monday to Friday: Daytime (07:00hrs – 19:00hrs)	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary at NSLs within 15m of the proposed works; Negative, Slight to Moderate and Temporary at NSLs 20m to 50m from the proposed works; and Negative, Not Significant at distances greater than 50m from the proposed works. 	<ul style="list-style-type: none"> Negative, Slight to Moderate and Temporary at NSLs within 15m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 15m from the proposed works.
	Monday to Friday: Evening: (19:00hrs – 23:00hrs) or Saturdays (08:00hrs – 16:30hrs)	<ul style="list-style-type: none"> Negative, Significant to Very Significant and Temporary to Short-Term at NSLs within 25m of the proposed works; Negative, Moderate to Significant and Temporary at NSLs 25m to 50m from the proposed works; Negative, Slight to Moderate and Temporary at NSLs 50m to 60m from the proposed works; and Negative, Not Significant at distances greater than 60m from the proposed works. 	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary at NSLs within 15m from the proposed works; Negative, Slight to Moderate and Temporary at NSLs within 15m to 20m from the proposed works; and Negative, Not Significant and Temporary at NSLs at distances greater than 20m from the proposed works.
Compounds	Monday to Friday: Daytime (07:00 – 19:00hrs)	<ul style="list-style-type: none"> Negative, Moderate to Significant and Temporary at NSLs within 10m of the Construction Compounds; Negative, Slight to Moderate and Temporary at NSLs between 15m and 40m from the 	<ul style="list-style-type: none"> Negative, Not Significant and Temporary at NSLs at distances within 10m of the Construction Compounds.

Figure 3.8.12 Extract from Table 9.42 in Chapter 9 of the EIAR

The impact of the construction noise and vibration on wildlife within the park is further described in Chapter 12 of the EIAR.

In relation to breeding birds, as per Section 12.4.3.5.1.3 “*The noise, vibration, increased human presence and the visual deterrent of construction traffic, associated with site clearance and construction will temporarily disturb breeding bird species and is likely to displace breeding birds from habitat areas adjacent to the footprint of the Proposed Scheme. Construction activities will largely involve carriageway and pavement resurfacing / reconstruction as required, readjustment of kerbs and new road. However, as an important transport corridor in a heavily urbanized landscape, there is an existing relatively high level of human disturbance within the immediate environment of the Proposed Scheme (e.g., Rathfarnham Road R114 and N81 / M50 Interchange) and as such it is likely that breeding species present are habituated to a certain degree of disturbance. The magnitude of the impact will be dependent on the type of construction works and their duration; general construction activities will have a less pronounced affect than blasting, in terms of its Zol, but will be on-going from periods of up to 24 months and multiple breeding seasons across the entirety of the Construction Phase. However, phasing of the construction works in scheme section will reduce the temporary nature of this impact to approximately one to twelve month disturbances in each section of the Proposed Scheme.*

Table 12.15 provides a summary of the indicative construction noise calculations at varying distances, which have been modelled in the Chapter 9 Noise and Vibration in Volume 3 of this EIAR. All areas within 250m of the Proposed Scheme will be subject to construction activities which generate noise levels greater than 50dB (e.g., piling, rock-breaking, etc.). These activities will result in a greater magnitude of effect on the baseline environment. As a result, noise and vibration from these activities, will have the potential to result in the reduced breeding success of breeding bird species in the vicinity of the works. Breeding pairs will be temporarily displaced during the construction works.

The area over which disturbance / displacement effects will occur, forms a relatively small part of larger expanses of similar habitat types in the wider locality (e.g., mixed broadleaved woodland (WD1)). As such, given the availability of suitable habitat in the wider locality of the Proposed Scheme, the construction works are therefore not likely to affect the conservation status of breeding birds and will not result in a significant negative effect, above the local geographic scale. Although it is not possible to quantify the magnitude of this potential impact (or the potential effect zone) with precision, it could potentially extend for several hundred metres Environmental Impact Assessment Report (EIAR) Volume 2 of 4 Main Report Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme Chapter 12 Page 87 from the Proposed Scheme. The results of noise modelling carried out for the Proposed Scheme confirmed that at 150m, noise levels for all construction activities will be below 60dB (See Chapter 9 (Noise & Vibration)). Given the temporary to short-term nature of the construction works, coupled with the existing levels of disturbance within these urban areas, disturbance or displacement effects associated with the Construction Phase of the Proposed Scheme will also be over the short-term. Therefore, these impacts will not affect the conservation status of breeding bird species and will not result in a negative effect, above the local geographic scale.”

In relation to Section 12.4.3.5.2 wintering birds, *“None of the construction activities proposed would be expected to result in any more than a moderate level of disturbance effect on wintering birds at distances beyond 250m. At 100m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Low, or no, effects would be expected for those noise levels. Any landscape features, vegetation cover or buildings between the construction site and winter bird sites would contribute to further reducing the ambient noise at any given distance. Therefore, 300m is considered to be a precautionary buffer in defining the ZoI of disturbance effects. As the majority of works will be carried out during normal working daylight hours, the potential for construction to disturb wintering birds at night, will not arise. Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these wintering bird species to other suitable available lands in the locality. These impacts will be associated with general construction activities (e.g. visual impact of construction workers and machinery and the associated vibration and more constant / continuous noise levels) and impulse noise disturbance from infrequent noise sources with a high noise level, such as blasting/ rock breaking. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and / or roosting habitat for these wintering bird species.”*

To mitigate and monitor the impact of noise and vibration on wildlife within the park during construction the following measures as described in the EIAR will be implemented:

As per Section 12.5.1.2.4 *“The appointed contractor will provide a site hoarding of 2.4m height along noise sensitive boundaries, at a minimum, at the Construction Compound, which will assist in minimising the potential for dust impacts off-site”*

As per Section 12.5.1.5.1.3 *“To mitigate disturbance and / or displacement to breeding birds from noise and vibration activities the relevant mitigation measures as described in Chapter 9 (Noise & Vibration) will be implemented by the appointed contractor. The use of noise generating equipment shall be tempered by the use of modern machinery that shall have appropriate noise restrictors for use in urban situations. Furthermore, the location of equipment that has the potential to cause long-term noise impacts, shall be sited in such a manner so that noise baffling screening reduces noise spill to adjacent areas of open ground.”*

Air Quality

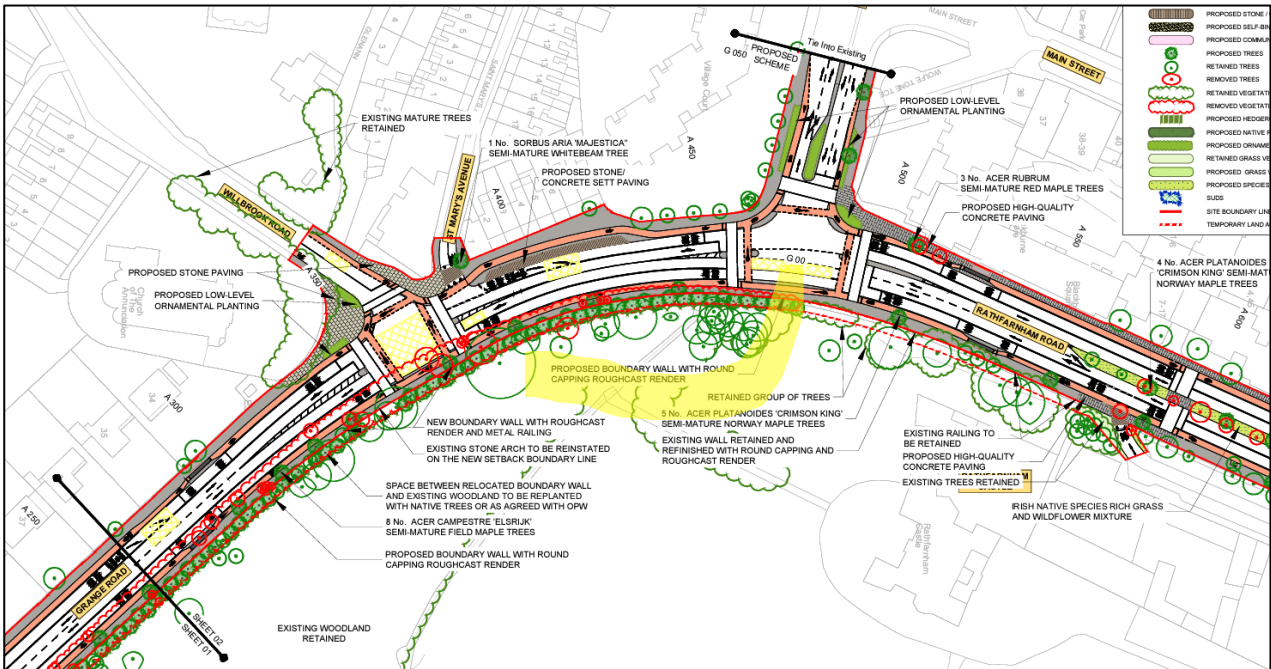
In relation to air quality during construction, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme’s operation are neutral and long-term.

Section 7.6.1 describes the residual impact of the Construction Phase: *“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. The air dispersion modelling assessment of Construction Phase traffic emissions has found that the Proposed Scheme will be neutral overall in the study area. There are no substantial or moderate adverse effects expected as a result of the Construction Phase of the Proposed Scheme. Therefore, overall it is considered that the residual effects as a result of the Proposed Scheme’s construction are neutral and short-term. No significant residual impacts have been identified during the Construction Phase of the Proposed Scheme, whilst meeting the scheme objectives set out in Chapter 1 (Introduction)”*

In addition, the EIAR Volume 3 Figures: Part 3 of 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM10, PM2.5 during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

ix. Replacement of the Castle Wall

Section 4.5.2.1 in Chapter 4 in Volume 2 of the EIAR describes the Proposed Scheme along this section. “The Proposed Scheme will commence at the junction of Grange Road and Nutgrove Avenue. Between this junction and the Castleside Drive junction it is proposed to provide a single bus lane alongside general traffic lanes and cycle tracks in both directions. To accommodate the road layout, it is proposed to utilise limited land-take from adjacent properties, including setting back the existing boundary wall to Rathfarnham Castle Park. The existing boundary wall of Rathfarnham castle will be set back and reconstructed with a round capping roughcast render”. The extent of the proposed wall reinstatement is shown on Drawing Nos. BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001 and BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001, relevant extract from one of those drawings below with the detail highlighted.



As per Section 16.5.1.5 in Chapter 16 in Volume 2 of the EIAR “the proposed land take to Grange Road directly impacts the boundary wall to the Rathfarnham Castle Demesne. Rathfarnham Castle is a 16th century Castle remodelled in the 18th century and is a National Monument (RMP DU022-014, Nat. Mon. No. 628, PO no. 2/1986, SDCC RPS 221) and therefore of High sensitivity. It is also located directly opposite the Rathfarnham Architectural Conservation Area. The Demesne (NIAH 2351) has been much reduced in size but is a public park around the Castle, preserving its setting. Some trees will be removed as a result of the land take and will be a temporary negative visual impact during construction. The pre-mitigation Construction Phase impact is Direct, Negative, Significant Temporary. The present boundary to Rathfarnham Castle on Grange Road and Rathfarnham Road are replacement boundaries built as part of the Rathfarnham Road bypass. The existing mix of boundary treatments on the Grange Road and Rathfarnham Road provides a poor and discordant street frontage and detracts from the streetscape, particularly in relation to the adjoining ACA and Protected Structures. The concrete block walling also detracts significantly from the Castle and its setting and is out of keeping with the Castle and its Demesne. The proposed land take presents an opportunity to reinstate a more consistent and sympathetic boundary treatment which is in keeping with the Castle, its Demesne landscape and the ACA. Consultations have been undertaken with SDCC, OPW, Dept. of Housing, Local Government and Heritage regarding the encroachment into the Rathfarnham Castle Demesne and the removal, set back and replacement of the existing boundary wall. The following boundary treatment is proposed as part of the Proposed Scheme.

The proposed wall will be 2.8m in height with a rounded capping detail. This is consistent with the existing wall and together with the proposed landscape treatment will provide the necessary buffer between the proposed scheme and the Castle and its Demesne and maintains and enhances the sense of enclosure.

It is noted that in their submission, South Dublin County Council indicate that proposed boundary wall details are acceptable stating *'the new boundary wall required at this location will provide a boundary treatment that improves views from the Castle and allows the boundary treatment of the Castle Demesne to be more consistent and improve the overall visual impact and architectural detail'*.

x. Impact on woodland playground

There is an existing woodland playground within Rathfarnham Castle. Section 4.5.2.8 in Chapter 4 of the EIAR provides a description of the landscape and urban design works and it acknowledges that *'...the impacted woodland will be replanted with native species and the existing playground will be integrated with the new planting and setback wall alignment (refer to Image 4.2)'*. An extract of Image 4.2 from Section 4.5.2.8 on Chapter 4 is provided below:



Figure 3.8.13 Rathfarnham Castle (extract from Image 4.2 from Section 4.5.2.8 of Chapter 4)

As a consequence of the Proposed Scheme the vehicular traffic lanes will be circa 4.5m closer to the playground than the existing road.

The submission contends that the Proposed Scheme will result in negative impacts on the playground, including increased noise.

The Proposed Scheme will require widening into the park boundary, the closest elements of the Proposed Scheme to the new park boundary are the proposed footpaths and cycle lanes. A bus lane will move approximately 4.5m closer to the natural playground as a result of the Proposed Scheme.

Chapter 9 of the EIAR has undertaken a detailed impact assessment relating to both construction and operational phase noise and vibration impacts associated with the Proposed Scheme taking account of the realignment of all vehicular and active travel lanes and the resultants forecasted traffic flows along the adjoining road network with and without the Proposed Scheme in place. The resultant noise impacts associated with the Proposed Scheme once operational are determined to be neutral to minor positive within the Park. This is due to the overall reduction in traffic flows (cars and HGVs) along the Proposed Scheme.

It is noted that the existing boundary wall will be replaced with a wall of the same height along the park boundary and hence no change in the effectiveness of noise screening from the boundary wall treatment will occur. Whilst there will be a portion of trees removed from the park boundary, these do not provide any notable noise screening for road traffic and hence are not relied upon for noise reduction.

Finally it is important to note that all traffic noise calculations are based on full fleet using combustion engines. As noted in Section 9.4.4.1.1.4 in Chapter 9 in Volume 2 of the EIAR, during the proposed year of opening, 2028, the percentage of vehicles with combustion engines will be reduced compared to the existing scenario. 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. This will in turn reduce the operational traffic noise levels from buses along the adjacent bus lane.

xi. Request to improve Nutgrove Avenue cycle facilities

It is proposed to tie the scheme into the existing Nutgrove Avenue immediately after the Nutgrove Avenue/Grange Road junction as per the general arrangement drawing below.

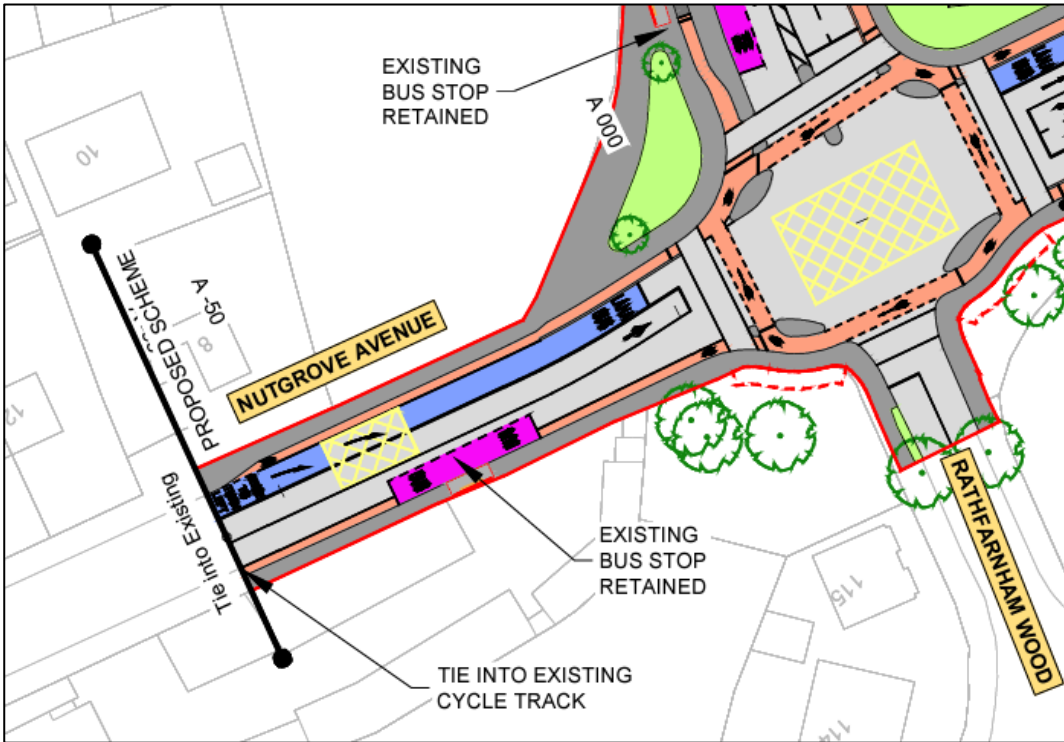


Figure 3.8.14 General Arrangement of Proposed Scheme (Sheet 01)

As per the 2022 Greater Dublin Cycle Network Plan published by the NTA identifies a Nutgrove for a secondary cycle link as indicated by the blue line below. The Proposed Scheme does not preclude any improvement to cycle facilities along Nutgrove Avenue in future.

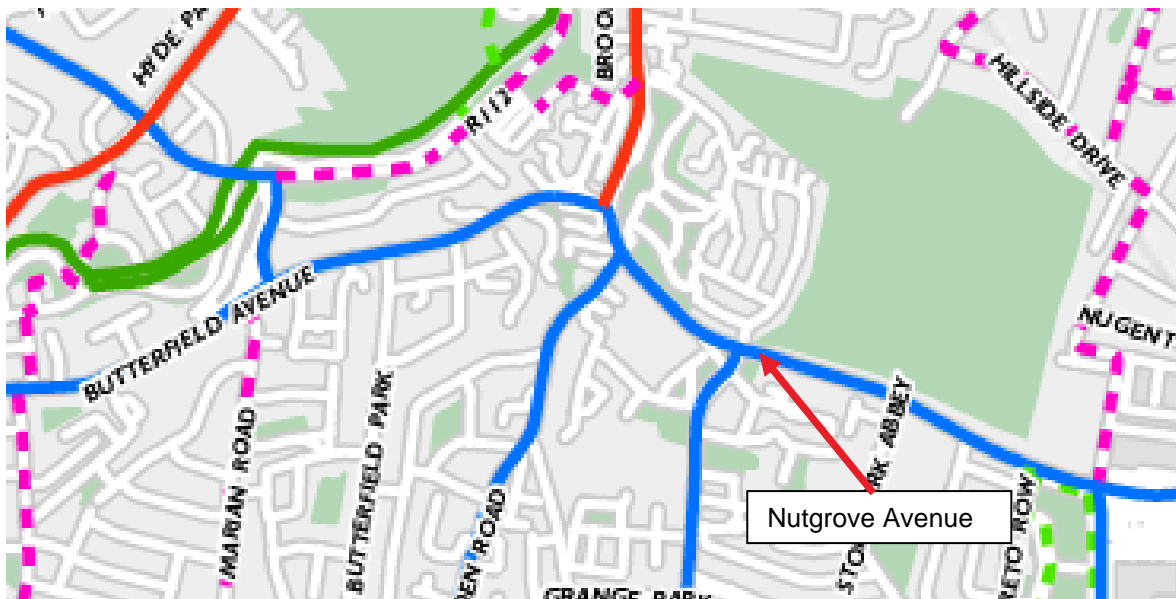


Figure 3.8.15 Extract from 2022 Greater Dublin Cycle Network Plan

xii. Bus Stops

Table 6.29 relates to the change between R821 Nutgrove Avenue and R137 Terenure Road North.

Section 4.6.5.5 of Chapter 4 Proposed Scheme Description of Volume 2 of the EIAR notes the following:

“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.” As a outcome of the bus stop assessment there is a proposed reduction in bus stops from 18 to 15 R821 Nutgrove Avenue and R137 Terenure Road North which results in a positive significant effect as set out in Table 6.30, extract below.

Section	Chainage	Description of Impact	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Avenue to R137 Terenure Road North	A000 - A1850	<ul style="list-style-type: none"> • Three fewer stops than in the Do Minimum. Bus stops are located in more convenient locations for communities and access to signalised crossings. • Slight improvements to bus stop facilities throughout. 	Medium	Medium	Positive Significant

xiii. Courtyard/Stables Redevelopment

In relation to the potential Courtyard/Stables redevelopment which does not yet have planning grant as of the day of writing this response report. Section 21.5.1 in Chapter 21 (Cumulative Impacts & Environmental Interactions), of Volume 2 of the EIAR acknowledges that other projects could directly interface with the Proposed Scheme and that appropriate liaison will take place:

“Other major infrastructure projects could directly interface with the construction of the Proposed Scheme. Interface liaison will take place on a case-by-case basis through the NTA, as will be set out in the Construction Contract, to ensure that there is coordination between projects, that construction access locations remain unobstructed by the Proposed Scheme works and that any additional construction traffic mitigation measures required to deal with cumulative impacts are managed appropriately.”

xiv. Nutgrove Avenue/Grange Road Junction Signals

At the time of preparing Chapter 6 of the EIAR there was not a signalised pedestrian crossing on the western arm of the R821 Nutgrove Avenue/R821 Grange Road/R822 Grange Road signalised junction. It is acknowledged that a separate project, the Grange Road project which was recently completed installed a signalised pedestrian crossing on the western arm. The assessment of the effects on pedestrian impact during operation is shown below.

As per Section 6.4.6.1.3.1 in addition to a pedestrian crossing on the western arm “The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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.”

Junctions	Chainage	Do Minimum	Do Something	Impact	Sensitivity	Significance of Effect
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.8.16 Extract from EIAR Chapter 6 (Table 6.27)

3.9 CPO-09 – Brid & Tom Rafter – 46 Rathfarnham Road

3.9.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing Rathfarnham carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. This will require localised land acquisition on the eastern boundaries to the existing carriageway.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.3m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.9.1.

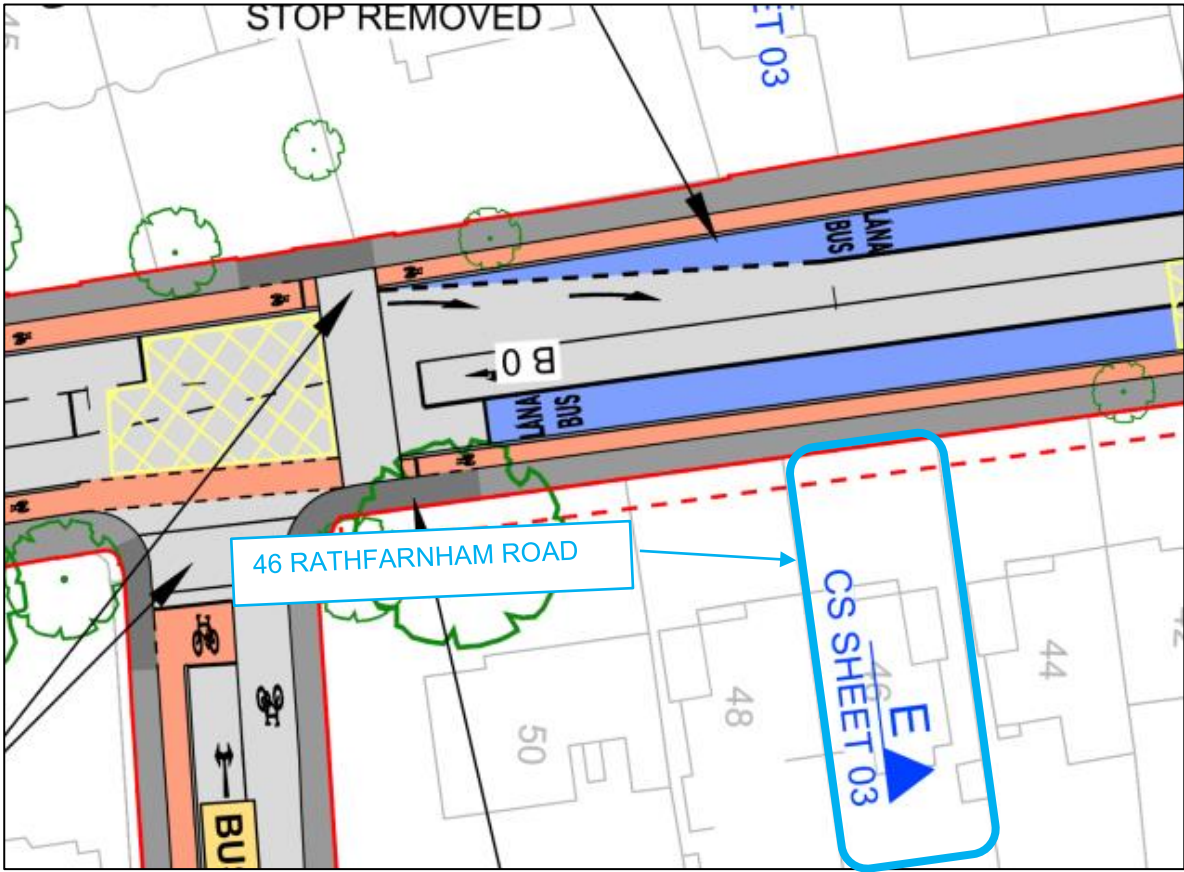


Figure 3.9.1 General Arrangement of Proposed Scheme adjacent to 46 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.9.2.

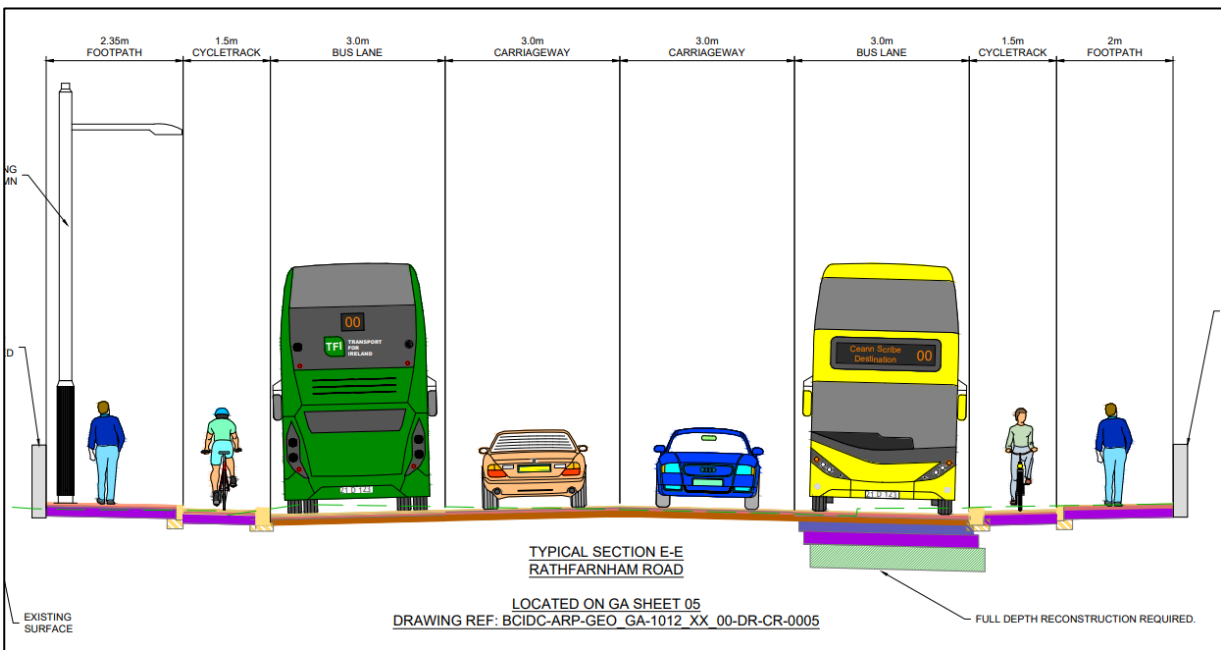


Figure 3.9.2 Typical Cross-Section adjacent to 46 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 46 Rathfarnham Road is shown in Figure 3.9.3.

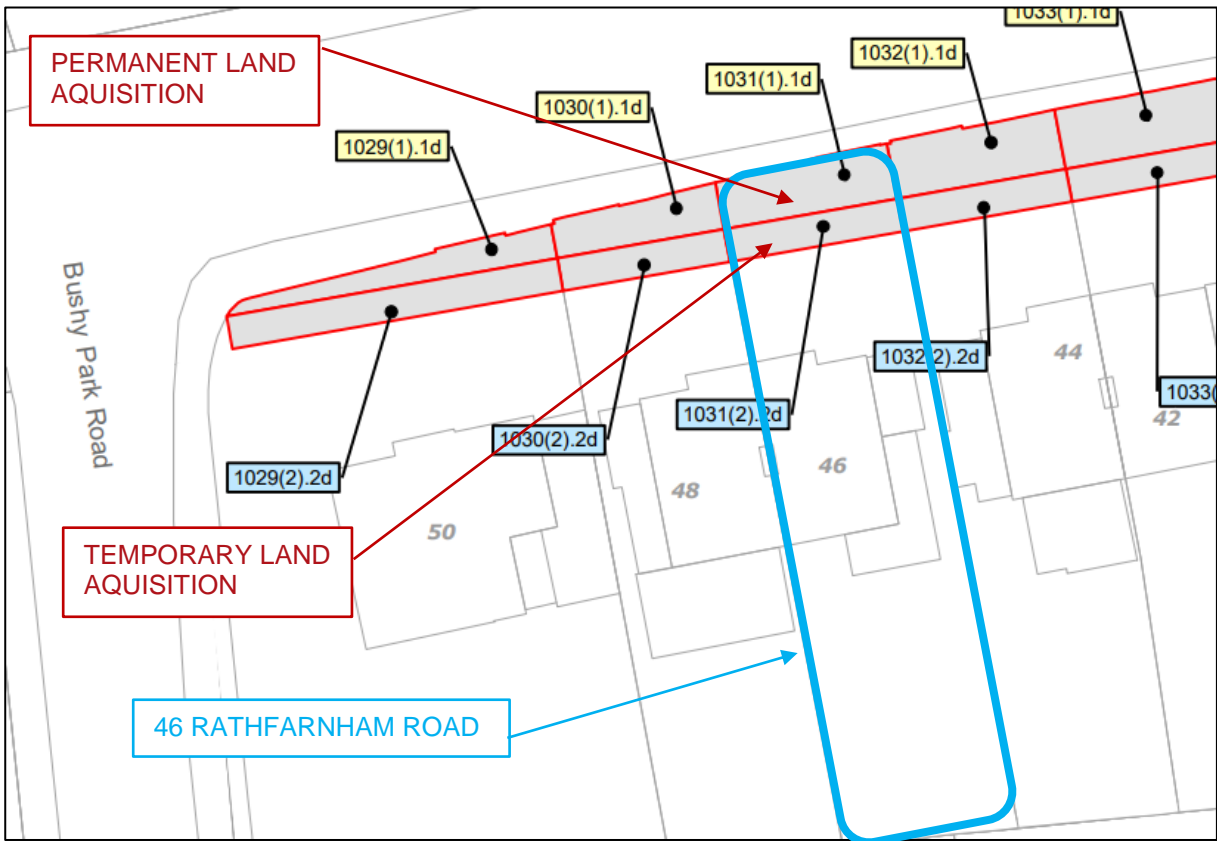


Figure 3.9.3 Extract from CPO Deposit Maps adjacent to 46 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.9.4.

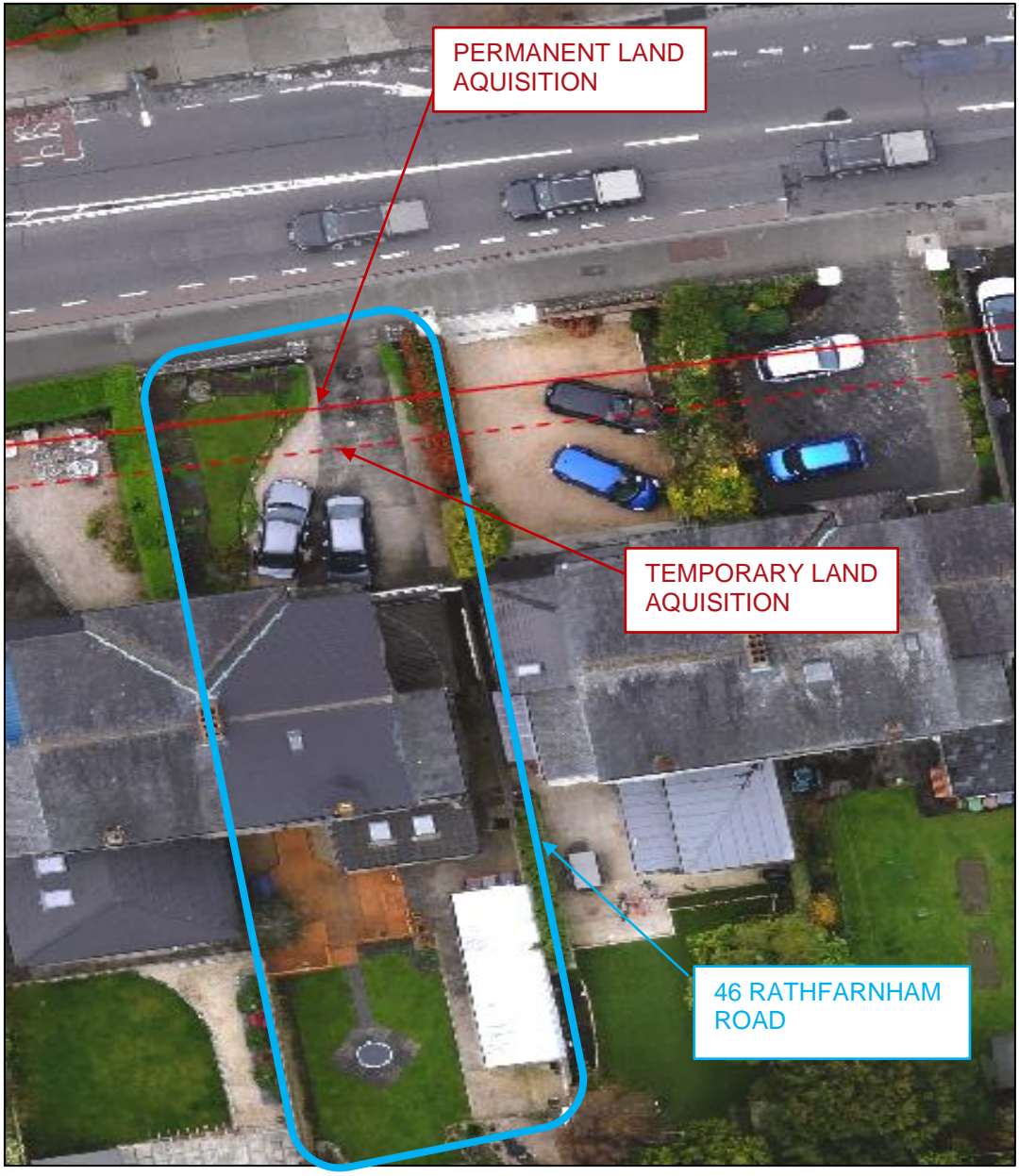


Figure 3.9.4 Proposed Land Acquisition lines adjacent to 46 Rathfarnham Road
The existing property frontage is shown in Figure 3.9.5.



Figure 3.9.5 Existing frontage of 46 Rathfarnham Road (Image source: Google)

3.9.2 Summary of the Points of Objection to the CPO by Brid and Tom Rafter

This submission objected to CPO for the reasons summarised in the following section.

i. Inadequate Cumulative Impact Assessment

The submission noted that the cumulative impact of the Proposed Scheme and the broader BusConnects project are insufficiently described and assessed in the EIAR. It stated that the Proposed Scheme should be considered in conjunction with the other BusConnects projects, in particular the Kimmage to City Centre Bus Corridor Scheme and the Belfield/Blackrock to City Centre Core Bus Corridor Scheme.

ii. Legal principles related to compulsory acquisition

The submission suggests that the NTA has not complied with the legal requirements to the compulsory acquisition of private property as identified by the Supreme Court in *Rein v Industrial Development Agency* [2015], stating that the proposed road layout as presented, and the proposed compulsory acquisition has not been justified or necessitated by the need for improved public transport infrastructure.

iii. Benefits of proposals in this area do not justify the CPO

The submission states that the savings represented by the 300-meter section between Bushy Park Road to Terenure Road North represents a fraction of the expected time savings and does not warrant the acquisition of land in this area. The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications acquiring the land. The submission noted that the Proposed Scheme will contribute towards noise and air pollution and deprive the residents of the use and enjoyment of land proposed for temporary and permanent acquisition.

iv. Changes to work patterns due to the COVID-19 pandemic

The submission states that the modelled data did not take into account adjusted hybrid working practices following the COVID-19 epidemic.

- v. Inability to turn a car within the driveway

Shortening the driveway will inhibit the resident's ability to turn their car around in the driveway and will require them to reverse across into the new road cross-section.

- vi. Proposed Scheme Out of Character for Urban Village

The submission suggests that the Proposed Scheme is unsuitable for an urban village.

3.9.3 Responses to the Points of Objection

- i. Inadequate Cumulative Impact Assessment

A detailed response to this item is presented in Section 2.1.1.

- ii. Legal principles related to compulsory acquisition

The submission raises concerns regarding the NTA's compliance with the legal prerequisites for the compulsory acquisition of private property, as delineated by the Supreme Court in the case of *Rein v Industrial Development Agency* [2015]. It contends that the proposed road layout and the intended compulsory acquisition lack justification or necessity in light of the requirements for enhanced public transport infrastructure. In 2015, the Supreme Court articulated the following principles for the exercise of statutory powers related to land acquisition:

- a) That the authority 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.

Regarding principles a and b, the NTA is empowered by section 44 of the Dublin Transport Authority Act 2008 (as amended) to compulsorily acquire land for the purpose of establishing public transport infrastructure. Thus, the NTA possesses the requisite statutory authority to execute the Compulsory Purchase Order (CPO).

Regarding principal c, the NTA has delineated the necessity of the Proposed Scheme in EIAR Volume 2 Chapter 2 Need for the Proposed Scheme. This section elaborates on the transport requirements of the Proposed Scheme at both regional and local levels. Furthermore, in Section 2.3 of Chapter 2, the document expounds on how the Proposed Scheme aligns with various national and regional policies, including but not limited to the National Development Plan (2021-2030), the Transport Strategy for the Greater Dublin Area (2016-2035), the Climate Action Plan (2023), and the Climate Action and Low Carbon Development (Amendment) Act 2021, often referred to as the 2021 Climate Act.

Section 2.1 outlines the need for the Proposed Scheme stating that:

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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks.

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.

Section 2.2.1.4 of Chapter 2 states:

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.

Rathfarnham Road was identified as a primary cycle route (9A), in the GDA Cycle Network Plan 2013, this is further described in the extract below from section 2.2.1.4:

Extracts from the GDA Cycle Network Plan 2013 are shown in Image 2.1 and Image 2.2, which highlights the Proposed Scheme in the context of the planned cycle network. In the GDACNP 2013, there were two primary cycle routes (Cycle Route 9A and Cycle Route 10) and a number of secondary cycle routes (including Routes 9B, S04 and 10) identified along the Proposed Scheme

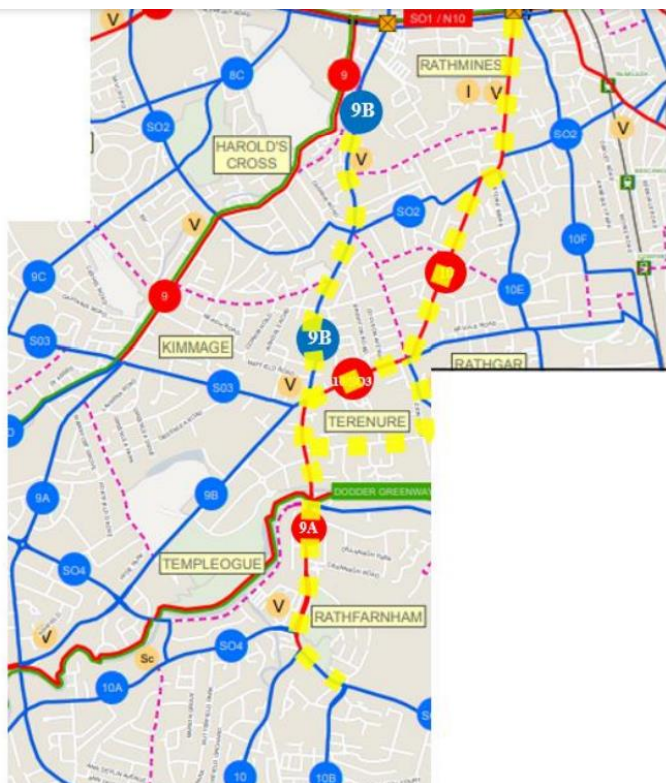


Figure 3.9.6 Extract from 2013 GDA Cycle Network (Proposed Scheme Highlighted in Yellow for Information

In preparing the GDA Transport Strategy (2022 – 2042) the NTA 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). The Proposed Scheme, including the section along Rathfarnham Road is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network is needed to address the deficiencies in the very limited segregated cycling infrastructure currently available on this corridor.



Figure 3.9.7 Extract from 2022 Greater Dublin Area Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

EIAR Volume 2 Chapter 2 Need for the Proposed Scheme, Section 2.2.1.4 states:

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 Core Bus Network Report focused on the overall existing bus service network and identified locations where the bus network is operating sub-optimally. The network is dominated by a radial network to/from the Dublin City Centre, supplemented by low frequency orbital and local bus routes serving larger destinations outside of the City Centre core.

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.

The Core Bus Network study included a recommended route from Terenure/Rathfarnham to the City Centre on the basis of the need to serve significant demand along this entire corridor, and the need to address service deficiencies (lack of bus priority and associated journey time reliability) for a high level of scheduled bus services already operating along this corridor.

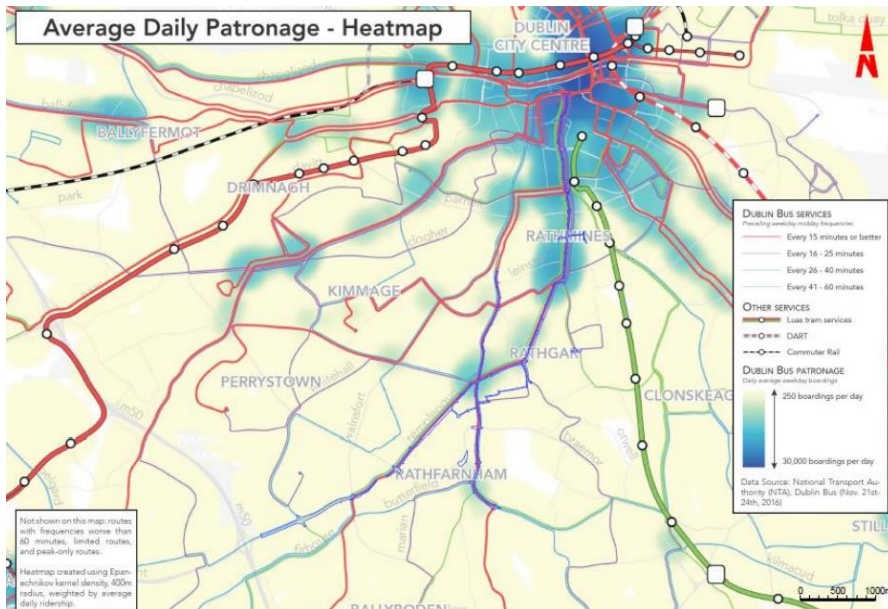


Figure 3.9.8 Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal ((NTA 2019)). Proposed Scheme Highlighted in Blue for Information

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.

Article 5(1)(d) of Directive 2011/92/EU as amended by Directive 2014/52/EU (“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’.

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;
2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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
7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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 Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 (Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR.

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above.

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village).*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Section 4.5.2.1 of the EIAR describes the general overview of the Proposed Scheme at Section 2: *Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road*. At the section adjacent to 46 Rathfarnham Road, between Bushy Park Road and Terenure Road North it is proposed to provide 1.5m wide cycle tracks, bus lanes and traffic lanes in both directions. To accommodate these new bus lanes on this section of Rathfarnham Road, it is proposed to acquire land from adjacent properties on the eastern side of Rathfarnham Road.

Further details on the options assessment carried out in this area is presented in Section 2.3.2 of this report.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

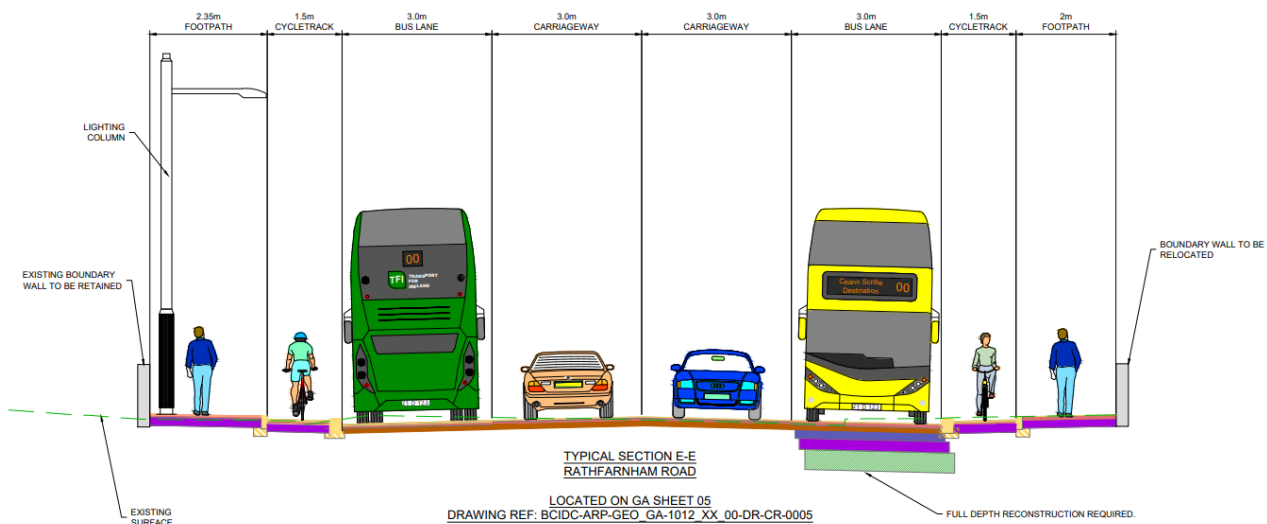


Figure 3.9.9 Typical Cross-section of Proposed Scheme between Bushy Park Road and Terenure Cross

Concerning principle d, at the specific area outside 46 Rathfarnham Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the absolute minimum width of 1.8m for footpaths and desirable width of 2m for cycle tracks. At this location a 2m footpath has been provided. However, as noted in table 4.3 of Chapter 4 of the EIAR, a reduced width cycle track of 1.5m is provided through this area in order to minimise impacts on adjacent properties while also meeting the scheme objectives. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

iii. Benefits of proposals in this area do not justify the CPO

The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications of acquiring land.

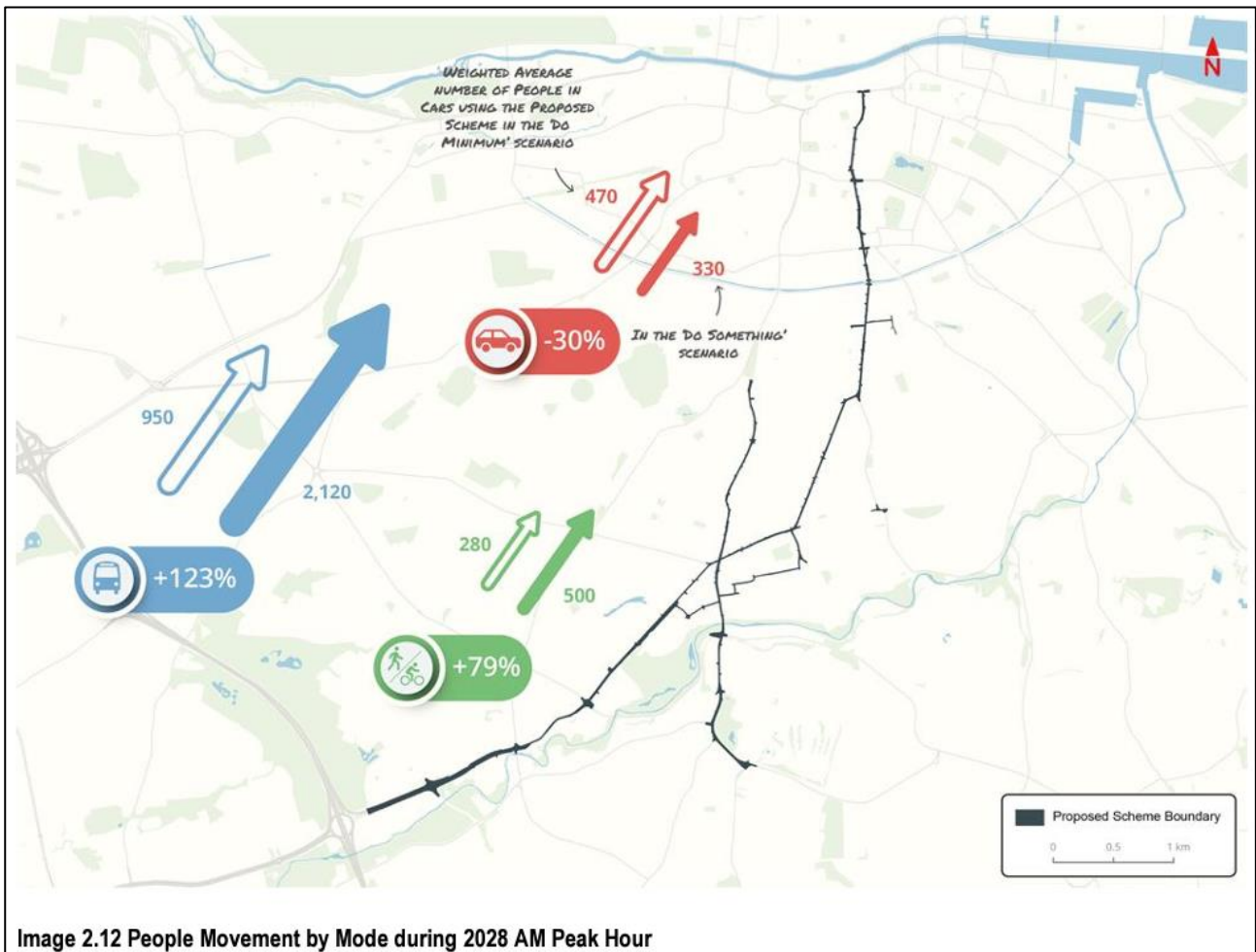
As stated in Section 2.1 of Chapter 2 of the EIAR, the Proposed Scheme aims to meet growth demand by:

“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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.”

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.



In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.

In terms of bus journey time savings, Section 6.4.6.3 of Chapter 6 of Volume 2 of the EIAR notes the following:

*A micro-simulation model assessment has been developed and network performance indicators established for bus operations along Proposed Scheme. The results of the assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 12% 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, 7.4 hours of savings in 2028 and 6.2 hours in 2043, when compared to the Do Minimum combined across all buses. Overall, it is anticipated that the improvements to the network performance indicators for bus users along the Proposed Scheme will have a **Positive, Very-Significant and Long-term effect**.*

In relation to Air Quality, EIAR Volume 2 Chapter 7, section 7.5.3 states that the Proposed Scheme will have a generally neutral impact on air quality. Noting that *vehicle emissions technology will improve, and the Irish vehicle fleet will continue to evolve to the extent that vehicle emissions impacts associated with the Proposed Scheme are anticipated to be short-term. City wide traffic management measures and proactive encouragement of low emissions vehicle uptake would accelerate these improvements.*

Table 7.39: Summary of Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring Measures

Assessment Topic	Potential Impact (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
Road traffic impacts on local human receptors	Neutral, Long-term	Neutral, Long-term
Road traffic impacts on local ecological receptors	Positive, Slight, Long-term	Positive, Slight, Long-term
Regional air quality	Neutral, Long-term	Neutral, Long-term

Figure 3.9.10 Extract from Table 7.39 in Chapter 7 of the EIAR

In relation to Noise and Vibration, EIAR Volume 2 Chapter 9 Noise and Vibration, section 9.5.2.1 states that:

The impact assessment has determined that traffic noise impacts across the study area for the Proposed Scheme results in a positive to neutral imperceptible to slight short and long-term direct impacts along the Proposed Scheme and negative imperceptible to moderate short- and long-term indirect impacts along the surrounding road network. 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 relation to noise and vibration occurring from the construction phase, section 9.6.1 states that:

During evening periods, noise impacts associated with the Construction Phase will be Negative, Moderate to Significant and Temporary for the majority of scheduled works within 15m of the works and Negative, Not Significant beyond 15m. At distances between 15m to 20m from road widening / utility diversion works, there is the potential for Negative, Moderate to Significant and Temporary impacts. At distances within 10m of road widening / utility diversion works, the noise impact will be Negative, Significant to Very Significant and Temporary. As per DMRB Noise and Vibration (UKHA 2020), in cases of moderate to major magnitude of impacts, the duration of works determines the overall significance rating.

As part of the mitigation measures, the durations advised in the DMRB Noise and Vibration will be followed, where feasible, to reduce overall significance effects (i.e. scheduling works to occur for periods of less than 10 days / nights over 15 consecutive day / night periods and less than 40 days over six consecutive months where significant effects are identified). Once the CNL and duration of works is considered in line with the DMRB Noise and Vibration, all key Construction Phase residual noise levels will be Not Significant, whilst meeting the scheme objectives set out in Chapter 1 (Introduction).

EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling, pedestrian, and bus infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Table 6.27: Section 2 – Significance of Effects for Pedestrian Impact during Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate

R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.9.11 Extract from EIAR Chapter 6 (Table 6.27)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Table 6.28: Section 2 – Cycling Impact during Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant

R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.9.12 Extract from EIAR Chapter 6 (Table 6.28)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Bus Infrastructure

Table 6.29, in section 6.4.6.1.3.3 of Chapter 6 outlines the changes to bus stop infrastructure along Section 2 of the Proposed Scheme, with reference to the number and percentage of bus stops that provide each facility in the Do Minimum and Do Something scenarios.

Table 6.29: Section 2 – Overview of Changes in Bus Stop Facilities

Bus Stop Facility	Do Minimum		Do Something		Comment
	No. of Stops	Percentage of Stops	No. of Stops	Percentage of Stops	
RTPi	2	11%	15	100%	RTPi added to all bus stops.
Timetable information	15	83%	15	100%	It is proposed that all bus stops provide real-time information.
Shelter	11	61%	12	80%	Shelter to be provided at all but three bus stops which are limited by spatial constraints.
Seating	10	55%	12	80%	Seating to be provided at all but three bus stops which are limited by spatial constraints.
Accessible Kerbs	16	89%	15	100%	Full provision.
Indented Drop Off Area	0	0%	0	0%	All proposed bus stops will be located inline within bus lanes.
Total Stops	18		15		Three fewer than the Do Minimum.

As set out in 6.4.6.1.3.2:

The contents of Table 6.29 indicate that there are significant improvements to the bus stop facilities along Section 1 of the Proposed Scheme. It is proposed that all bus stops will be provided inline within dedicated bus lanes along the entirety of the corridor, meaning that buses will not incur delay when setting off after picking up passengers. Improvements in the provision of real-time information, shelters, seating and accessible kerbs at the bus stops throughout Section 2 of the Proposed Scheme are assessed as providing an overall positive impact for bus passengers.

All proposed facilities have been designed in accordance with BusConnects Preliminary Design Guidance which has been developed with cognisance to the relevant accessibility guidance. Taking into account the provision of bus lanes, pedestrian accessibility and bus stop facilities outlined within this section, Table 6.30 below outlines the bus qualitative assessment along Section 2 of the Proposed Scheme.

Table 6.30: Section 2 – Bus Qualitative Impact during Operational Phase

Section	Chainage	Description of Impact	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Avenue to R137 Terenure Road North	A000 - A1850	<ul style="list-style-type: none"> Three fewer stops than in the Do Minimum. Bus stops are located in more convenient locations for communities and access to signalised crossings. Slight improvements to bus stop facilities throughout. 	Medium	Medium	Positive Significant

As indicated in Table 6.30, the Proposed Scheme improves the quality of existing bus infrastructure along Section 2 of the Proposed Scheme, which will provide long term benefits for bus users. The impact for this section of the Proposed Scheme is Medium Positive. The sensitivity of environment rating is predominately categorised as 'medium.' This results in a **Positive, Significant and Long-term** effect on this section.

Further detail on the benefits of the Proposed Scheme are presented in Section 2.1.1.

- iv. Change to work patterns due to the COVID-19 Pandemic

A detailed response to this item is presented in Section 2.1.1.

- v. Inability to turn a car within the driveway

The permanent acquisition will result in the loss of up to approximately 2.8m of lands with an additional 2m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be approximately 2m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including pillars and entrance between the pillars will be at least 8.5m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar to the current scenario and that this should not hinder the ability to park within the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

- vi. Proposed Scheme Out of Character for Urban Village

Chapter 17 of the EIAR has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme.

17.4.4.1 presents an assessment of the Proposed Scheme in terms of Impact on Townscape and Streetscape Character. Section 17.4.4.1.2 presents the assessment for the Nutgrove to Terenure Road North Section:

*The sensitivity of this section is **high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used.*

*There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is **very high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Very Significant and Short-Term** becoming Neutral, Moderate and Long-Term.*

Section 17.4.4.1.2 presents the assessment for the Terenure Road North to Charleville Road Section:

*The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimised through design iteration, Terenure Road East will be widened in parts which will require permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.*

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

*The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.*

3.10 CPO-10 – Celine & John Cullen – 14 Fortrose Park

3.10.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus priority and pedestrian facilities along the corridor.

Between Ashfield Place and the Templeogue Tennis Club, it is proposed to provide a bus lane and a general traffic lane in each direction. It is proposed to utilise a limited amount of land-take within this section to achieve the desired cross-section. Within Templeogue Village, between Templeogue Tennis Club and the Templeville Road junction, it is proposed to manage bus priority through the use of signal-controlled priority and tie into South Dublin County Council's Templeogue Village Initiative Scheme. To accommodate this cross section, land acquisition will be required along the Templeogue Road. Land acquisition is proposed on the northern side of Templeogue Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at 14 Fortrose Park, with a maximum width of land to be permanently acquired of approximately 1.8m. The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.10.1.

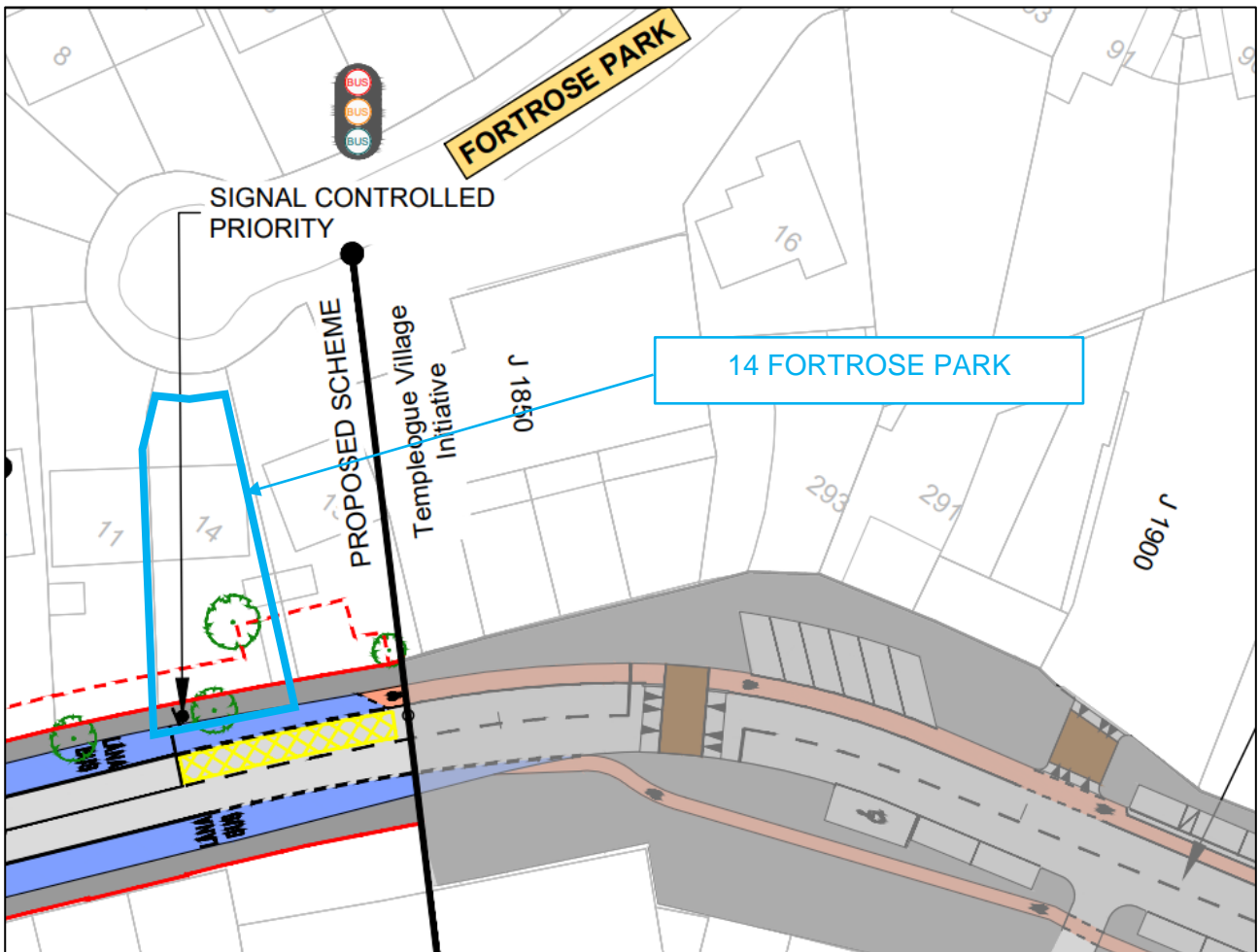


Figure 3.10.1 General Arrangement of Proposed Scheme adjacent to 14 Fortrose Park (Sheet 33)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.10.2.

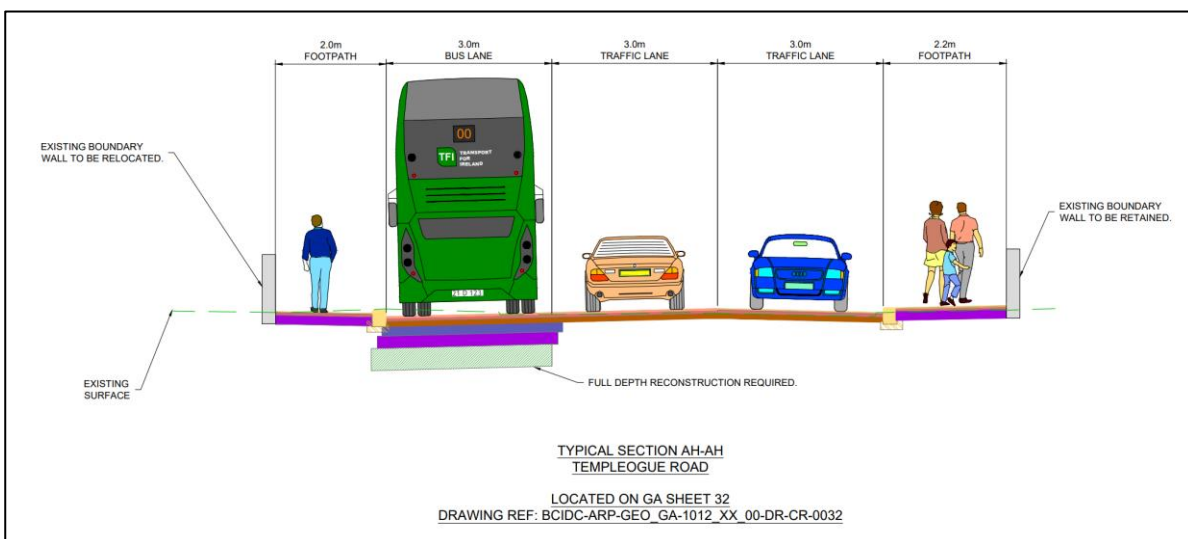


Figure 3.10.2 Typical Cross-Section adjacent to 14 Fortrose Park

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 14 Fortrose Park is shown in Figure 3.10.3.

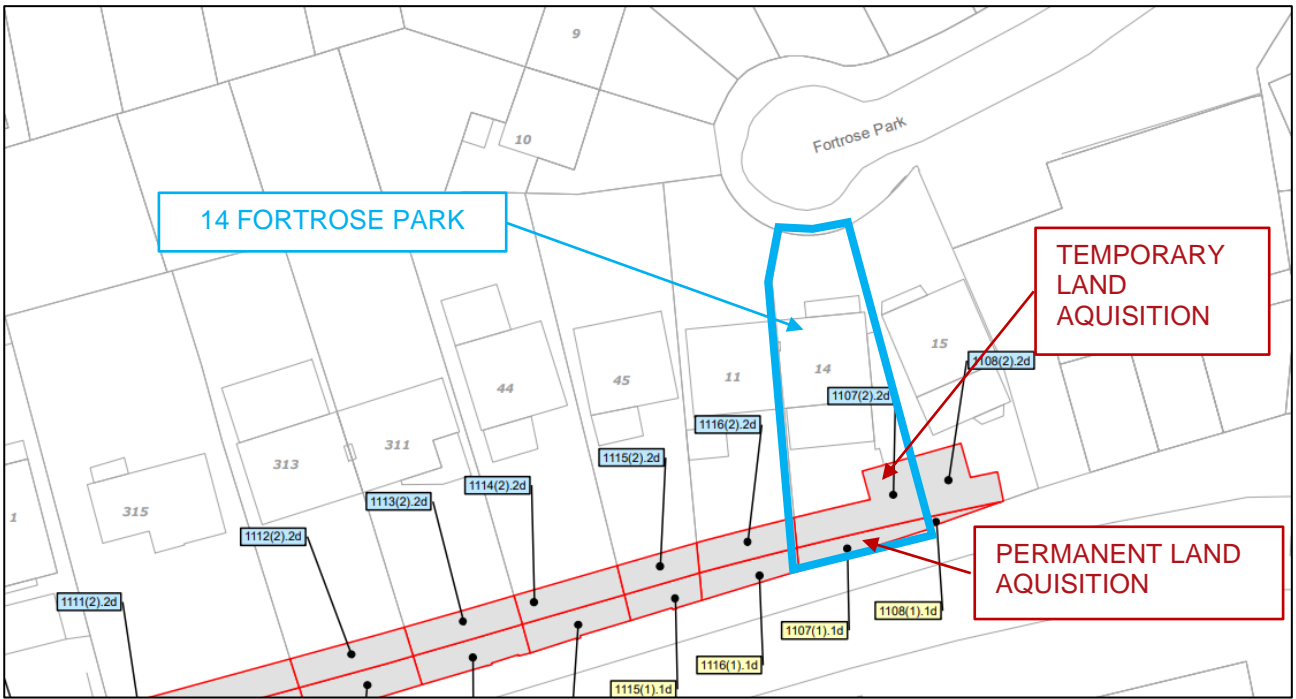


Figure 3.10.3 Extract from CPO Deposit Maps adjacent to 14 Fortrose Park



Figure 3.10.4 Proposed Land Acquisition lines adjacent to 14 Fortrose Park

The existing back of property is shown in Figure 3.10.5.



Figure 3.10.5 Existing back view of 14 Fortrose Park from Templeogue Road (Image source: Google)

3.10.2 Summary of the Points of Objection to the CPO by Celine and John Cullen

This submission objected to CPO for the reasons summarised in the following section.

- i. Safety concerns associated with discontinuity of cycle tracks on Templeogue Road.

The submission raised concerns about the safety considerations associated with termination of inbound and outbound cycle lanes between Cypress Grove Road and Templeogue Village. The submission suggested two alternative proposals that could be explored to provide continuous cycle track.

- Diverting general traffic along Old Bridge Road or Cypress Grove Road, under this option the section of Templeogue Road will consist of a dedicated bus lane with local traffic and segregated cycle tracks.
- Signal controlled priority north of Cypress Grove Road for inbound traffic and south of Templeville Road junction for outbound traffic.

- ii. Loss of privacy and increased noise and air pollution

The submission raised a concern about the loss of privacy and increase in air and noise pollution due to the removal of trees in the back garden and moving the road closer to their property, stating that increase in noise and air pollution will deteriorate their ability to enjoy their garden.

- iii. Lack of clarity around the temporary acquisition

The submission raised a concern regarding the proposed temporary acquisition of their property, stating that there are two existing concrete sheds and a 40-year-old Magnolia tree within the area proposed for temporary acquisition. The submission states that the area proposed for temporary acquisition is not suitable for a site compound, and if it was to be used for those purposes it would cause severe disturbances to the residence life.

3.10.3 Responses to the Points of Objection

- i. Safety concerns associated with discontinuity of cycle tracks on Templeogue Road.

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. Section 3.3.2.1.1 assessed five scheme options (S1-1 to S1-5) for the section of Templeogue Road between Wellington Lane and Templeville Road. Following an MCA, sub-option S1-5 was identified as the preferred option for this section. The MCA concluded that sub-option S1-5 *“was identified as having significant benefits over other options in relation to Transport Reliability and Quality, Traffic Network Integration, Road Safety, Archaeology and Cultural Heritage and Land Use Character. Option S1-5 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route”*.

There is insufficient space to provide dedicated bus infrastructure and cycling facilities without extensive CPO of private lands or major disruptions to traffic in the area. The MCA has identified the preferred option (S1-5) as the most suitable in achieving the projects objectives.

The submission recommended that an option including a bus gate north of Cypress Grove Road is considered, this option was partially considered under options S1-1 to S1-4 in Chapter 3 Consideration of Reasonable Alternatives. These options were eliminated due to option S1-5 performing better in terms of Transport Reliability and Quality, Traffic Network Integration, Road Safety, Archaeology and Cultural Heritage and Land Use Character.

The other alternative recommendation made in the submission recommended signal-controlled priority north of Templeogue Bridge (Bus stop 1158), for northbound buses and a signal-controlled priority south of the Templeville Road junction. This option was assessed in the Preferred Route Option Report, included in the Supplementary Information submitted to ABP as part of the planning application. The option was considered but was not carried forward for the reasons outlined in section 3.4.1.2.1 of the report:

“A sub option was also considered between Cypress Grove Road and Templeogue Village which sought to minimise the impact on properties this section. This option proposed curtailing the inbound bus lane at Cypress Grove Road and re-commencing it at the north-eastern side of Templeogue Village. However, it was considered that in combination with vehicular activity in Templeogue Village, this distance (~500m) was too much to give guaranteed bus priority through use of signal-controlled priority. It was considered that this option would not be in line with the objectives of the scheme and, as such, this option was not considered any further.”

“An additional option considered curtailing the inbound bus lane at Cypress Grove Road and re-commencing it at after Ashfield Place. However, under this option, no cycle facility would be provided between Cypress Grove Road and Ashfield Place meaning cyclists would have to share with general traffic. It was considered that this option would not be in line with the objectives of the scheme and, as such, this option was not considered any further.”

An independent Stage 1 Road Safety Audit was complete by PMCE on the Proposed Scheme, the report is available in the Supplementary Information, Appendix M2 Stage 1 Road Safety Audit. The independent auditor did not identify the section of Templeogue Road with shared cycle and traffic facilities as a potential safety concern. It should be noted that the section between Cypress Grove Road and north of Templeogue village will have the speed limit reduced to 30km/h.

ii. Loss of privacy and increased noise and air pollution

The proposed permanent acquisition will result in the loss of between 2.2m to 1.2m at the roadside of the back garden, with an additional 3.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. Upon completion of the permanent works, the temporary land take area will be handed back to the property owner. The edge of the proposed carriageway (bus lane) will be 3.5m to 2.3m closer to the residence than the edge of the existing general traffic lane.

The proposed land acquisition at 14 Fortrose Park is necessary to facilitate the optimum cross-section in line with the scheme's objectives outlined in EIAR Volume 2 Chapter 1 Introduction. Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. Section 3.3.2.1.1 assessed five scheme options (S1-1 to S1-5) for the section of Templeogue Road between Wellington Lane and Templeville Road.

A Multi-Criteria Analysis (MCA) which evaluated the route options under the assessment criteria of; Capital Cost, Transport Reliability and Quality, Cycle Network Integration, Traffic Network Integration, Road Safety, Archaeology and Cultural Heritage and Land Use Character was undertaken for the five scheme options. Following an MCA, sub-option S1-5 was identified as the preferred option for this section. The MCA concluded that sub-option S1-5 *“was identified as having significant benefits over other options in relation to Transport Reliability and Quality, Traffic Network Integration, Road Safety, Archaeology and Cultural Heritage and Land Use Character. Option S1-5 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route”*.

In relation to the impact of the Proposed Scheme on noise and vibration, these impacts have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.” Table 9.39 lists these roads and Templeogue Road is not included, indicating that there are no potential significant noise impacts envisaged along Templeogue Road.

In relation to air pollution, EIAR Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality as a result of the Proposed Scheme’s operation are neutral and long-term.

In respect of loss of privacy, reinstatement of property frontage including boundary walls, gates, railings 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.

iii. Lack of clarity around temporary acquisition

Both permanent and temporary land acquisition is required at this property, the extents of which are outlined in the Deposit Maps replicated in Figure 3.10.4 above. In terms of the temporary acquisition, 3 meters from the proposed boundary wall will be required for the duration 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. 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. For clarity, it is not proposed to utilise the area identified for temporary or permanent acquisition as a site compound.

It is noted the entire area identified for temporary acquisition will not be required for the duration of the works. It is acknowledged that during the construction of the works there will be inconveniences for all users, but this will be managed to minimise impacts for all affected parties. The duration of the works will vary from property to property, but access and egress will be always maintained. Prior to undertaking any accommodation works within private property the appointed contractor will engage in consultation with landowners, during consultation the landowner will have an opportunity to raise any concerns and outline any requirements associated with the land in question.

For clarity, the proposed temporary acquisition is to facilitate any potential work to the shed on the property that may arise due to the works associated with the Proposed Scheme at that location. With respect to the magnolia tree on the property, which is not identified for removal, as noted in 5.5.2.4 of the EIAR:

Trees to be retained within and adjoining the works areas will be suitably protected as necessary as per the British Standards Institution (BSI) British Standard (BS) 5837:2012 Trees in Relation to Design, Demolition and Construction (BSI 2012). Trees identified for removal will be removed in accordance with BS 3998:2010 Tree Work. Recommendations (BSI 2010). The location of trees to be retained, and trees to be removed is shown on the Landscaping General Arrangement drawings (BCIDA-ARP-ENV_LA-0809_XX_00-DR-LL-9001).

A suitably qualified arborist will be appointed by the contractor to monitor tree protection, and tree removal related activities. The design has been developed to ensure removal of trees has been minimised in so far as practicable. Where necessary, protective fencing will be erected, and mitigation measures will be put in place, prior to construction works commencing in the immediate vicinity.

Works required within the root protection area of trees to be retained will follow the Arboricultural methodology included in Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR. Further information on mitigation measures with regards to the removal and protection of trees is provided in Chapter 12 (Biodiversity), and further information on the assessment of tree removal with regards to landscape and visual impact is provided in Chapter 17 (Landscape (Townscape) & Visual) of this EIAR.

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 EIAR Volume 2 Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

3.11 CPO-11 – Christopher Langheld and Others – 72/73 Camden Street Lower, Dublin 2

3.11.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.4.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Camden Street Lower it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor.

Between Charlotte Way and Cuffe Street it is proposed to provide bus lanes in each direction and a single outbound general traffic lane on Camden Street/Wexford Street. The outbound bus lane will not commence until just south of Montague Street due to the proximity of existing built form to the carriageway. Bus priority will be achieved by signal-controlled priority over this section. Under this proposal, inbound traffic will reroute to Harcourt Street to access Cuffe Street and beyond. 1.5m wide cycle tracks are proposed in this section in order to provide sufficient footpath space in this area of significant pedestrian activity.

In order to accommodate this cross section, permanent land acquisition will be required between 62 and 74 Camden Street Lower along the western side, with a maximum width of land to be permanently acquired of approximately of 0.7m along the footpath outside 72/73 Lr. Camden Street, Dublin 2.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.11.1.

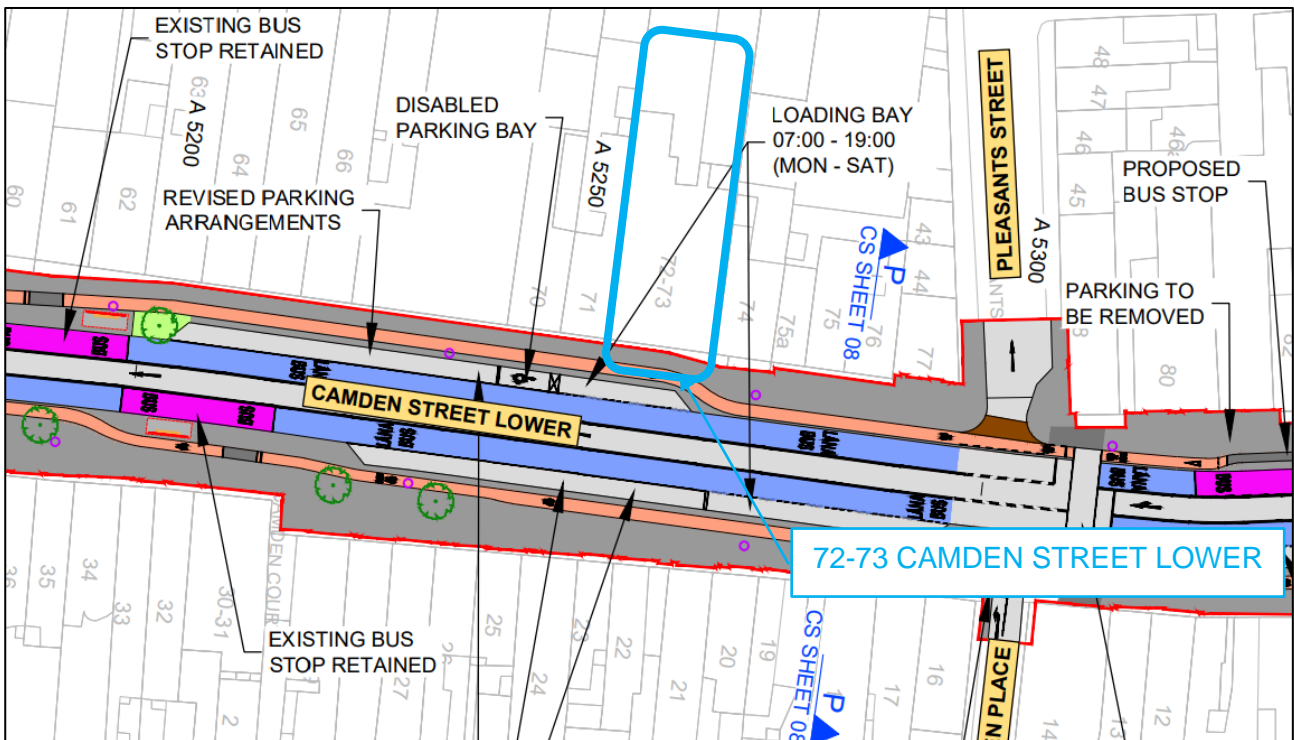


Figure 3.11.1 General Arrangement of Proposed Scheme adjacent to 72-73 Camden Street Lower (Sheet 16)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.11.2.

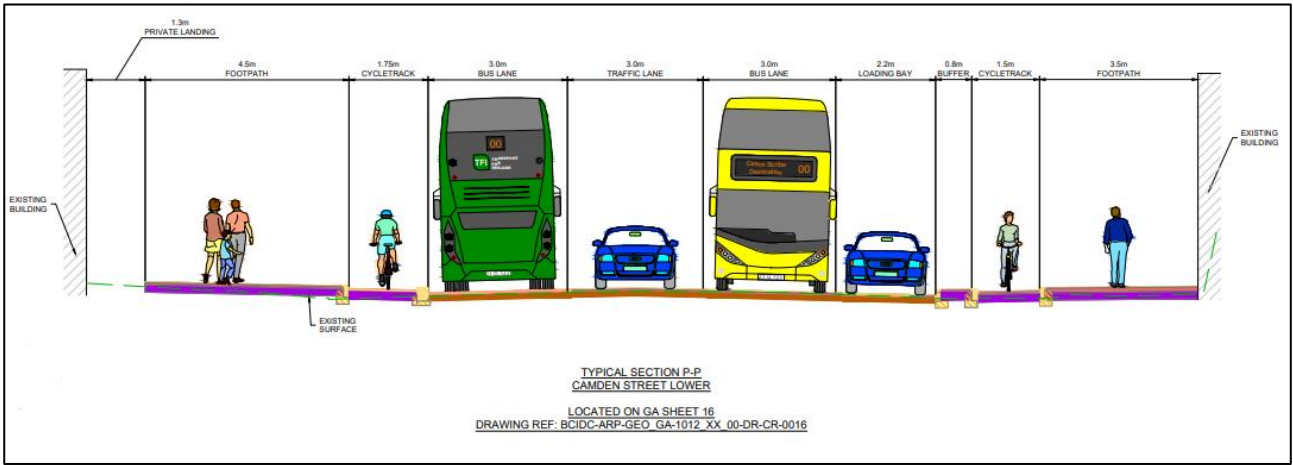


Figure 3.11.2 Typical Cross-Section adjacent to 72-73 Camden Street Lower

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 72-73 Camden Street Lower is shown in Figure 3.11.3.

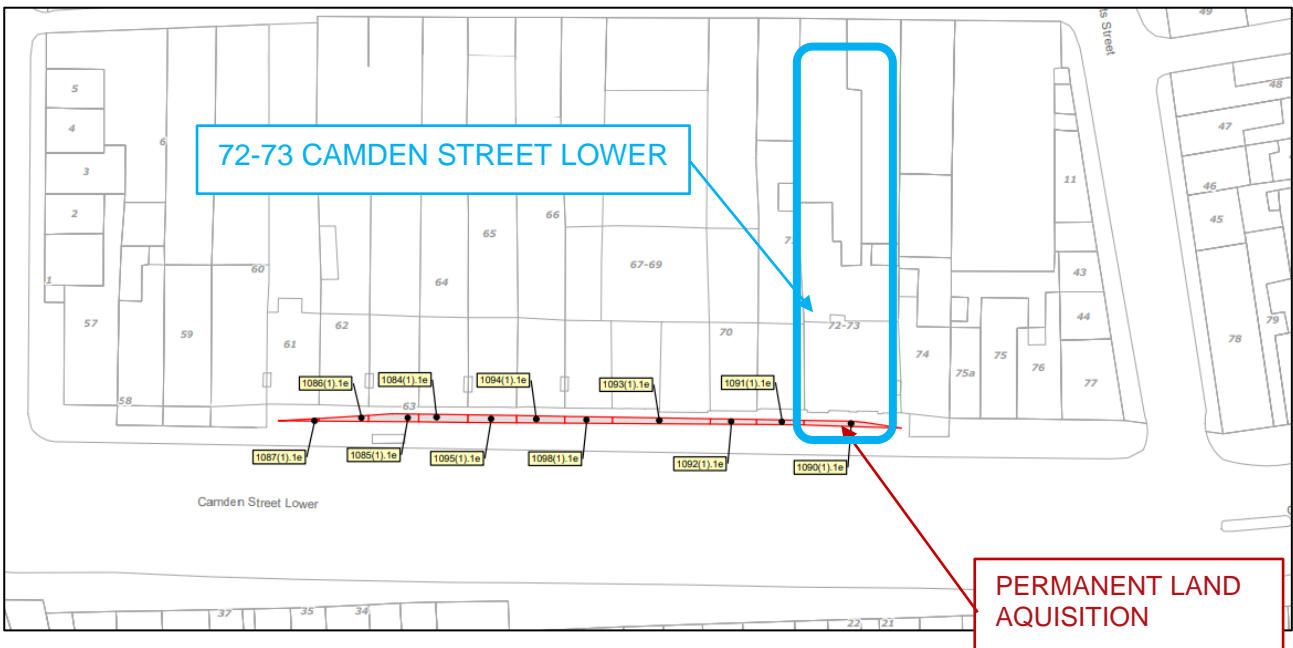


Figure 3.11.3 Extract from CPO Deposit Maps adjacent to 72-73 Camden Street Lower



Figure 3.11.4 Proposed Land Acquisition lines adjacent to 72-73 Camden Street Lower
The existing back of property is shown in Figure 3.11.5.

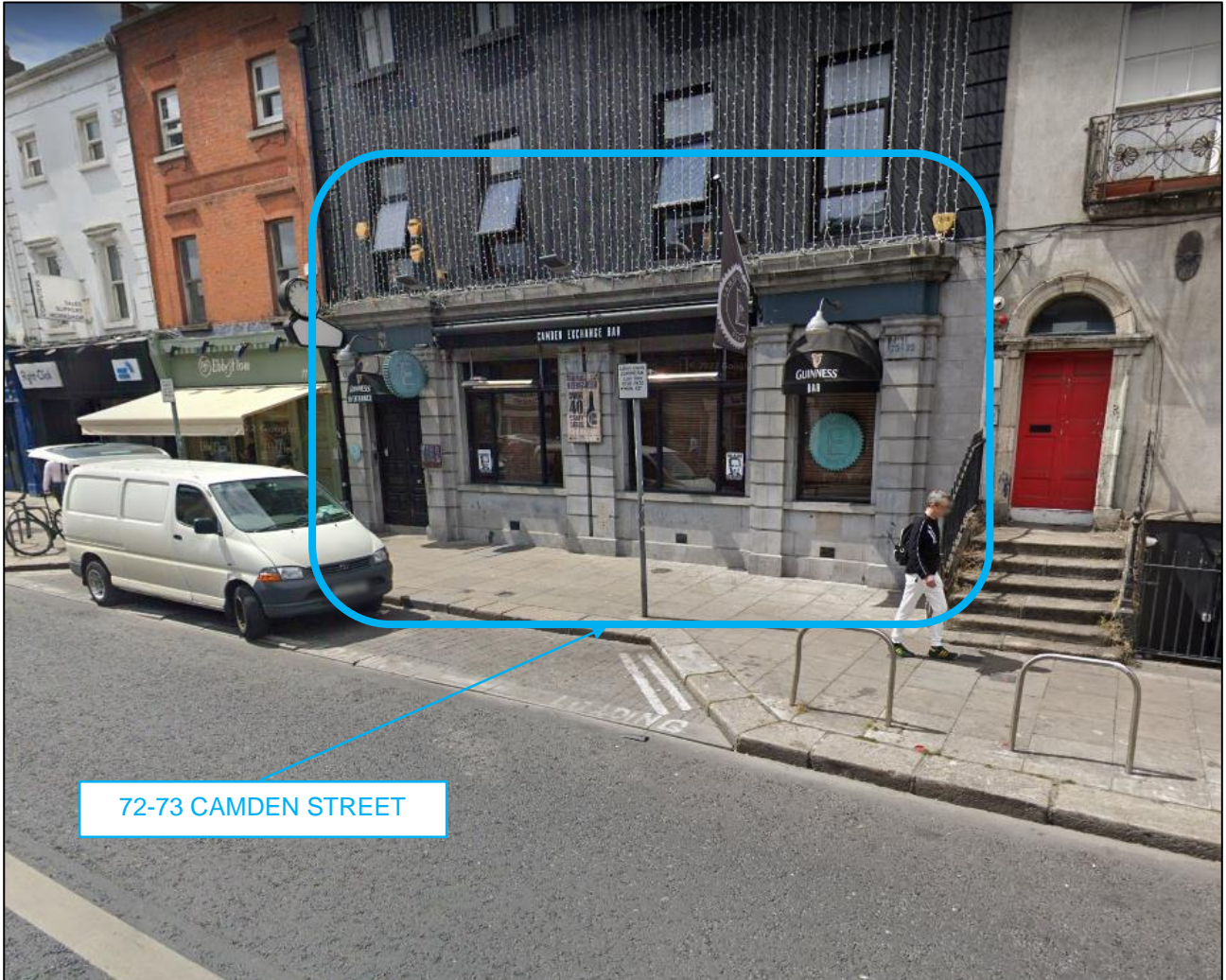


Figure 3.11.5 Existing view of 72-73 Camden Street Lower (Image source: Google)

3.11.2 Summary of the Points of Objection to the CPO by Christopher Langheld and Others

This submission objected to CPO for the reasons summarised in the following section.

i. Extents of land ownership

72/73 Lr. Camden Street, Dublin 2. The owners claim ownership of the entire footpath up to the loading bay, while the Deposit Maps reference 1090(1).1e in the planning documents submitted to ABP only indicate partial acquisition by BusConnects CPO.

ii. Liaison with Irish Water

The submission states that Irish Water are considering the replacement of lead potable water pipes and recommend that the NTA engage with Irish Water on the matter.

3.11.3 Responses to the Points of Objection

i. Extents of land ownership

The Compulsory Purchase Order has been prepared on the basis of thorough research into the extent or private properties and ownership of same. The research undertaken by our team, including consultation with Dublin City Council, indicates that the land owned by 72/73 Lr. Camden Street building boundary up to a line that reaches from the edge of the stairs at 74 Camden Street. Furthermore, it is noted that the space between the private landing and the loading bay is a public footpath.

- ii. Liaison with Irish Water

The Proposed Scheme includes all works necessary to facilitate the scheme objectives. Replacement of water infrastructure is a matter for Irish Water.

3.12 CPO-12 – Ciara McElinn – 12 Rathfarnham Wood

3.12.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 4.8m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.12.1.

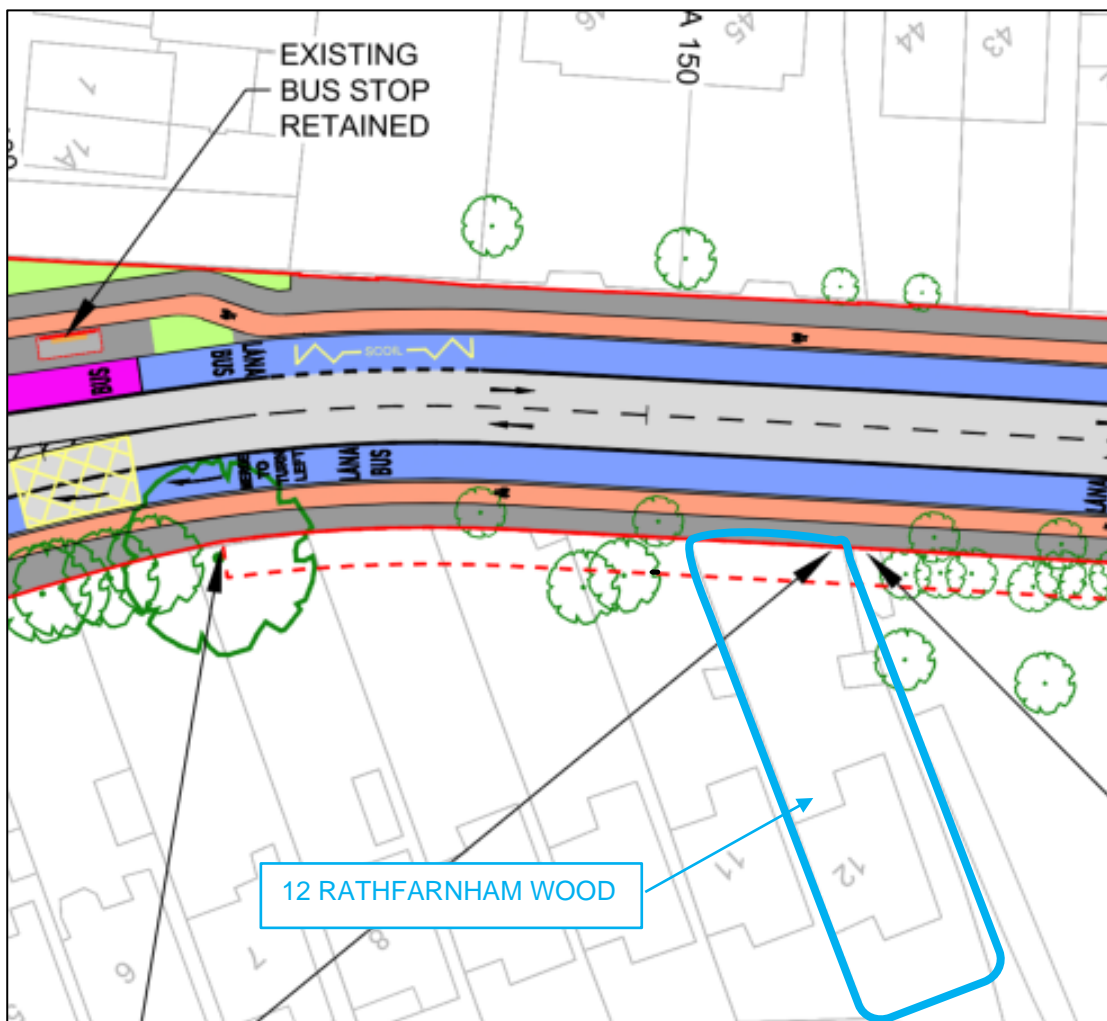


Figure 3.12.1 General Arrangement of Proposed Scheme adjacent to 12 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.12.2.

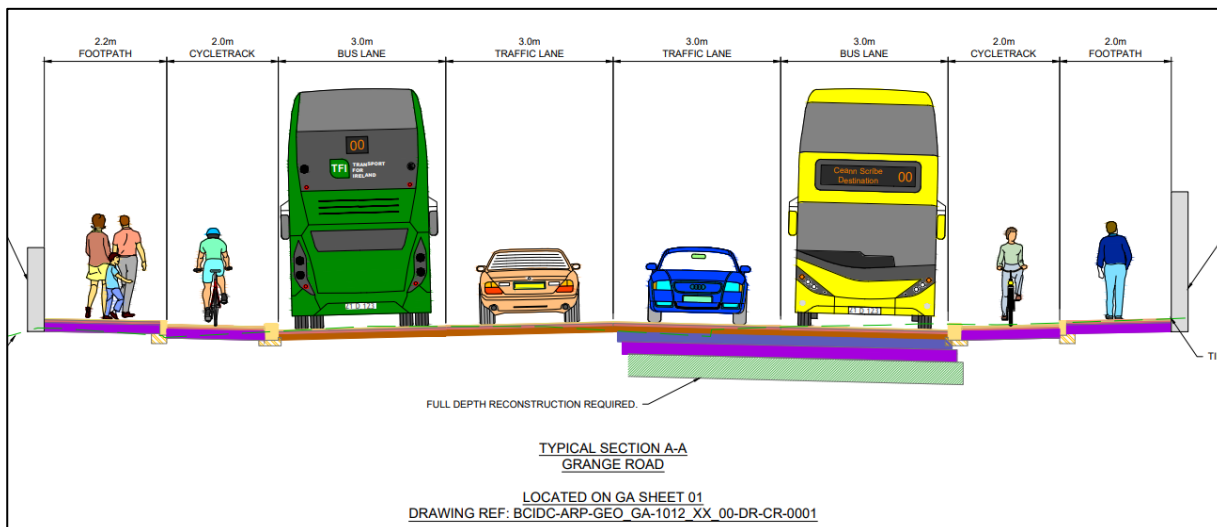


Figure 3.12.2 Typical Cross-Section adjacent to 12 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 12 Rathfarnham Wood is shown in Figure 3.12.3.

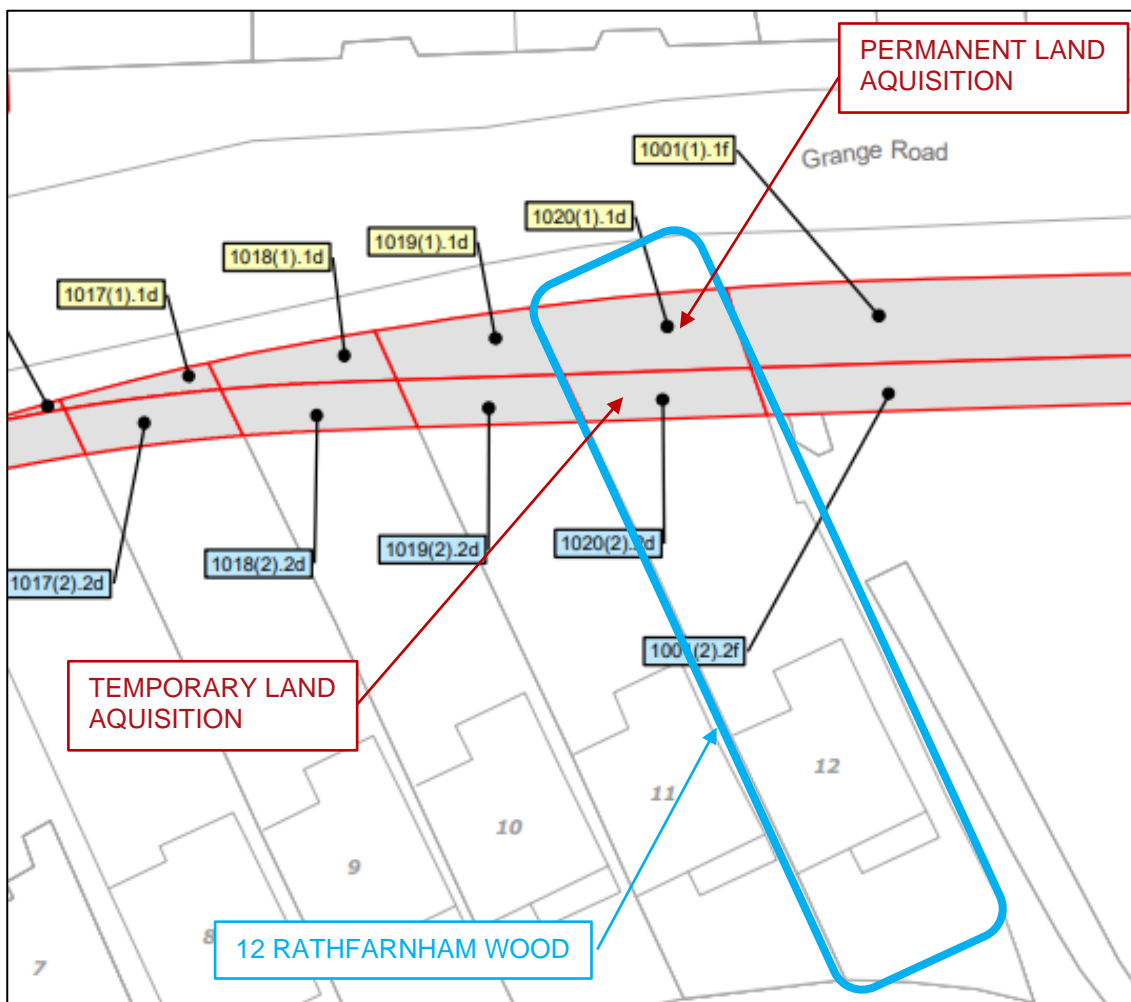


Figure 3.12.3 Extract from CPO Deposit Maps adjacent to 12 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.12.4.

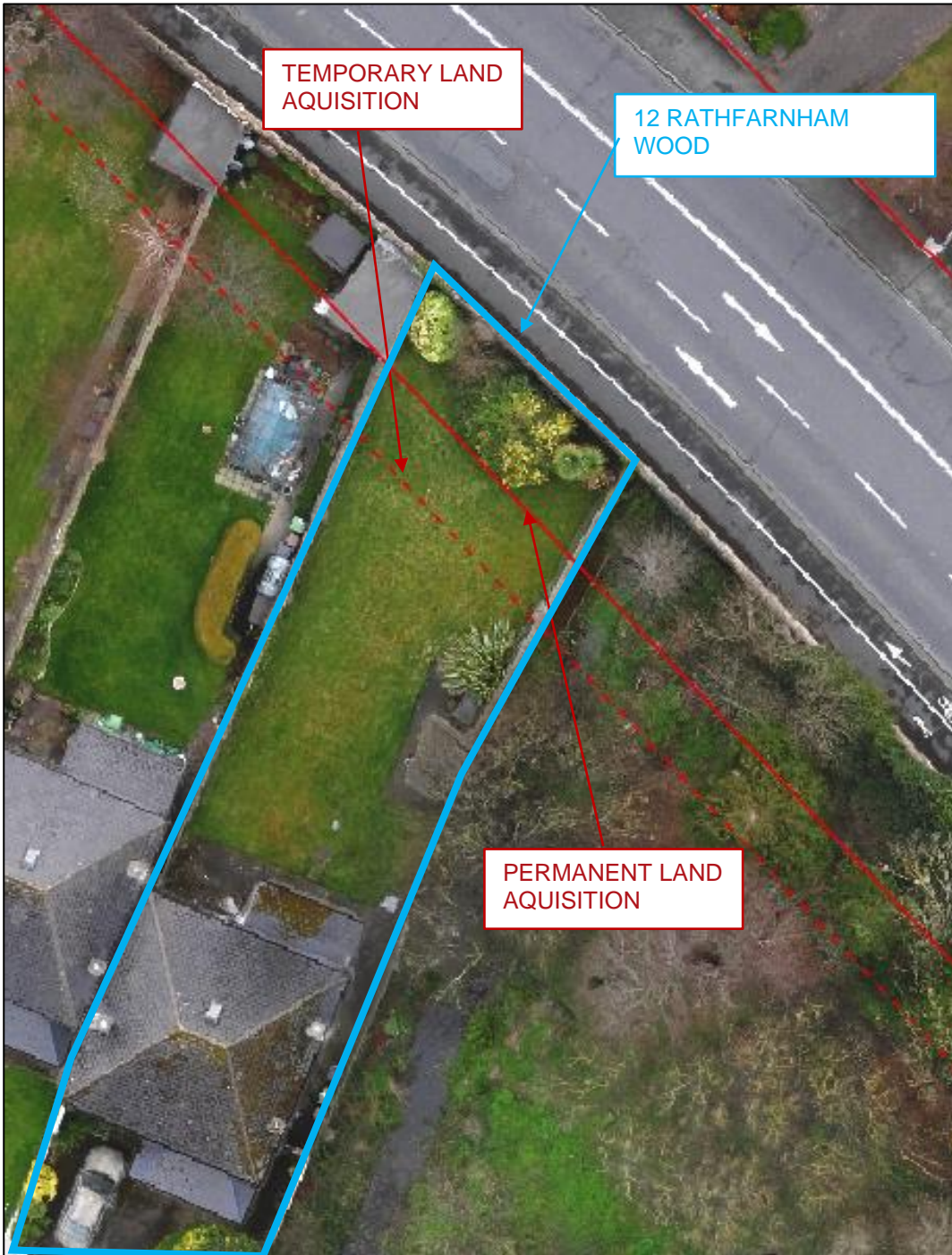


Figure 3.12.4 Proposed Land Acquisition lines adjacent to 12 Rathfarnham Wood
The existing property rear boundary is shown in Figure 3.12.5



Figure 3.12.5 Existing property rear boundary of 12 Rathfarnham Wood (Image source: Google)

3.12.2 Summary of the Points of Objection to the CPO by Ciara McElinn

This submission objected to CPO for the reasons summarised in the following section.

i. Impact on privacy

The submission states that the proposed land acquisition at 12 Rathfarnham Wood will result in reduced privacy.

ii. No consideration of Glin River

The submission notes that the Environmental Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin river to the area.

iii. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, The submission goes on to suggest using bus priority as an alternative to reduce land take need. In addition the following options are suggested:

- Terminate Proposed Scheme at Butterfield Avenue – the submission suggests stopping the scheme at the Butterfield Avenue junction to avoid impacting the Rathfarnham Castle Park
- Acquire land from the houses on the southern side of Grange Road

- Cyclists share bus lanes as proposed elsewhere on the scheme

iv. Climate Impact of Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

v. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

vi. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use.

vii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife.

viii. Replacement of the Castle Wall

The submission contends that proposed roughcast render wall will be aesthetically inferior to the existing granite wall. It also goes on suggest that the EIAR is misleading in the description of this.

ix. Impact on woodland playground

It also notes the impact on the Woodland playground close to the boundary wall along Grange Road which particularly important resource for children with autism.

x. Request to improve Nutgrove Avenue cycle facilities

A number of concerns in relation to the poor quality of the existing Nutgrove Avenue cycle facilities and a request to upgrade them as part of the scheme

xi. Bus Stops

The submission notes that there is a reduction in the number of bus stops along in the area. The submission states that the Proposed Scheme proposes to reduce the number of bus stops from 18 to 15 according to Table 6.29 and is considered a regressive step.

xii. Courtyard/stables redevelopment

The submission notes that there are other proposals for the northern area of the Rathfarnham Castle Park by others. It notes that this development has been mooted for some time and is not considered by the BusConnects project. The submission contends that cumulative effects of the courtyard development and BusConnects proposal is too significant an incursion into the park.

xiii. Nutgrove Avenue/Grange Road Junction Signals

The submission notes that Section 6.4.6.1.3.1 of EIAR states as an advantage of BusConnects that a signalised crossing would be added to the western arm of the R821 Nutgrove Avenue/R821 Grange Road/R822 Grange Road signalised junction, the submission notes that the scheme documentation states that this is a benefit when in fact it is already in existence.

3.12.3 Responses to the Points of Objection

Items ii – xiii raises the same concerns as CPO-08. Please refer to Section 3.8.3 for responses to these items. See below for response to item i.

i. Impact on privacy

In respect of loss of privacy, if the CPO is confirmed by An Bord Pleanála, reinstatement of property boundaries 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.

3.13 CPO-13 – Claire Hughes & Fergus Bolster – 44 Rathfarnham Road Terenure

3.13.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing Rathfarnham carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. This will require localised land acquisition on the eastern boundaries to the existing carriageway.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.5m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.13.1.

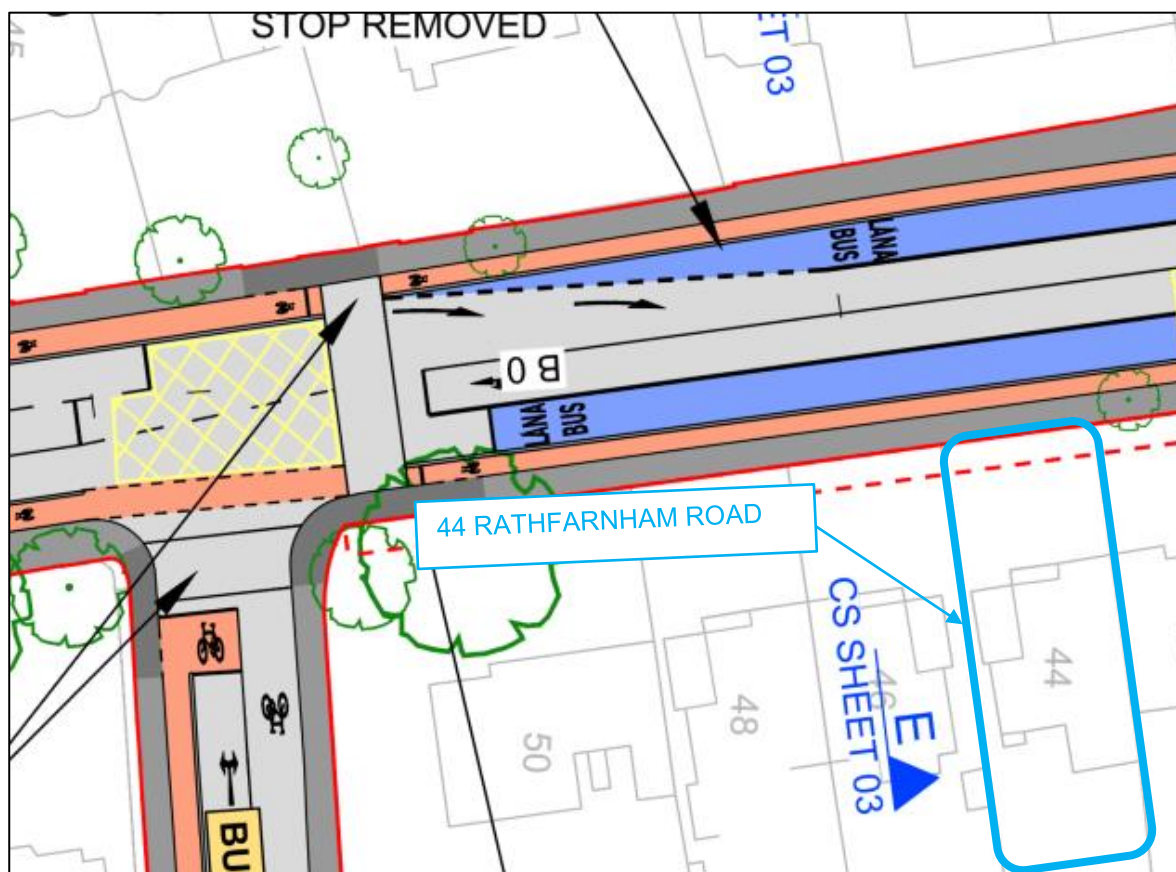


Figure 3.13.1 General Arrangement of Proposed Scheme adjacent to 44 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.13.2

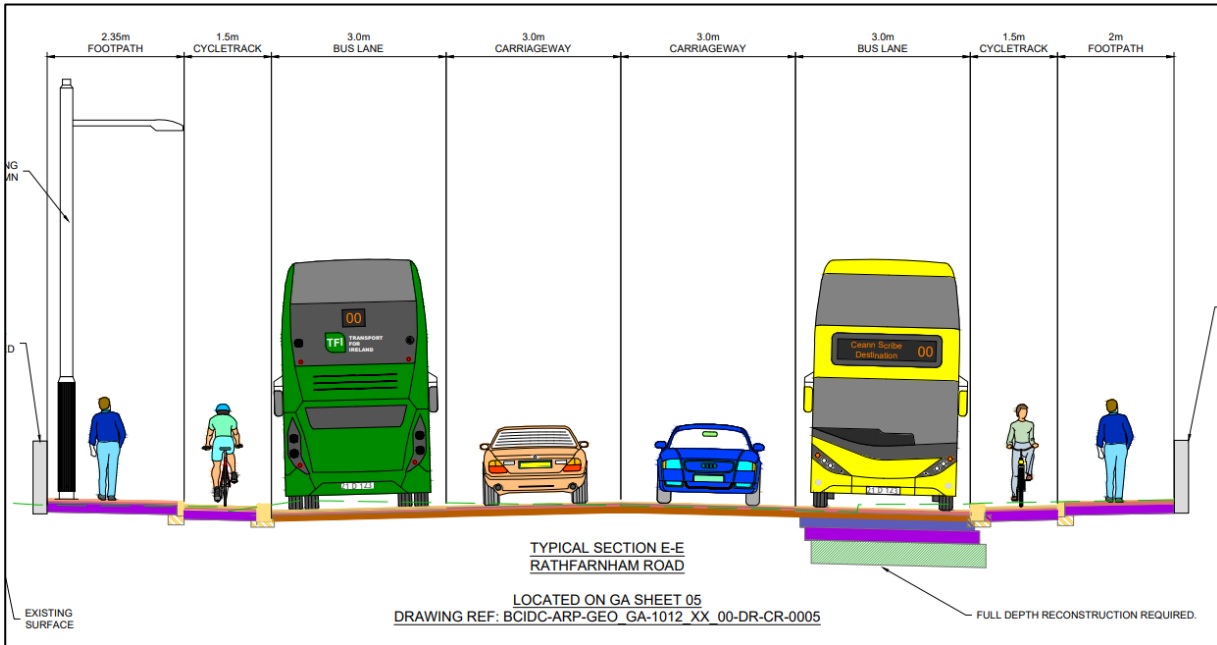


Figure 3.13.2 Typical Cross-Section adjacent to 44 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 44 Rathfarnham Road is shown in Figure 3.13.3.

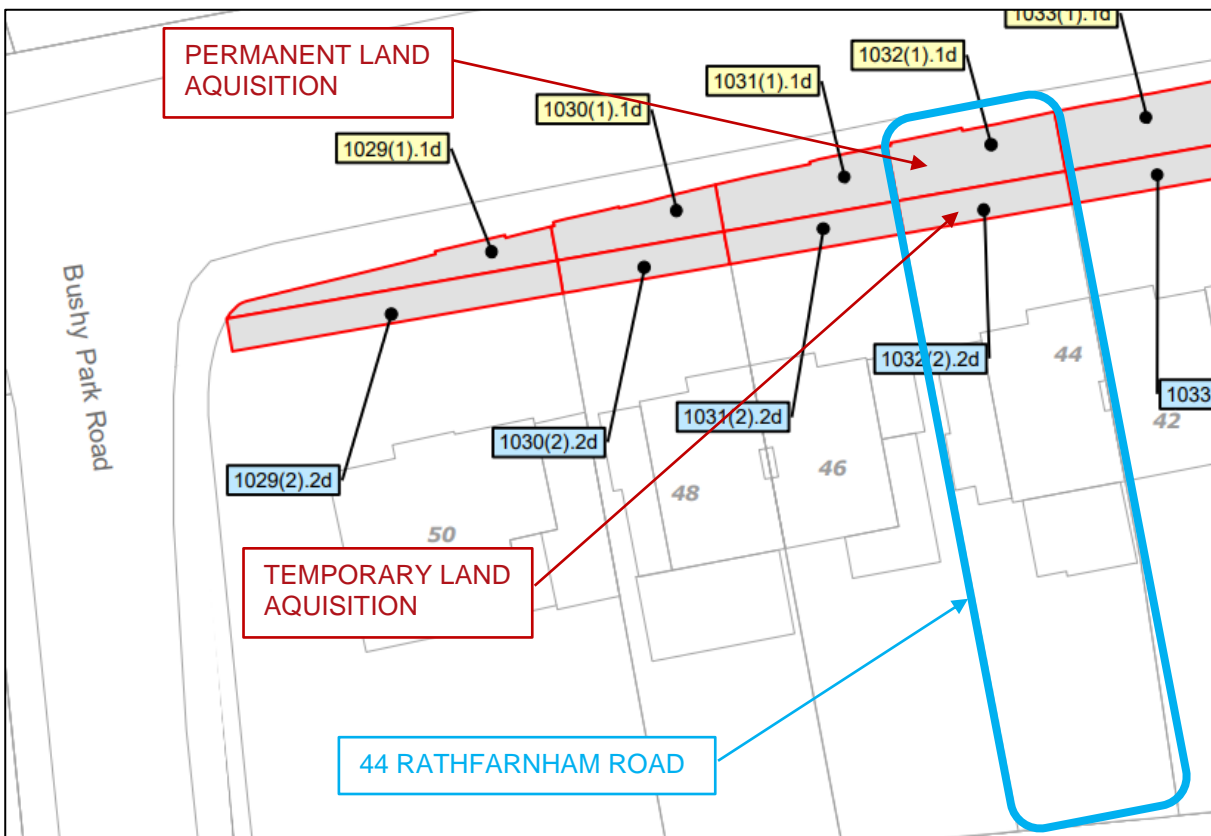


Figure 3.13.3 Extract from CPO Deposit Maps adjacent to 44 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.13.4.

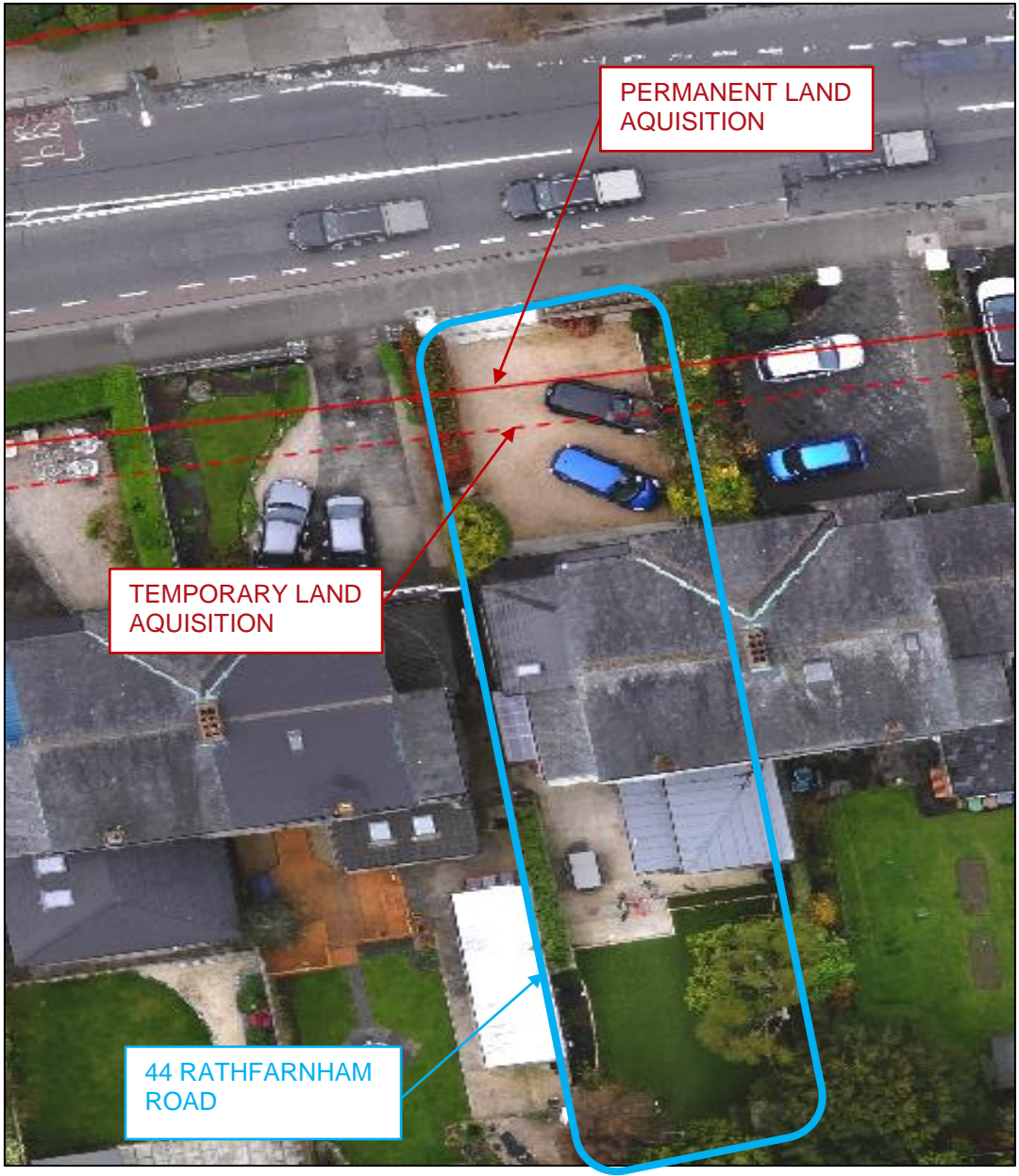


Figure 3.13.4 Proposed Land Acquisition lines adjacent to 44 Rathfarnham Road
The existing property frontage is shown in Figure 3.13.5.



Figure 3.13.5 Existing frontage of 44 Rathfarnham Road (Image source: Google)

3.13.2 Summary of the Points of Objection to the CPO by Claire Hughes & Fergus Bolster

This submission objected to CPO for the reasons summarised in the following section.

i. Inadequate Cumulative Impact Assessment

The submission noted that the cumulative impact of the Proposed Scheme and the broader BusConnects project are insufficiently described and assessed in the EIAR. It stated that the Proposed Scheme should be considered in conjunction with the other BusConnects projects, in particular the Kimmage to City Centre Bus Corridor Scheme and the Belfield/Blackrock to City Centre Core Bus Corridor Scheme.

ii. Legal principles related to compulsory acquisition

The submission suggests that the NTA has not complied with the legal requirements to the compulsory acquisition of private property as identified by the Supreme Court in *Rein v Industrial Development Agency* [2015], stating that the proposed road layout as presented, and the proposed compulsory acquisition has not been justified or necessitated by the need for improved public transport infrastructure.

- iii. Benefits of proposals in this area do not justify the CPO

The submission states that the savings represented by the 300-meter section between Bushy Park Road to Terenure Road North represents a fraction of the expected time savings and does not warrant the acquisition of land in this area. The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications acquiring the land. The submission noted that the Proposed Scheme will contribute towards noise and air pollution and deprive the residents of the use and enjoyment of land proposed for temporary and permanent acquisition.

- iv. Changes to work patterns due to the COVID-19 pandemic

The submission states that the modelled data did not take into account adjusted hybrid working practices following the COVID-19 epidemic.

- v. Inability to turn a car within the driveway

Shortening the driveway will inhibit the resident's ability to turn their car around in the driveway and will require them to reverse across into the new road cross-section.

- vi. Proposed Scheme Out of Character for Urban Village

The submission suggests that the Proposed Scheme is unsuitable for an urban village.

3.13.3 Responses to the Points of Objection

- i. Inadequate Cumulative Impact Assessment

A detailed response to this item is presented in Section 2.1.1.

- ii. Legal principles related to compulsory acquisition

The submission raises concerns regarding the NTA's compliance with the legal prerequisites for the compulsory acquisition of private property, as delineated by the Supreme Court in the case of *Reid v Industrial Development Agency* [2015]. It contends that the proposed road layout and the intended compulsory acquisition lack justification or necessity in light of the requirements for enhanced public transport infrastructure. In 2015, the Supreme Court articulated the following principles for the exercise of statutory powers related to land acquisition:

- a) That the authority 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.

Regarding principles a and b, the NTA is empowered by section 44 of the Dublin Transport Authority Act 2008 (as amended) to compulsorily acquire land for the purpose of establishing public transport infrastructure. Thus, the NTA possesses the requisite statutory authority to execute the Compulsory Purchase Order (CPO).

Regarding principal c, the NTA has delineated the necessity of the Proposed Scheme in EIAR Volume 2 Chapter 2 Need for the Proposed Scheme. This section elaborates on the transport requirements of the Proposed Scheme at both regional and local levels. Furthermore, in Section 2.3 of Chapter 2, the document expounds on how the Proposed Scheme aligns with various national and regional policies, including but not limited to the National Development Plan (2021-2030), the Transport Strategy for the Greater Dublin Area (2016-2035), the Climate Action Plan (2023), and the Climate Action and Low Carbon Development (Amendment) Act 2021, often referred to as the 2021 Climate Act.

Section 2.1 outlines the need for the Proposed Scheme stating that:

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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks.

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.

Section 2.2.1.4 of Chapter 2 states:

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.

Rathfarnham Road was identified as a primary cycle route (9A), in the GDA Cycle Network Plan 2013, this is further described in the extract below from section 2.2.1.4:

Extracts from the GDA Cycle Network Plan 2013 are shown in Image 2.1 and Image 2.2, which highlights the Proposed Scheme in the context of the planned cycle network. In the GDACNP 2013, there were two primary cycle routes (Cycle Route 9A and Cycle Route 10) and a number of secondary cycle routes (including Routes 9B, S04 and 10) identified along the Proposed Scheme

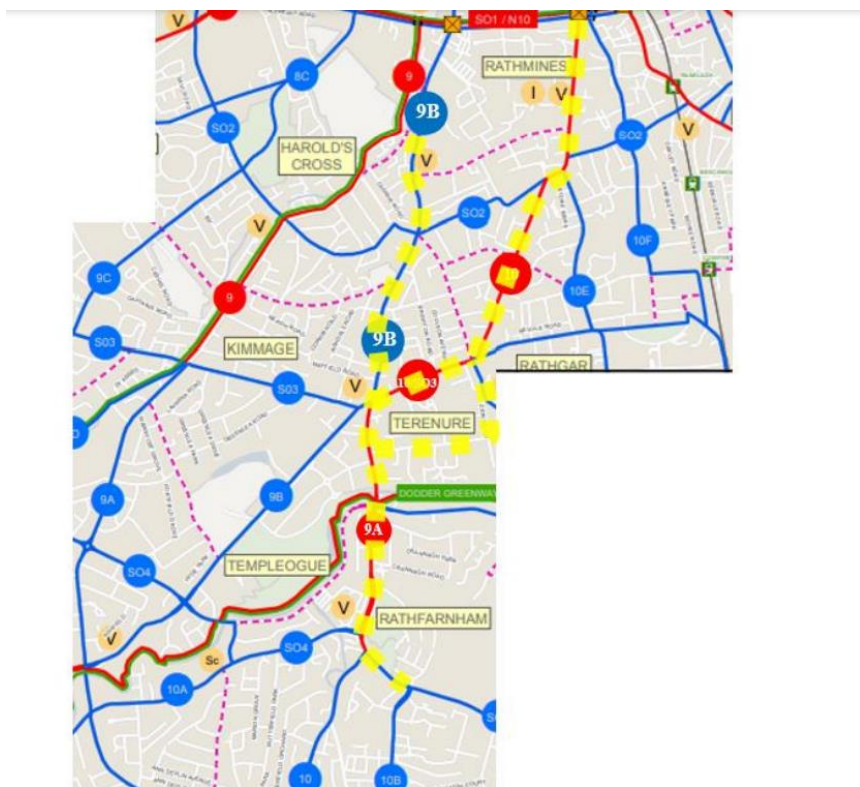


Figure 3.13.6 Extract from 2013 GDA Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

In preparing the GDA Transport Strategy (2022 – 2042) the NTA 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). The Proposed Scheme, including the section along Rathfarnham Road is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network is needed to address the deficiencies in the very limited segregated cycling infrastructure currently available on this corridor.



Figure 3.13.7 Extract from 2022 Greater Dublin Area Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

EIAR Volume 2 Chapter 2 Need for the Proposed Scheme, Section 2.2.1.4 states:

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 Core Bus Network Report focused on the overall existing bus service network and identified locations where the bus network is operating sub-optimally. The network is dominated by a radial network to/from the Dublin City Centre, supplemented by low frequency orbital and local bus routes serving larger destinations outside of the City Centre core.

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.

The Core Bus Network study included a recommended route from Terenure/Rathfarnham to the City Centre on the basis of the need to serve significant demand along this entire corridor, and the need to address service deficiencies (lack of bus priority and associated journey time reliability) for a high level of scheduled bus services already operating along this corridor.

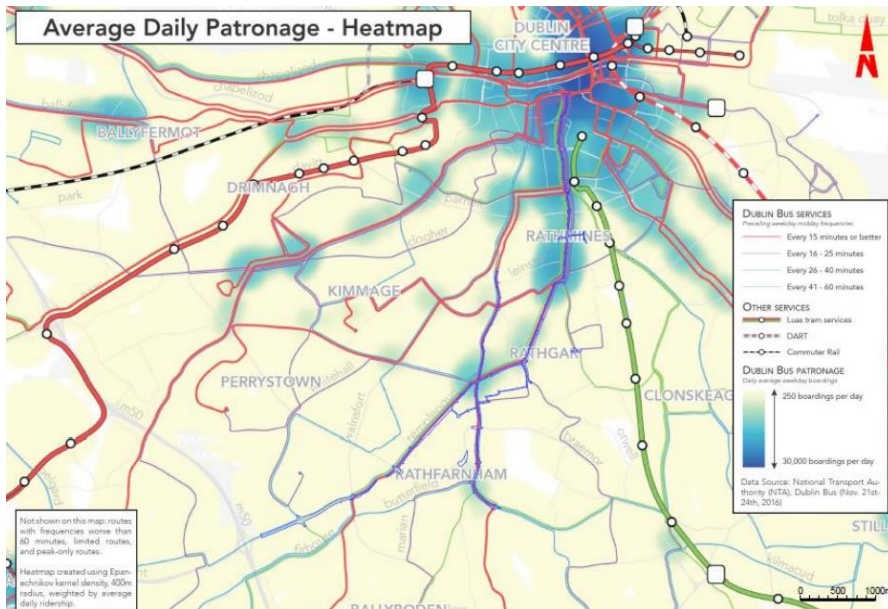


Figure 3.13.8 Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal ((NTA 2019)). Proposed Scheme Highlighted in Blue for Information

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.

Article 5(1)(d) of Directive 2011/92/EU as amended by Directive 2014/52/EU (“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’.

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;
2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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
7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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 Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 (Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR.

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above.

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village).*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Section 4.5.2.1 of the EIAR describes the general overview of the Proposed Scheme at Section 2: *Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road*. At the section adjacent to 44 Rathfarnham Road, between Bushy Park Road and Terenure Road North it is proposed to provide 1.5m wide cycle tracks, bus lanes and traffic lanes in both directions. To accommodate these new bus lanes on this section of Rathfarnham Road, it is proposed to acquire land from adjacent properties on the eastern side of Rathfarnham Road.

Further details on the options assessment carried out in this area is presented in Section 2.3.2 of this report.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

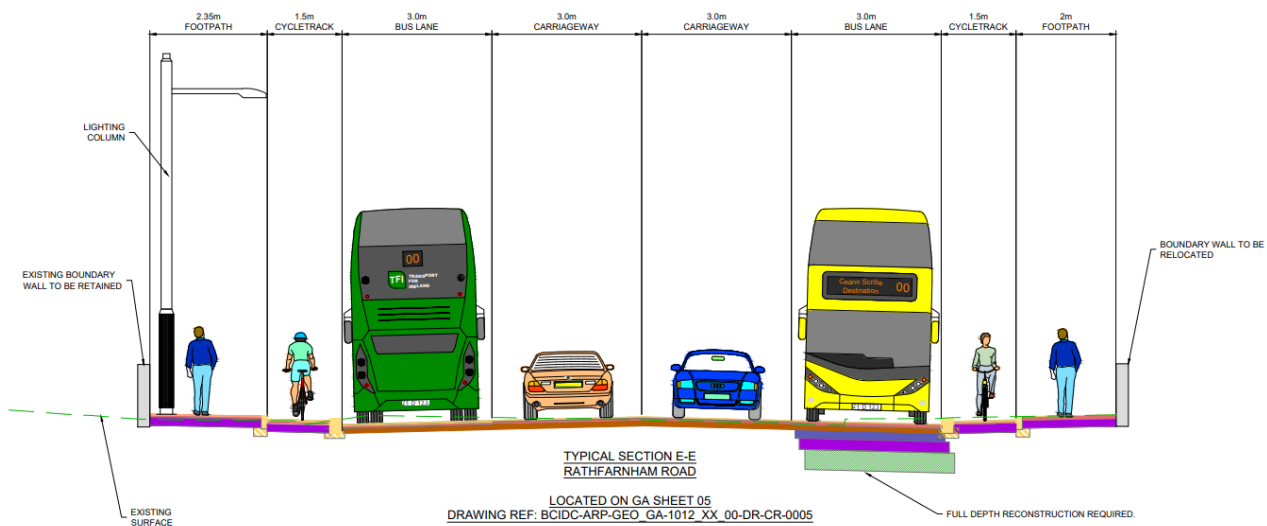


Figure 3.13.9 Typical Cross-section of Proposed Scheme between Bushy Park Road and Terenure Cross

Concerning principle d, at the specific area outside 44 Rathfarnham Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the absolute minimum width of 1.8m for footpaths and desirable width of 2m for cycle tracks. At this location a 2m footpath has been provided. However, as noted in table 4.3 of Chapter 4 of the EIAR, a reduced width cycle track of 1.5m is provided through this area in order to minimise impacts on adjacent properties while also meeting the scheme objectives. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

iii. Benefits of proposals in this area do not justify the CPO

The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications of acquiring land.

As stated in Section 2.1 of Chapter 2 of the EIAR, the Proposed Scheme aims to meet growth demand by:

“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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.”

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.

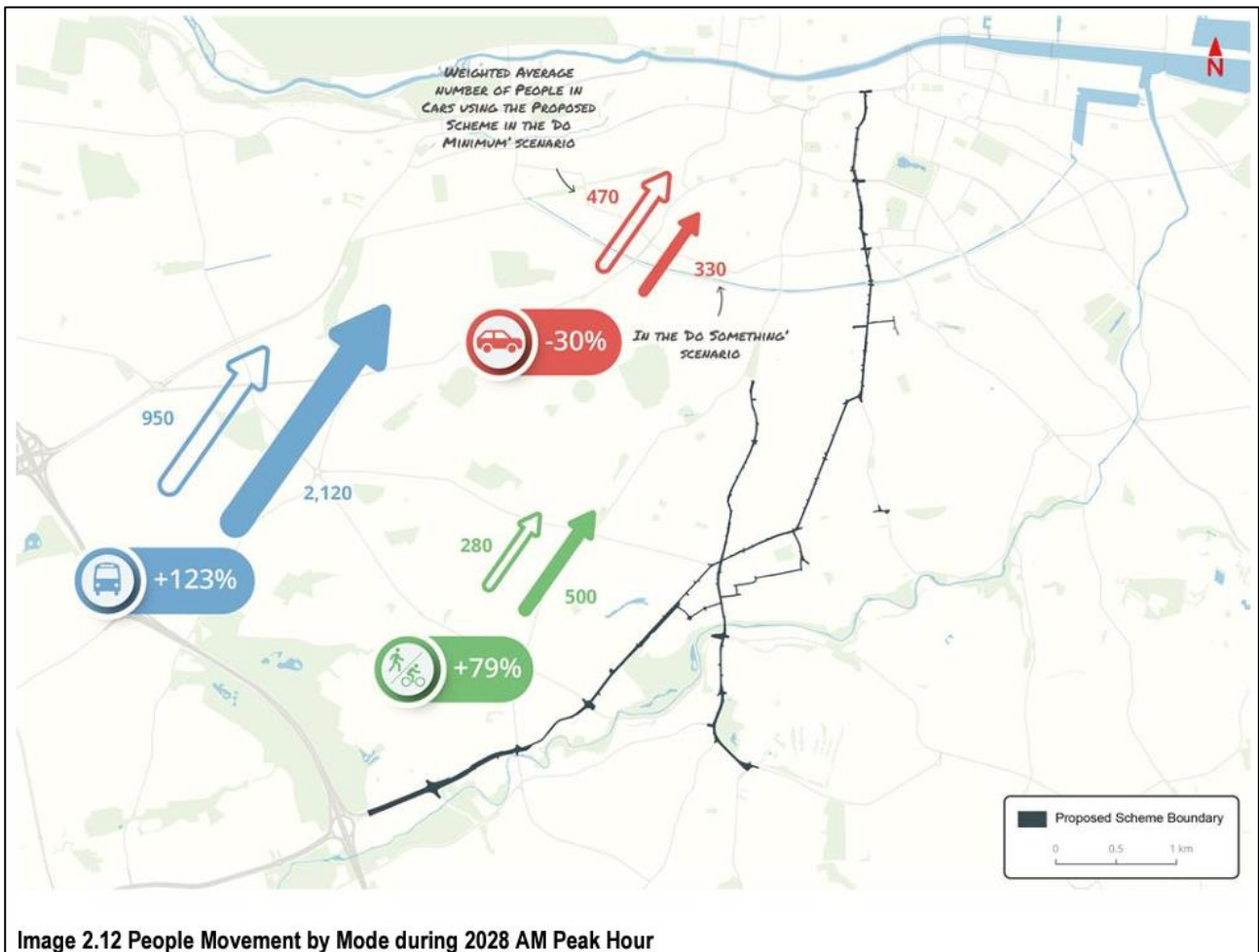


Image 2.12 People Movement by Mode during 2028 AM Peak Hour

In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.

In terms of bus journey time savings, Section 6.4.6.3 of Chapter 6 of Volume 2 of the EIAR notes the following:

*A micro-simulation model assessment has been developed and network performance indicators established for bus operations along Proposed Scheme. The results of the assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 12% 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, 7.4 hours of savings in 2028 and 6.2 hours in 2043, when compared to the Do Minimum combined across all buses. Overall, it is anticipated that the improvements to the network performance indicators for bus users along the Proposed Scheme will have a **Positive, Very-Significant and Long-term effect**.*

In relation to Air Quality, EIAR Volume 2 Chapter 7, section 7.5.3 states that the Proposed Scheme will have a generally neutral impact on air quality. Noting that vehicle emissions technology will improve, and the Irish vehicle fleet will continue to evolve to the extent that vehicle emissions impacts associated with the Proposed Scheme are anticipated to be short-term. City wide traffic management measures and proactive encouragement of low emissions vehicle uptake would accelerate these improvements.

Assessment Topic	Potential Impact (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
Road traffic impacts on local human receptors	Neutral, Long-term	Neutral, Long-term
Road traffic impacts on local ecological receptors	Positive, Slight, Long-term	Positive, Slight, Long-term
Regional air quality	Neutral, Long-term	Neutral, Long-term

Figure 3.13.10 Summary of Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring

In relation to Noise and Vibration, EIAR Volume 2 Chapter 9 Noise and Vibration, section 9.5.2.1 states that:

The impact assessment has determined that traffic noise impacts across the study area for the Proposed Scheme results in a positive to neutral imperceptible to slight short and long-term direct impacts along the Proposed Scheme and negative imperceptible to moderate short- and long-term indirect impacts along the surrounding road network. 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 relation to noise and vibration occurring from the construction phase, section 9.6.1 states that:

During evening periods, noise impacts associated with the Construction Phase will be Negative, Moderate to Significant and Temporary for the majority of scheduled works within 15m of the works and Negative, Not Significant beyond 15m. At distances between 15m to 20m from road widening / utility diversion works, there is the potential for Negative, Moderate to Significant and Temporary impacts. At distances within 10m of road widening / utility diversion works, the noise impact will be Negative, Significant to Very Significant and Temporary. As per DMRB Noise and Vibration (UKHA 2020), in cases of moderate to major magnitude of impacts, the duration of works determines the overall significance rating.

As part of the mitigation measures, the durations advised in the DMRB Noise and Vibration will be followed, where feasible, to reduce overall significance effects (i.e. scheduling works to occur for periods of less than 10 days / nights over 15 consecutive day / night periods and less than 40 days over six consecutive months where significant effects are identified). Once the CNL and duration of works is considered in line with the DMRB Noise and Vibration, all key Construction Phase residual noise levels will be Not Significant, whilst meeting the scheme objectives set out in Chapter 1 (Introduction).

EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling, pedestrian, and bus infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Table 6.27: Section 2 – Significance of Effects for Pedestrian Impact during Operational Phase

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawm Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.13.11 Extract from EIAR Chapter 6 (Table 6.27)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Table 6.28: Section 2 – Cycling Impact during Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.13.12 Extract from EIAR Chapter 6 (Table 6.28)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Bus Infrastructure

Table 6.29, in section 6.4.6.1.3.3 of Chapter 6 outlines the changes to bus stop infrastructure along Section 2 of the Proposed Scheme, with reference to the number and percentage of bus stops that provide each facility in the Do Minimum and Do Something scenarios.

Table 6.29: Section 2 – Overview of Changes in Bus Stop Facilities

Bus Stop Facility	Do Minimum		Do Something		Comment
	No. of Stops	Percentage of Stops	No. of Stops	Percentage of Stops	
RTPI	2	11%	15	100%	RTPI added to all bus stops.
Timetable information	15	83%	15	100%	It is proposed that all bus stops provide real-time information.
Shelter	11	61%	12	80%	Shelter to be provided at all but three bus stops which are limited by spatial constraints.
Seating	10	55%	12	80%	Seating to be provided at all but three bus stops which are limited by spatial constraints.
Accessible Kerbs	16	89%	15	100%	Full provision.
Indented Drop Off Area	0	0%	0	0%	All proposed bus stops will be located inline within bus lanes.
Total Stops	18		15		Three fewer than the Do Minimum.

As set out in 6.4.6.1.3.2:

The contents of Table 6.29 indicate that there are significant improvements to the bus stop facilities along Section 1 of the Proposed Scheme. It is proposed that all bus stops will be provided inline within dedicated bus lanes along the entirety of the corridor, meaning that buses will not incur delay when setting off after picking up passengers. Improvements in the provision of real-time information, shelters, seating and accessible kerbs at the bus stops throughout Section 2 of the Proposed Scheme are assessed as providing an overall positive impact for bus passengers.

All proposed facilities have been designed in accordance with BusConnects Preliminary Design Guidance which has been developed with cognisance to the relevant accessibility guidance. Taking into account the provision of bus lanes, pedestrian accessibility and bus stop facilities outlined within this section, Table 6.30 below outlines the bus qualitative assessment along Section 2 of the Proposed Scheme.

Table 6.30: Section 2 – Bus Qualitative Impact during Operational Phase

Section	Chainage	Description of Impact	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Avenue to R137 Terenure Road North	A000 - A1850	<ul style="list-style-type: none"> Three fewer stops than in the Do Minimum. Bus stops are located in more convenient locations for communities and access to signalised crossings. Slight improvements to bus stop facilities throughout. 	Medium	Medium	Positive Significant

*As indicated in Table 6.30, the Proposed Scheme improves the quality of existing bus infrastructure along Section 2 of the Proposed Scheme, which will provide long term benefits for bus users. The impact for this section of the Proposed Scheme is Medium Positive. The sensitivity of environment rating is predominately categorised as ‘medium.’ This results in a **Positive, Significant and Long-term** effect on this section.*

Further detail on the benefits of the Proposed Scheme are presented in Section 2.1.1.

- iv. Change to work patterns due to the COVID-19 Pandemic

A detailed response to this item is presented in Section 2.1.1.

- v. Inability to turn a car within the driveway

The permanent acquisition will result in the loss of up to 3.5m of lands with an additional 2m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be 2.5m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including pillars and entrance between the pillars will be at least 8.5m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar to the current scenario and that this should not hinder the ability to park within the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

vi. Proposed Scheme Out of Character for Urban Village

Chapter 17 of the EIAR has considered the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme.

17.4.4.1 presents an assessment of the Proposed Scheme in terms of Impact on Townscape and Streetscape Character. Section 17.4.4.1.2 presents the assessment for the Nutgrove to Terenure Road North Section:

*The sensitivity of this section is **high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used.*

There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces.

*There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is **very high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Very Significant and Short-Term** becoming Neutral, Moderate and Long-Term.*

Section 17.4.4.1.2 presents the assessment for the Terenure Road North to Charleville Road Section:

*The sensitivity of this section is **very high**. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimised through design iteration, Terenure Road East will be widened in parts which will require permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.*

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.

The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.

3.14 CPO-14 – Conal & Racquel O'Donnell– 76 Terenure Road East

3.14.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions.

To accommodate this cross section, land acquisition is proposed on the northern and southern side of the Terenure Road East between Saint Joseph's Church and Brighton Road. Permanent and temporary land acquisition is proposed at the 76 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 3.7m and temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.14.1.

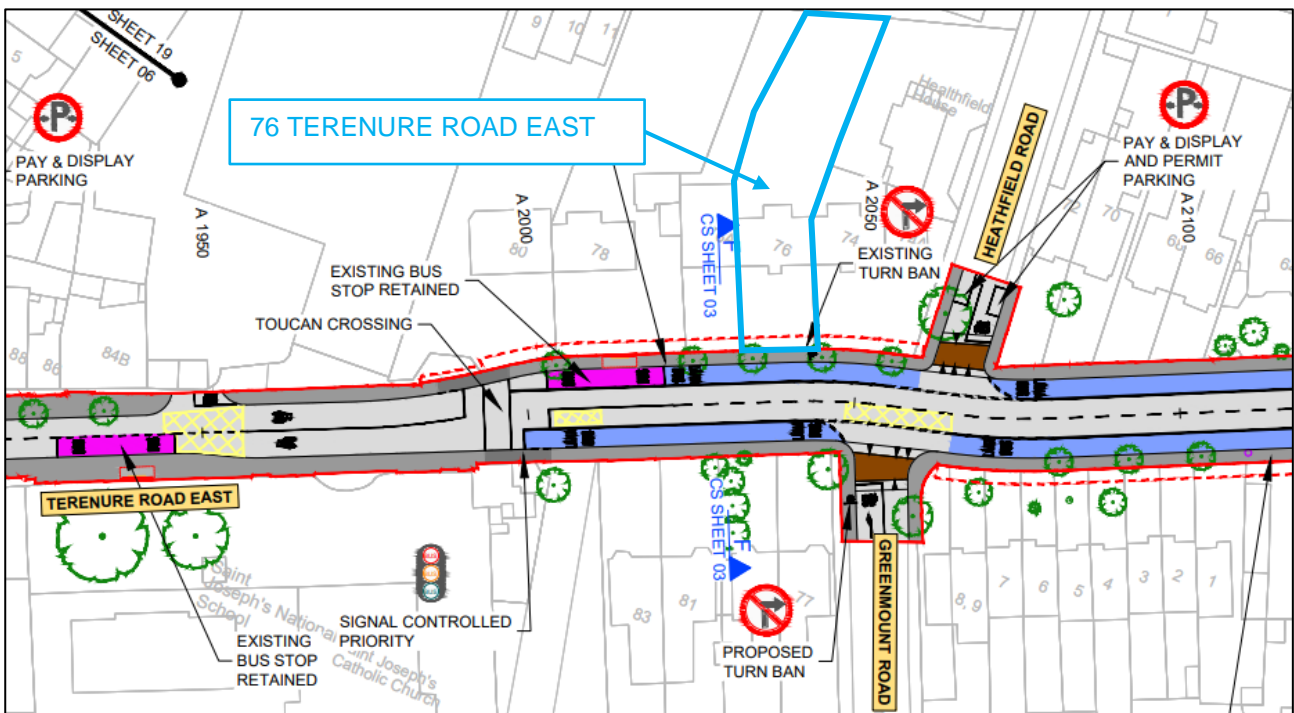


Figure 3.14.1 General Arrangement of Proposed Scheme adjacent to 76 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.14.2.

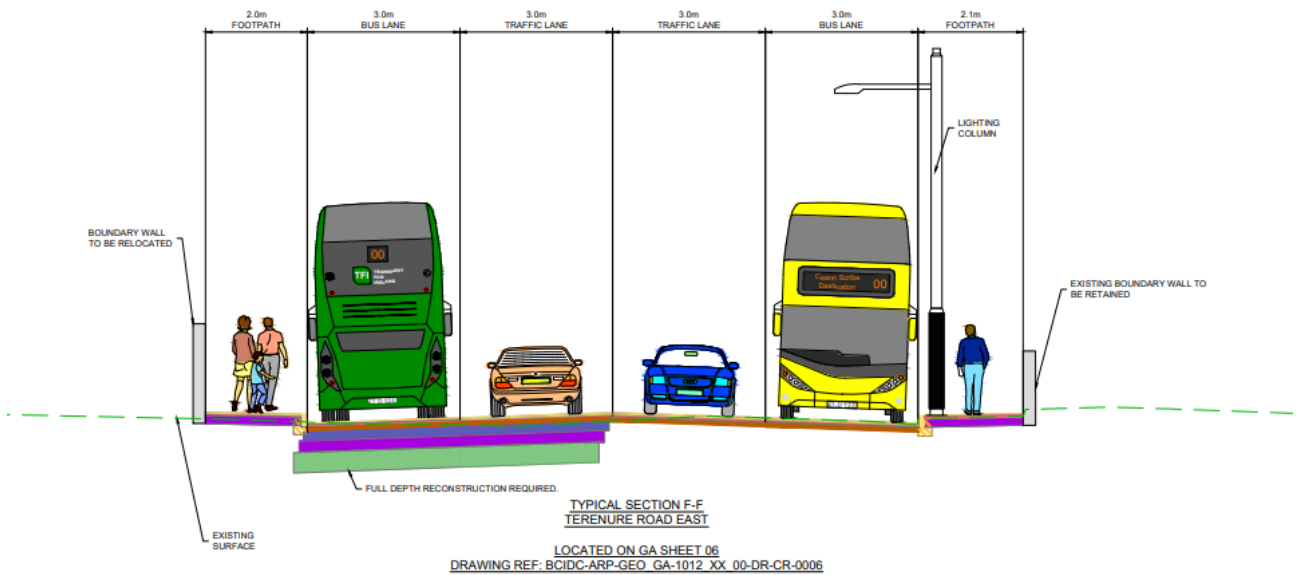


Figure 3.14.2 Typical Cross-Section adjacent to 76 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 62 Terenure Road East is shown in Figure 3.14.3.

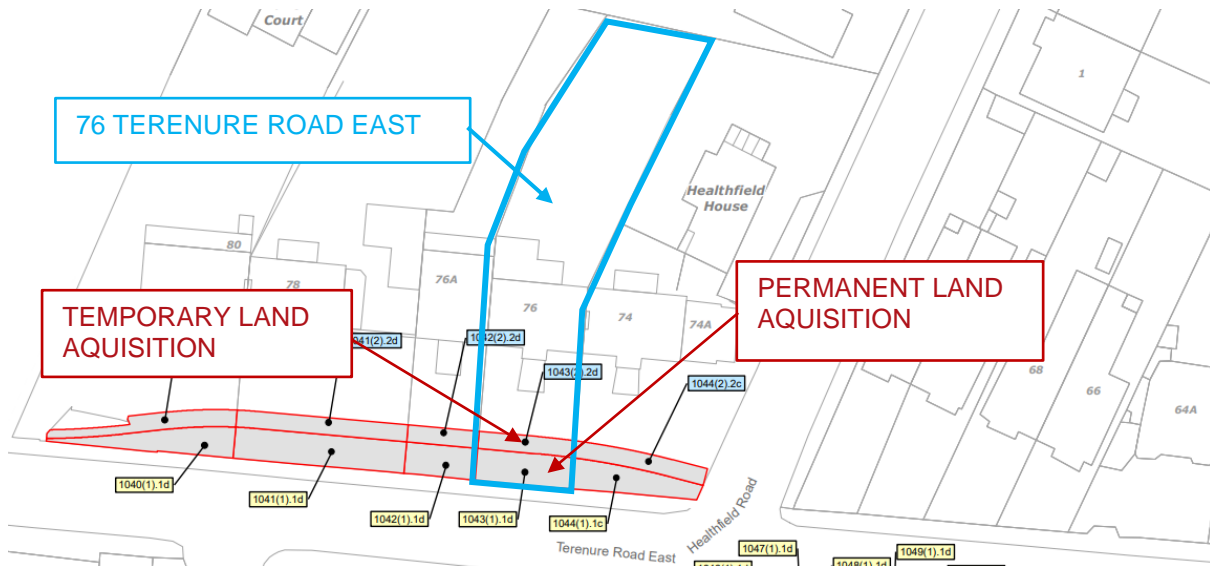


Figure 3.14.3 Extract from CPO Deposit Maps adjacent to 76 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.14.4.

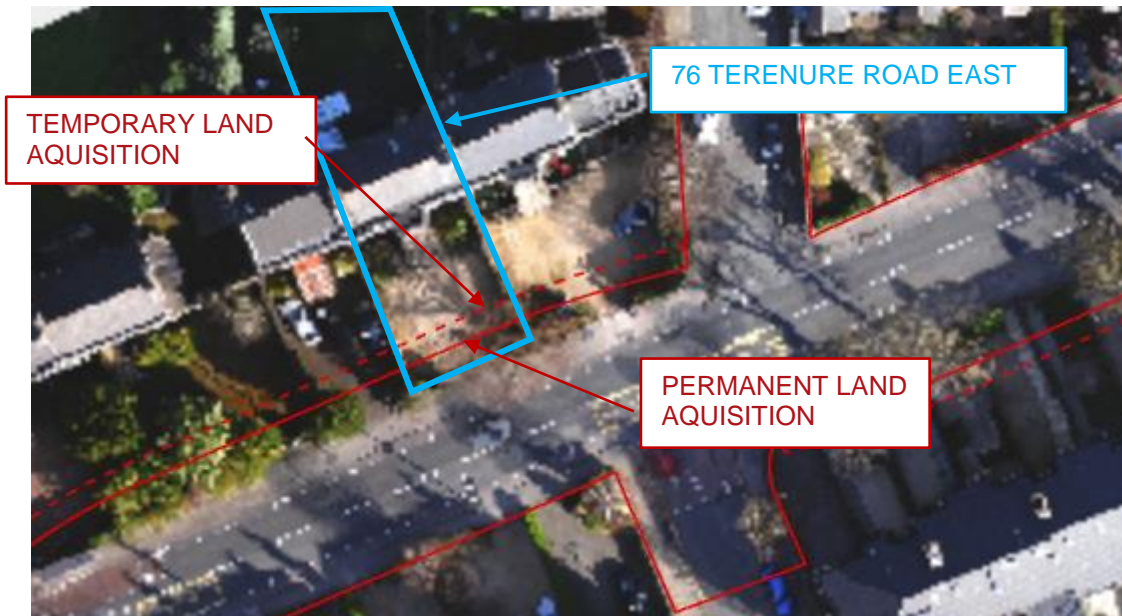


Figure 3.14.4 Proposed Land Acquisition lines adjacent to 76 Terenure Road East

The existing property frontage is shown in Figure 3.14.5.

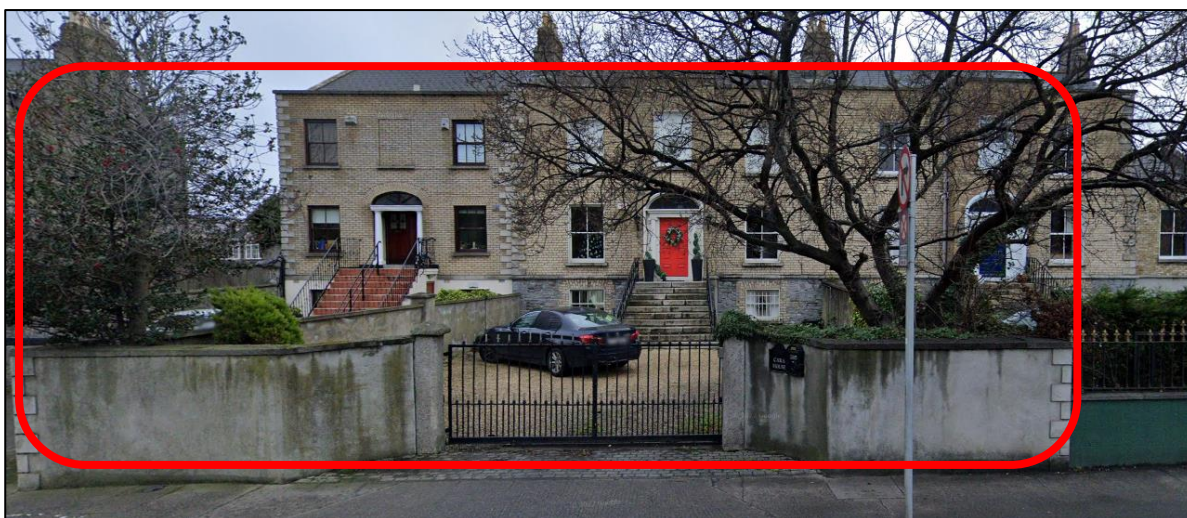


Figure 3.14.5 Existing frontage of 76 Terenure Road East (Image source: Google)

3.14.2 Summary of the Points of Objection to the CPO by Conal & Racquel O'Donnell

This submission objected to CPO for the reasons summarised in the following section.

- i. Section 51 and CPO Application should not be made concurrently
- ii. Contravention of Article 1 of the First Protocol to the European Convention on Human Rights

The submission suggests that there is some contravention of the First Protocol to the European Convention on Human Rights. The submission concludes with *“The board has a duty and an obligation to ensure that its decision meet the requirements of both European and domestic legislation and that the landowners effected by the compulsory expropriation do not suffer an excessive burden under Article 1 of the First Protocol to the Convention on Human Right”*.

- iii. No Funding Approved for the Scheme

The submission asserts that funding has not yet been approved for the detailed design, the land acquisition or the construction of the scheme.

iv. Common Good

The submission states that the confirming Authority must prove that the acquisition of the property is clearly justified by the common good. Stating that the NTA has not demonstrated that this is the case.

v. Consideration of Alternatives

The submission states that alternative routes have not been adequately assessed and reasons for their rejection have not been provided. The submission continues to state that the assessment carried out has not established that this route is the most effective route for delivery of the Proposed Scheme, and that the assessment does not establish that there is an urgent need for the scheme.

vi. Compliance with Development Plans

The submission states that the Proposed Scheme does not comply with the Development Plans of the Local Authorities.

vii. Impact of CPO on a protected structure

The submission asserts that the assessment has not adequately taken into account the potential ramifications of the Proposed Scheme on the O'Donnell Family home. It further notes that this residence is designated as a protected structure, which encompasses a tree safeguarded by the prevailing Development Plan Provisions

viii. General Scheme of the Planning and Development (Land Value Sharing and Urban Development Zone) Bill 2022

The submission alleges that, according to the "Land Value Sharing and Urban Development Zones Bill 2022", the rules for compensation, the process of assessment, and the title transfer procedures would all be governed by this new bill. The submission sets out that these new provisions are different from what was mentioned in the served notice, including how compensation is determined when an agreement cannot be reached. It further asserts that the Board should not confirm any CPO until property owners have been properly informed about the legislation and procedures that will be used to settle their claims.

3.14.3 Responses to the Points of Objection

i. Section 51 and CPO Application should not be made concurrently

It was entirely appropriate and proper for the NTA to make (i) an application to the Board for confirmation of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 (the "CPO") and (ii) an application to the Board for approval of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (the "Proposed Scheme") under section 51 of the Roads Act 1993 (as amended) (the "Roads Act").

As the Board will be aware, section 51(7)(b) of the Roads Act provides as follows:

"(7) (b) Where an application for approval under this section [being section 51 of the Roads Act 1993 (as amended) which is what has occurred here in relation to the Proposed Scheme] relates to a proposed road development, and

- i. a scheme submitted to the Minister [now An Bord Pleanála] for approval under section 49, or*
- ii. an application submitted to the Minister [now An Bord Pleanála] for a bridge order under the Act of 1946, or*
- iii. a compulsory purchase order submitted to the Minister [now An Bord Pleanála] for confirmation [which is what has occurred here with this CPO],*

*relate wholly or partly to the same proposed road development, the Minister [now An Bord Pleanála] **shall** make a decision on such approval and on the approval of such scheme or the making of such bridge order or the confirmation of such compulsory purchase order **at the same time.**" (emphasis added)*

As the NTA's application for approval of the Proposed Scheme under section 51 of the Roads Act and the CPO submitted to the Board for confirmation "relate wholly or partly to the same proposed road development", the Board is therefore statutorily required to make its decisions at the same time.

Therefore, it is not open to the Board to accede to the request made on behalf of the objector to first make a decision in relation to the application for approval of the Proposed Scheme under section 51.

Further, there are very many practical reasons including in relation to the efficient use of the decision maker's resources as to why it is entirely appropriate to deal with the section 51 application and the related application for confirmation of the CPO together. Indeed, this is also in ease of those who may wish to make an objection and/or submission both in writing and/or at any oral hearing that may be held in relation to the section 51 application and the application for confirmation of the CPO.

ii. Contravention of Article 1 of the First Protocol to the European Convention on Human Rights

Article 1 of the First Protocol to the European Convention on Human Rights states that:

Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

There has been no contravention of Article 1 of the First Protocol which itself qualifies the right to peaceful enjoyment of possessions by reference to the concept of public or general interest. This is also in keeping with Article 40.3.2 of the Constitution which recognises that the exercise of property rights ought to be regulated by the principles of social justice and that the State may delimit the exercise of property rights with a view to reconciling their exercise with the exigencies of the common good.

The Proposed Scheme is being pursued cognisant 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 including that the impact on an individual's right to private property occasioned by a compulsory acquisition must be justified or necessitated by the exigencies of the common good, and that the impairment of an individual's rights must not exceed that which is necessary to attain the legitimate object sought to be pursued i.e. it must be proportionate to the ends sought to be achieved.

In this regard, all of the lands included in the Templeogue/Rathfarnham to City Centre Core Bus Corridor Compulsory Purchase Order 2023 are necessary and required for the construction and/or operation of the Proposed Scheme (being for the provision of public transport infrastructure) and to meet the objectives of the Proposed Scheme which are as detailed in section 1.2 of Chapter 1 of the EIAR as follows:-

- *“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.”*

It is therefore clear that the Proposed Scheme is in accordance with the concept of public or general interest and is according with the exigencies of the common good. Further, the response to Item iv below articulates the benefits of the Proposed Scheme and outlines the necessity for the impacts on individuals' property rights in accordance with the exigencies of the common good.

iii. No Funding Approved for Scheme

The submission asserts that funding has not yet been approved for the detailed design, the land acquisition or the construction of the scheme.

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 \(www.gov.ie\)](http://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 keys 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 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:

- i. 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)*
- ii. 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*

iv. Common Good

As noted above in relation to item ii., in relation to compulsory acquisition whereby it impacts on an individual's right to private property same is to be justified or necessitated by the exigencies of the common good.

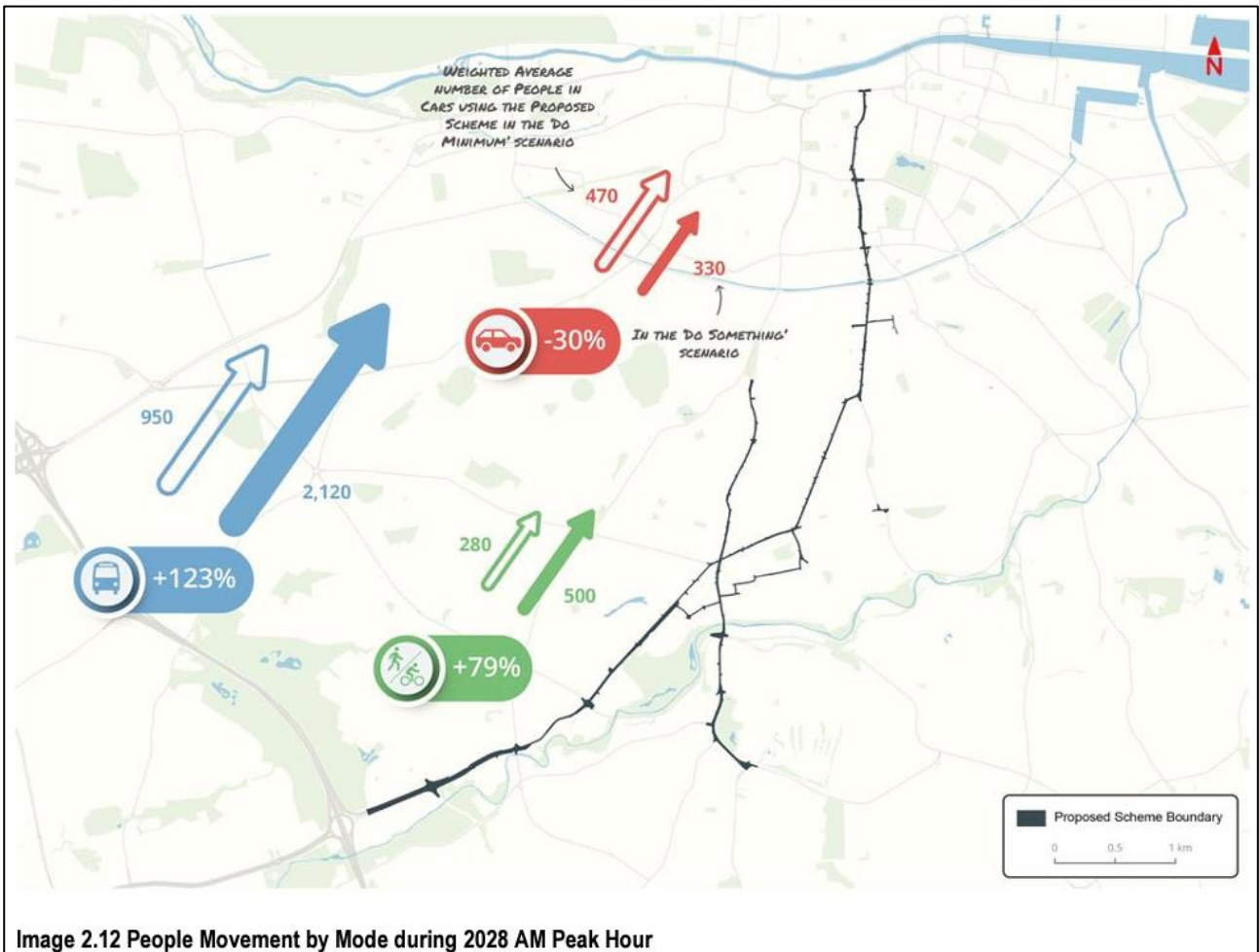
The Proposed Scheme is clearly being pursued for the common good and that is detailed throughout the EIAR and in particular in Chapter 2: Need for the Proposed Scheme. Section 2.1 of Chapter 2 of the EIAR, sets out that the Proposed Scheme aims to meet growth demand by:

"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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment."

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.



In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

*Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.*

The significant benefits of the scheme are elaborated upon throughout the EIAR with a summary of the key benefits presented in Section 2.1.1 of this response. 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.

v. Need for the Scheme and Consideration of Alternatives

Need for the Scheme

The NTA has delineated the necessity of the Proposed Scheme in EIAR Volume 2 Chapter 2 Need for the Proposed Scheme. This section elaborates on the transport requirements of the Proposed Scheme at both regional and local levels. Furthermore, in Section 2.3 of Chapter 2, the document expounds on how the Proposed Scheme aligns with various national and regional policies, including but not limited to the National Development Plan (2021-2030), the Transport Strategy for the Greater Dublin Area (2016-2035), the Climate Action Plan (2023), and the Climate Action and Low Carbon Development (Amendment) Act 2021, often referred to as the 2021 Climate Act.

Section 2.1 outlines the need for the Proposed Scheme stating that:

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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks.

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.

Section 2.2.1.4 of Chapter 2 states:

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.

Terenure Road East was identified as a primary cycle route (9A), in the GDA Cycle Network Plan 2013, this is further described in the extract below from section 2.2.1.4:

Extracts from the GDA Cycle Network Plan 2013 are shown in Image 2.1 and Image 2.2, which highlights the Proposed Scheme in the context of the planned cycle network. In the GDACNP 2013, there were two primary cycle routes (Cycle Route 9A and Cycle Route 10) and a number of secondary cycle routes (including Routes 9B, S04 and 10) identified along the Proposed Scheme

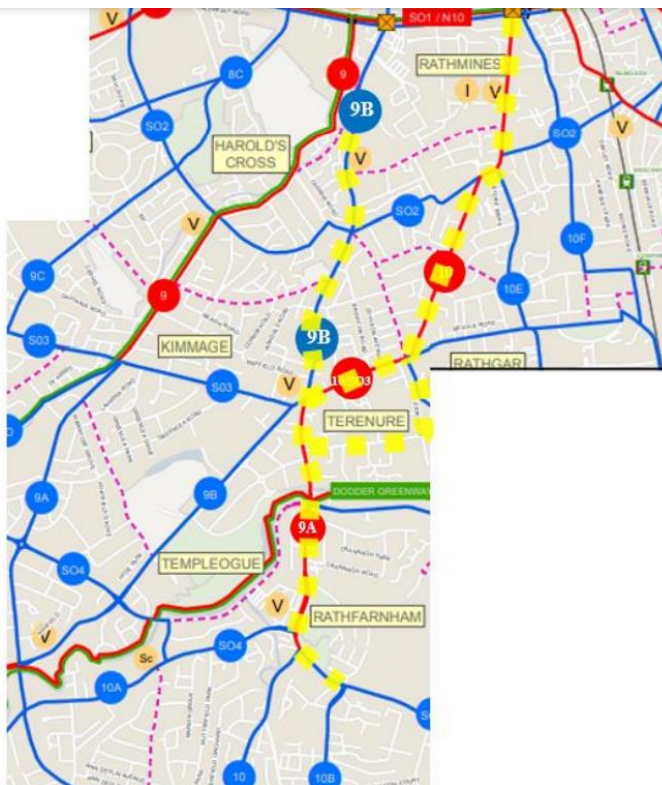


Figure 3.14.6 Extract from 2013 GDA Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

In preparing the GDA Transport Strategy (2022 – 2042) the NTA 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). The Proposed Scheme, including the section along Rathfarnham Road is supported by the GDACNP 2013 and the 2022 Greater Dublin Area Cycle Network is needed to address the deficiencies in the very limited segregated cycling infrastructure currently available on this corridor.



Figure 3.14.7 Extract from 2022 Greater Dublin Area Cycle Network (Proposed Scheme Highlighted in Yellow for Information)

EIAR Volume 2 Chapter 2 Need for the Proposed Scheme, Section 2.2.1.4 states:

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 Core Bus Network Report focused on the overall existing bus service network and identified locations where the bus network is operating sub-optimally. The network is dominated by a radial network to/from the Dublin City Centre, supplemented by low frequency orbital and local bus routes serving larger destinations outside of the City Centre core.

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.

The Core Bus Network study included a recommended route from Terenure/Rathfarnham to the City Centre on the basis of the need to serve significant demand along this entire corridor, and the need to address service deficiencies (lack of bus priority and associated journey time reliability) for a high level of scheduled bus services already operating along this corridor.

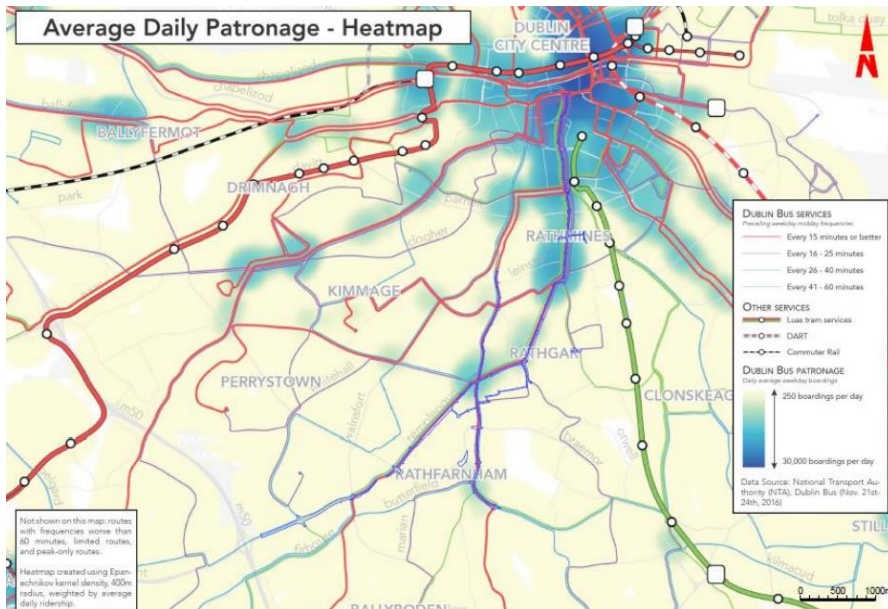


Figure 3.14.8 Average Daily Patronage Heatmap (Dublin Area Bus Network Redesign Revised Proposal ((NTA 2019)). Proposed Scheme Highlighted in Blue for Information

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.

Consideration of Alternatives

Article 5(1)(d) of Directive 2011/92/EU as amended by Directive 2014/52/EU (“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’.

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;
2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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

7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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 Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 (Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR.

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above. These constrained locations are as follows:

- Terenure Village to Rathgar Village – TVR
- Cycle Route options between Bushy Park Road junction and Grand Canal

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village).*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character.

Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

Following the completion of the public consultation process 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. Section 3.4.1.1.3 of Chapter 3 of the EIAR describes the assessment in the section between Terenure and Grosvenor Road:

The EPR Option within this section of the Proposed Scheme proposed to provide bus and traffic lanes in each direction along Terenure Road East, except for a short section between Terenure Cross and Aldi where only an outbound bus lane was proposed. Cycle lanes were proposed in each direction between Ferrard Road and Rathgar Avenue, but none were proposed between Terenure Cross and Ferrard Road. It was highlighted through the public consultation process that this proposal impacted on several properties with heritage value, including the loss of mature trees from within these properties. Additionally, a review of the EPR Option proposals against the detailed topographical survey showed that it was not possible to provide a bus lane and two traffic lanes on Terenure Road East immediately to the east of Rathfarnham Road. On Rathgar Road the EPR Option proposed bus lanes, traffic lanes and cycle tracks in each direction along Rathgar Road. This would result in impact on heritage properties along the length of Rathgar Road as well as the loss of trees from within these properties. These impacts were noted as being of concern to many local residents during the public consultation. Alternative design solutions were therefore explored in this area in determining a draft PRO.

At the draft Preferred Route Option stage, five options were assessed, as follows:

- Option RG1: Option RG1 would provide a general traffic lane in each direction along the entirety of this route section, as well as dedicated bus lanes and cycle tracks along the CBC for the majority of the route section. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey;
- Option RG2: Option RG2 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes in each direction. Under this option, bus lanes would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signal controlled priority.

No cycle facilities would be provided on Terenure Road East under this option. Additional cycle facilities would be provided on Terenure Road North and Harold's Cross Road, linking to the Kimmage to City Centre CBC, and providing an alternative route for cyclists travelling towards the city which would otherwise use Terenure Road East. Additional secondary cycle facilities would also be provided on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road, linking back to the CBC at Rathgar Village to provide some level of service for east west cyclists.

A one-way inbound traffic arrangement would be provided on Rathgar Road, with outbound traffic diverted to alternative routes. 1.5m wide cycle tracks would be provided along Rathgar Road;

- Option RG3: Option RG3 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes and cycle tracks in each direction. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. A one-way inbound traffic arrangement would be provided on Rathgar Road, with outbound traffic diverted to alternative routes. 2.0m wide cycle tracks would be provided along Rathgar Road;
- Option RG4: Option RG4 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes in each direction. Under this option, bus lanes would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signal controlled priority. No cycle facilities would be provided on Terenure Road East under this option.

Additional cycle facilities would be provided on Terenure Road North and Harold's Cross Road, linking to the Kimmage to City Centre CBC, and providing an alternative route for cyclists travelling towards the city which would otherwise use Terenure Road East. Additional cycle facilities would also be provided on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road, linking back to the CBC at Rathgar Village to provide some level of service for east-west cyclists. A two-way general traffic arrangement would be provided on Rathgar Road. An inbound bus lane would be provided between Highfield Road and Frankfort Avenue, while north of this point inbound bus priority would be managed through signal controlled bus priority. An outbound bus lane would be provided between Grosvenor Road and Frankfort Avenue, while south of this point outbound bus priority would be managed through signal controlled bus priority. 1.5m wide cycle tracks would be provided along Rathgar Road; and

- Option RG5: Option RG5 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes and cycle tracks in each direction. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. A two-way general traffic arrangement would be provided on Rathgar Road. An inbound bus lane would be provided between Highfield Road and Frankfort Avenue, while north of this point inbound bus priority would be managed through signal controlled bus priority. An outbound bus lane would be provided between Grosvenor Road and Frankfort Avenue, while south of this point outbound bus priority would be managed through signal controlled bus priority. 2.0m wide cycle tracks would be provided along Rathgar Road.

Option RG2 – the provision of bus lanes and general traffic lanes on Terenure Road East, a one-way outbound regime on Rathgar Road and alternative cycle facilities on Terenure Road North/Harold's Cross Road and Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing full physical bus priority throughout the majority of this section and would minimise the impact the curtilage of protected structures and private gardens and trees on Terenure Road East and Rathgar Road through the provision of alternative cycle routes. This option would provide bus priority, and while cycle facilities would not be provided along a section of the CBC, the proposal included an attractive and safe alternative.

In terms of the sub-criteria under the Environment criterion, the preferred option performed significantly better than other options in terms of Architectural Heritage as fewer protected structures would be impacted. In terms of Flora and Fauna the preferred option performed significantly better than other options due to the reduced impacts on existing trees along Rathgar Road. In terms of Landscape and Visual, the preferred option performed significantly better than other options due to the reduced impacts on adjacent residential properties. In terms of Air Quality and Noise and vibration the preferred option performed marginally better than other options due to the fact that traffic would be redirected from the CBC.

In terms of Land Use Character the preferred option performed marginally worse than other options due to the fact that a number of car parking spaces would be removed to facilitate the alternative cycle facility on Terenure Road North/Harold's Cross Road.

A number of other options were also considered in the area. Of relevance to Terenure Road East, the below option was considered:

Option of a bus gate along Terenure Road East between Rathfarnham Road and Rathgar Road. This option was not considered feasible due to the orbital traffic movement function of Terenure Road East and the lack of an alternative route for east-west traffic movements.

In addition, a bus gate at this location was not considered feasible in combination with scheme proposals for a bus gate within Rathmines Village, which is considered a more appropriate location given the inability to introduce other bus priority measures on this road section.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report. The design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

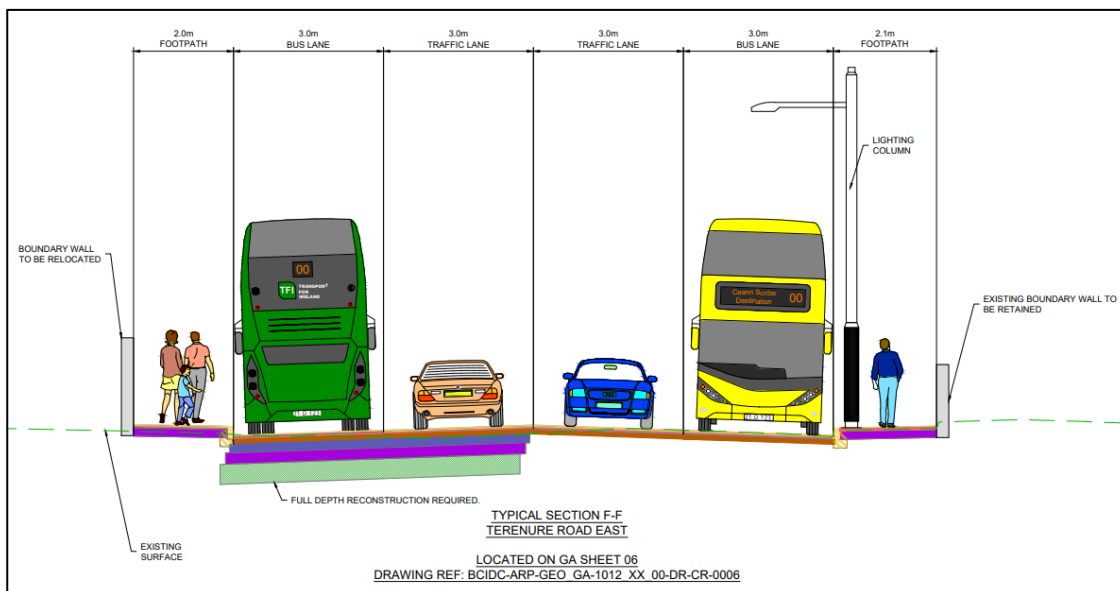


Figure 3.14.9 Typical Cross-section of Proposed Scheme between St Joseph’s School and Greenmount

At the specific area outside 76 Terenure Road East, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description Figures, General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath, traffic lane and bus lane. This sets the desirable width of 1.8m for footpaths, 3.0m for traffic (<60km/h), and absolute minimum width of 3.0m for bus lanes. At the location adjacent to 76 Terenure Road East, the minimum cross-section width was applied order to minimise impacts on adjacent properties while also meeting the scheme objectives.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project’s objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

vi. Compliance with Development Plans

The submission highlights a significant concern regarding the Proposed Scheme’s alignment with the Development Plans of the Local Authorities it passes. In EIAR Volume 2 Chapter 2 Need for the Proposed Scheme, the document describes the Proposed Scheme’s adherence to national and regional policies, detailed in sections 2.3.3 and 2.3.4. Furthermore, an overview of how the national and regional policies correlate with the scheme is provided in *response ii. Specifically in the context of land acquisition justification and consideration of alternatives*. This response will address the matter of the Proposed Scheme’s compliance and alignment with the Development Plans of Local Authorities.

The Proposed Scheme is located within three local authority functional areas, Dún Laoghaire Rathdown County Council (DLRCC), South Dublin County Council (SDCC) and Dublin City Council (DCC). The Proposed Scheme is within DLRCC where it commences from the junction of the R821 and R822 along Grange Road. The Proposed Scheme is within SDCC from the Tallaght Road to the Templeogue Road and Fortfield Road junction. The remainder of the Proposed Scheme is within DCC.

Dún Laoghaire Rathdown County Council Development Plan 2022 – 2028

Section 2.3.5.1 of Chapter 2 described the Dún Laoghaire Rathdown County Council Development Plan 2022 – 2028 in the context of the Proposed Scheme. In Chapter 2, Table 2.12 provides an overview of how the Proposed Scheme aligns with key transport policies outlined in the DLRC Development Plan, specifically those related to bus improvements.

The Dún Laoghaire-Rathdown County Development Plan (DLRCDP) (DLRCC 2022) guides the future growth and development of the functional area of DLRCC. The DLRCDP 2022-2028 was adopted and came into effect in April 2022 and approximately 70m of the Proposed Scheme is within its jurisdiction. A SEA, AA and Strategic Flood Risk Assessment (SFRA) were carried out as part of the DLRCDP.

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’ (Dún Laoghaire-Rathdown County Development Plan 2022-2028, p.2). The DLRCDP places sustainable transport and mobility as a core principle in the future development of the county.

The DLRCDP (DLRCC 2022) states:

The National Transport Authority’s (NTA) ‘Transport Strategy for the Greater Dublin Area 2016-2035’ provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area over the medium to long term. The Planning Authority must ensure that the County Development Plan is consistent with the Transport Strategy of the NTA. The Dublin Transport Authority Act 2008 (as amended) provides that the NTA’s Transport Strategy, must be reviewed every six years. While the Draft ‘Greater Dublin Area Transport Strategy 2022 - 2042’ has been published, the 2016 - 2035 strategy is still in place until the Draft is finalised.

The DLRCDP (DLRCC 2022) recognises that increasing capacity on public transport including bus corridors is a means to promoting modal change and active travel. It is noted that under the heading ‘Promoting Active Travel: Cycling and Walking’ that it states:

The Core Corridors of the BusConnects programme will provide high quality facilities, segregated from the bus lanes and general traffic lanes as far as is practicable. This will enhance safety for cyclists and provide a network of key cycling routes.

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).

South Dublin County Council Development Plan (SDCCDP) 2022-2028

Section 2.3.5.3 of Chapter 2 describes South Dublin County Council Development Plan (SDCCDP) 2022-2028 in the context of the Proposed Scheme. In Chapter 2, Table 2.13 provides an overview of how the Proposed Scheme aligns with key transport policies outlined in the SDCC Development Plan, specifically those related to bus improvements.

The South Dublin County Council Development Plan 2022-2028 (hereafter referred to as the SDCCDP 2022-2028) (SDCC 2022) sets the strategy for the proper planning and sustainable development of South Dublin County. A SEA, AA, FRA and NIS were produced as part of the plan.

The development plan came into effect on the 3rd of August 2022 with the exception of two sections which are subject to a Ministerial Direction by the Minister of State at the Department of Housing, Local Government and Heritage, the sections are as follows.

The plan includes ‘a vision for the County’s growing communities, places, housing, jobs, sustainable transport and the delivery of services in a manner which promotes climate action and efficient patterns of land use, paying particular attention to the physical, cultural, environmental and social identities that define areas within the County and support their ongoing evolution and integration with each other’. The transport element of the strategy sets out that it seeks to:

rebalance transport and mobility within the County by promoting ease of movement by sustainable modes (including walking, cycling and public transport). This will provide for the freeing up of road space for essential functions such as, public transport and emergency vehicles. It will also allow for commercial transport which is essential to economic growth.

In doing so, the Council will continue to provide for all elements of the transportation network that are within its remit and will engage with external agencies including the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) to assist the delivery of sustainable transport projects that are provided at a regional or national level.

In addition to the above, it is clear that SDCC has recognised the importance of BusConnects to improving transport and movement within SDCC, as outlined under the heading 'Travel Mode Share':

Transition to public transport will be aided by improvements in the pipeline including the roll-out of BusConnects which will include proposals for six new dedicated bus routes through the County. BusConnects will provide a redesigned more efficient bus network with high frequency spines, new orbital routes, and increased bus services.

Furthermore, the SDCCDP 2022-2028 identifies BusConnects as a strategic project 'that will have the potential over the coming years to have a transformative impact on travel by shifting the dominance of car-based transport towards public transport'.

Dublin City Development Plan 2022 – 2028

Section 2.3.5.3 of Chapter 2 describes the Dublin City Development Plan 2022 – 2028 in the context of the Proposed Scheme. In Chapter 2, Table 2.14 provides an overview of how the Proposed Scheme aligns with key transport policies outlined in the DCC Development Plan, specifically those related to bus improvements.

The 2022 – 2028 DCDP (DCC, 2022) was adopted on the 2nd of November 2022 and came into effect on the 14th of December, it guides how the city will develop to meet the needs of its residents, visitors and workers. A SEA, AA and SFRA were produced as part of the DCDP.

The vision of the DCDP is to establish champion compact city living, distinct character, a vibrant culture, and a diverse, smart, green, innovation-based economy. DCC aims to establish the city as one of Europe's most sustainable, dynamic, and resourceful city regions. The DCDP places sustainable transport as a core principle in the future development of the city:

Within the next 10 years, Dublin will have an established international reputation as one of Europe's most sustainable, dynamic and resourceful city regions. Dublin, through the shared vision of its citizens and civic leaders, will be a beautiful, compact city, with a distinct character, a vibrant culture and a diverse, smart, green, innovation-based economy. It will be a socially inclusive city of urban neighbourhoods with excellent community and civic infrastructure based on the principles of the 15-minute city, all connected by an exemplary public transport, cycling and walking system and interwoven with a high quality bio-diverse, green space network. In short, the vision is for a capital city where people will seek to live, work, experience, invest and socialise, as a matter of choice.

In 'Translating the Core Strategy into Development Plan Policies and Objectives', the core strategy has the following supports:

The Core Strategy will promote development and appropriate intensification along the routes of the three key public transport projects to be developed over the development plan period comprising Bus Connects (2021 – 2023).

The DCDP recognises that increasing capacity on public transport including bus corridors is a means to promoting modal change and active travel.

The Planning Report presented in Appendix 2.1 of Volume 4 of the EIAR considers the existing policy framework for the Proposed Scheme in the context of relevant legislation, International, European, National, Regional and Local planning strategy, plans and policy documents

vii. Impact of CPO on a Protected Structure

The submission asserts that the assessment has not adequately taken into account the potential ramifications of the Proposed Scheme on 76 Terenure Road North. It further notes that this residence is designated as a protected structure, which encompasses a tree safeguarded by the prevailing Development Plan provisions.

The NTA notes the concerns raised in relation to the proposed CPO in this location. The impact of the Proposed Scheme on this property is outlined in Section 16.4.3.1 of Chapter 16 of the EIAR, Architectural Heritage. This Section of the EIAR notes: "Land take at 74a to 80 Terenure Road East will result in the removal of the boundary treatments to 74, 76 and 78 Terenure Road East (DCC RPS 8118, 8119, 8121) Protected Structures of Medium Sensitivity.

The boundary to 76 consists of a cement rendered wall with dressed granite capping. The entrance piers are similarly constructed. Railings are reproduction electric gates”.

Section 16.5.1.1 of Chapter 16 of the EIAR, Architectural Heritage, further notes:

Three locations were identified where the Proposed Scheme will directly impact on the boundaries of Protected Structures during the Construction Phase. These include the boundaries to 74, 76 and 78 Terenure Road East (DCC RPS 8118, 8119, 8121), 59 to 69 Terenure Road East (DCC RPS 8106, 8107, 8109, 8111, 8113, 8116) and 50 to 62 Terenure Road East (DCC RPS 8097, 8099, 8101, 8103, 8105, 8108). The boundaries are to be repositioned to facilitate the proposed bus and cycle lanes. The pre-mitigation Construction Phase impact will be Direct, Negative, Significant, Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 High to Low. The predicted residual impact is **Direct, Negative, Slight, Temporary**.

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is one tree proposed to be removed at No. 76 Terenure Road East. This tree has been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- An 10m tall mature Oak displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the section of Terenure Road East between the pedestrian crossing at St. Joseph’s and Heathfield Road, it is proposed to plant 5 No. Sorbus Aucuparia Semi-mature rowan trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17. As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

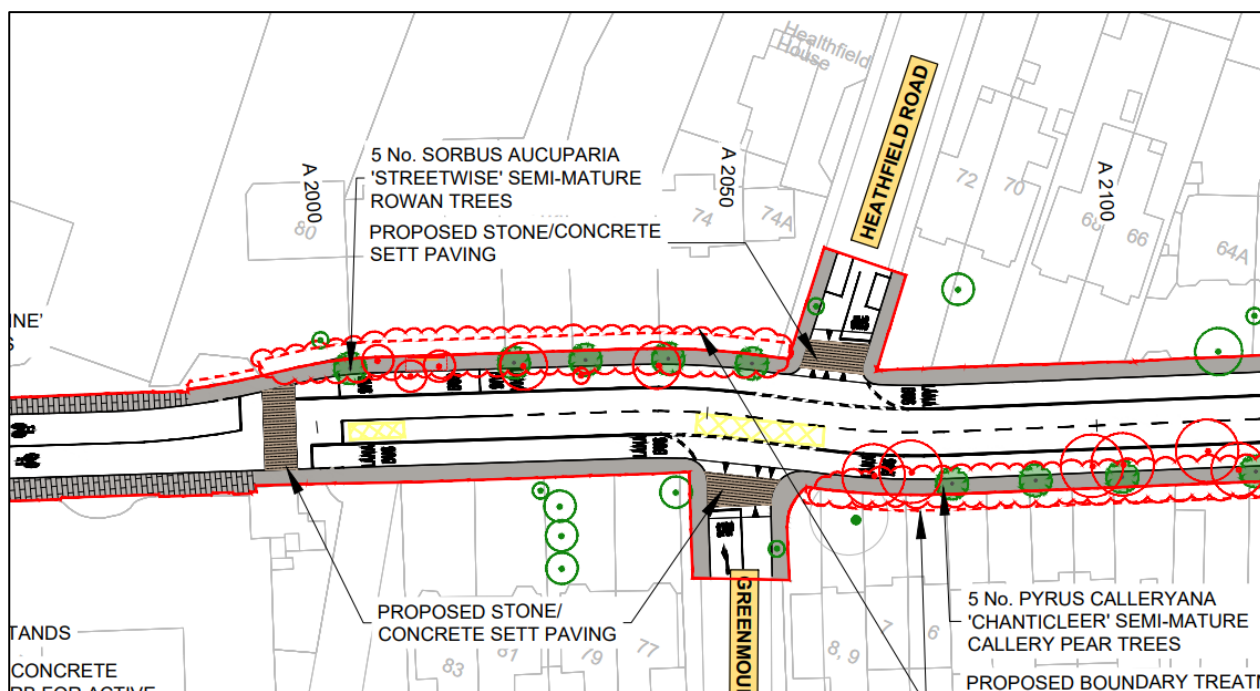


Figure 3.14.10 Landscape General Arrangement Drawings at Terenure Road East

Regarding the statement made in the submission concerning the protection of the tree in the front garden of 76 Terenure Road East under the current Development Plan Provision, it's important to note that Chapter 3 of The South Dublin Development Plan 2022-2028 outlines various policies and objectives related to build heritage, architectural conservation, landscapes, natural heritage sites, public rights of way, tree preservation orders (TPO), cultural heritage, and sites of geological heritage. Notably, there are no Tree Preservation Orders (TPO) in place along the Proposed Scheme.

- viii. General Scheme of the Planning and Development (Land Value Sharing and Urban Development Zone) Bill 2022

The NTA has adhered to the correct statutory procedures in relation to the CPO notices. The CPO was made by the NTA in exercise of the powers conferred on them by the Housing Act 1966 (as amended), the Planning and Development Act 2000 (as amended) and the Dublin Transport Authority Act 2008 (as amended). These procedures have not been changed or amended.

In relation to the reference to the Land Value Sharing and Urban Development Zone Bill 2022, the updated general scheme of the Planning and Development (Land Value Sharing and Urban Development Zone) Bill 2022 was published on 13 April 2023, and the provisions within the general scheme of the Bill are subject to change following pre-legislative scrutiny. It is only then that a final Bill will be published. Further, it is only at Bill stage and even if it did apply (which it doesn't as explained below) it is not law until a Bill has been enacted and commenced. Also, the Bill as it currently stands is not applicable to the CPO being pursued here.

The general scheme of the Bill intends, among other things, to enable the State to secure a share of the increase in land value that occurs as a result of certain public zoning and designation decisions and to provide for mechanisms to encourage timely development on land, in particular residential development, and for the designation of Urban Development Zones to enable the strategic and comprehensive development, redevelopment, or improvement of under-utilised urban or suburban areas. Therefore, it does not have any relevance to the procedures for assessing and determining compensation in the context of this CPO.

3.15 CPO-15 – Daniel & Jackie Durkan – 315 Templeogue Road

3.15.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus lanes and traffic lanes in each direction. To accommodate this cross section, land acquisition will be required along the northern side of the Templeogue Road.

Dedicated cycle facilities are provided on the approach to the Cypress Grove Road junction; however these will terminate approximately 100m from the junction where cyclists will share the bus lane in an inbound direction and the general traffic lane in an outbound direction over a short distance. To improve safety for cyclists, it is proposed to introduce a 30kph speed limit between Cypress Grove Road and Templeogue Village.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.4m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.15.1.

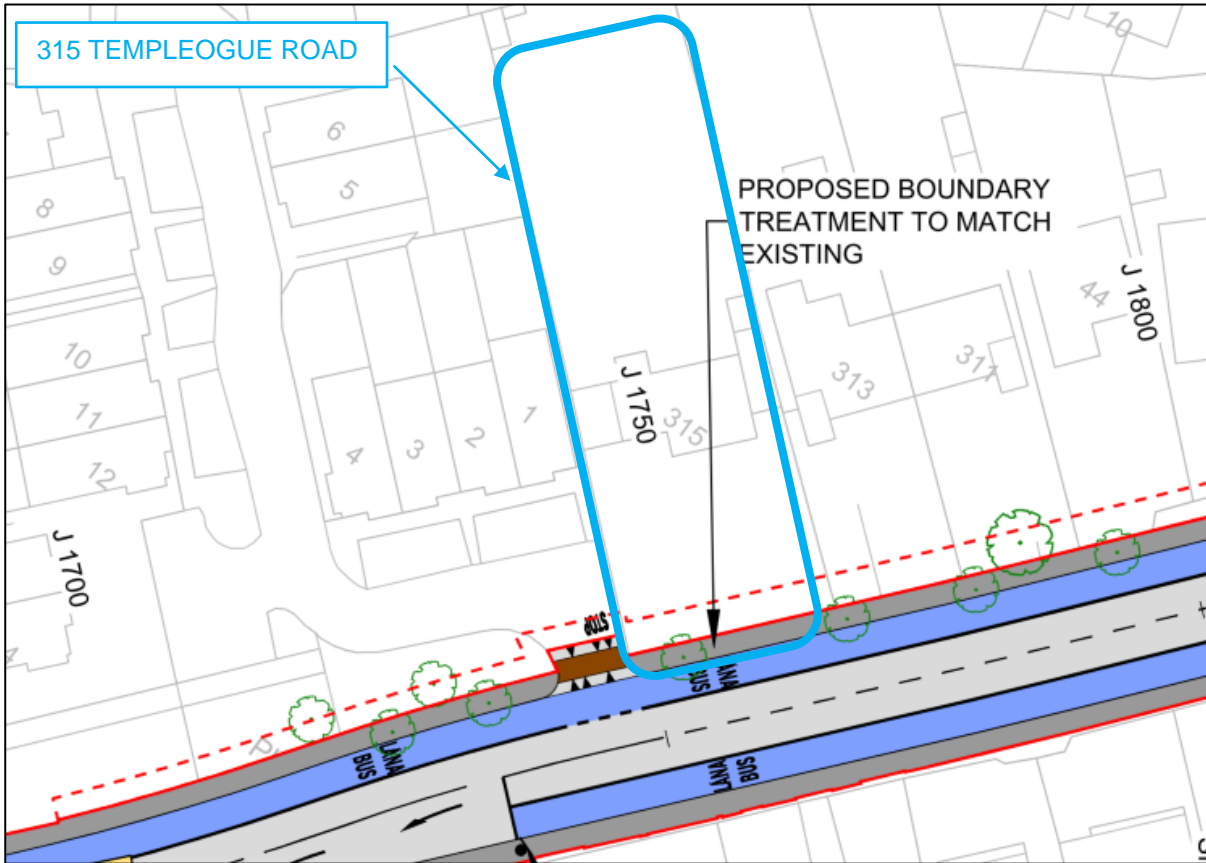


Figure 3.15.1 General Arrangement of Proposed Scheme adjacent to 315 Templeogue Road (Sheet 32)

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 315 Templeogue Road is shown in Figure 3.15.2.

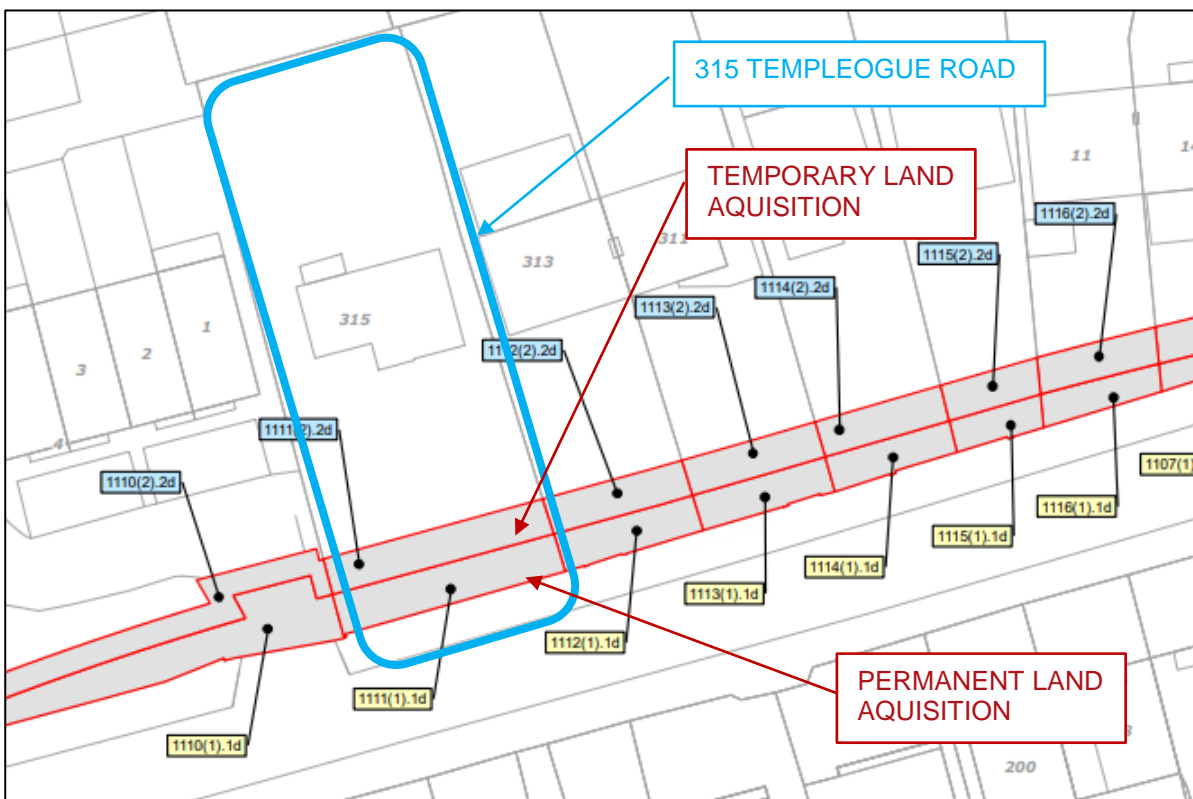


Figure 3.15.2 Extract from CPO Deposit Maps adjacent to 315 Templeogue Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.15.3.



Figure 3.15.3 Proposed Land Acquisition lines adjacent to 315 Templeogue Road

The existing property frontage is shown in Figure 3.15.4.



Figure 3.15.4 Existing frontage of 315 Templeogue Road (Image source: Google)

3.15.2 Summary of the Points of Objection to the CPO by Daniel and Jackie Durkan

- i. Traffic disruption and access to property

The submission suggested that there will be traffic disruption resulting from the proposed signal-controlled bus priority measures for inbound buses before reaching Templeogue Village and at the Ashfield Development for outbound buses. Specifically, it emphasises that this may lead to congestion along the section of Templeogue Road in the vicinity of No. 315. Additionally, the submission highlights the issue of two traffic queues forming in proximity due to these signal placements, which could impede the ease of access to and egress from No. 315.

- ii. Land acquisition

The submissions raised concerns related to the proposed land acquisition, especially in relation to removal of trees, green area, and children’s playground outside Ashfield Development.

iii. Traffic Calming

The submission noted that requested traffic calming measures at Cypress Grove Road / Templeogue Road and Templeville Road / Templeogue Road Junction was not implemented in the Proposed Scheme.

iv. Bus gate

The submission raised a concern about the proposed traffic calming measures at Templeogue Road, especially the bus gate at approach to Terenure Village and turning bans. It also notes that there has been no consideration for the impact of displaced heavy good vehicles will have on side roads.

3.15.3 Responses to the Points of Objection

i. Traffic disruption and access to property

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively with Table 6.60 and 6.64 providing more detail. These diagrams and tables are reproduced below.

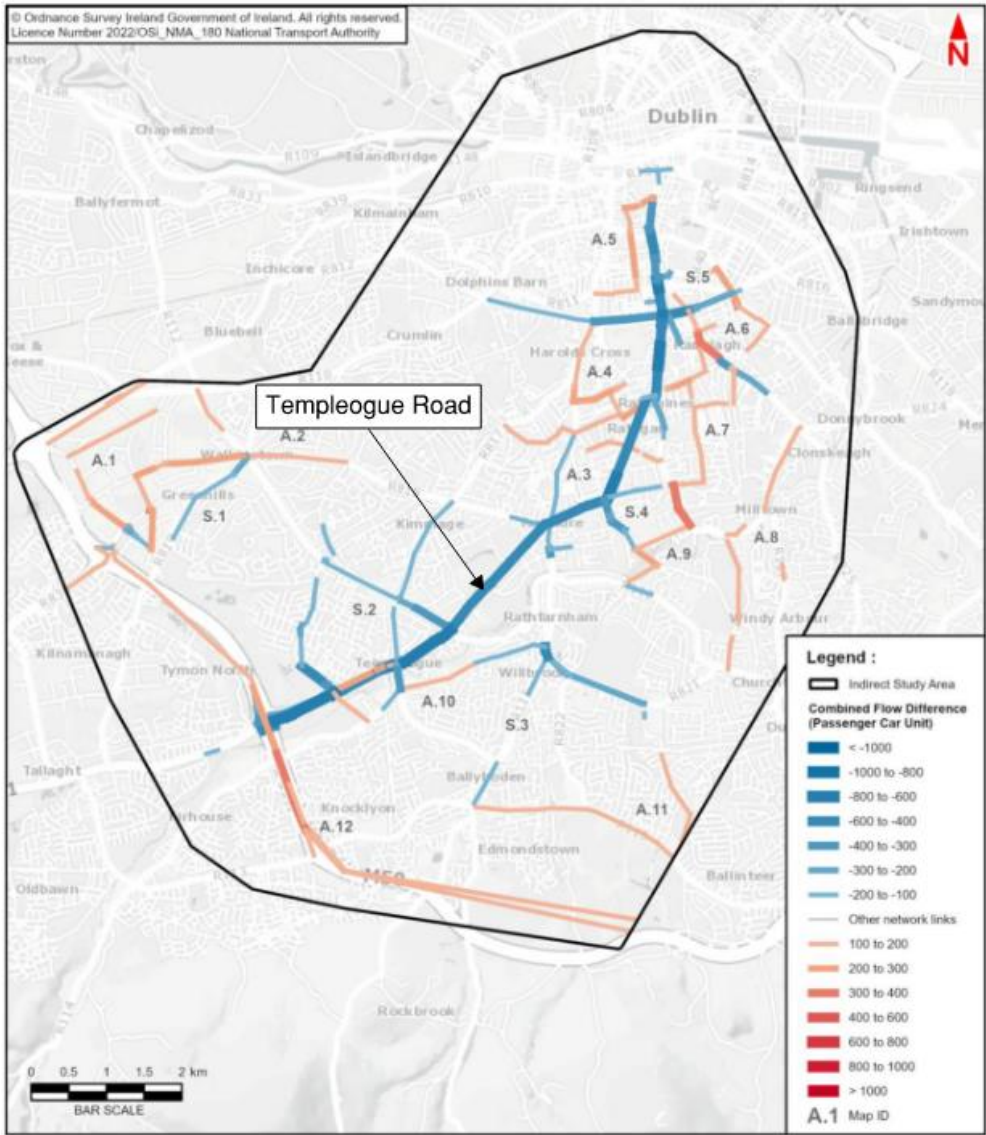


Figure 3.15.5 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

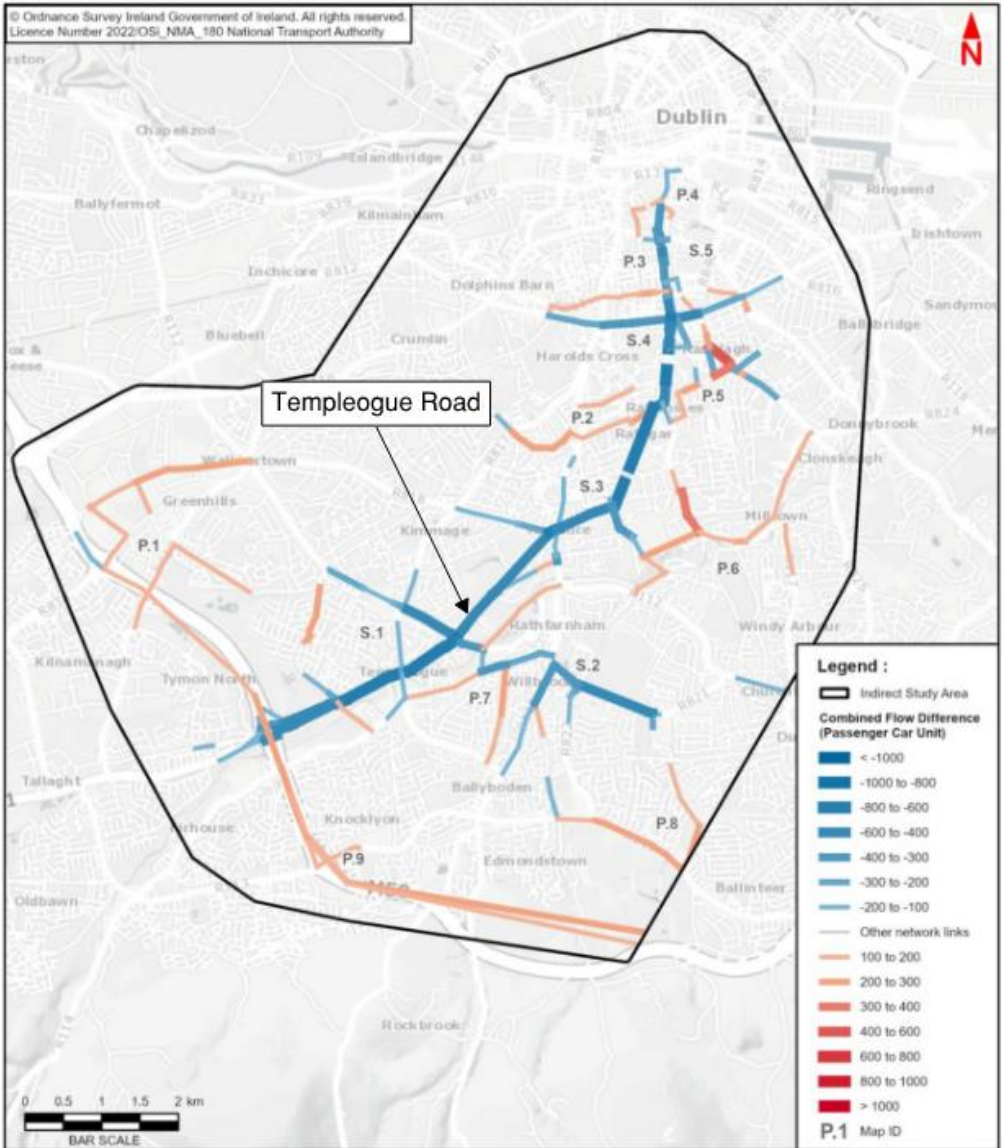


Figure 3.15.6 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.1	Cypress Grove Road	1,080	900	-180
		Old Bridge Road	1,242	1,087	-155
		Springfield Avenue	1,265	926	-339
		Tallaght Road	1,471	1,044	-427
		Templeogue Road	1,303	852	-451
		Templeville Road	972	558	-414
		Wellington Lane	2,241	1,960	-280
S.2	Templeogue Road	864	462	-402	
S.3	Rathdown Park	171	30	-140	
	Templeogue Road	864	462	-402	
	Terenure Place	1,335	735	-600	
	Terenure Road West	802	584	-218	

Figure 3.15.7 Road links that Experience a Reduction of ≥ 100 Combined Flows during PM Peak Hour (Direct Study Area) Table 6.64 from EIAR Chapter 6

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.2	Cypress Grove Road	1,108	926	-182
		Old Bridge Road	1,333	983	-350
		Tallaght Road	1,675	1,400	-275
		Templeville Road	1,036	689	-348
		Wollington Lane	2,141	1,851	-291
	S.4	Templeogue Road	665	212	-453
		Terenure Place	1,345	759	-586
		Terenure Road West	704	597	-107

Figure 3.15.8 Road links that Experience a Reduction of ≥ 100 Combined Flows during AM Peak Hour (Direct Study Area) Table 6.60 from EIA Chapter 6

The traffic modelling for Templeogue Road, as shown in Figure , Figure , Figure 3.15.7 and Figure 3.15.8, reveals an overall reduction in combined flow. This reduction is due to increased bus usage and walking/cycling along the Proposed Scheme, coupled with a decrease in car travel. In Section 6.4.6.1.8.1 of Chapter 6, the quantitative people movement assessment reports a 30% reduction in car travel, a 123% increase in bus passengers, and a 79% rise in pedestrians and cyclists during the AM Peak Hour. Section 6.4.6.1.8.2 notes a 39% reduction in car travel, a 145% increase in bus riders, and a 91% increase in pedestrians and cyclists during the PM Peak Hour.

Due to the projected overall reduction in combined traffic flow, it is unlikely that the proposed signal control bus priority will have a substantial impact on the accessibility and departure from the driveway of No. 315.

ii. Land acquisition

The submissions raised concerns related to the proposed land acquisition, especially in relation to removal of trees, green area, and children's playground outside Ashfield Development.

The proposed permanent acquisition will result in the loss of 3.4m at the roadside of the front garden, with an additional 3.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. Upon completion of the permanent works, the temporary land take area will be handed back to the property owner.

The proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIA Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. The proposed land acquisition represents the minimum required to achieve the optimal cross-section. The route and option assessment process undertaken along Templeogue Road is detailed in section 3.3.2.1 of Chapter 3 and the Preferred Route Option Report.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

Reinstatement of property frontage including boundary walls, gates, railings, landscaping, and playground outside Ashfield Development 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 EIA or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

EIA Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there are no trees proposed to be removed at No. 315. In relation to the common area of Ashfield Development, two trees are identified to be removed, these trees are surveyed and assessed as part of the AIAR, and have been categorised as follows:

- An 24m tall mature Sycamore displaying overall good condition, of Category B2 and with 20+ estimated remaining years;
- An 12m tall mature Taxus Baccata Yew displaying over good condition, of Category A2 and with a 40+ estimated remaining years.

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4, 4 trees are proposed outside the Ashfield Development, resulting in a net increase of 2 trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17. As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

- iii. Proposed Inbound Bus gate on Templeogue Road

Detailed responses to the issues raised by this submission have been provided in Section 2.2.2.

3.16 CPO-16 – Dearbhail Shannon– 6 The Townhouses, Terenure Road East

3.16.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph’s Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph’s Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.1m and temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.16.1.

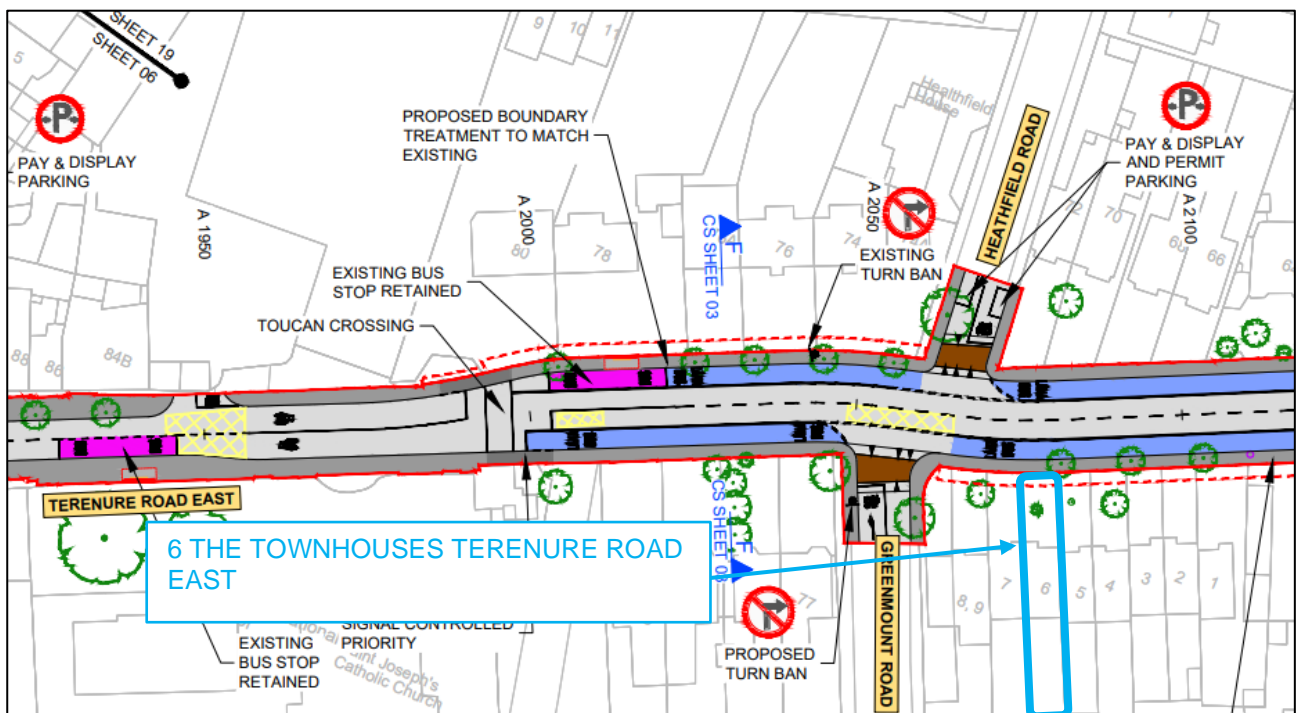


Figure 3.16.1 General Arrangement of Proposed Scheme adjacent to 6 The Townhouses Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.16.2.

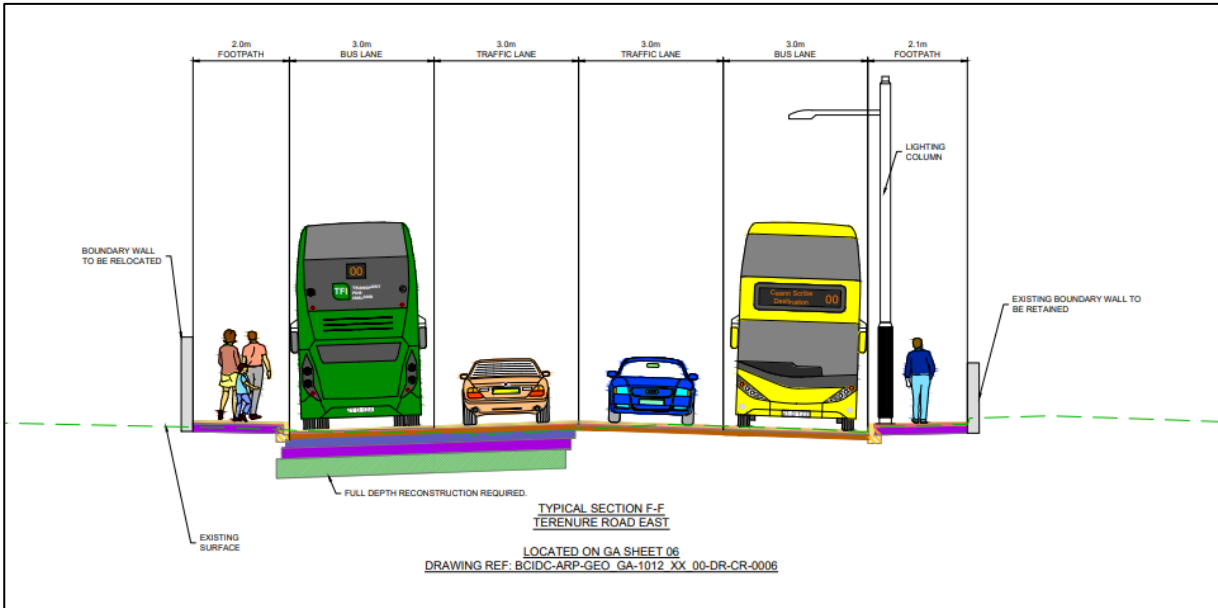


Figure 3.16.2 Typical Cross-Section adjacent to 6 The Townhouses Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 6 The Townhouses Terenure Road East is shown in Figure 3.16.3.

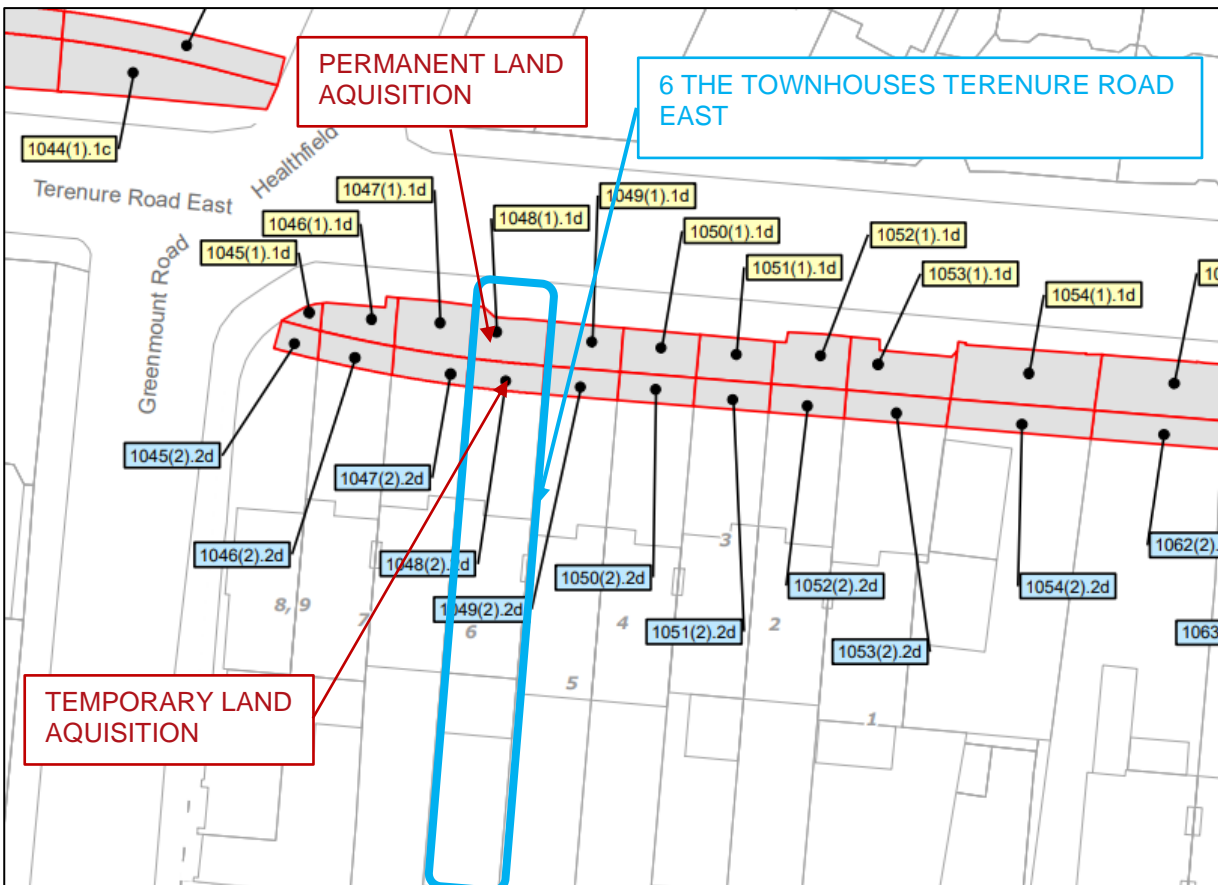


Figure 3.16.3 Extract from CPO Deposit Maps adjacent to 6 The Townhouses Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.16.4.

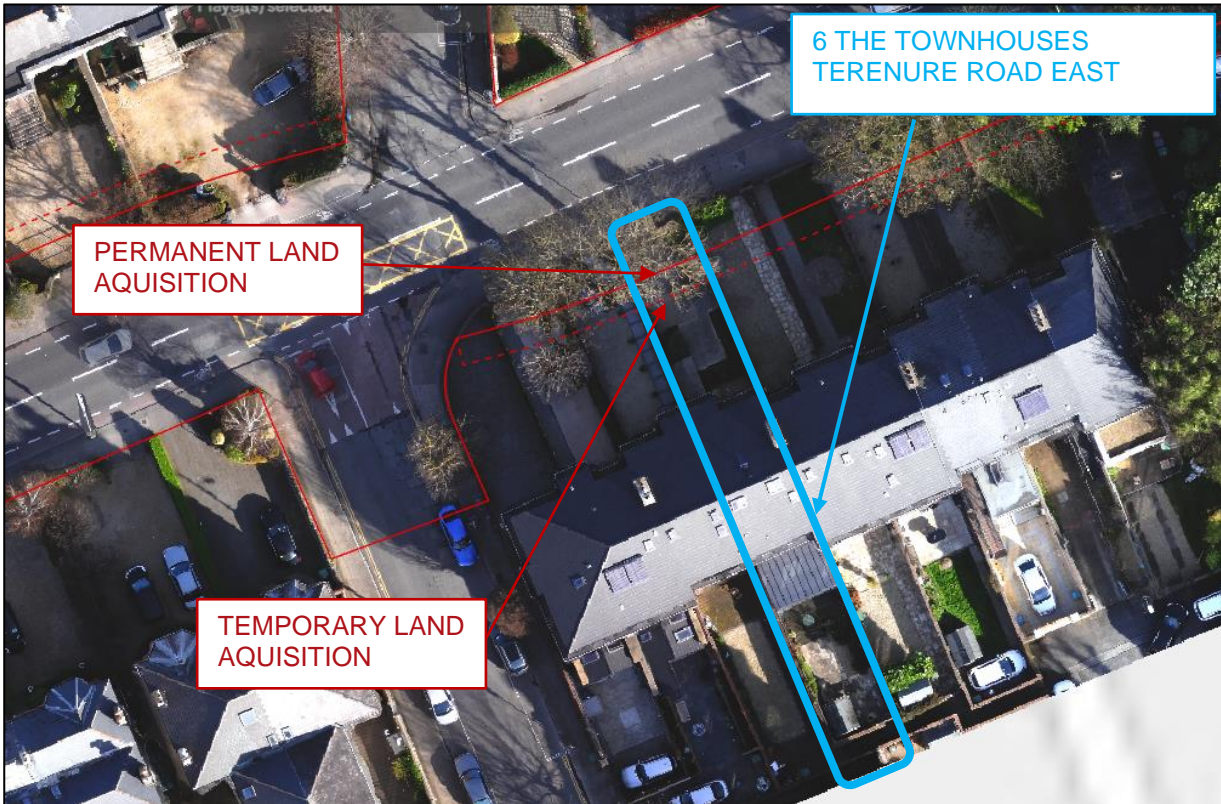


Figure 3.16.4 Proposed Land Acquisition lines adjacent to 6 The Townhouses Terenure Road East
The existing property frontage is shown in Figure 3.16.5.



Figure 3.16.5 Existing frontage of 6 The Townhouses Terenure Road East (Image source: Google)

3.16.2 Summary of the Points of Objection to the CPO by Dearbhail Shannon

i. Lack of clarity around land acquisition

The submission raised a concern regarding the proposed temporary and permanent land acquisition of their property, stating that it is difficult to comprehend the full impact of the Compulsory Purchase Order.

ii. Consultation Process

The submission notes that the consultation process was neither fair nor inclusive. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making. It also underscores that not all neighbours received revised plans concurrently, resulting in an unfair, incomplete, and unequal consultation process.

iii. Impact on Heritage Properties

The submission asserts that the Proposed Scheme failed to engage with conservation authorities from Dublin City Council and South Dublin County Council concerning its impact on the historic suburban villages. Furthermore, it contends that the BusConnects proposals directly contradict the objectives outlined in the Dublin City Development Plan 2016-2023 concerning the future development of Dublin's historic urban villages and their local communities.

iv. Existing bus priority signal on Terenure Road East is adequate

This submission states that the traffic volume on Terenure Road East is insufficient to justify the existing proposals for that section. It goes on to suggest that the already established and successful priority bus signalling system is adequate for achieving the project's objectives associated with bus infrastructure.

v. Removal of trees on Terenure Road East

The submission also highlights that the current proposals for Terenure Road East will have a detrimental effect on the visual and environmental aspects of the road. This is primarily due to the planned tree removal associated with land acquisition, as well as the potential harm to the root systems of trees beyond the scope of the land acquisition from the proposed construction activities.

vi. Changes to work patterns due to the COVID-19 pandemic

The submission states alternative solutions should be considered due to the change in traffic patterns because of the Covid-19 Pandemic.

vii. Cost Benefit Analysis

The submission states that there was no cost benefit analysis complete for the Proposed Scheme.

viii. Alternative, less intrusive measures

The submission states alternative less intrusive measures should be considered along the Proposed Route, such as cashless payment system, congestion charges and improved bus frequency.

ix. Metro and light rail is more appropriate

x. Right turn from Rathfarnham Road onto Terenure Road East

The submission raised a concern about the safety and congestion implication of introducing a right turn from Rathfarnham Road onto Terenure Road East. It notes that the right turn will have safety implications for cyclists and pedestrians.

xi. Traffic disruption due to traffic management proposals

The submission states that the proposed traffic management proposals such as bus gates and one-way systems will redirect traffic through smaller residential roads. It continues to state that the redirected traffic will contribute towards noise pollution, decrease in safety for pedestrians and cyclists. It also states that the bus gate at Military Road and one-way system on Rathgar Road will severely limit options for residents, the submission gives an example of returning home by car from Rathmines to Rathgar or Terenure Road East.

The submission notes that the NTA has not set out the traffic modelling clearly, making it difficult to critically analyse the full impact of the scheme.

3.16.3 Responses to the Points of Objection

i. Lack of clarity around land acquisition

Both permanent and temporary land acquisition is required at this property, the extents of which are outlined in the Deposit Maps replicated in Figure 3.16.3 above. In terms land permanent acquisition, 3.1 meters from the proposed boundary wall will be required to achieve the optimum road cross-section, as described in Section 4.5.3.1 of EIAR Volume 2 Chapter 4 Proposed Scheme Description and General Arrangement Drawings. Additional 2.0m temporary acquisition is required for the duration of the works to facilitate reconstruction of the boundary treatment.

Any land temporary 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 is noted the entire area identified for temporary acquisition will not be required for the duration of the works. It is acknowledged that during the construction of the works there will be inconveniences for all users, but this will be managed to minimise impacts for all affected parties. The duration of the works will vary from property to property, but access and egress will be always maintained. Prior to undertaking any accommodation works within private property the appointed contractor will engage in consultation with landowners, during consultation the landowner will have an opportunity to raise any concerns and outline any requirements associated with the land in question.

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.

ii. Consultation process

A detailed response to this item is presented in Section 2.1.1.

iii. Impact on Heritage properties on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

iv. Existing bus priority signal on Terenure Road East is adequate

A detailed response to this item is presented in Section 2.4.2.

v. Removal of Trees on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

vi. Changes to working patterns as a result of the Covid-19 pandemic

A detailed response to this item is presented in Section 2.1.1.

vii. Cost / Benefit Analysis

All major publicly funded infrastructure projects, such as the BusConnects Infrastructure Schemes are subject to the Public Spending Code ([gov.ie](http://www.gov.ie) - [The Public Spending Code \(www.gov.ie\)](http://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's 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 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)
- 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

viii. Implementation of other less intrusive measures

A detailed response to this item is presented in Section 2.1.1.

ix. Metro / Light rail is more appropriate

A detailed response to this item is presented in Section 2.1.1.

x. Right turn from Rathfarnham Road onto Terenure Road East

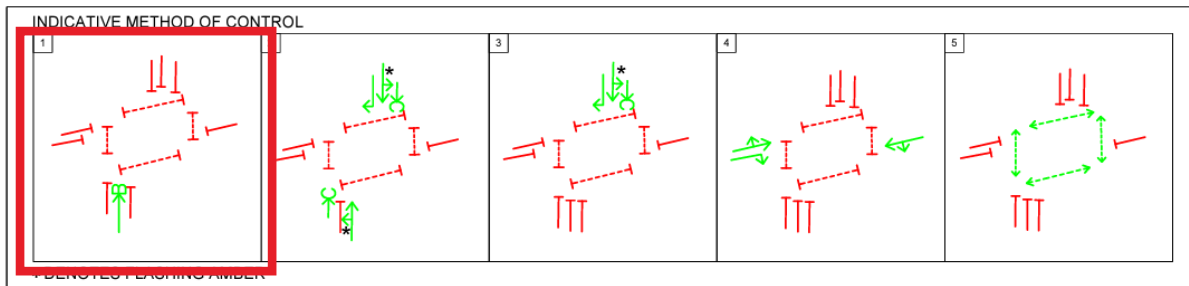
Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets out turning bans and other traffic management measures which will be implemented on the route to direct traffic away from either the Proposed Scheme corridor (to maximise bus journey time reliability) or to limit use of side streets as a short-cut route by through traffic. An extract from this table is presented in Figure 3.16.6.

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Rathfarnham Road/Castleside Drive/Main Street Junction	Bus Priority Signals at Rathfarnham Road/Castleside Drive/Main Street Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Dodder Park Road Junction	Bus Priority Signals at Rathfarnham Road/Dodder Park Road Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Rathdown Park Junction	Inbound Bus Priority Signal at Rathfarnham Road/Rathdown Park	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Terenure Road East/Terenure Road West Junction	Right turn for buses from Rathfarnham Road to Terenure Road East introduced through bus priority signal	To allow for bus movements in this direction as per the A spine in the New Dublin Area Bus Network	Buses allowed to turn right from Rathfarnham Road onto Terenure Road East.
Terenure Road East/Greenmount Road Junction	No Right turn allowed from Greenmount Road onto Terenure Road East	To mitigate against inbound traffic bypassing right turn ban at Terenure Cross	No right turn from Greenmount Road onto Terenure Road East for general traffic.
Rathgar Road/Highfield Road Junction	Inbound Bus Priority Signal	To allow for bus priority on Rathgar Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.

Figure 3.16.6 Extract from Table 4.25 of the Preliminary Design Report

The submission notes that the reintroduction of this right turn movement would introduce safety issues. However, as can be seen in the Junction System Design drawings included in Volume 3 of the EIAR, it is proposed that buses turning right from Rathfarnham Road would do so in its own stage therefore removing any potential safety issues. An extract from the staging diagrams is presented below with the relevant stage highlighted.

Figure 3.16.7 Extract from Junction System Design Drawings (Sheet 8)



It is noted that an independent Stage 1 Road Safety Audit was complete by PMCE on the Proposed Scheme, the report is available in the Supplementary Information, Appendix M2 Stage 1 Road Safety Audit. The independent auditor did not identify a hazard associated with the right-turn on pedestrians and cyclists.

- xi. Traffic disruption due to traffic management proposals

A detailed response to the one-way on Rathgar Road is presented in Section 2.4.2

A detailed response to bus gates on Templeogue Road and Rathmines are presented in Section 2.2.2 and 2.5.2 respectively.

A detailed response to noise pollution is presented in Section 2.1.1.

3.17 CPO-17 – Denise Russell– 44 Templeogue Road

3.17.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus lanes and traffic lanes in each direction. To accommodate this cross section, a limited amount of land acquisition will be required along the northern side of the Templeogue Road.

Dedicated cycle facilities are provided on the approach to the Cypress Grove Road junction; however these will terminate approximately 100m from the junction where cyclists will share the bus lane in an inbound direction and the general traffic lane in an outbound direction. To improve safety for cyclists, it is proposed to introduce a 30kph speed limit between Cypress Grove Road and Templeogue Village.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3m and a maximum width of land to be temporarily acquired of approximately 3m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.17.1.

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.17.3.



Figure 3.17.3 Proposed Land Acquisition lines adjacent to 44 Templeogue Road

The existing property frontage is shown in Figure 3.17.4.

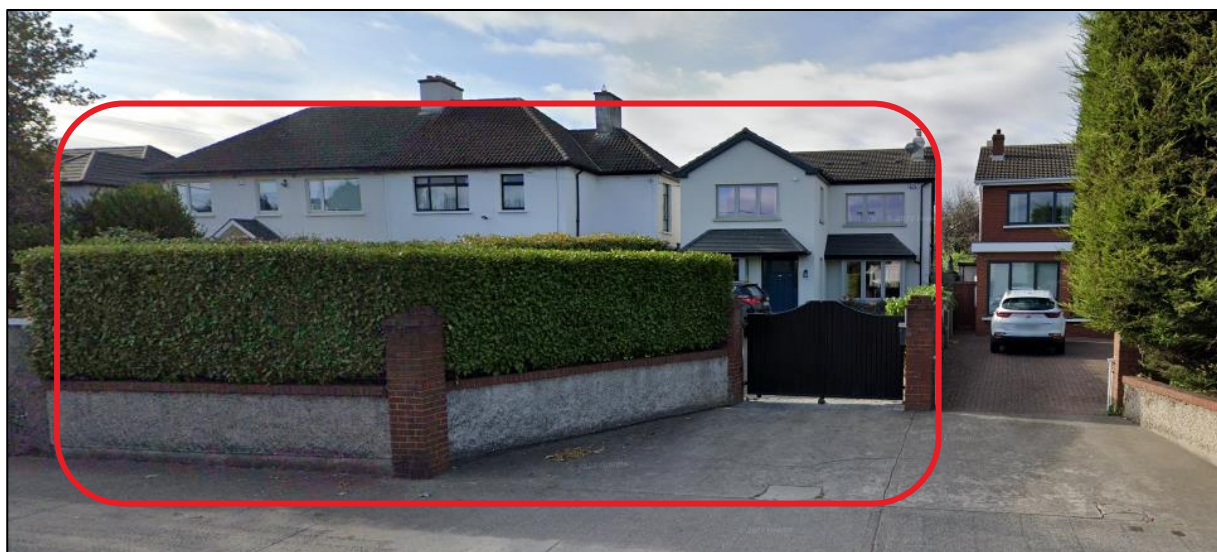


Figure 3.17.4 Existing frontage of 44 Templeogue Road (Image source: Google)

3.17.2 Summary of the Points of Objection to the CPO by Denise Russell

This submission objected to the CPO for the reasons summarised in the following section.

- i. Deterioration of visual appeal of front garden

The submission noted that the Proposed CPO will have a negative impact on the aesthetic of the property.

- ii. Driveway Access and Parking

The submission states that acquiring the land will reduce the available car parking spaces in the front garden. Additionally, it points out that the CPO will prevent residents from safely reversing within their driveway to access the road.

iii. Loss of Privacy

The submission states that the removal of hedges in the front garden will result in a reduction to privacy.

iv. Impact on property value

The submission notes that the Proposed Scheme and associated impacts will have a negative impact on their property value.

v. Traffic volumes on Templeogue Road

The submission states that the proposed traffic management, such as prohibiting traffic onto local roads, will result in an overreliance on Templeogue Road.

vi. Impact on local businesses

The submission states that an increase in traffic volumes on Templeogue Road will have a detrimental effect on local businesses.

vii. Removal of Trees

The submissions states that removal of trees along the proposed route will have adverse consequences on the local wildlife's natural habitat and will be a detrimental factor in escalating air and noise pollution within the vicinity.

viii. Continuous cycle lanes

The submission notes that Proposed Scheme does not provide for continuous cycle lanes.

ix. Impact of Covid-19

The submission notes that since the Covid-19 pandemic, society has embraces changes in the way people work and live. It continues to state that the BusConnects plan is based on flawed assumptions that were determined prior to the pandemic.

x. Implementation of other less intrusive measures

The submission states alternative less intrusive measures should be considered along the Proposed Route, such as cashless payment system, congestion charges and improved bus frequency.

3.17.3 Responses to the Points of Objection

i. Deterioration of visual appeal of front garden

The proposed permanent acquisition will result in the loss up to 3.0m at the roadside of the front garden, with an additional 3.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. Upon completion of the permanent works, the temporary land take area will be handed back to the property owner.

Section 17.4.4.2.8 in Chapter 17 of the EIAR sets out the impact on streetscape elements and visual impacts during operation.

Operation of the Proposed Scheme will require the permanent acquisition from 72no. residential properties:

- Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
- Nos. 311, 313 and 315 Templeogue Road (3no.);
- Nos. 44 and 45 Templeogue Road (2no.);
- 11, 14 and 15 Fortrose Park (3no.);
- Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
- Nos. 141, 143, 145, 147, 149, 151 and 153 Rathfarnham Road (7no.);
- Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69 and 71 Rathfarnham Road (11no.);
- Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.);

- No. 80 Earls Court, Terenure Road (1no.); • Nos. 74, 74A, 76, 76A and 78 Terenure Road East (5no.);
- Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
- Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
- Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.).

*The houses have matured established gardens with boundary railings / walls, entrances / gates and associated lawns and plantings. There will be continuing effects from permanent loss of land area and trees which were removed during the Construction Phase. However, there will be like-for-like reinstatement of boundaries, planting and, in most cases, the planting of new street trees in similar locations to those removed, which will reduce negative effects over the long-term. The sensitivity is **high**, and the magnitude of change is **very high**.*

*The potential townscape / streetscape and visual impact of the Operational Phase on these residential properties is assessed to be **Negative, Very Significant and Short-Term** becoming **Negative, Moderate / Significant and Long-Term**.*

Reinstatement of property frontage including boundary walls, gates, railings, 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.

In addition to reinstating the property frontage on a like-for-like basis, it is also proposed to provide Four new street trees on the footpath, on the section of Templeogue Road between No. 315 and 44. The proposed landscape design can be found in EIAR Volume 3 Chapter 4 Landscape General Arrangement.

ii. Driveway access and parking

The permanent acquisition will result in the loss of 3.0m of lands with an additional 3.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be 4.0m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including gate and entrance pillars will be at least 16m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme and that this should not hinder the availability of parking in the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.



Figure 3.17.5 Land acquisition at 44 Templeogue Road

iii. Loss of Privacy

In respect of loss of privacy, if the CPO is confirmed by An Bord Pleanála, 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.

In addition to reinstating the property frontage on a like-for-like basis, it is also proposed to provide Four new street trees on the footpath, on the section of Templeogue Road between No. 315 and 44. The proposed landscape design can be found in EIAR Volume 3 Chapter 4 Landscape General Arrangement.

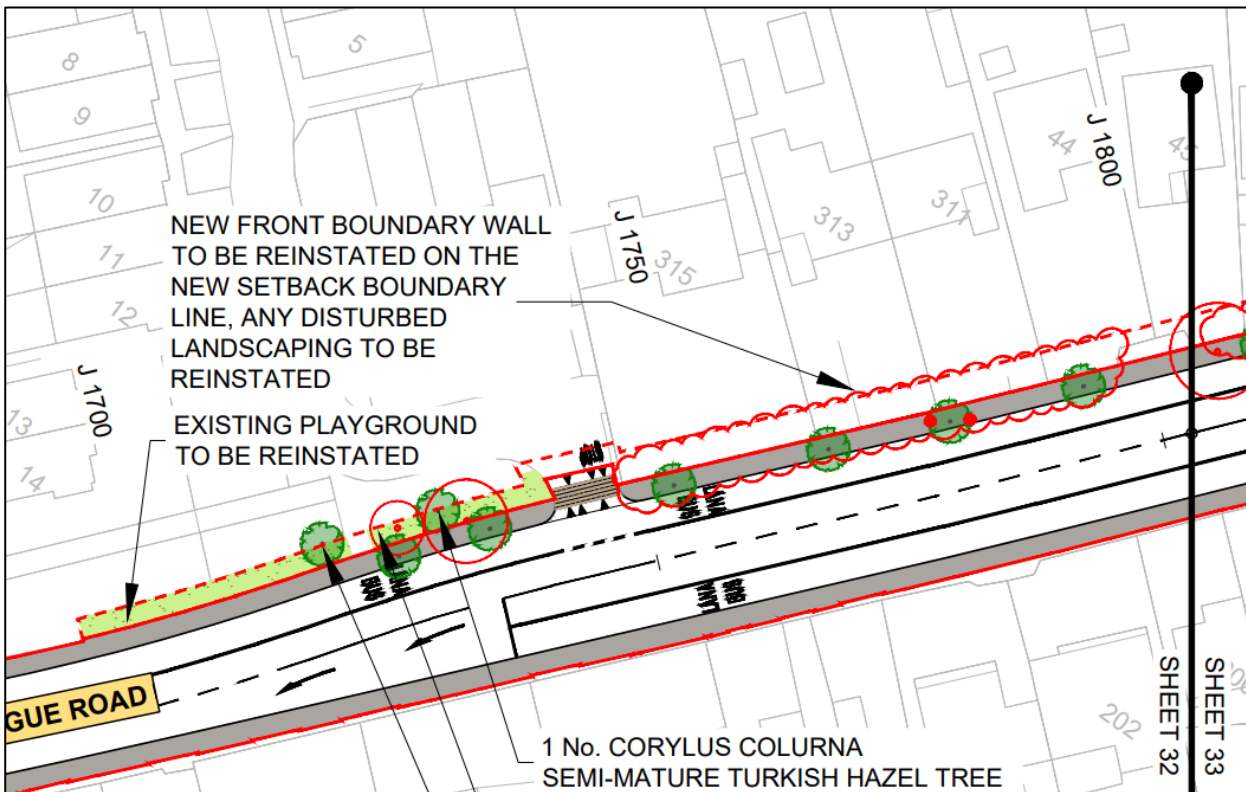


Figure 3.17.6 Landscape General Arrangement at Templeogue Road

iv. Impact on Property Value

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, including on Templeogue Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes:

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. and

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 on Templeogue 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.

v. Traffic volumes on Templeogue Road

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively with more detail presented in Table 6.60 and 6.64. These diagrams and tables are reproduced below.

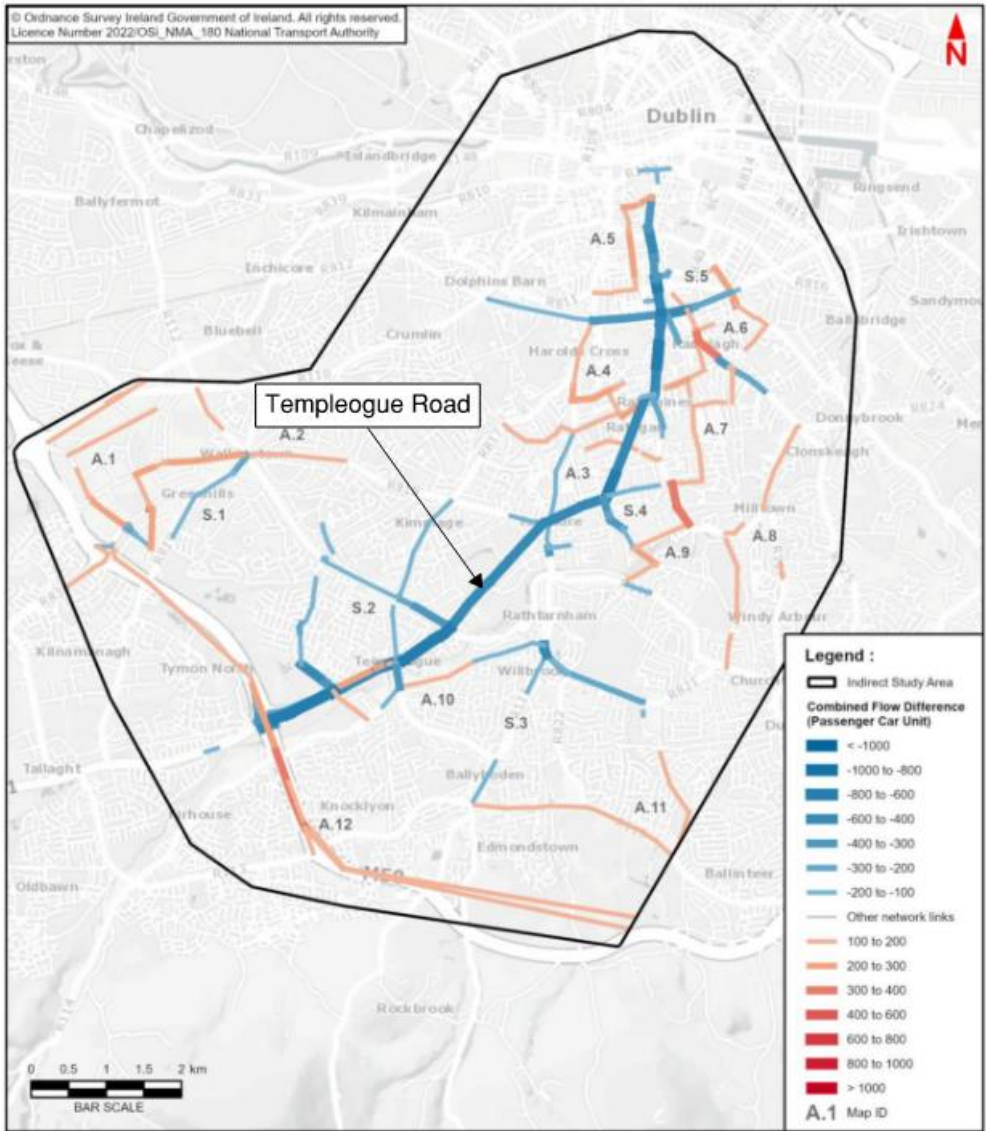


Figure 3.17.7 Figure 1.1.9: Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

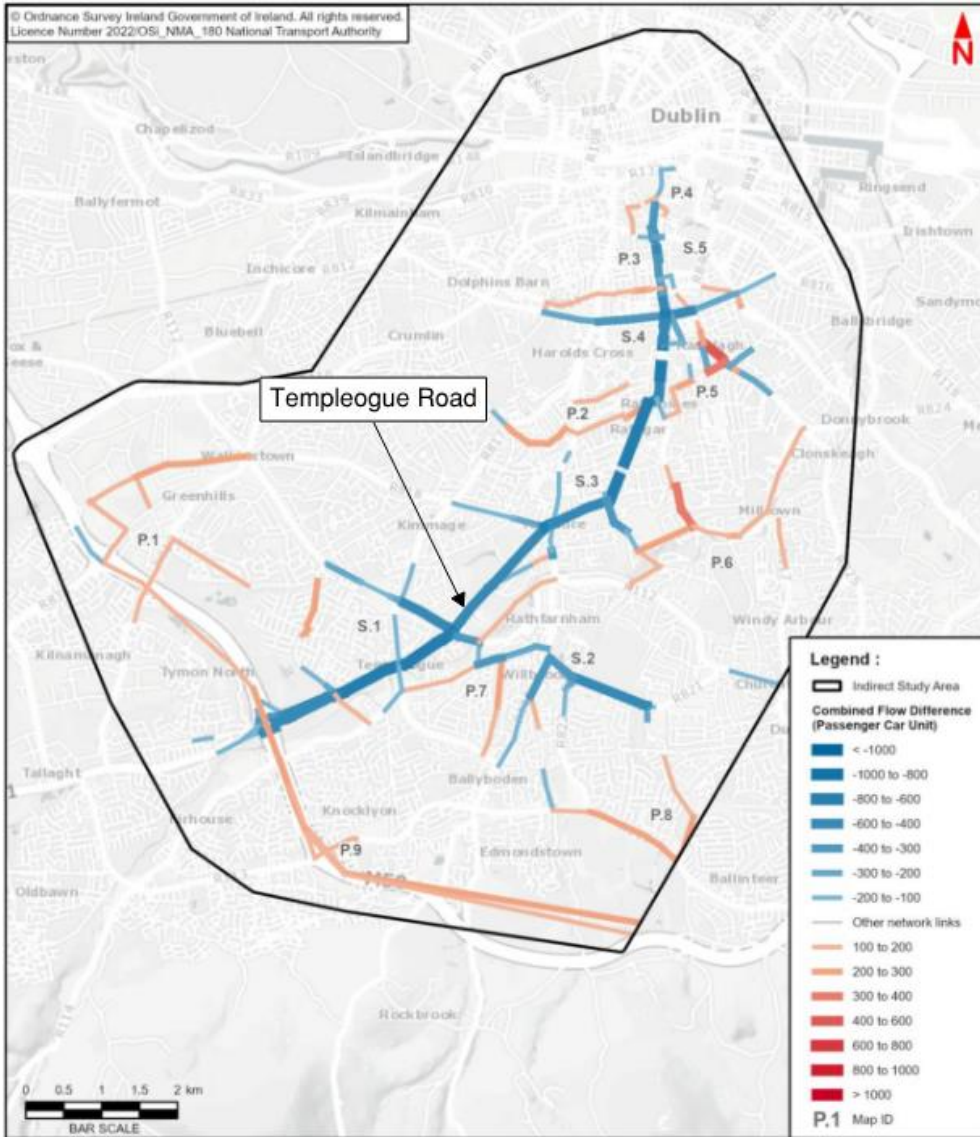


Figure 3.17.8 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.1	Cypress Grove Road	1,080	900	-180
		Old Bridge Road	1,242	1,087	-155
		Springfield Avenue	1,265	926	-339
		Tallaght Road	1,471	1,044	-427
		Templeogue Road	1,303	852	-451
		Templeville Road	972	558	-414
		Wellington Lane	2,241	1,960	-280
	S.2	Templeogue Road	864	462	-402
S.3	Rathdown Park	171	30	-140	
	Templeogue Road	864	462	-402	
	Terenure Place	1,335	735	-440	
		Terenure Road West	802	584	-218

Figure 3.17.9 Road links that Experience a Reduction of ≥ 100 Combined Flows during PM Peak Hour (Direct Study Area) Table 6.64 from EIAR Chapter 6

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.2	Cypress Grove Road	1,108	926	-182
		Old Bridge Road	1,333	983	-350
		Tallaght Road	1,675	1,400	-275
		Templeville Road	1,036	689	-348
		Wollington Lane	2,141	1,851	-291
	S.4	Templeogue Road	665	212	-453
		Terenure Place	1,345	759	-586
		Terenure Road West	704	597	-107

Figure 3.17.10 Road links that Experience a Reduction of ≥ 100 Combined Flows during AM Peak Hour (Direct Study Area) Table 6.60 from EIAR Chapter 6

As shown in the above tables, Templeogue Road will result in a reduced combined flow during both the AM Peak Hour (-402 PCUs) and PM Peak Hour (-453 PCUs).

vi. Impact on Local Business

As described in response v. *Traffic volumes on Templeogue Road*, the assessment on traffic volumes completes for the Proposed Scheme and detailed in Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR concluded that there will be overall reduction to combined traffic flows on Templeogue Road.

Furthermore, the aim of the Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on Templeogue Road and surrounding area, 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, including on Templeogue Road, by providing significantly improved sustainable transport options. It is therefore expected that the improvements to the sustainable transport options on Templeogue Road and surrounding areas will promote more frequent local trips to nearby amenities, such as Templeogue and Terenure Village.

EIAR Volume 4 Chapter 9 Appendix A10.2 The Economic Impact of the Core Bus Corridors, concludes that businesses along the corridors are not likely to see reduction in footfall, desire likely reductions in general traffic along the Proposed Scheme. Section 2 states that “*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*”.

Section 3 of the Economic Impact Report states that there is likely to be increased commercial opportunities and improved sales for the majority of impacted businesses. Section 3 states “*Evidence suggests that those travelling to shops via car spend on average more per trip, as can be seen in the graph to the left. However due to the frequency of visits by bus, bike or walking, the average total spend is much higher for this cohort. As such, local businesses could benefit financially from greater access to customers through these modes of transport.*”

vii. Removal of Trees

Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the Proposed Scheme.

The survey was undertaken between the 10th and 13th August 2020. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame street, including the Terenure Road North / Harold’s Cross Road section and the of the Proposed Scheme. The below impact assessment report is based on the British standard BS 5837:2012 Trees in relation to design, demolition and construction recommendations. This standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan.

The Arboricultural Impact Assessment and a tree protection plan was prepared for the Proposed Scheme to identify trees that may be impacted on by the proposed development based on the proposed design.

Section 6 of Appendix A17.1 states: *This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.*

In EIAR Chapter 17 Landscape (Townscape) and Visual, Section 17.1 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. In relation to the Templeogue Road, the following sections of Chapter 17 are relevant and demonstrate that a detailed and comprehensive assessment has been undertaken of the impacts associated with the Proposed Scheme.

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal.

Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 231 individual trees as a result of the Proposed Scheme. As shown on the Landscape General Arrangement drawings in Volume 3 of the EIAR, it is noted that approximately 170 street trees are proposed along Templeogue Road between M50 Junction 11 and Terenure Road / Rathfarnham Road Junction, with the proposed removal of approximately 58 trees, resulting in a net gain of approximately 112 trees along this section of the Proposed Scheme.

Section 17.4.3.1 of the EIAR sets out the assessment of the impact on Townscape and Streetscape Character, with section 17.4.3.1.1 setting out the impact on Templeogue Road.

*The baseline townscape is of **low sensitivity** west of Templeogue Village to **high** sensitivity through Templeogue Village to Terenure. The Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and localised removal of trees and planting. There will be land take from 15 residential properties on Templeogue Road involving permanent loss of garden area, setting back of boundaries, construction of retaining wall, and removal of trees hedges and other garden planting. There will be substantial works to Spawell roundabout where the existing roundabout junction will be upgraded to a four-arm signalised junction. The central island and splitter islands and associated vegetation of the roundabout will be removed and there will be a rearrangement and general expansion of the outer landscape areas. There will be more minor works to verges and other roadside landscape areas throughout this section with some limited loss of trees to accommodate new or realigned cycle tracks. There will be works to the surrounds of the historic folly of Templeogue Arch for the purposes of permanently enhancing the setting of the structure and providing public access. The construction works will not alter the overall townscape character along this section of the Proposed Scheme but there will be temporary disturbance to the landscape and visual amenity of the streetscape. The magnitude of change in the baseline environment is **high**.*

*The townscape / streetscape impact of the Construction Phase is assessed to be **Negative, Moderate Temporary / Short-Term**, west of Templeogue and **Negative, Significant / Very Significant and Temporary / Short-Term** through Templeogue to Rathfarnham Road.*

Section 17.4.4.2 of the EIAR presents an assessment of the impact on Streetscape Elements and Visual Impacts, with 17.4.4.2.9 presenting the impact on trees.

*The design of the Proposed Scheme has sought to avoid impacts on trees as far as practicable, however, some trees will have been removed during the Construction Phase. The most significant loss occurs from sections of streets and gardens of residential properties. In some locations the loss will be particularly evident such as on Terenure Road East, where trees are mature and visually prominent in the streetscape. The Operational Phase of the Proposed Scheme will not impact directly on additional trees but there will be continuing effects resulting from the loss of trees lost during construction. The effect will become positive over the long-term as proposed tree planting matures resulting in a net gain in tree canopy coverage. The sensitivity **high** and the magnitude of change is **medium**.*

*The townscape and visual impact of the Operational Phase on trees and plantings is assessed to be **Negative, Moderate and Short-Term** becoming **Positive, Moderate and Long-Term**.*

The impact of the Proposed Scheme on habitat loss and loss of breeding / resting site has been assessed and are reported in Chapter 12 Biodiversity of Volume 2 of EIAR. Section 12.4.3.5.1.1 states that *“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”*.

In relation to noise pollution, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”* Table 9.39 lists these roads and Templeogue Road is not identified, indicating that there are no potential significant noise impacts envisaged along Templeogue Road.

In relation to air pollution, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme’s operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO2 concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

viii. Continuous cycle lanes

One of the objectives of the Proposed Scheme outlined in Chapter 1, Introduction of Volume 2 of the EIAR is to *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.*

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. In the vicinity of the property to which this submission relates, the alternatives considered are detailed in section 3.3.2.1. A number of options were considered in this area which included dedicated online cycle facilities (Option S1-2) as well as alternative routes for cyclists (Option S1-3 and S1-4). On balance the Proposed Scheme was selected as the preferred option. It is noted that in this area, cyclists will share with the bus lane and the speed limit has been reduced to 30km/h.

It should be noted that the assessment of routes and options was an iterative process and, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives.

Table 4.1 of EIAR Volume 4 Proposed Scheme Description provides a summary of changes as a result of the Proposed Scheme. The table notes that in the existing scenario, 28% of cycling facilities, covering 11km in both directions, are segregated. However, under the Proposed Scheme, 85.4% of cycling facilities will be segregated, totalling 23.3km. This represents a substantial 112% increase in segregated cycling facilities along the proposed route.

Features	Existing (km)	Proposed Scheme (km)
Bus Lanes		
Inbound	4.4	6.1
Outbound	1.5	5.4
Bus Priority Through Traffic Management		
Inbound	0.1	2.9
Outbound	0.3	3.0
Total Bus Priority (both directions)	6.3	17.4 (+175%)
Bus Measures		
Proportion of Route with Bus Measures	32%	87%
Cycle Facilities Segregated		
Inbound	1.3	9.6
Outbound	1.8	10.3
Cycle Facilities – Non segregated		
Inbound	3.3	1.7
Outbound	4.6	1.7
Cyclist Facilities – Overall		
Total Cyclist Facilities (both directions)	11	23.3 (+112%)
Proportion segregated	28%	85.4%
Other Features		
Number of Pedestrian Signal Crossings	76	106
Number of Residential Properties with Land Acquisition	Not applicable	72

Figure 3.17.11 Summary of Changes as a result of the Proposed Scheme (Table 4.1 in EIAR Chapter 4)

ix. Impact of Covid-19

A detailed response to this item is presented in Section 2.1.1.

xii. Implementation of other less intrusive measures

A detailed response to this item is presented in Section 2.1.1.

3.18 CPO-18 – Eaton Hall Owners Management Company–Eaton Hall, Terenure Road North

3.18.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road North it is proposed to provide an alternative cycle facility consisting of cycle tracks in each direction along Terenure Road North and Harold's Cross Road, connecting to the Kimmage to City Centre Core Bus Corridor Scheme at Harold's Cross.

To accommodate works in this area, namely the construction of a raised entry treatment, permanent and temporary land acquisition will be required along Terenure Road North on the western side outside Eaton Hall, with a maximum width of land to be permanently acquired of 0.1m, and to be temporarily acquired of approximately 1.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.18.1.

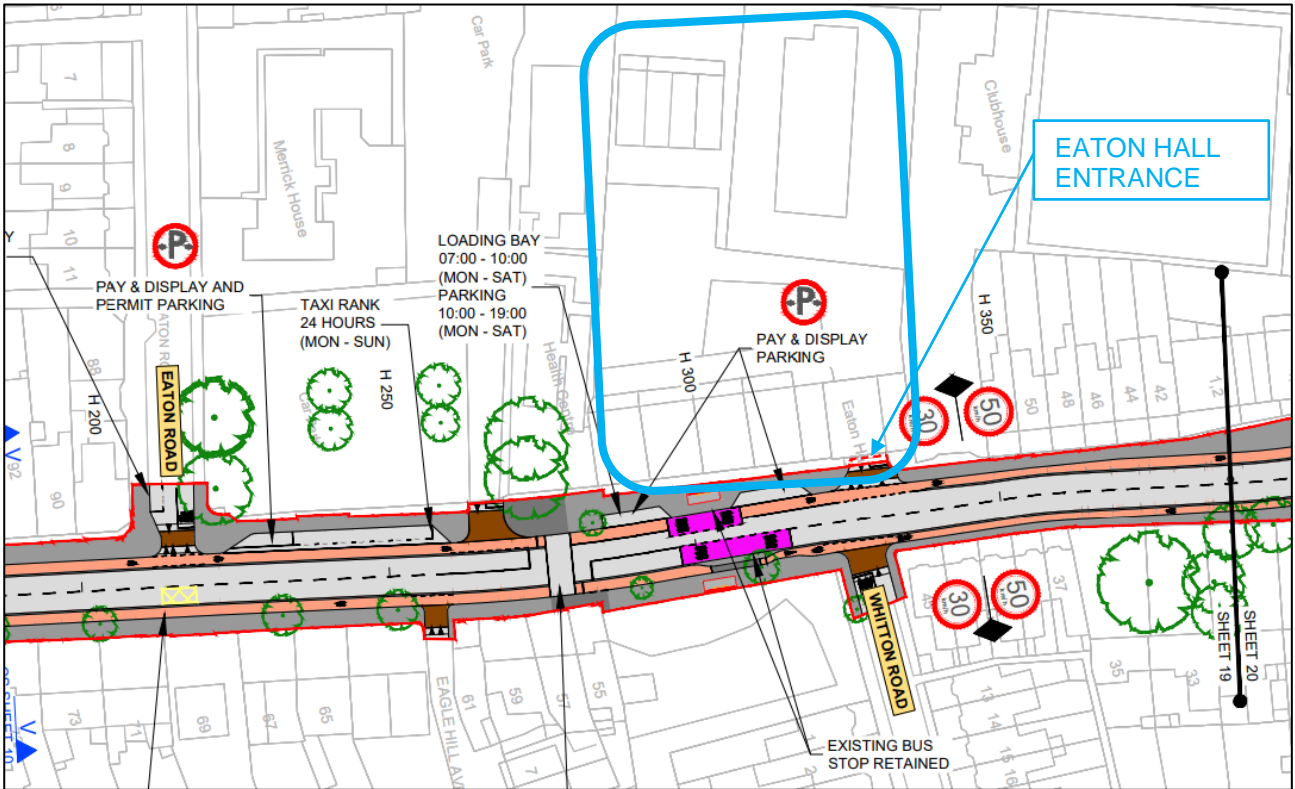


Figure 3.18.1 General Arrangement of Proposed Scheme at laneway adjacent to Eaton Hall (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.18.2.

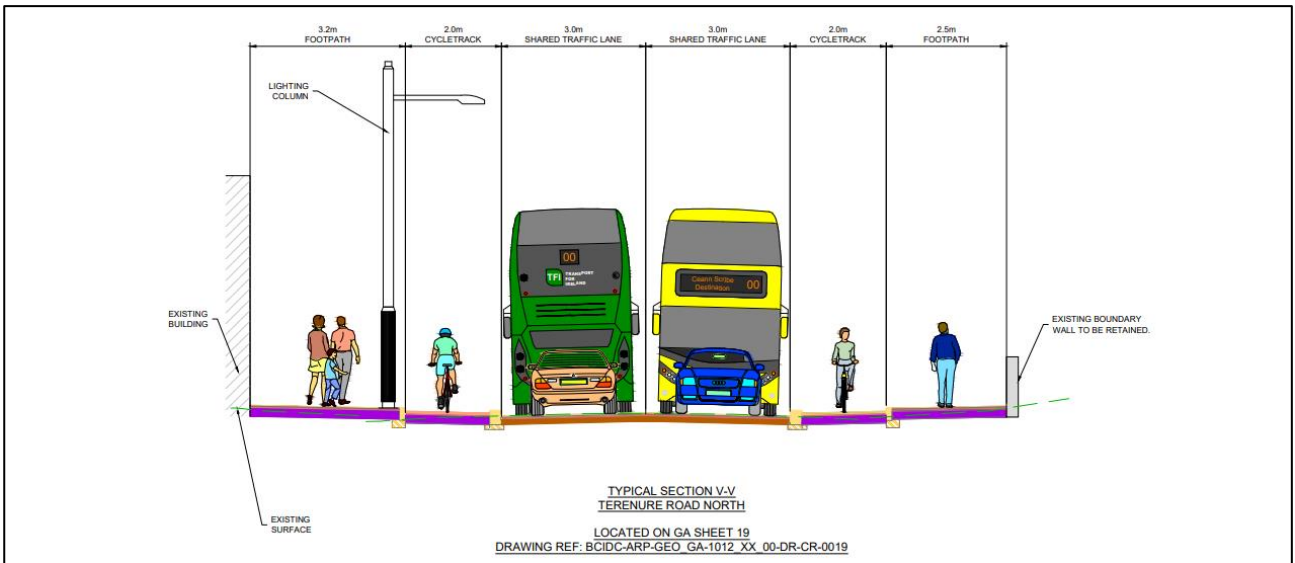


Figure 3.18.2 Typical Cross-Section at laneway adjacent to Eaton Hall

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at Eaton Hall is shown in Figure 3.18.3.

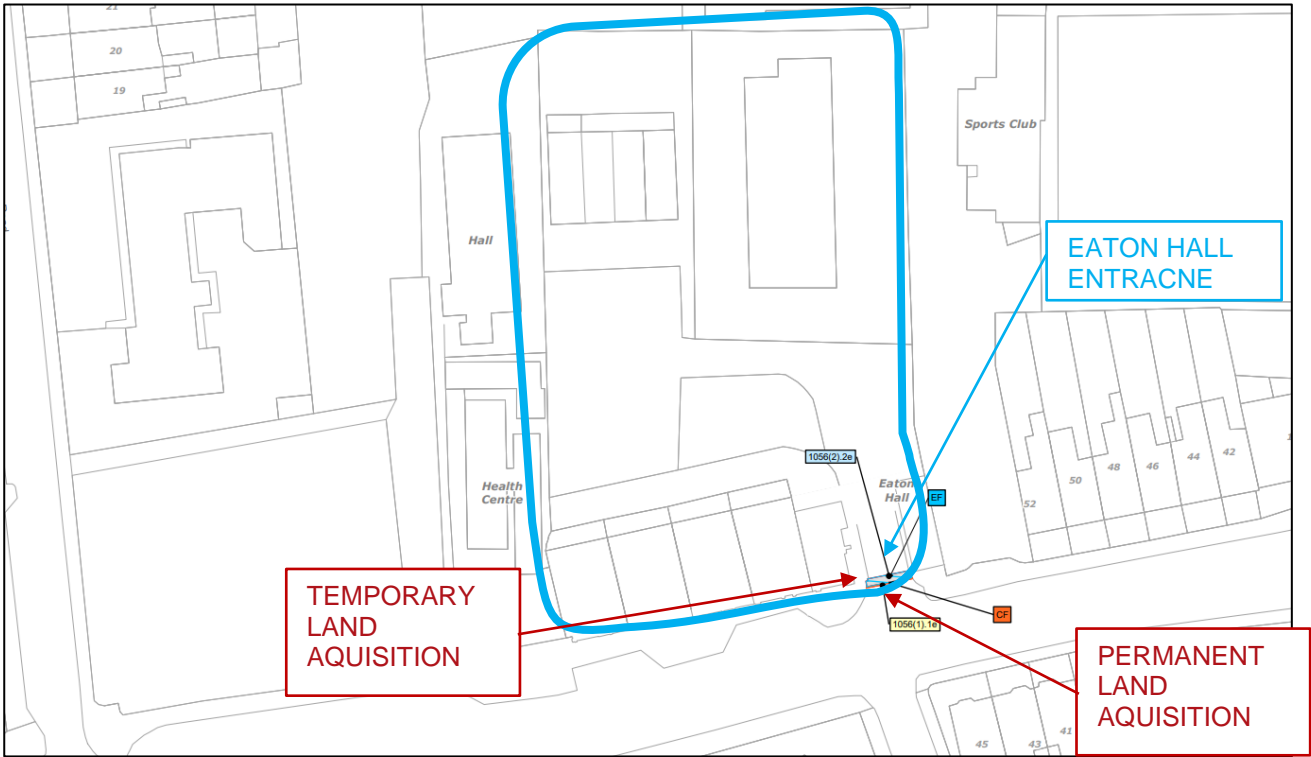


Figure 3.18.3 Extract from CPO Deposit Maps at Eaton Hall

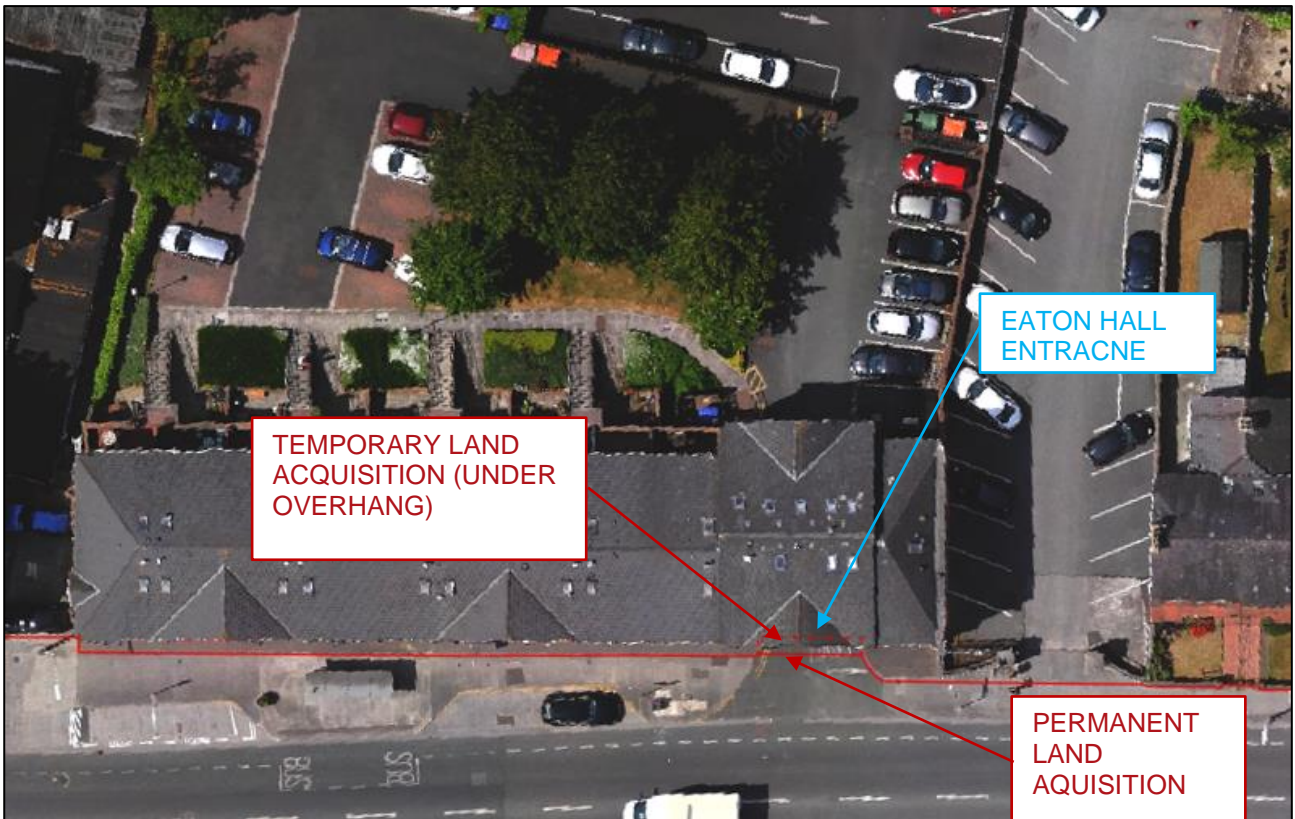


Figure 3.18.4 Proposed Land Acquisition lines at Eaton Hall

The existing property frontage is shown in Figure 3.18.5.



Figure 3.18.5 Existing frontage at Eaton Hall entrance (Image source: Google)

3.18.2 Summary of the Points of Objection to the CPO by Eaton Hall Owners' Management Company

This submission objected to CPO for the reasons summarised in the following section.

i. Impact on access

The submission states that restricting access to Eaton Hall will cause unusual and unnecessary expense and inconvenience for residents and request that continued access to the parking area for residents is maintained at all times.

3.18.3 Responses to the Points of Objection

i. Impact on access

The proposed land acquisition at Eaton Hall is required to allow for the construction of the proposed raised crossing at the entrance to Eaton Hall. In terms of the permanent land acquisition, as this land will ultimately be transferred to the possession of Dublin City Council, it is necessary to acquire any private rights associated with the land in question. However, it is important to note that the Proposed Scheme does not propose to permanently restrict vehicular access/egress to/from the grounds of Eaton Hall.

Similarly, the temporary acquisition, required to facilitate the construction of the proposed raised crossing, will result in a temporary restriction on private rights at this location when construction works are in progress at the entrance. Upon completion of the works, the temporary land take area will be handed back to the property owner. It is noted the temporary acquisition will not be required for the full duration of the works.

It is acknowledged that during the construction of the works there will be inconveniences for all users but this will be managed to minimise impacts for all affected parties. The duration of the works will vary from property to property, but access and egress will be maintained at all times. As described in paragraph 5.5.3.2 of Chapter 5 Construction of Volume 2 of the EIAR, details regarding temporary access provisions will be discussed with homes and businesses prior to construction starting in the area. When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and 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. This includes facilitating alternative pedestrian access to the site if required, which is noted as a concern in the submission.

As noted in section 6.5.1 of Chapter 6 of the EIAR, a detailed Construction Traffic Management Plan will be prepared, and subsequently implemented, by the appointed contractor prior to construction, including Temporary Traffic Management arrangements prepared in accordance with Department of Transport's 'Traffic Signs Manual, Chapter 8 Temporary Traffic Measures and Signs for Roadworks'. The CTMP will be consulted upon with the road authority and will include measures to minimise the impacts associated with the Construction Phase upon the peak periods of the day. It will include imbedded mitigation measures which will assist to alleviate any negative impact as a result of the Construction Phase of the Proposed Scheme. The appointed contractor will also prepare a Construction Stage Mobility Management Plan (CSMMP) which will be developed prior to construction, as described in the CEMP, to actively encourage personnel to travel to site by sustainable means.

3.19 CPO-19 – Elaine Timbs– 63 Rathfarnham Road

3.19.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.2m and a maximum width of land to be temporarily acquired of approximately 6.2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.19.1.

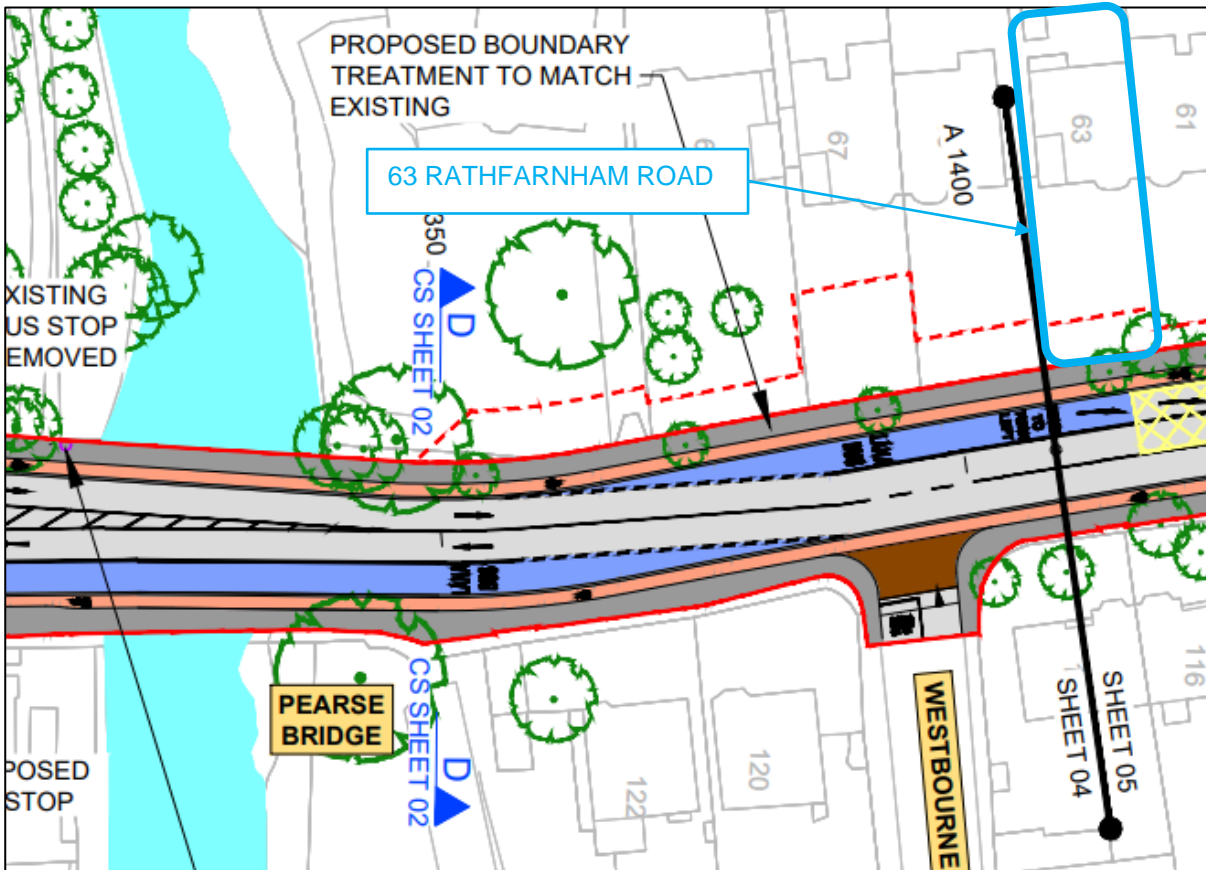


Figure 3.19.1 General Arrangement of Proposed Scheme adjacent to 63 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.19.2.

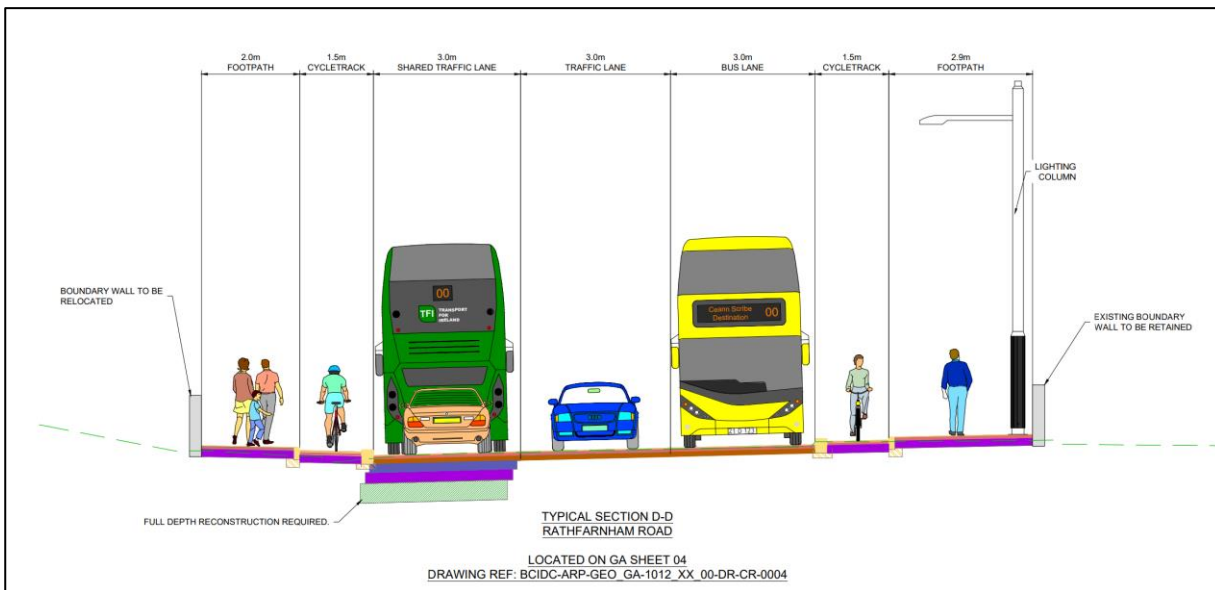


Figure 3.19.2 Typical Cross-Section adjacent to 63 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 63 Rathfarnham Road is shown in Figure 3.19.3.

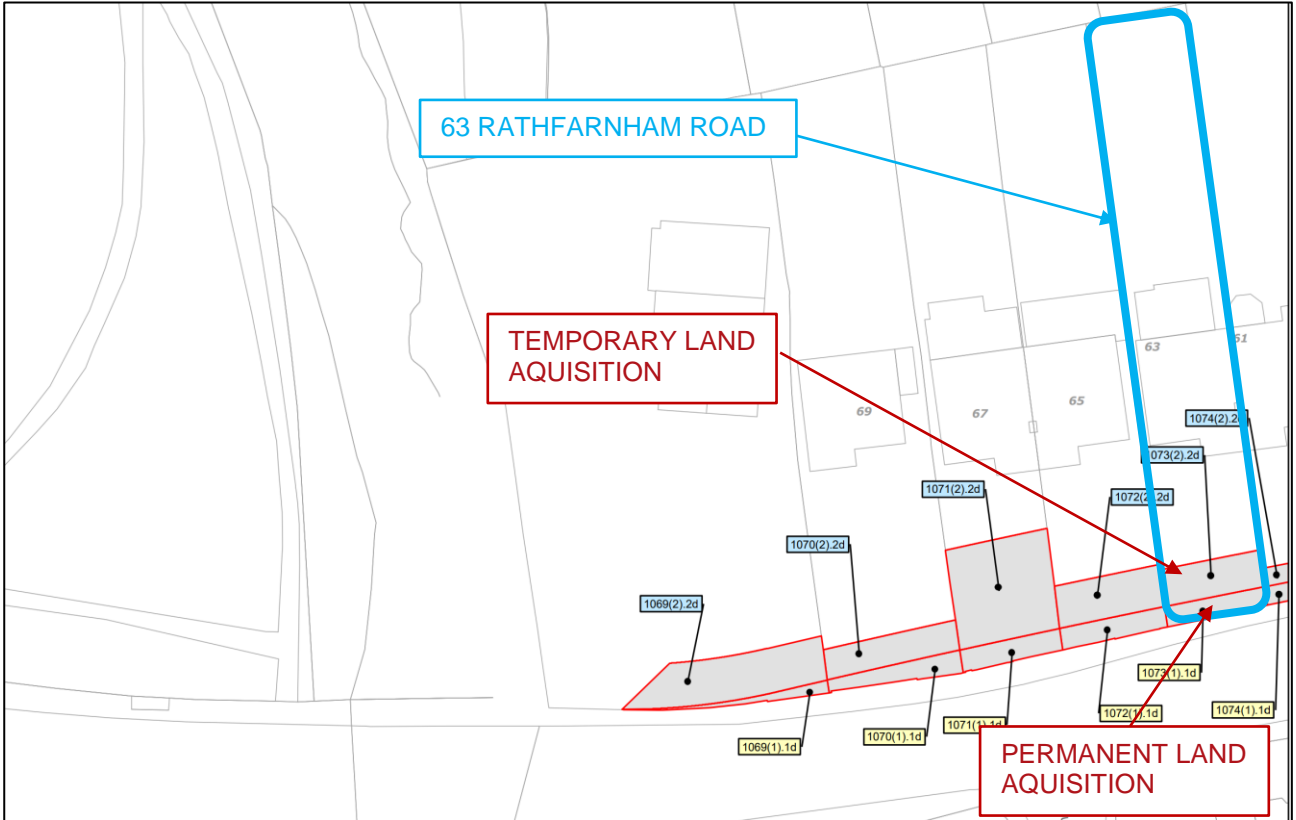


Figure 3.19.3 Extract from CPO Deposit Maps adjacent to 63 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.19.4.

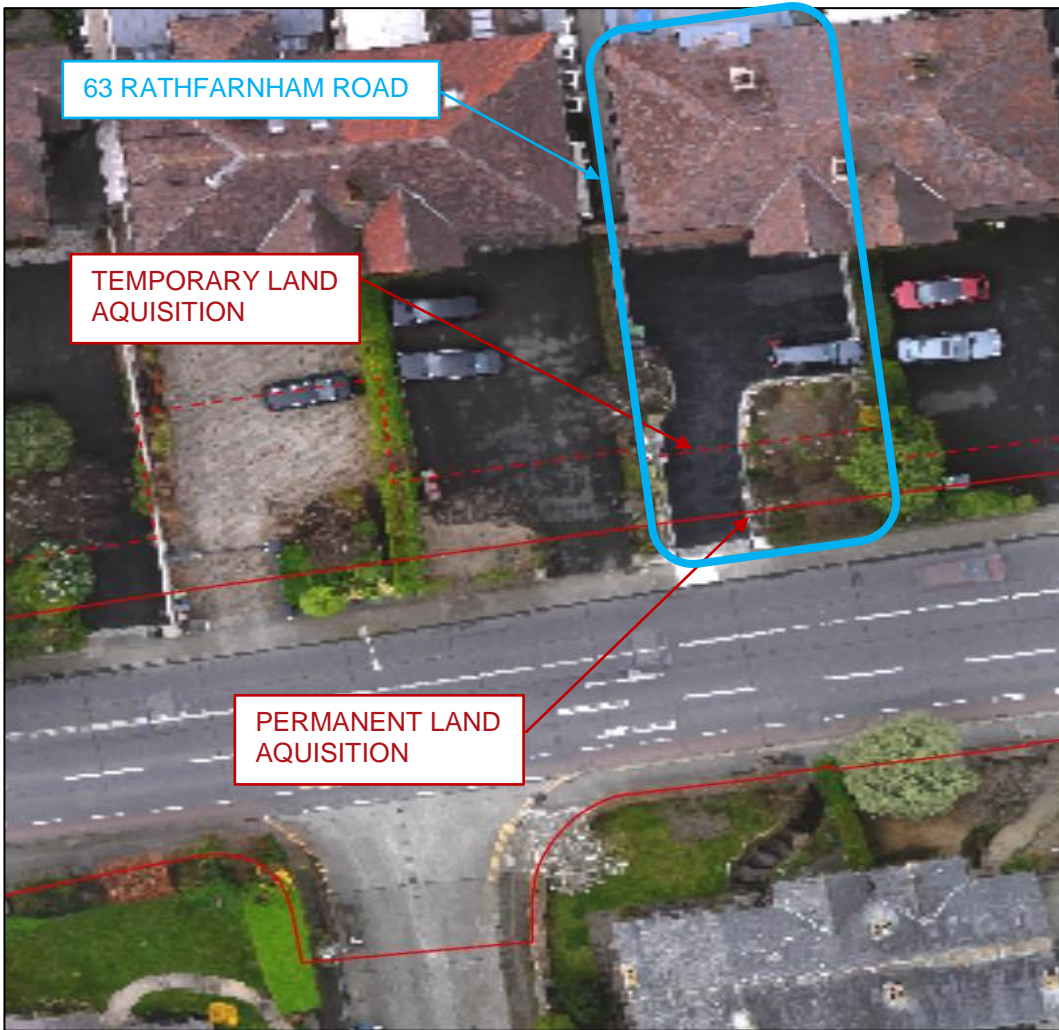


Figure 3.19.4 Proposed Land Acquisition lines adjacent to 63 Rathfarnham Road
The existing property frontage is shown in Figure 3.19.5.



Figure 3.19.5 Existing frontage of 63 Rathfarnham Road (Image source: Google)

3.19.2 Summary of the Points of Objection to the CPO by Elaine Timbs

i. Impact on Driveway Gradients

The submission raised a concern that the Proposed Scheme will result in increased driveway gradients resulting in unsafe gradients. The submission also noted that this a direct breach of building regulations Part M.

ii. Clarification on Temporary Acquisition

iii. Cumulative Traffic Assessment

The submission noted that an integrated traffic modelling of immediately adjacent BusConnects routes should be included in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

iv. Impact of traffic diversions on surrounding road network

The submission states that the proposed traffic restrictions and diversions will cause rerouting of traffic through residential streets, that have either not been designed to accommodate anything other than residential traffic or are already operating at full capacity. The submission gave Springfield Avenue and Dodder View Road as an example. It also noted that the proposed traffic restrictions along the Proposed Scheme will result in drivers using residential streets as short cuts.

v. Congestion from bus priority on Rathfarnham Road

The submission noted that the bus priority measures at Dodder Park Road and Rathdown Park are only 260m apart and are likely to cause significant traffic congestion. It also noted that the need for bus priority measures is not clear. The submission referenced the RW Nowlan & Associates Report which recommends a longer green time at the Rathdown Park junction instead of the bus priority, stating that it will benefit buses while alleviating congestion.

vi. Environmental Impact Assessment on Bushy Park and the Dodder River

The submission noted that the NTA has not considered environmental impacts on the Dodder River and Bushy Park arising from the redirected traffic on Dodder View Road. This includes a concern around the impact of the scheme on bats at Pearse Bridge.

vii. Necessity of road widening

The submission questions the necessity of CPO at this section of Rathfarnham Road, suggesting that there are no environmental differences between the section outside No 51-71 Rathfarnham Road and 91-129 Rathfarnham Road, where a shared bus and cyclists' space is proposed.

viii. Footpath Width

The submission states that the NTA are proposing larger than necessary footpath widths for the cross-section adjacent to 51-71 Rathfarnham Road. It notes that the NTA has proposed footpath widths between 2.35m and 2.9m.

ix. Contravention of the development plan zoning objective

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

x. Removal and Replacement of trees

The submission expressed their concern in relation to the proposed removal of trees along the Proposed Scheme, stating that it will negatively impact the environment. It also notes that the proposed removal of trees will result in increased air and noise pollution.

The submission notes that the NTA has not provided sufficient detail around the replacement of trees at Rathfarnham Road.

xi. Air Quality Impacts as a Result of Increase in Traffic

The submission raised a concern regarding an increase in air pollutants, such as nitrogen oxides, particles, carbon monoxide and hydrocarbons associated with combustion engine vehicles. In addition, the submission notes concern regarding fine friction particles associated with tyre and brake wear and tear.

xii. Inadequate Consultation

The submission notes that the consultation process was neither fair nor inclusive. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

xiii. Safety Concerns at the Terenure Cross Junction

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create safety concerns. The submission notes that there isn't sufficient space for large vehicles to take this turn and, that the introduction of this turn will cause safety concerns for pedestrians using the junction.

xiv. Implementation of other less intrusive measures

The submission outlines several alternatives that should be considered as part of the Proposed Scheme:

- Metro
- Bus priority at all junctions

- Deploying more buses at peak time on the existing bus routes
- Implementing cashless fares
- Introducing city centre congestion chargers
- Manage and police current road usage rules
- Counter flow initiatives
- Off route cycle lanes for cyclists
- Independent traffic flow assessment
- Park and ride facilities

xv. Impact of Covid-19

The submission expressed concerns that the traffic modelling complete in the traffic impact assessment for the Proposed Scheme is flawed due to the impact of Covid 19 on society and developments of hybrid working. It also notes that the assessment did not consider any localised impacts highlighting increases in traffic and congestion.

xvi. Routing of orbital route services

The submission noted that there is no consideration in the Proposed Scheme for orbital bus routes that will connect suburban villages in Dublin. It continues to note that if orbital routes are not provided, people will choose to drive rather than taking multiple buses to get to their destination.

xvii. Impact on heritage streetscape

The submission expressed concerns relating to the impact on heritage, environment and village/community fabric. It noted that the Proposed Scheme doesn't align with the objectives outlined in DMURS in relation to providing streets with a social function, that place sustainability, multimodal movement, pedestrians, and accessibility at the centre of the design. It continues to note that the Proposed Scheme will negatively impact the heritage streetscape in Rathfarnham, Terenure and Rathgar. It highlights that there are several protected structures along the Proposed Scheme, such as Pearse Bridge, Memorial Hall, and properties along Terenure Road East.

xviii. Impact on Local Business

The submission expressed concerns about the potential impact of the Proposed Scheme on local traders and businesses.

xix. Park and Ride Facilities

The submission notes that park and ride facilities should be provided along the Proposed Scheme to encourage more bus journeys into the city.

xx. Bus Service

The submission notes that the Proposed Scheme will result in a reduced bus service.

xxi. Cyclists Safety

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about cyclists' safety due to the proposals for a shared cyclists and bus facility.

xxii. Alternative Solution - Metro

The submission suggested that a Metro is more appropriate for this corridor.

xxiii. Cost / Benefit Analysis

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'. It also adds that the assessment of the Proposed Scheme should be done against a metro system.

3.19.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-07. Please refer to Section 3.7.3 for responses to these items.

3.20 CPO-20 – Greg & Audrey Turley – 59 Terenure Road East

3.20.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions.

To accommodate this cross section, land acquisition is proposed on the northern and southern side of the Terenure Road East between Saint Joseph's Church and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 59 Terenure Road East, with a maximum width of land to be permanently acquired of up to approximately 2.6m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.20.1.

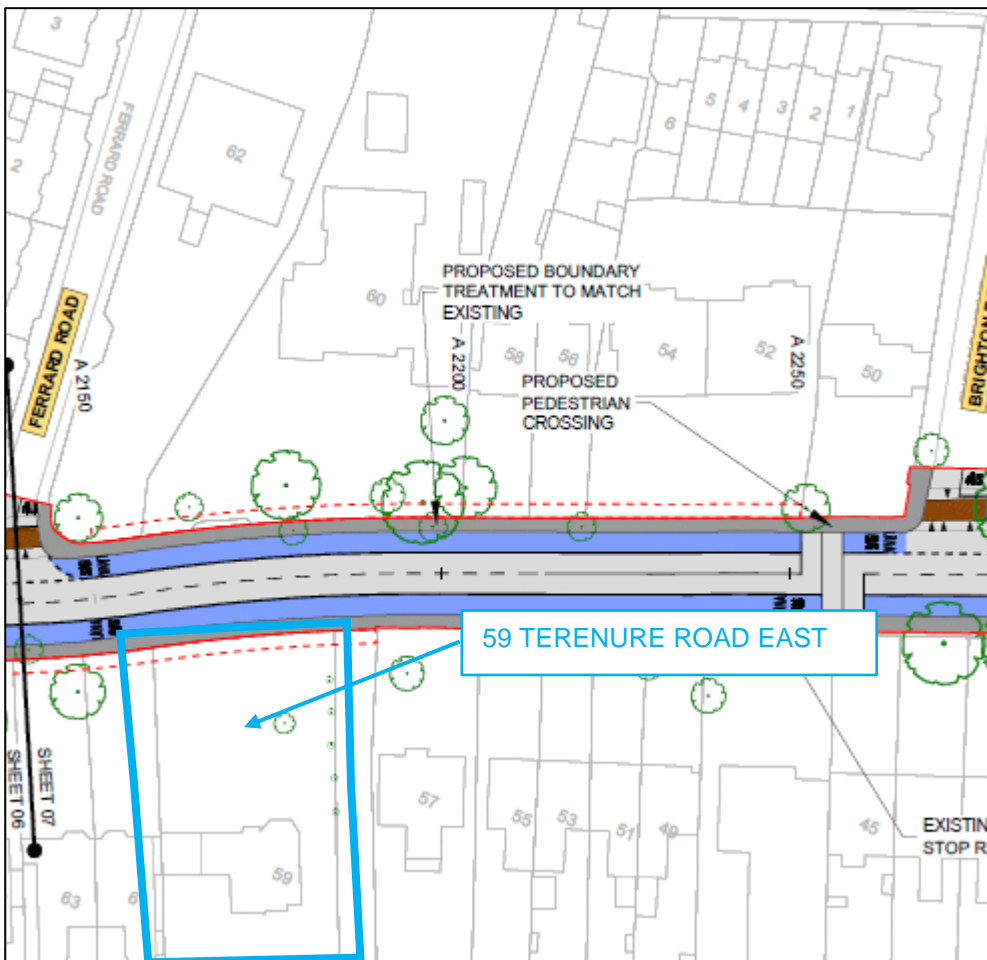


Figure 3.20.1 General Arrangement of Proposed Scheme adjacent to 59 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.20.2.

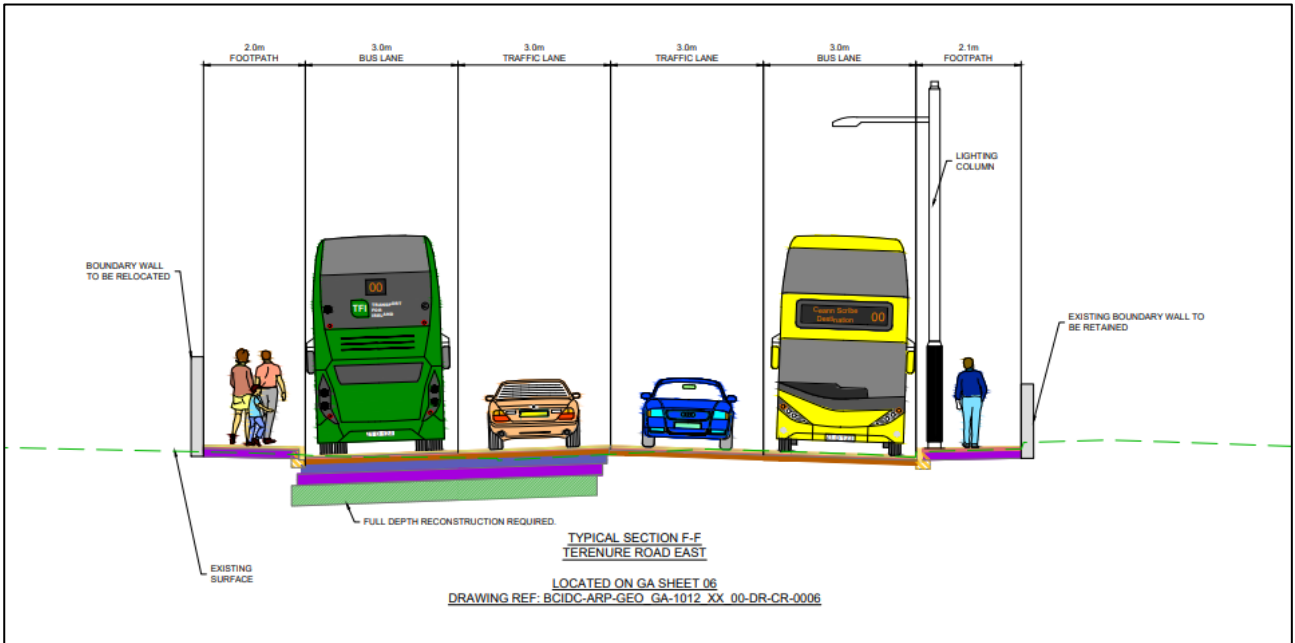


Figure 3.20.2 Typical Cross-Section adjacent to 59 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 59 Terenure Road East is shown in Figure 3.20.3.

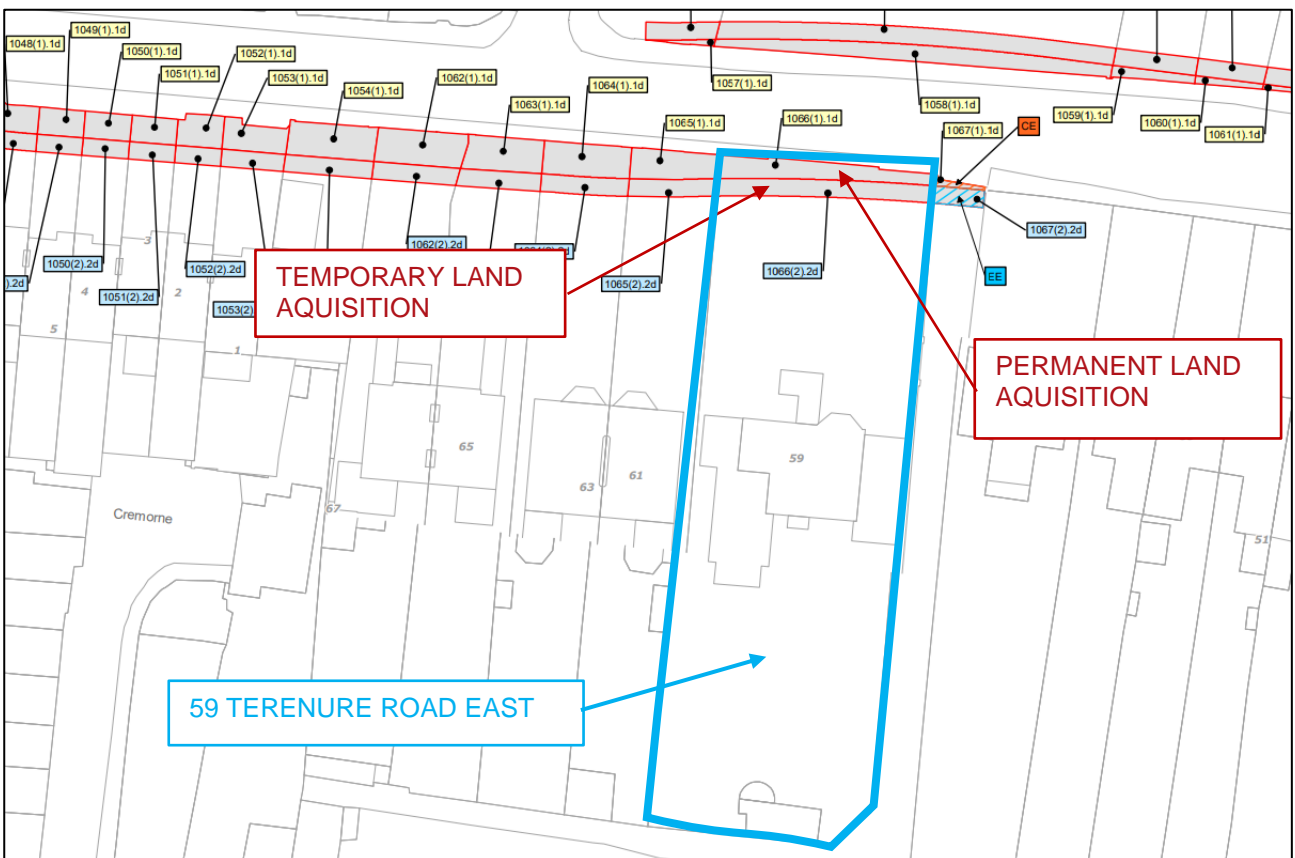


Figure 3.20.3 Extract from CPO Deposit Maps adjacent to 59 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.20.4.



Figure 3.20.4 Proposed Land Acquisition lines adjacent to 59 Terenure Road East

The existing property frontage is shown in Figure 3.20.5.



Figure 3.20.5 Existing frontage of 59 Terenure Road East (Image source: Google)

3.20.2 Summary of the Points of Objection to the CPO by Greg and Audrey Turley

- i. Removal of trees at property underestimated

The submission notes that the EIAR underestimates the number of trees on the property that will be affected by the Proposed Scheme noting that multiple trees will be removed, not just the two identified by the proposals.

- ii. Traffic data out of date due to Covid

The suggests notes that the basis of the traffic assessment is out of date due to changes in travel patterns as a result of Covid.

iii. Section 51 and CPO Application should not be made concurrently

The submission notes concern over the appropriateness of the NTA making (i) an Application for Confirmation of the CPO and (ii) an Application for Approval of the Proposed Scheme under Section 51 of the Roads Act 1993 (as amended) and the Board making its decisions at the same time.

iv. NTA has not demonstrated need for the scheme and the CPO

The submission notes that the NTA has not established that there is a need for the Scheme or that the lands to be acquired are required. The submission also notes that no alternative solutions have been considered.

v. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East. The submission also noted that no cycle facilities are proposed along Terenure Road East.

vi. Inadequate Consultation

The submission notes that the consultation process was inadequate. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

vii. Cost Benefit Analysis is Required

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'.

viii. Implementation of other BusConnects measures first

The submission suggests that less intrusive measures that form part of the BusConnects programme should be implemented first (e.g. cashless fares). It is also suggested that the benefits delivered by the infrastructure and other measures of the programme are separated to identify the benefits as a result of the infrastructure alone.

ix. Metro is more suitable for this corridor

The submission notes concern that a metro option has not been considered by the NTA for the Rathfarnham corridor.

x. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

xi. Congestion at Terenure Cross due to proposed changes

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create issues with the operation of the junction resulting in congestion.

xii. Impact on Businesses due to loss of parking/loading

The submission states that businesses in Rathgar and Terenure will lose access to their customers due to the removal of parking and loading facilities in these areas.

xiii. Bus Gate Hours of Operation

The submission suggests that consideration should be given to reducing the hours of operation of the bus gates on the Proposed Scheme.

xiv. Proposed Cycle Facilities are Insufficient

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about facilities provided on alternative routes. The submission also raised concerns about cycle tracks being blocked by vehicles e.g., delivery vehicles.

xv. Traffic Impact as a result of Traffic Management Measures

The submission raises a number of concerns about the impact of proposed traffic management measures (namely bus gates and proposed one-way on Rathgar Road) on the surrounding road network. Specific concerns included:

- Traffic rerouting from current corridor to residential streets and impact on these streets
- Traffic rerouting to other routes and resulting congestion (e.g., through Harold's Cross and Ranelagh)
- New access routes to/from the city following implementation of traffic management measures

The submission suggest that the effect of rerouting traffic has not been considered in the modelling undertaken.

xvi. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

The submission noted traffic modelling should include immediately adjacent BusConnects routes and should be presented in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

3.20.3 Responses to the Points of Objection

i. Removal of trees at property underestimated

In order to assess the impact of the Proposed Schemes on trees, a tree survey was undertaken in August 2020. The survey and resulting assessment of the impact of the scheme is presented in the Arboricultural Impact Assessment Report, which is included as Appendix A17.1 of EIAR. The methodology for the survey is set out in section 1.2 of Appendix A17.1

“An initial tree survey and visual condition assessment was undertaken on the 24th and 25th of August 2020. As part of this report and in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction - recommendations, only trees with diameters of 75mm or greater were surveyed. Also, in accordance with section 4.4.2.3 of the British standard document, where trees formed obvious groups, these were assessed and recorded as groups. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold's Cross Road section and the Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road section of the Proposed Scheme.

The survey concentrated primarily on the significant trees/hedgerows and groups located within 20m of any development works which could impact on the tree (this could include excavation, resurfacing, utility installation, new signage/lighting etc) within and adjacent to the Proposed Scheme and has been based on the topographical survey plan provided. The objective of this survey was to gather information regarding the trees along the Proposed Scheme and to assess the impact the Proposed Scheme may have on the trees. Refer to Appendix A for the tree survey schedule.”

While the submission does not identify particular trees that have been omitted from the assessment, it is understood that it is referring to a tree that is located close to the boundary wall on Terenure Road East at the easter side of the property as indicated in the Streetview image below.



Figure 3.20.6 Streetview image of trees at boundary to 59 Terenure Road East

It is noted, as set out in Section 1.2 Methodology of the Arboricultural Impact Assessment Report, that trees with diameters of less than 75mm were not included in the survey. This tree had been captured in the topographical survey but was omitted in error from the survey.

While this was not captured in the Arboricultural Impact Assessment Report or on the Landscape General Arrangement Drawings, the planned removal of this tree was identified in the Proposed Surface Water Drainage Works drawings included in Volume 3 of the EIAR as presented below.

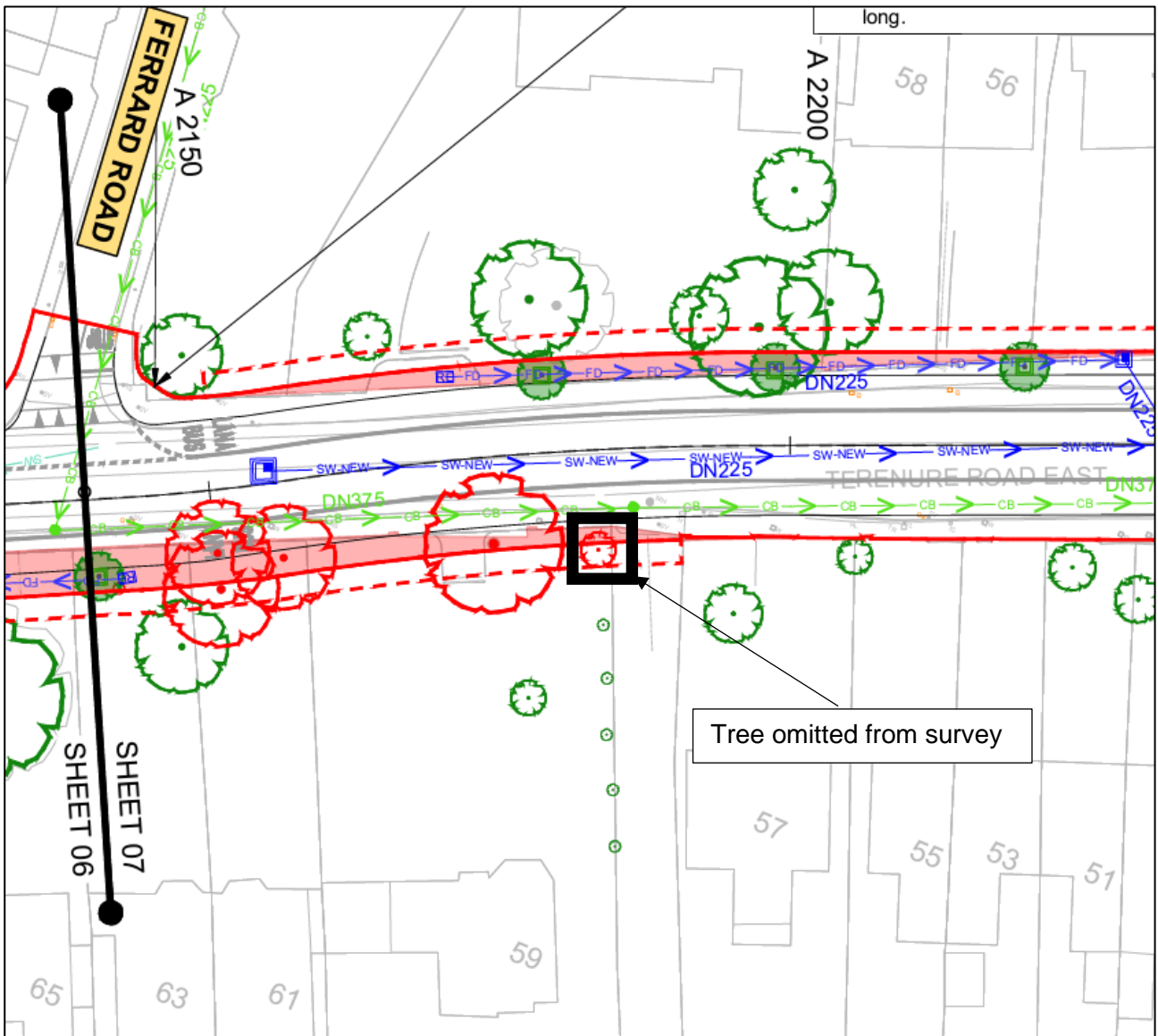


Figure 3.20.7 Extract from Proposed Surface Water Drainage Works drawings (Sheet 7)

It is important to note that the impact assessment of the Proposed Scheme on trees has included the loss of the tree noted and that the number of trees to be removed across the scheme (169 trees) includes this particular tree. As such the assessment presented in the EIAR remains valid.

17.4.3.1.3 of Chapter 17 Landscape and Visual of Volume 2 of the EIAR sets out the assessment of the impact on townscape/streetscape during the construction stage.

*The baseline townscape is of **very high sensitivity** and the Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)) and landscape works. Although the design of the schemes has sought as far as practicable to limit impacts on private properties and trees, the works will involve acquisition from several residential properties with associated removal of boundaries, trees and other plantings. There will be a substantial impact on the streetscape of Terenure Road East from the loss of several prominent specimen trees. These element of works will result in considerable changes along the Terenure to Rathgar section of the Proposed Scheme, but other sections of the scheme will involve relatively modest changes. The construction works will not alter the overall townscape character along this section of the Proposed Scheme, however, the works will detract from the streetscape character and amenity, particularly between Terenure and Rathgar. The magnitude of change in the baseline environment is **high**.*

*The potential townscape / streetscape impact of the Construction Phase is assessed to be **Negative, Very Significant and Temporary / Short-Term**.*

Section 17.4.4.1.3 of Chapter 17 sets out the assessment of the impact on townscape/streetscape during the operational stage.

The sensitivity of this section is very high. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme between Terenure and Rathgar. Although land take has been minimised through design iteration, Terenure Road East will be widened in parts which will require permanent land acquisition from sections of residential properties, some of which are protected structures, and others which have mature trees that are prominent features of the streetscape. There will be a change to the alignment of historic boundary features and loss of several prominent mature garden trees which are located on the edge of the street. There will be provision of several new street trees along Terenure Road which over time will neutralise the negative effects associated with loss of trees removed during the Construction Phase.

There will be a substantial improvement of the junctions to each end of Terenure Road East; a new paving scheme will be provided to the junctions including high-quality concrete paving to active frontages, stone / concrete sett paving to pedestrian crossings, sett paving to formalised parking bays, as well as a narrowing of crossing distances to reduce crossing times and allow removal of detracting features such as pedestrian guardrails and traffic bollards. There will also be tree planting and some new ornamental planting areas provided.

*The Operational Phase will not alter the overall townscape character of this section but will result in both substantial localised negative and positive changes to the streetscape character. Despite the adverse impacts on trees and properties there will be a substantial localised improvement in some areas of streetscape and the effect across the overall section will become positive over the long-term as proposed planting matures. The magnitude of change in the baseline environment is **medium / high**.*

*The townscape / streetscape impact of the Operational Phase is assessed to be **Negative, Significant and Short-Term** becoming **Positive, Moderate and Long-Term**.*

As noted in section 17.5.2.1 Review of Photomontages of Chapter 17, photomontages have been prepared from key or illustrative viewpoints to give an indication of changes and potential effects resulting from the Proposed Scheme during the Operational Phase after the implementation of the scheme. The proposed views are shown with proposed planting at approximately 10 – 15 years post completion of the Construction Phase. This below text describes the Proposed Scheme changes as illustrated in the photomontage. The Photomontages are as included in Figure 17.2 in Volume 3 of the EIAR. Figure 3.20.9 shows the proposed view from Terenure Road East at Ferrard Road. Section 17.5.2.1.10 states:

The primary change is the widening of the road corridor, land take from residential properties on the far (south) side of the road, with setting back and reinstatement of boundaries and removal of the large mature beech tree and other trees in the adjacent garden. There is a notable reduction in visual amenity of the view.



Figure 3.20.8 View 10 Existing: Road East at Ferrard Road looking east.



Figure 3.20.9 View 10 Photomontage as Proposed: Terenure Road East at Ferrard Road looking east

The submission refers to an evergreen oak tree and 4 semi mature hornbeam trees which would be affected by the Proposed Scheme. However, only two trees are identified for removal within this property. The submission also refers to loss of trees in Beaumont House (60 Terenure Road East) which have not been identified.

Figure 3.20.10 presents an extract from the Landscaping 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 which shows the proposed landscaping proposals, including any tree removal, along Terenure Road East.

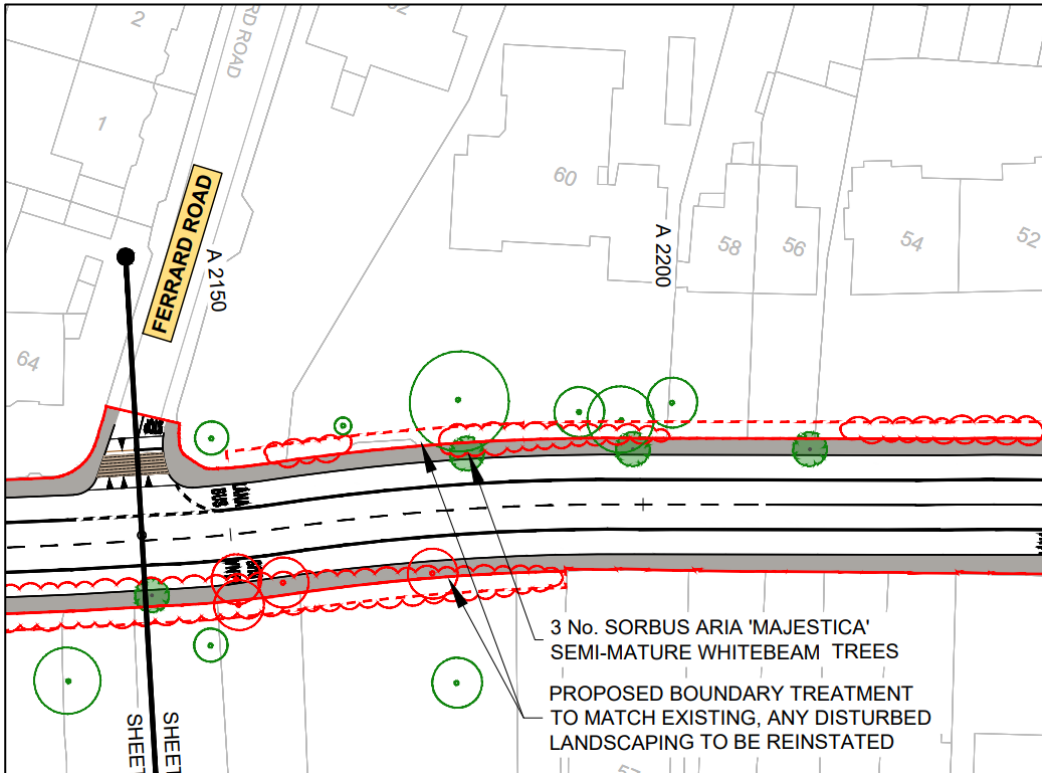


Figure 3.20.10 Landscaping General Arrangement at Terenure Road East (Sheet 07)

It can be seen that it is not proposed to remove any trees from within the grounds of 60 Terenure Road East. It will be necessary to remove the existing hedgerow immediately adjacent the wall. It is also noted that the Landscaping General Arrangement Drawings indicate that it is proposed to plant 3 no. street trees (Sorbus Aria 'Majestica' Semi-Mature Whitebeam Trees) in the vicinity of the property.

With respect to further trees could be impacted as a result of construction works, Section 17.5.1 of the EIAR 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 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. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.
- New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g. Cellweb or equivalent), installed without excavation using no dig techniques.
- Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.

- Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.
- Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under Arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.
- The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.
- All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and Arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

A detailed response to concerns around the removal of trees generally on Terenure Road East is presented in Section 2.4.2.

- ii. Traffic data out of date due to Covid

A detailed response to this item is presented in Section 2.1.1.

- iii. Section 51 and CPO Application should not be made concurrently.

It was entirely appropriate and proper for the NTA to make (i) an application to the Board for confirmation of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 (the "CPO") and (ii) an application to the Board for approval of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (the "Proposed Scheme") under section 51 of the Roads Act 1993 (as amended) (the "Roads Act").

As the Board will be aware, section 51(7)(b) of the Roads Act provides as follows:

"(7) (b) Where an application for approval under this section [being section 51 of the Roads Act 1993 (as amended) which is what has occurred here in relation to the Proposed Scheme] relates to a proposed road development, and

- i. *a scheme submitted to the Minister [now An Bord Pleanála] for approval under section 49, or*
- ii. *an application submitted to the Minister [now An Bord Pleanála] for a bridge order under the Act of 1946, or*

- iii. a compulsory purchase order submitted to the Minister [now An Bord Pleanála] for confirmation [which is what has occurred here with this CPO],

*relate wholly or partly to the same proposed road development, the Minister [now An Bord Pleanála] **shall** make a decision on such approval and on the approval of such scheme or the making of such bridge order or the confirmation of such compulsory purchase order **at the same time.***” (emphasis added)

As the NTA’s application for approval of the Proposed Scheme under section 51 of the Roads Act and the CPO submitted to the Board for confirmation “*relate wholly or partly to the same proposed road development*”, the Board is therefore statutorily required to make its decisions at the same time. Therefore, it is not open to the Board to accede to the request made on behalf of the objector to first make a decision in relation to the application for approval of the Proposed Scheme under section 51.

Further, there are very many practical reasons including in relation to the efficient use of the decision maker’s resources as to why it is entirely appropriate to deal with the section 51 application and the related application for confirmation of the CPO together. Indeed, this is also in ease of those who may wish to make an objection and/or submission both in writing and/or at any oral hearing that may be held in relation to the section 51 application and the application for confirmation of the CPO.

- iv. NTA has not demonstrated need for the scheme and the CPO.

Need for the Scheme

Chapter 2 on Volume 3 of the EIAR presents in detail the need for the Proposed Scheme. Section 2.1 summarise this.

Sustainable transport infrastructure assists in creating more sustainable communities and healthier places while also stimulating our economic development. It 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 depends on a combination of continuous bus lanes and signal control priority at pinch-points and junctions. Currently bus lanes are available for 30% of Templeogue / Rathfarnham to City Centre, with signal control priority for buses provided over 2% of the Proposed Scheme. Cyclists must typically share space on bus lanes or general traffic lanes with only 15% of the route providing segregated cycle tracks. Furthermore, there are key sections of the current bus lanes that are not operational on a 24-hour basis in addition to being shared with both formal and informal parking facilities and cyclists which compromises the reliability and effectiveness of the bus services in these areas.

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. 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

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 (NTA 2019a) outlined that in 2019 (prior to COVID-19 restrictions) travel by sustainable modes accounted for 72% of all trips into Dublin City, 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.

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.

Further detail on the need for the Proposed Scheme is presented in Chapter 2.

Need for the CPO and Consideration of Alternatives

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;
2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;

6. 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
7. Finalisation of the **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 optimising the road layout in constrained locations including Rathfarnham Road, Rathgar Road, Rathmines Road Lower and Templeogue Road. 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 Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 of the Rathfarnham to City Centre Corridor (Rathfarnham Road – Terenure Road East – Rathgar Road – Rathmines Road Lower) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR and illustrated in Image 3.13 (reproduced below).

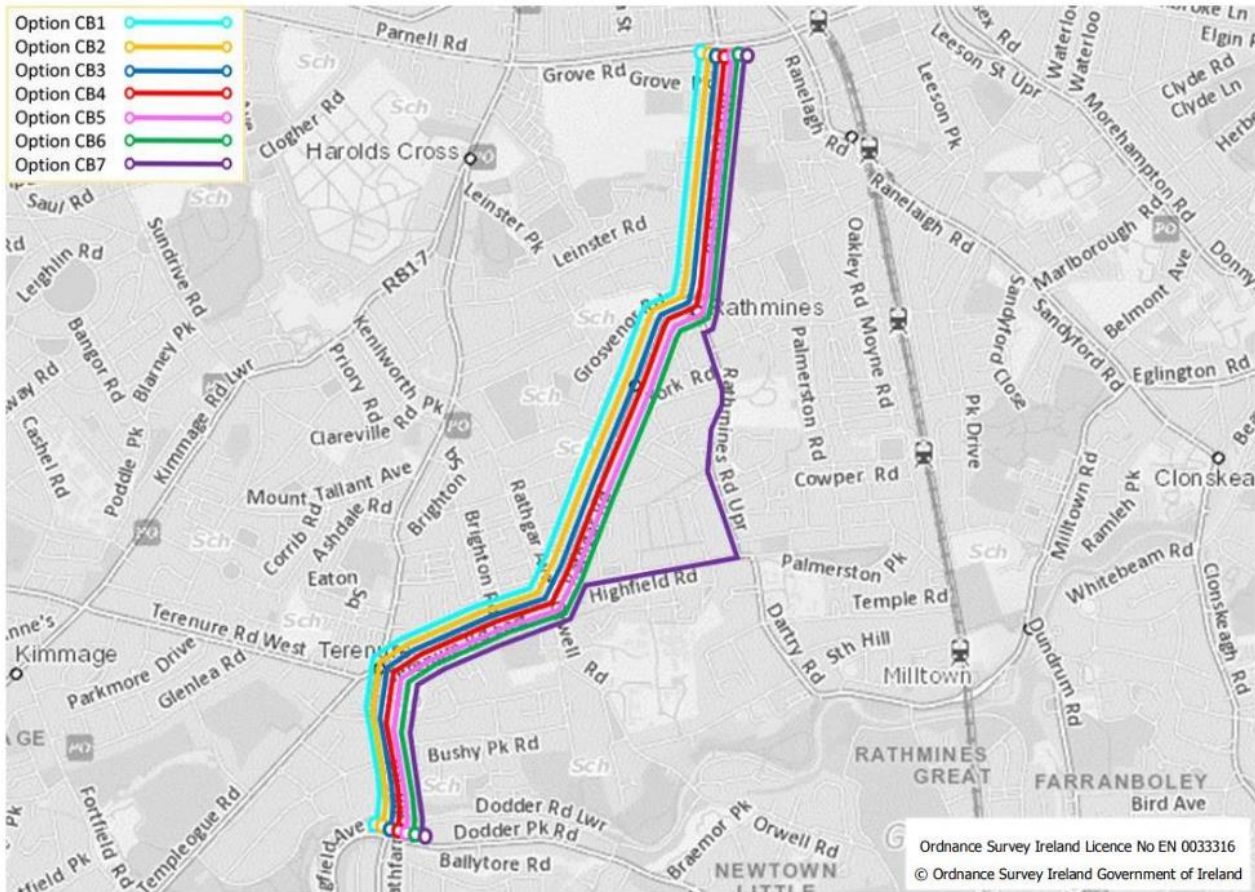


Image 3.13: Section 2 Route Options extracted from 'Rathfarnham to City Core Bus Corridor CBC Feasibility Study and Options Assessment Report'

Figure 3.20.11 Extract from EIAR Chapter3 Image 3.13

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above.

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above. One of these areas was the section between Terenure Village and Rathgar (TVR).

As set out in Section 3.3.2.2.1, there were eight scheme sub-options (TVR1 to TVR8) considered for the section along Rathfarnham Road and Terenure Road East to Rathgar Village which are discussed below.

- Sub-option TVR1: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided and a short section on Rathfarnham Road between Pearse Bridge and Bushy Park Road junction, where an outbound bus lane would not be provided. Segregated cycle facilities would be provided on Bushy Park Road and Orwell Road;
- Sub-option TVR2: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East. This would require the removal of one of the general traffic lanes in the outbound direction. A 3m wide two-way cycle bridge would be provided on the western side of Pearse bridge. Segregated cycle facilities would be provided on Bushy Park Road and Orwell Road;
- Sub-option TVR3: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village);

- Sub-option TVR4: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the west of Pearse Bridge) is proposed, to provide a parallel cycle route from Brookvale Downs to Rathdown Park. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- Sub-option TVR5: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the east of Pearse Bridge) is proposed to provide a parallel cycle route from the Dodder Greenway to Riversdale Avenue. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- Sub-option TVR6: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. A cycle bridge across the River Dodder (to the east of Pearse Bridge) is proposed to provide a parallel cycle route from the Dodder Greenway to Laurelton. Segregated cycle facilities would also be provided in both directions on Bushy Park Road, Zion Road and Orwell Road;
- Sub-option TVR7: This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East, with the exception of a 100m section at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided on a route via the Dodder Greenway, through Orwell Park and along Orwell Road to Rathgar Village; and
- Sub-option TVR8: This route sub-option would include the provision of continuous bus priority in both directions but with different routes for the northbound (Bushy Park Road/Orwell Road) and southbound (Terenure Road/Rathfarnham Road), with the exception of the section on Rathfarnham Road from Westbourne Road junction to Bushy Park Road junction where bus priority signalling is proposed in the outbound direction at this pinch point. Segregated cycle facilities would also be split in terms of direction. These facilities would be provided in the opposite direction to the bus facilities on Bushy Park Road/Terenure Road East. There is also a 100m section of Terenure Road East at Terenure Cross where the inbound cycle lane would not be provided.

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village).*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

Following the completion of the public consultation process 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.

Where substantial revisions had been made to the design since the publication of the Emerging Preferred Route, options were assessed using MCA to determine the Preferred Route Option. The MCA assessed any newly developed options against the previously identified Emerging Preferred Route. The methodology and MCA used were consistent with that carried out during the initial route optioneering work (including consideration of the relevant environmental aspects), which informed the identification of the Emerging Preferred Route.

Section 3.4.1.1.3 sets out the alternative options considered in there Terenure to Grosvenor Road section.

Option RG1: Option RG1 would provide a general traffic lane in each direction along the entirety of this route section, as well as dedicated bus lanes and cycle tracks along the CBC for the majority of the route section. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. This option is a version of the EPR Option, refined to reflect issues identified upon review of the topographical survey.

Option RG2: Option RG2 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes in each direction. Under this option, bus lanes would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signal-controlled priority. No cycle facilities would be provided on Terenure Road East under this option. Additional cycle facilities would be provided on Terenure Road North and Harold's Cross Road, linking to the Kimmage to City Centre CBC, and providing an alternative route for cyclists travelling towards the city which would otherwise use Terenure Road East. Additional secondary cycle facilities would also be provided on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road, linking back to the CBC at Rathgar Village to provide some level of service for east west cyclists. A one-way inbound traffic arrangement would be provided on Rathgar Road, with outbound traffic diverted to alternative routes. 1.5m wide cycle tracks would be provided along Rathgar Road.

Option RG3: Option RG3 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes and cycle tracks in each direction. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. A one-way inbound traffic arrangement would be provided on Rathgar Road, with outbound traffic diverted to alternative routes. 2.0m wide cycle tracks would be provided along Rathgar Road.

Option RG4: Option RG4 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes in each direction. Under this option, bus lanes would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signal-controlled priority. No cycle facilities would be provided on Terenure Road East under this option. Additional cycle facilities would be provided on Terenure Road North and Harold's Cross Road, linking to the Kimmage to City Centre CBC, and providing an alternative route for cyclists travelling towards the city which would otherwise use Terenure Road East. Additional cycle facilities would also be provided on Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road, and Orwell Road, linking back to the CBC at Rathgar Village to provide some level of service for east-west cyclists. A two-way general traffic arrangement would be provided on Rathgar Road. An inbound bus lane would be provided between Highfield Road and Frankfort Avenue, while north of this point inbound bus priority would be managed through signal-controlled bus priority. An outbound bus lane would be provided between Grosvenor Road and Frankfort Avenue, while south of this point outbound bus priority would be managed through signal-controlled bus priority. 1.5m wide cycle tracks would be provided along Rathgar Road; and

Option RG5: Option RG5 would provide a general traffic lane in each direction on Terenure Road East as well as bus lanes and cycle tracks in each direction. Under this option, bus lanes and cycle tracks would not be provided over a short section of Terenure Road East immediately east of Terenure Cross where bus priority would be managed through signalling. A two-way general traffic arrangement would be provided on Rathgar Road. An inbound bus lane would be provided between Highfield Road and Frankfort Avenue, while north of this point inbound bus priority would be managed through signal-controlled bus priority. An outbound bus lane would be provided between Grosvenor Road and Frankfort Avenue, while south of this point outbound bus priority would be managed through signal-controlled bus priority. 2.0m wide cycle tracks would be provided along Rathgar Road.

Option RG2 – the provision of bus lanes and general traffic lanes on Terenure Road East, a one-way outbound regime on Rathgar Road and alternative cycle facilities on Terenure Road North/Harold's Cross Road and Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing full physical bus priority throughout the majority of this section and would minimise the impact the curtilage of protected structures and private gardens and trees on Terenure Road East and Rathgar Road through the provision of alternative cycle routes. This option would provide bus priority, and while cycle facilities would not be provided along a section of the CBC, the proposal included an attractive and safe alternative.

An option of a bus gate along Terenure Road East between Rathfarnham Road and Rathgar Road was also considered. However as stated in section 3.4.1.1.3:

This option was not considered feasible due to the orbital traffic movement function of Terenure Road East and the lack of an alternative route for east-west traffic movements. In addition, a bus gate at this location was not considered feasible in combination with scheme proposals for a bus gate within Rathmines Village, which is considered a more appropriate location given the inability to introduce other bus priority measures on this road section.

Chapter 3 demonstrates that significant alternative options were considered along Terenure Road East over the course of the design process.

In terms of the need for the CPO, at the specific area outside 59 Terenure Road East, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and as derived from the comprehensive optioneering undertaken as part of the scheme development.

- v. Existing signal-controlled priority sufficient

A detailed response to this item is presented in Section 2.4.2.

In terms of lack of cycle facilities on Terenure Road East, as set out in Chapter 4 of the EIAR:

It is also proposed to provide an alternative cycle facility consisting of cycle tracks in each direction along Terenure Road North and Harold's Cross Road, connecting to the Kimmage to City Centre Core Bus Corridor Scheme at Harold's Cross. An additional alternative cycle facility is proposed along Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road, and Orwell Road to provide a secondary east-west route for cyclists travelling between Rathfarnham Road and Rathgar Road.

Chapter 3 of the EIAR sets out the various options considered in the Rathfarnham, Terenure and Rathgar areas, with a particular focus on cycle options. Through this process, it was determined that on balance, it was not considered appropriate to further widen Terenure Road East to accommodate segregated cycle tracks. The options assessment identified that an option which provided a direct north-south facility along Harolds Cross Road/Terenure Road North, in combination with an offline quiet street through Wasdale Grove, Wasdale Park and Victoria Road accommodating east-west cyclists would best meet the objectives of the scheme. This cycle facility is proposed to provide an alternative for those who wish to travel east-west (or vice versa). Given the low volumes of traffic on these roads, in combination with low speeds enforced by the presence of existing traffic calming measures, a quiet street facility is considered an appropriate solution in this area.

The increase in bus lane provision results in an increased length over which cyclists will not be required to share with general traffic, instead sharing with buses and taxis only. This proposal is complemented by a reduced speed limit of 30kph. This provides further resilience to the cycle network in the area in combination with the proposed alternative cycle route along Harolds Cross Road and as well as the alternative east-west route via Bushy Park Road, Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road, linking back to the CBC at Rathgar Village.

- vi. Inadequate Consultation

A detailed response to this item is presented in Section 2.1.1.

- vii. Cost Benefit Analysis is Required

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 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)
- 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

Refer to the BusConnects Business case website for further detail and links:

<https://www.nationaltransport.ie/planning-and-investment/transport-investment/projects/busconnects/busconnects-dublin-preliminary-business-case/>

viii. Implementation of other BusConnects measures first.

A detailed response to this item is presented in Section 2.1.1.

ix. Metro is more suitable for this corridor.

A detailed response to this item is presented in Section 2.1.1.

x. Impact on Heritage Properties on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

xi. Congestion at Terenure Cross due to proposed changes

The submission raised a concern with the proposed layout at the Terenure Cross junction, in particular the introduction of a right turn for buses from Rathfarnham Road to Terenure Road East noting that this would create congestion at the junction.

Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets traffic management measures which will be implemented on the route to facilitate the Proposed Scheme. An extract from this table is presented in Figure 3.20.12.

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Rathfarnham Road/Castleside Drive/Main Street Junction	Bus Priority Signals at Rathfarnham Road/Castleside Drive/Main Street Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Dodder Park Road Junction	Bus Priority Signals at Rathfarnham Road/Dodder Park Road Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Rathdown Park Junction	Inbound Bus Priority Signal at Rathfarnham Road/Rathdown Park	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Terenure Road East/Terenure Road West Junction	Right turn for buses from Rathfarnham Road to Terenure Road East introduced through bus priority signal	To allow for bus movements in this direction as per the A spine in the New Dublin Area Bus Network	Buses allowed to turn right from Rathfarnham Road onto Terenure Road East.
Terenure Road East/Greenmount Road Junction	No Right turn allowed from Greenmount Road onto Terenure Road East	To mitigate against inbound traffic bypassing right turn ban at Terenure Cross	No right turn from Greenmount Road onto Terenure Road East for general traffic.
Rathgar Road/Highfield Road Junction	Inbound Bus Priority Signal	To allow for bus priority on Rathgar Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.

Figure 3.20.12 Extract from Table 4.25 of the Preliminary Design Report

As can be seen in the Junction System Design drawings included in Volume 3 of the EIAR, it is proposed that buses turning right from Rathfarnham Road would do so in its own stage to remove any potential safety issues. An extract from the staging diagrams is presented below with the relevant stage highlighted.

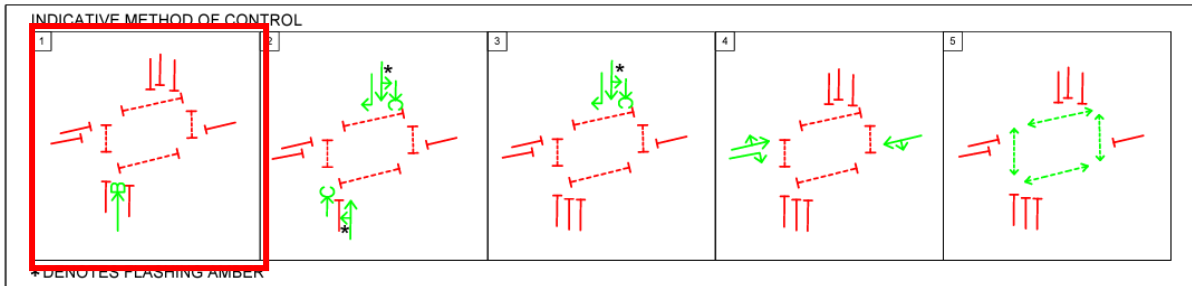


Figure 3.20.13 System Design Drawings (Sheet 8) of Junction Design Report in Appendix A6.3

The Junction Design Report in Appendix A6.3 of the EIA Volume 4 Part 2 of 4 presents a LinSig analysis for all major junctions along the Proposed Scheme with the assessment for Terenure Cross presented on page 34. This illustrates that the junction would be operating at capacity in both the morning and evening peaks. While the junction may be congested during the peak periods, it will be safer for pedestrians and cyclists through the introduction of shorter, more direct pedestrian crossings as well as upgrading crossings to toucan crossings. The proposed arrangement will also ensure that buses have priority through the junction.

- xii. Impact on Businesses in Terenure and Rathgar due to Loss of Parking/Loading

A detailed response to this item is presented in Section 2.4.2

- xiii. Bus Gate Hours of Operation

A detailed response to this item is presented in Section 2.2.2 and 2.5.2

- xiv. Proposed Cycle Facilities are Insufficient.

One of the objectives of the Proposed Scheme outlined in Chapter 1, Introduction of Volume 2 of the EIA is to *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.*

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIA outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. In the vicinity of the property to which this submission relates, the alternatives considered are detailed in section 3.3.2.1. A number of options were considered in this area as outlined in response to Item (iii). On balance the Proposed Scheme was selected as the preferred option which provided some degree of cycle facility through the extension of bus lanes along Terenure Road East while reducing the amount of land take envisaged as part of the Emerging Preferred Route. It is noted that in this area the speed limit has been reduced to 30km/h.

It should be noted that the assessment of routes and options was an iterative process and, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

Table 4.1 of EIA Volume 4 Proposed Scheme Description provides a summary of changes as a result of the Proposed Scheme. The table notes that in the existing scenario, 28% of cycling facilities, covering 11km in both directions, are segregated. However, under the Proposed Scheme, 85.4% of cycling facilities will be segregated, totalling 23.3km. This represents a substantial 112% increase in segregated cycling facilities along the proposed route.

Features	Existing (km)	Proposed Scheme (km)
Bus Lanes		
Inbound	4.4	6.1
Outbound	1.5	5.4
Bus Priority Through Traffic Management		
Inbound	0.1	2.9
Outbound	0.3	3.0
Total Bus Priority (both directions)	6.3	17.4 (+175%)
Bus Measures		
Proportion of Route with Bus Measures	32%	87%
Cycle Facilities Segregated		
Inbound	1.3	9.6
Outbound	1.8	10.3
Cycle Facilities – Non segregated		
Inbound	3.3	1.7
Outbound	4.6	1.7
Cyclist Facilities – Overall		
Total Cyclist Facilities (both directions)	11	23.3 (+112%)
Proportion segregated	28%	85.4%
Other Features		
Number of Pedestrian Signal Crossings	76	106
Number of Residential Properties with Land Acquisition	Not applicable	72

The NTA acknowledges the comments raised in relation to enforcement of cycle tracks. Enforcement of road traffic laws is a matter for An Garda Síochána.

xv. Traffic Impact as a result of Traffic Management Measures

A detailed response in relation to specific traffic impacts in the Terenure and Rathgar area is presented in Section 2.4.2 and 2.1.1.

A detailed response in relation to specific traffic impacts in the Rathmines area is presented in Section 2.5.2.

xvi. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

A detailed response to this item is presented in Section 2.1.1.

3.21 CPO-21 – Henry Lennon – 53 Rathfarnham Road

3.21.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Dodder Park Road and Rathdown Park, it is proposed to provide bus priority through a combination of signal-controlled priority and partial bus lanes, with 1.5m wide cycle tracks provided. To accommodate the new configuration within this section it is proposed to utilise land-take from adjacent properties on the western side of the road. Between Rathdown Park and Bushy Park Road, no bus lanes are proposed. It is proposed to maintain bus priority by providing signal-controlled priority in both directions and managing traffic queues in this area.

To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 0.8m and a maximum width of land to be temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.21.1.

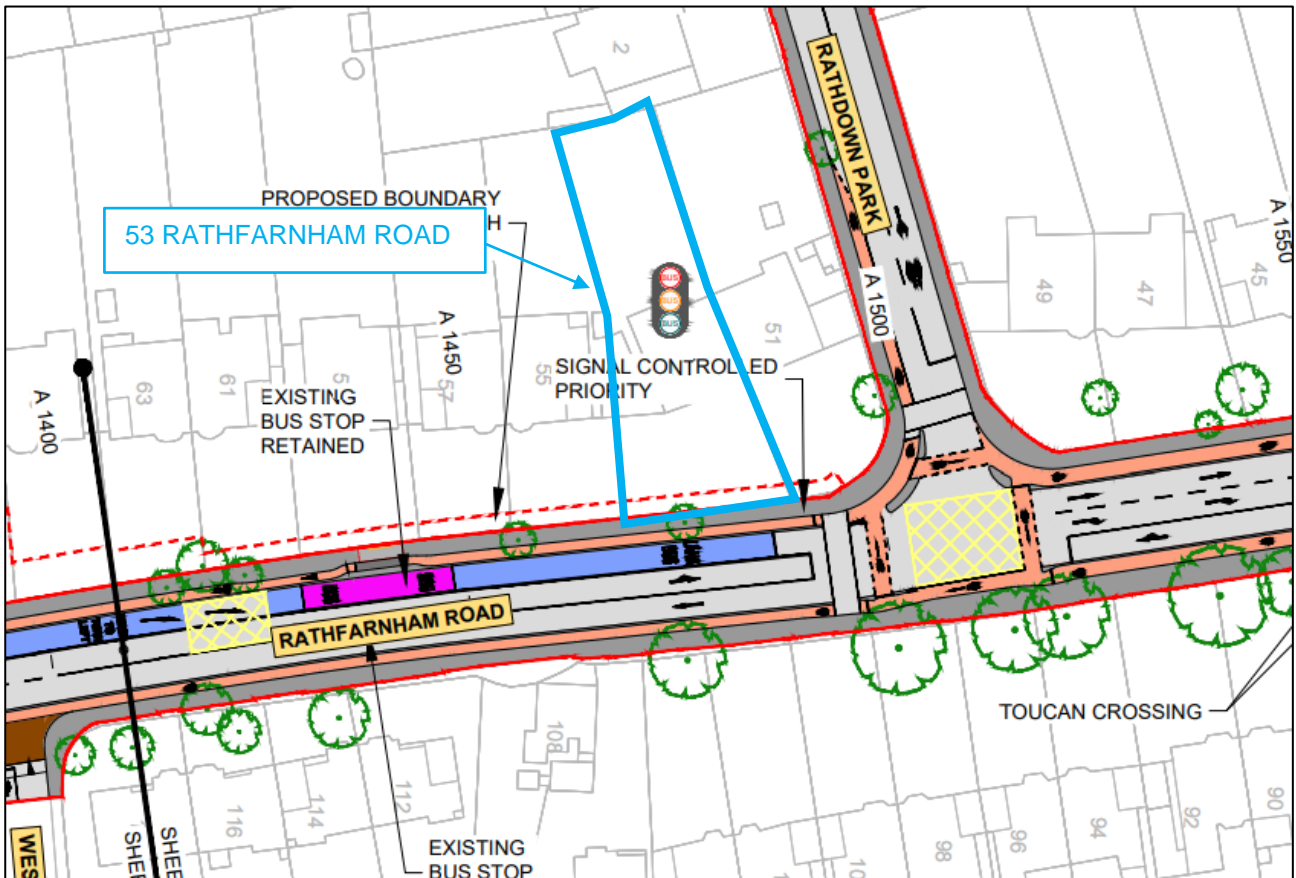


Figure 3.21.1 General Arrangement of Proposed Scheme adjacent to 53 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.21.2.

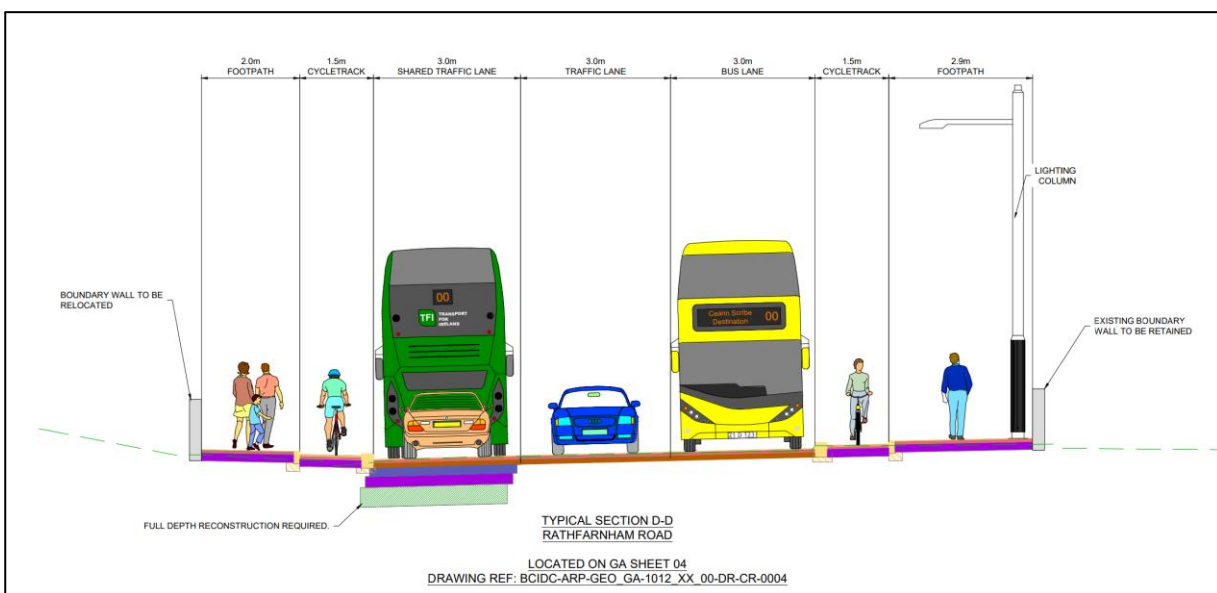


Figure 3.21.2 Typical Cross-Section adjacent to 53 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 53 Rathfarnham Road is shown in Figure 3.21.3.

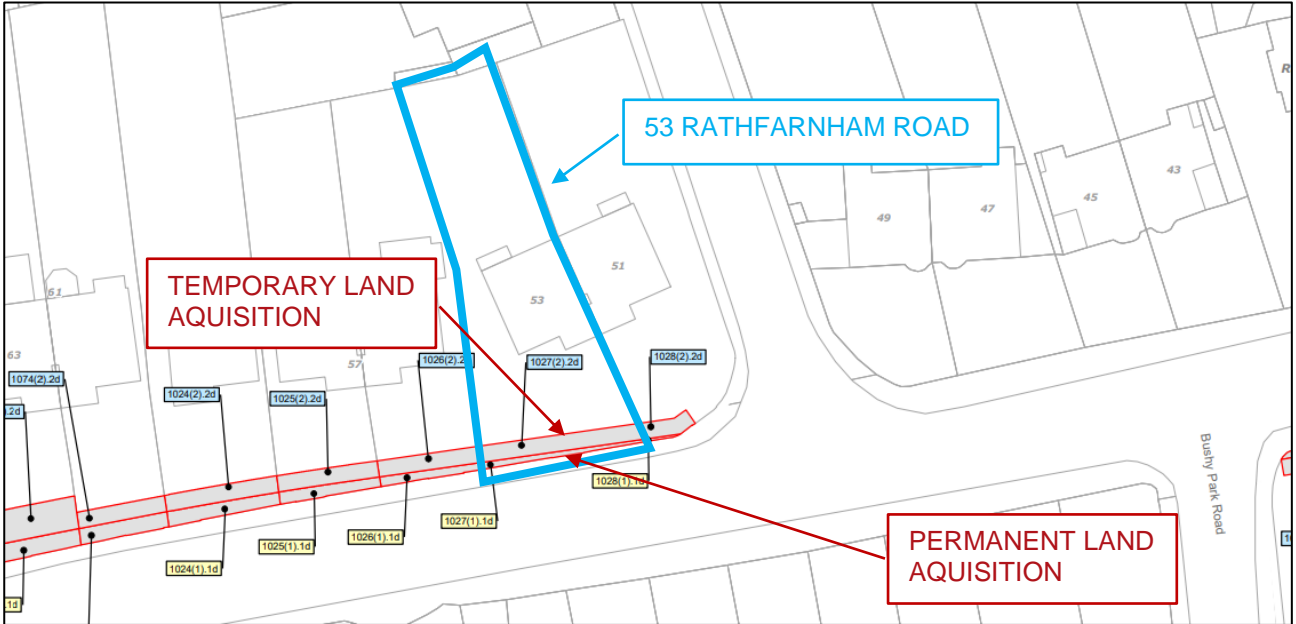


Figure 3.21.3 Extract from CPO Deposit Maps adjacent to 53 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.21.4.

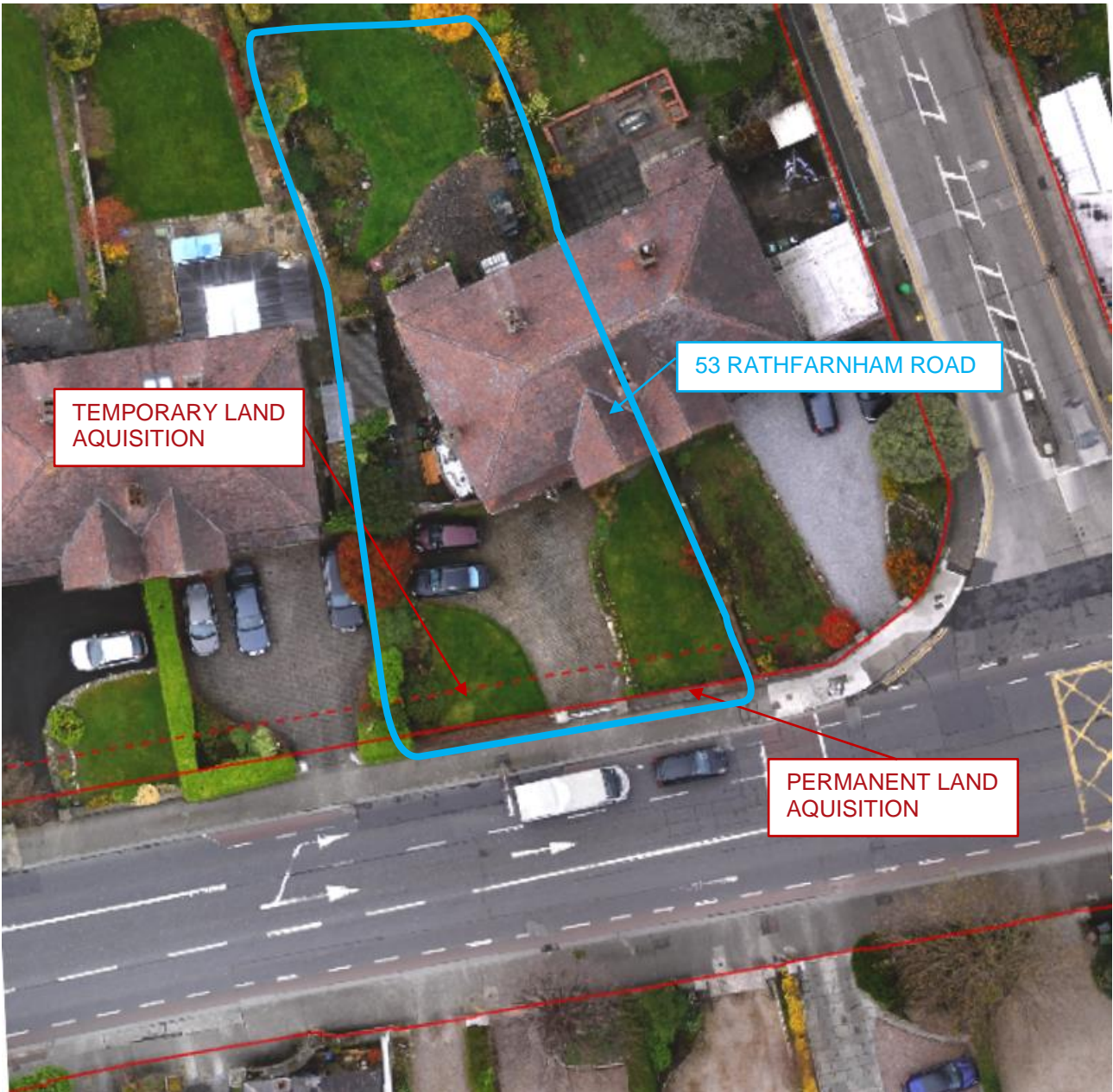


Figure 3.21.4 Proposed Land Acquisition lines adjacent to 53 Rathfarnham Road
The existing property frontage is shown in Figure 3.21.5.



Figure 3.21.5 Existing frontage of 53 Rathfarnham Road (Image source: Google)

3.21.2 Summary of the Points of Objection to the CPO by Henry Lennon

This submission objected to the CPO for the reasons summarised in the following section.

i. Unnecessary bike lanes

The submission questions the need for new bike lanes along Rathfarnham Road since there is existing bike lanes mixed with bus lanes along the route.

ii. Increased Traffic on Rathfarnham Road.

The submission raised a concern regarding the removal of a turn ban at Springfield Avenue to Dodder View Road and at Pearse Bridge, suggesting that it will force traffic to find alternative routes through Dodder View and Rathfarnham Road contributing towards congestion in the area and therefore causing additional pollution.

iii. Air Quality Impacts as a Result of Increase in Traffic

The submission raises a concern about additional pollution at their property due to increased traffic volumes on Rathfarnham Road.

iv. Increased Vibrations during Scheme Operation

The submission notes concern that the vibration level will worsen due to traffic being nearer the property.

v. Impact on Property Value

The submission notes that the Proposed Scheme and associated impacts will have a negative impact on their property value Impact to noise levels and Traffic being nearer to property.

vi. Impact of Proposals on Driveway and Parking

The submission raised a concern about the visitor parking being more difficult and alterations and a recess gate needed in their own property.

- vii. Lack of Clarity on Proposed CPO

The submission notes that proposed CPO is still not clear to them.

3.21.3 Responses to the Points of Objection

- i. Unnecessary Bike Lanes

One of the objectives of the Proposed Scheme outlined in Chapter 1, Introduction of Volume 2 of the EIAR is to *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.*

As presented in Section 2.2.1.4 of Chapter 2 of the EIAR, the Proposed Scheme at this location coincides with a Primary Route 9A in the 2022 Greater Dublin Area Cycle Network. The Proposed Scheme, which is supported by the 2022 Greater Dublin Area Cycle Network for the area is needed to address the deficiency in the very limited segregated cycling infrastructure currently available on this corridor.

An assessment of the existing and proposed cycle facilities is presented in section 6.4.6.1.3.2 of Chapter 6 of the EIAR as demonstrated in Table 6.28 (reproduced below).

Table 6.28: Section 2 – Cycling Impact during Operational Phase

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.21.6 Extract from EIAR Chapter 6 (Table 6.28)

This assessment shows that the current Level of Service for cyclist through this area is LoS C, largely due to the fact that cycle lanes on Rathfarnham Road are advisory lanes and unsegregated from traffic. The Proposed Scheme, through the introduction of segregated cycle tracks, will improve the level of service to LoS B. This is assessed as a Positive, Moderate and Long-Term effect on the cycling environment in the area.

- ii. Increased Traffic on Rathfarnham Road.

The submission states that the proposed traffic management in the area will cause rerouting of traffic through Rathfarnham Road causing additional flow of traffic. The submission notes the reintroduction of the right turn from Templeogue Road to Springfield Avenue as the main reason for this.

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

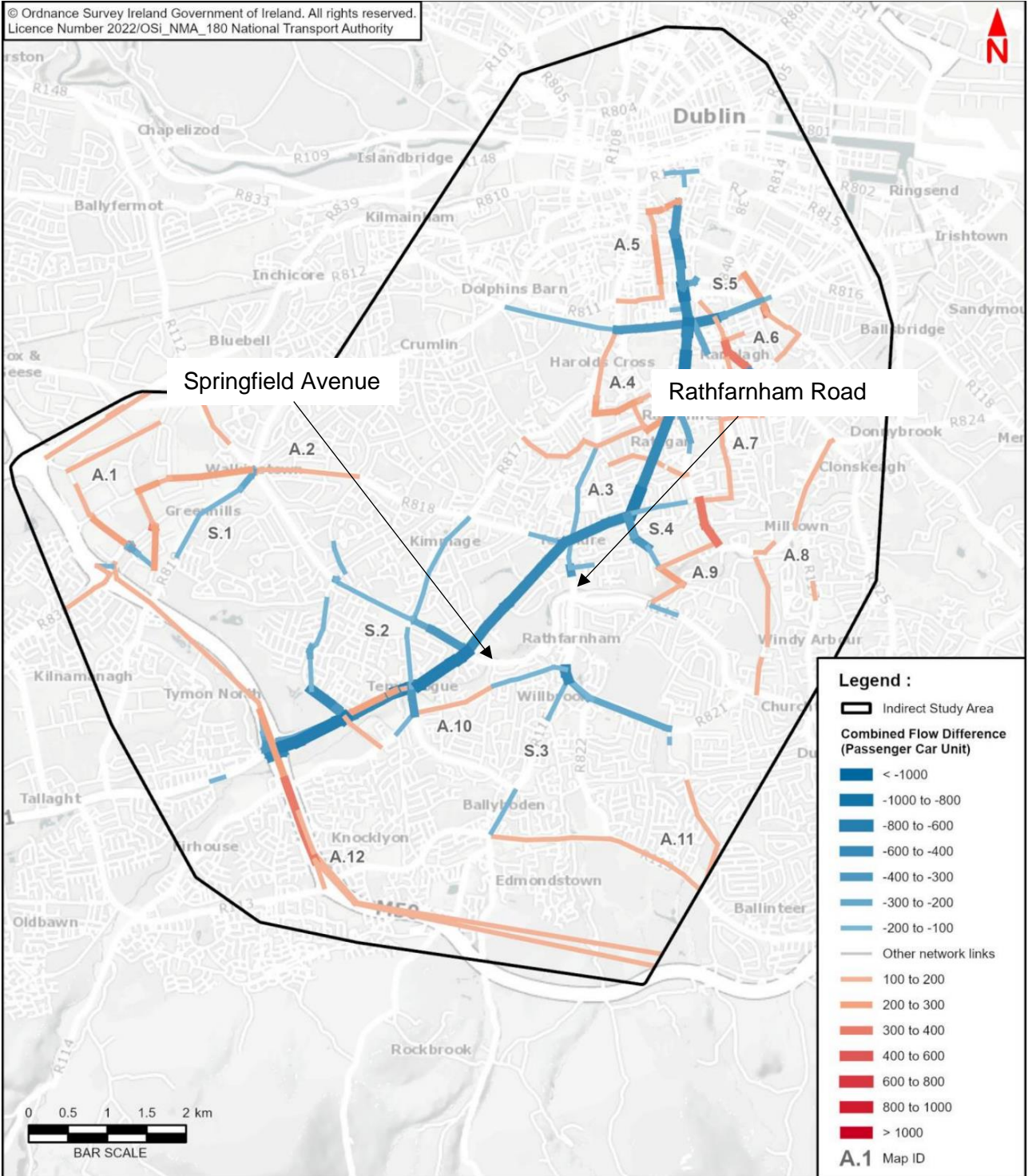


Figure 3.21.7 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

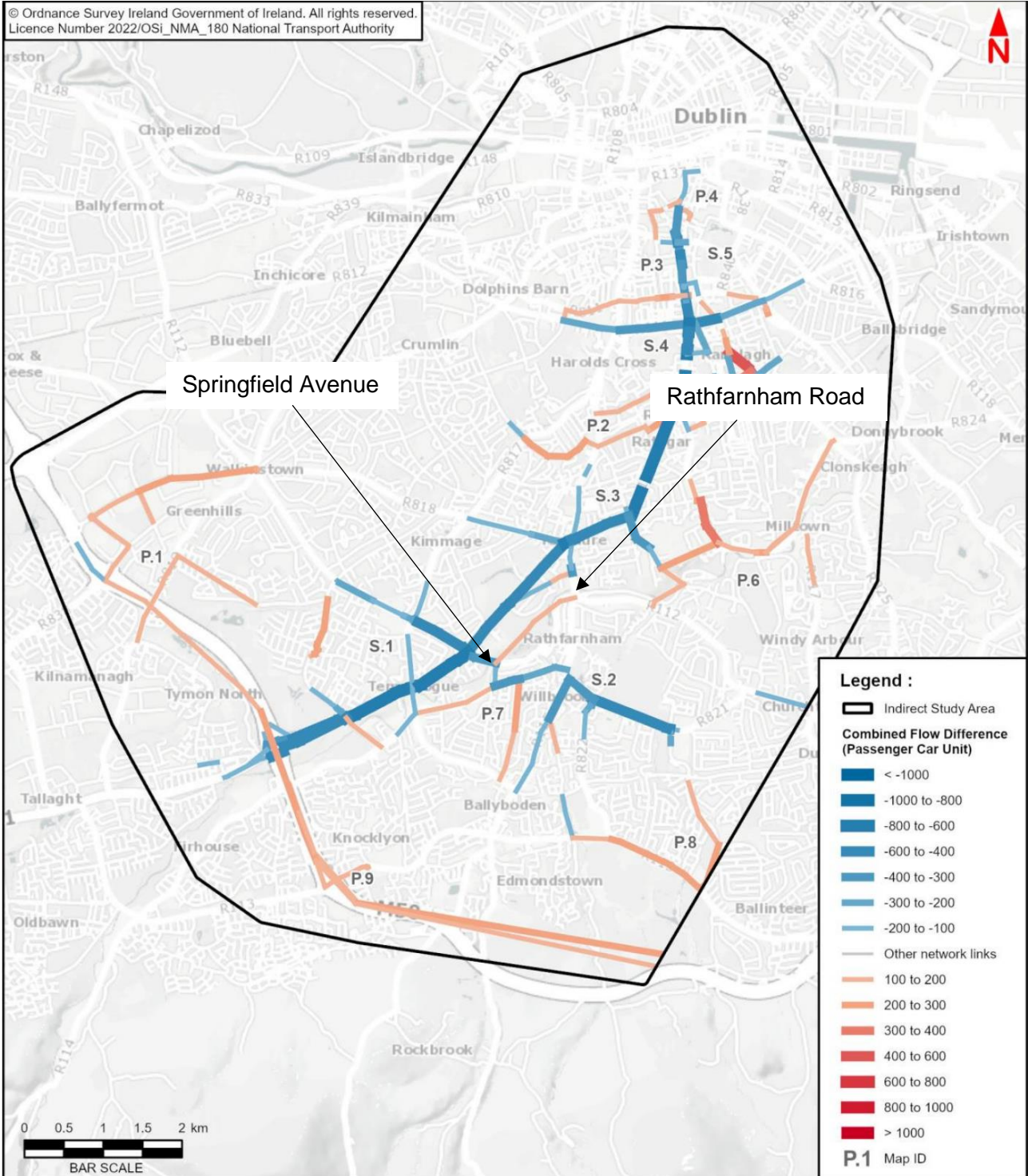


Figure 3.21.8 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

As can be seen in these figures, the traffic modelling undertaken does not identify any material change in traffic volumes along Springfield Avenue and on Rathfarnham Road during the AM peak as a result of the Proposed Scheme i.e. any changes in traffic volumes along Springfield Avenue and Dodder View Road are less than 100 passenger car units per hour. During the PM peak there is a reduction of traffic on Springfield Avenue and Rathfarnham Road and an increase of 120 PCU on Dodder View Road (as presented in Table 6.65).

Further details on the traffic impact in this area are presented in Section 2.3.2 of this report.

iii. Air Quality Impacts as a Result of Increase in Traffic

EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

iv. Vibrations

With respect to operational vibration levels associated with passing buses and other vehicular traffic, section 9.4.4.2 'Operational Vibration Impact Assessment' presents the outcome of the assessment undertaken:

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 2.5 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 is 650 over the 16hr daytime period along the Proposed Scheme are along Camden Street. This value is slightly lower than bus numbers along this road during the Do Minimum scenario. 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 0.016 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.

v. Impact on property value

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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values.

The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: *“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.”* and *“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 on Rathfarnham 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.

vi. Impact to noise levels and Traffic being nearer to property.

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

As noted in figure 9.4 (Opening Year 2028 Traffic Noise Impact Summary) and figure 9.5 (Design Year 2043 Traffic Noise Impact Summary) of Volume 3 of the EIAR, an Imperceptible/Positive noise impact is forecast along Rathfarnham Road adjacent 53 Rathfarnham Road.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”* Table 9.39 lists these roads and Rathfarnham Road is not included, indicating that there are no potential significant noise impacts envisaged along Rathfarnham Road.

As discussed in Section 9.4.4.1.1.4 of Chapter 9, 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 airborne noise 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.

vii. Impact of proposals on Driveway and Parking

The permanent acquisition will result in the loss of up to 0.8m of lands with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The front boundary wall, including gate and entrance pillars will be at least 11.8m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme and that this should not hinder the availability of parking in the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

If the CPO is confirmed by An Bord Pleanála, 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.

viii. Lack of Clarity on Proposed CPO

The submissions raised concerns related to the lack of clarity in relation to the proposed permanent land acquisition.

The proposed permanent acquisition will result in the loss of up to 0.8m at the roadside of the front garden, with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. This equates to an area of 12.2m² to be acquired permanently and an area of 39.6m² to be acquired temporarily.

If the CPO is confirmed by An Bord Pleanála, 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.

3.22 CPO-22 – James J & Catherine Finn – 11 Lissenfield, Rathmines

3.22.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.4.1 of Chapter 4 of Volume 2 of the EIAR Proposed Scheme Description between Castlewood Avenue and Grove Road, a general traffic lane and a cycle track in each direction are proposed, with the provision of a Bus Gate between Richmond Hill and Lissenfield which will restrict general traffic movements during the hours of operation of the Bus Gate (06:00 – 20:00 - 7 days a week). This proposal also allows for some increase to footpath widths through Rathmines and the provision of 2m wide cycle tracks in each direction through the village.

In order to achieve the desired design for the Proposed Scheme, namely the construction of a side road entry treatment, temporary land acquisition is proposed at this property, with a maximum width of land to be temporary acquired of approximately 4.9m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.22.1.

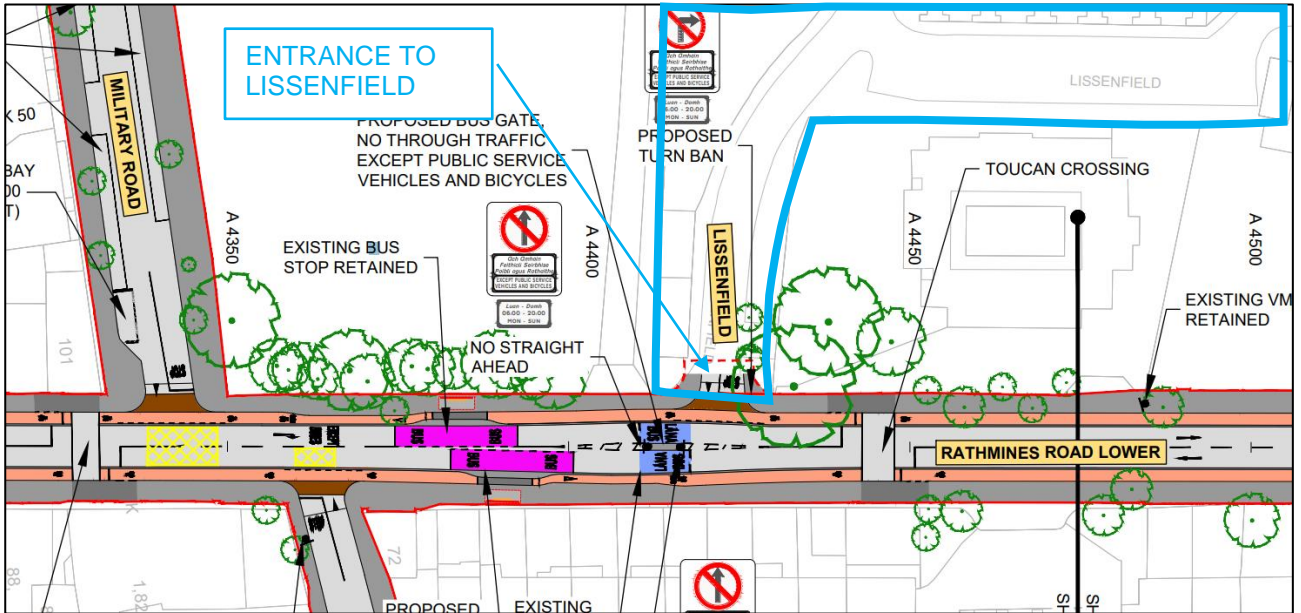


Figure 3.22.1 General Arrangement of Proposed Scheme adjacent to Lissenfield (Sheet 13)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.22.2.

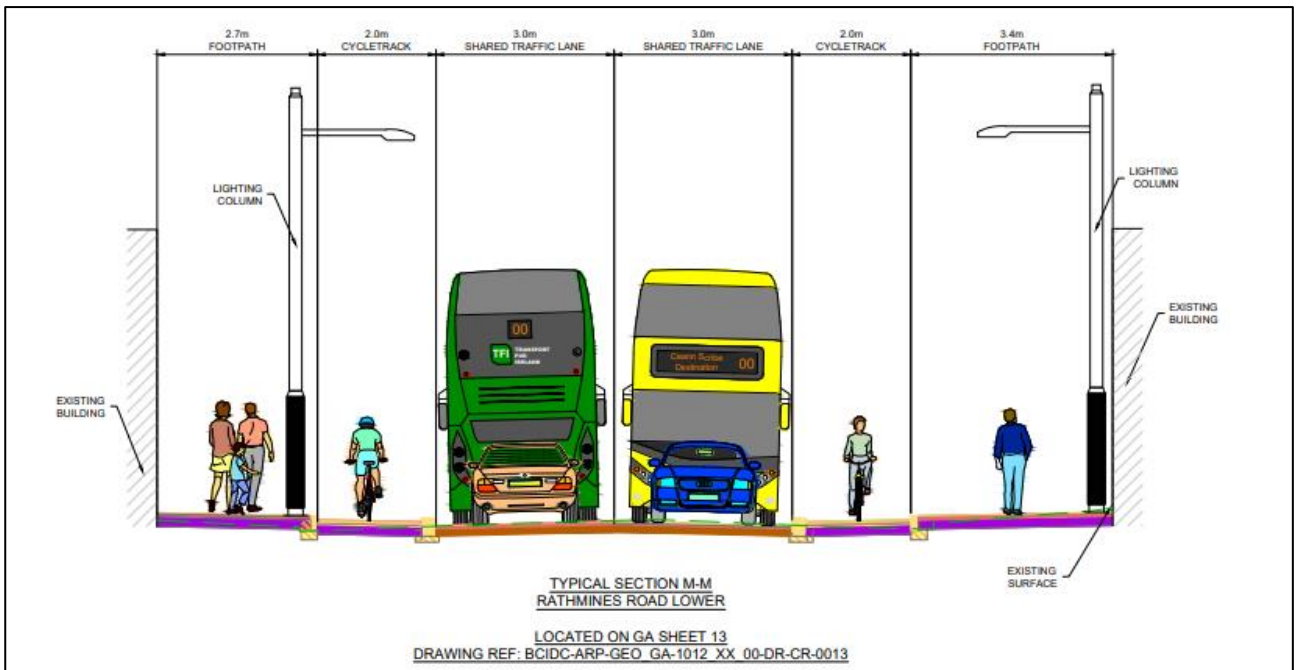


Figure 3.22.2 Typical Cross-Section adjacent to Lissenfield

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at Lissenfield is shown in Figure 3.22.3.

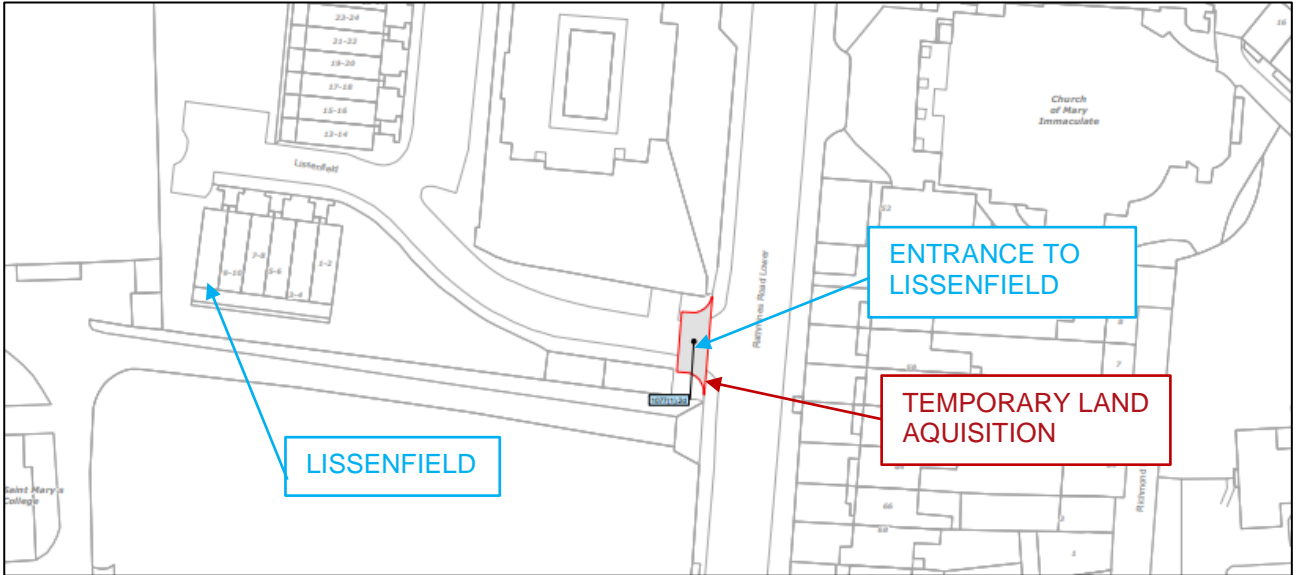


Figure 3.22.3 Extract from CPO Deposit Maps at entrance to Lissenfield

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.22.4.



Figure 3.22.4 Proposed Land Acquisition lines (at entrance to Lissenfield)

The existing property frontage is shown in Figure 3.22.5.



Figure 3.22.5 Existing entrance to Lissenfield (Image source: Google)

3.22.2 Summary of the Points of Objection to the CPO by James. J & Catherine Finn

This submission objected to CPO for the reasons summarised in the following section.

- i. Impact of traffic management on access to Lissenfield

The submission raised concerns around the impact of the proposed bus gate and turning prohibition on access from / to Lissenfield, noting that some residents require access to Rathmines Village by car.

3.22.3 Responses to the Points of Objection

- i. Impact of traffic management on access to Lissenfield

A detailed response to this item is presented in Section 2.5.2.

3.23 CPO-23 – James M Bourke & Ilona De Burgh– 4 The Townhouses, 73-75 Terenure Road East

3.23.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph’s Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph’s Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.1m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.23.1.

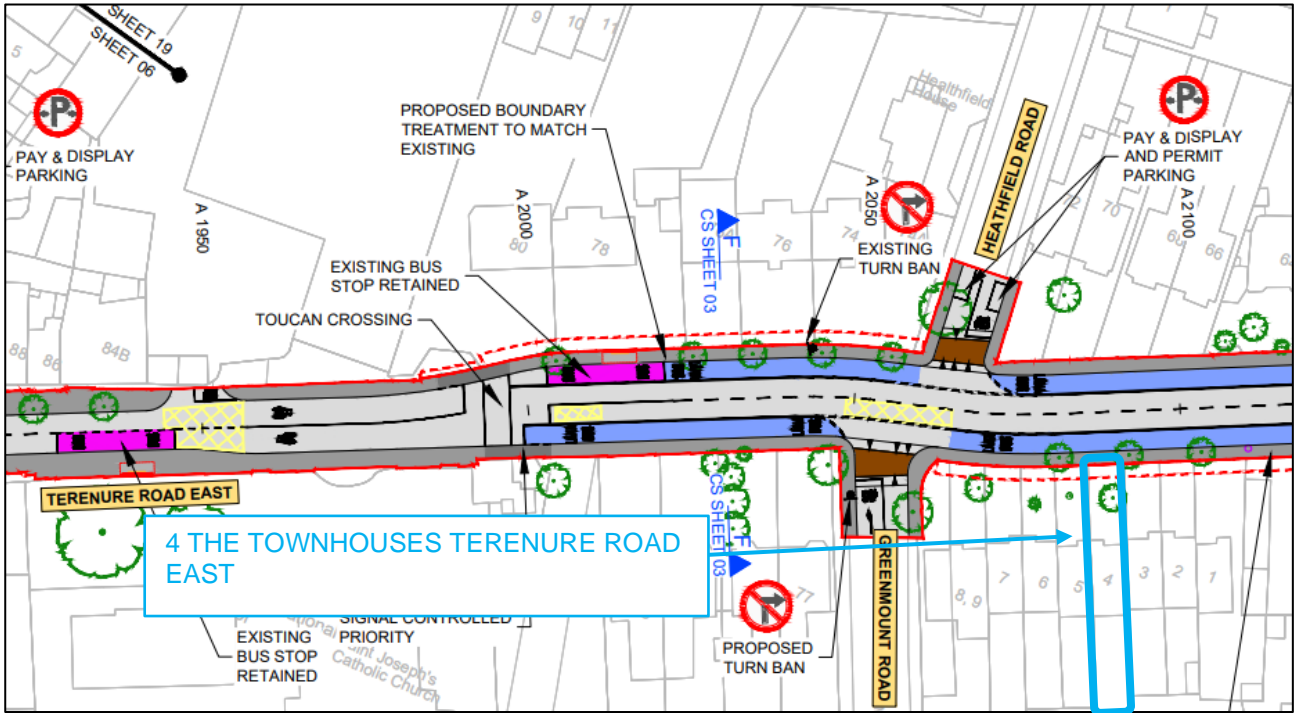


Figure 3.23.1 General Arrangement of Proposed Scheme adjacent to 4 The Townhouses Terenure Road East (Sheet 06)
 The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.23.2.

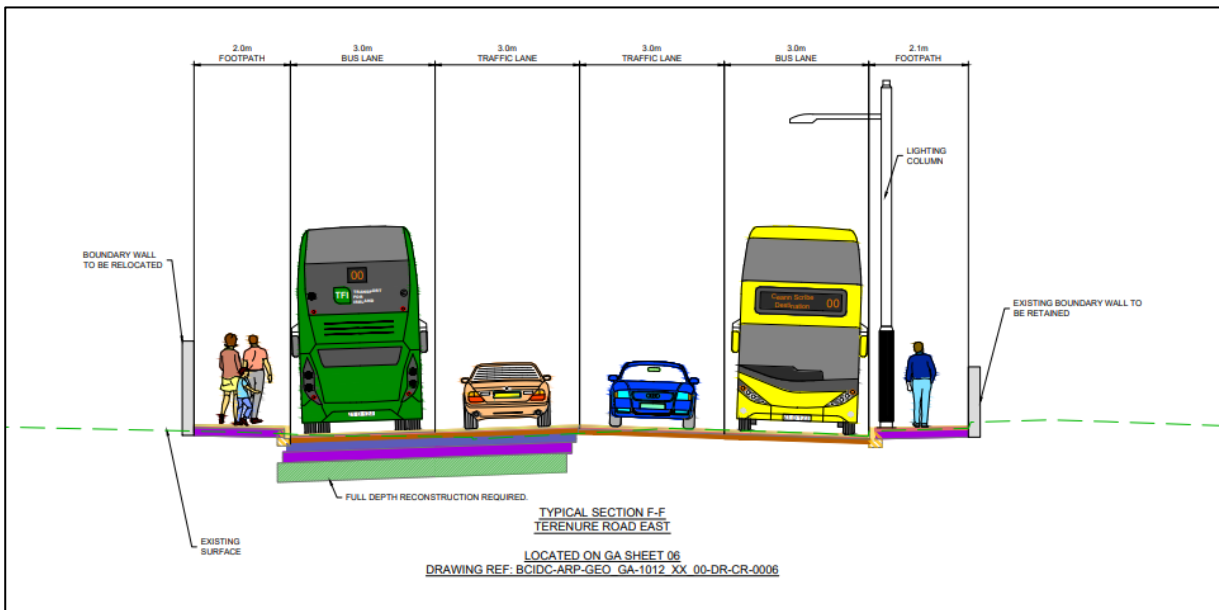


Figure 3.23.2 Typical Cross-Section adjacent to 4 The Townhouses Terenure Road East
 The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 4 The Townhouses Terenure Road East is shown in Figure 3.23.3.

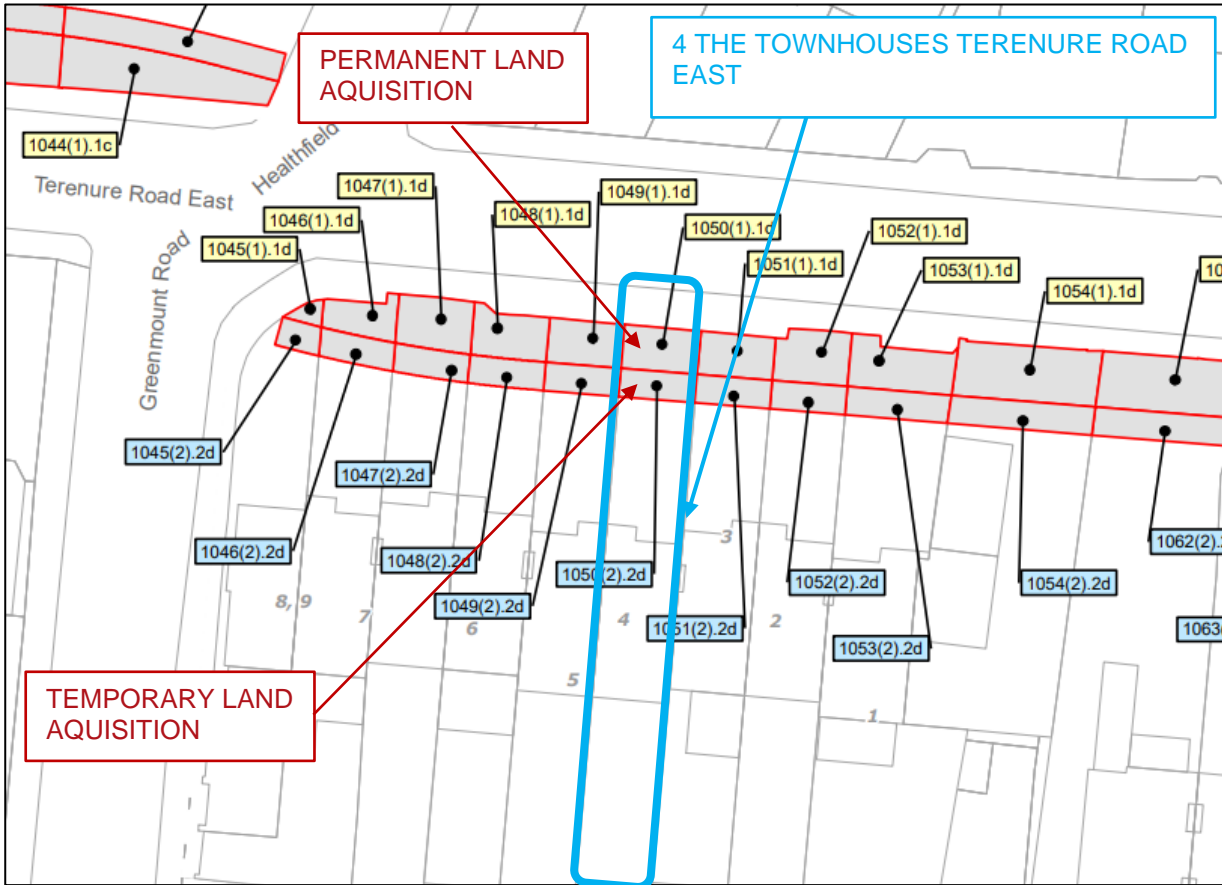


Figure 3.23.3 Extract from CPO Deposit Maps adjacent to 4 The Townhouses Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure .

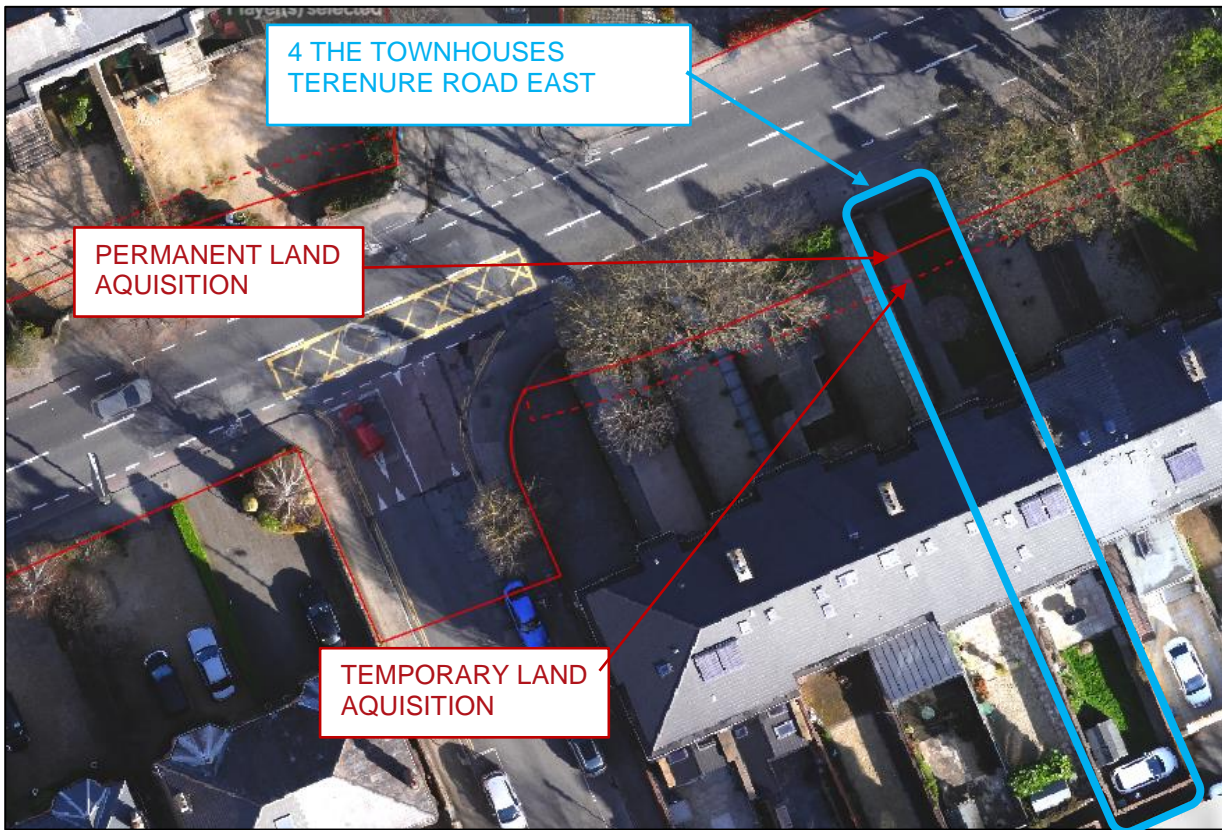


Figure 3.23.4 Proposed Land Acquisition lines adjacent to 4 The Townhouses Terenure Road East

The existing property frontage is shown in Figure 3.23.5.



Figure 3.23.5 Existing frontage of 4 The Townhouses Terenure Road East (Image source: Google)

3.23.2 Summary of the Points of Objection to the CPO by James M Bourke & Ilona De Burgh

This submission objected to CPO for the reasons summarised in the following section.

- i. Existing signal-controlled priority sufficient

The submission states that congestion on Terenure Road East was solved by introducing signal-controlled bus priority in 2022, noting that buses operate efficiently through this area since then.

- ii. Impact to heritage and natural environment

The submission raised concerns about the impact on heritage, natural environment and village character of Terenure Road East, noting that some properties along TRE are protected with original railings and stone boundaries.

- iii. Pollution

The submission raised concerns about the increased pollution associated with the Proposed Scheme.

- iv. Impact on structures

The submission expressed concern about potential damage to their building due to increased proximity of traffic.

3.23.3 Responses to the Points of Objection

- i. Existing bus priority signal on Terenure Road East is adequate.

A detailed response to this item is presented in Section 2.4.2.

- ii. Impact on Heritage and Natural Environment on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

- iii. Pollution

EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality as a result of the Proposed Scheme are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Terenure Road East. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

- iv. Impact on structures

Section 9.4.4.2 of EIAR Chapter 9 Noise and Vibration considers the operational vibration impact of the Proposed Scheme. *Analysis of traffic data for the Proposed Scheme indicates a reduction in overall AADT traffic flows along the core bus corridor. Reference to the monitoring results in Table 9.24 and Table 9.25 of Chapter 9 of the EIAR confirms that vibration levels associated with passing buses and other vehicular traffic at distances of 2.5 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 is 650 over the 16hr daytime period along the Proposed Scheme are along Camden Street. This value is slightly lower than bus numbers along this road during the Do Minimum scenario. 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 0.016 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.

3.24 CPO-24 – Jane Neill– 65 Rathfarnham Road

3.24.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.3m and a maximum width of land to be temporarily acquired of approximately 4.6m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.24.1.

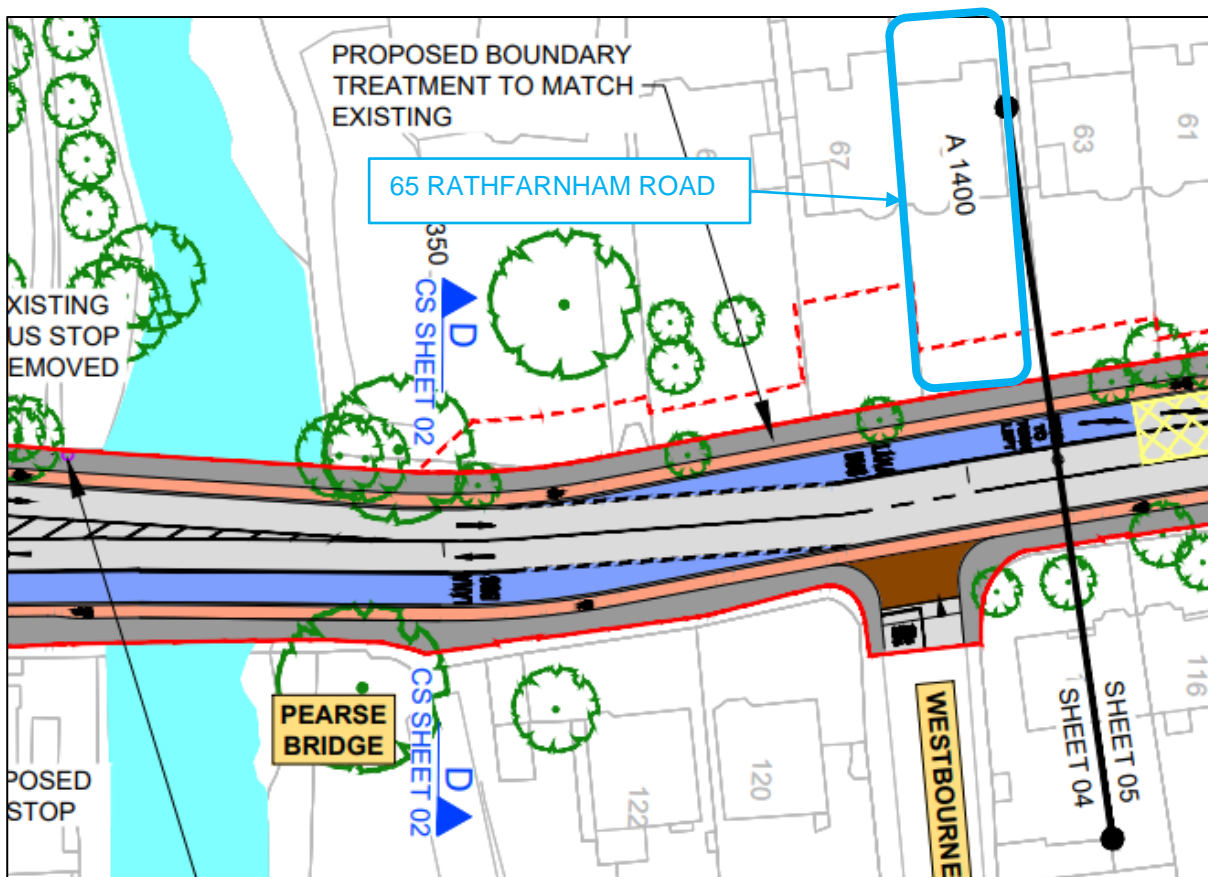


Figure 3.24.1 General Arrangement of Proposed Scheme adjacent to 65 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.24.2.

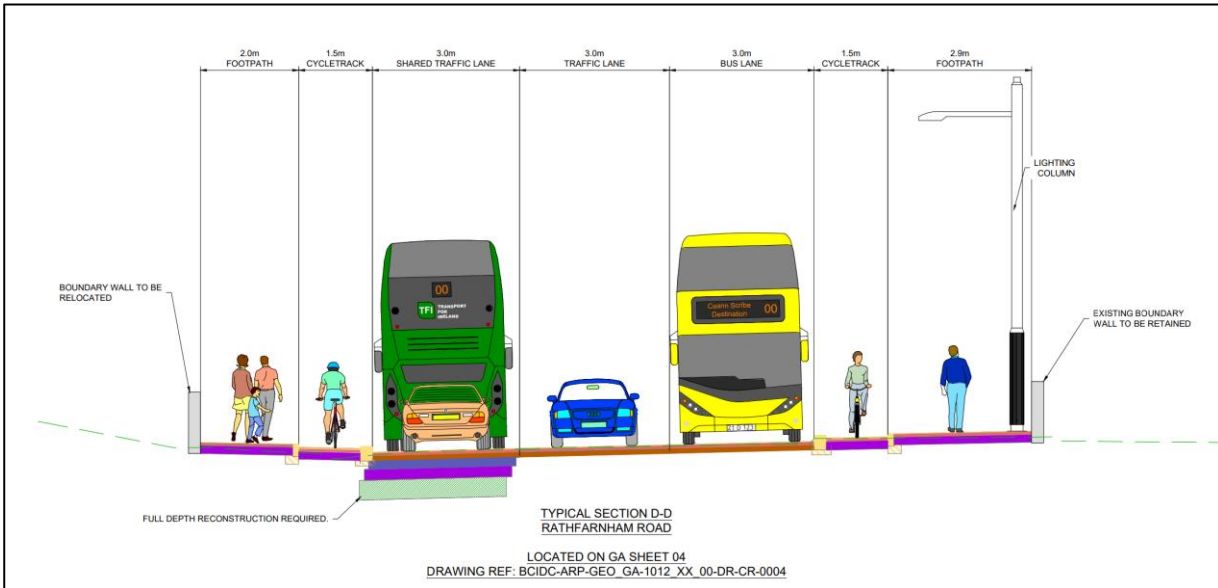


Figure 3.24.2 Typical Cross-Section adjacent to 65 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 65 Rathfarnham Road is shown in Figure 3.24.3.

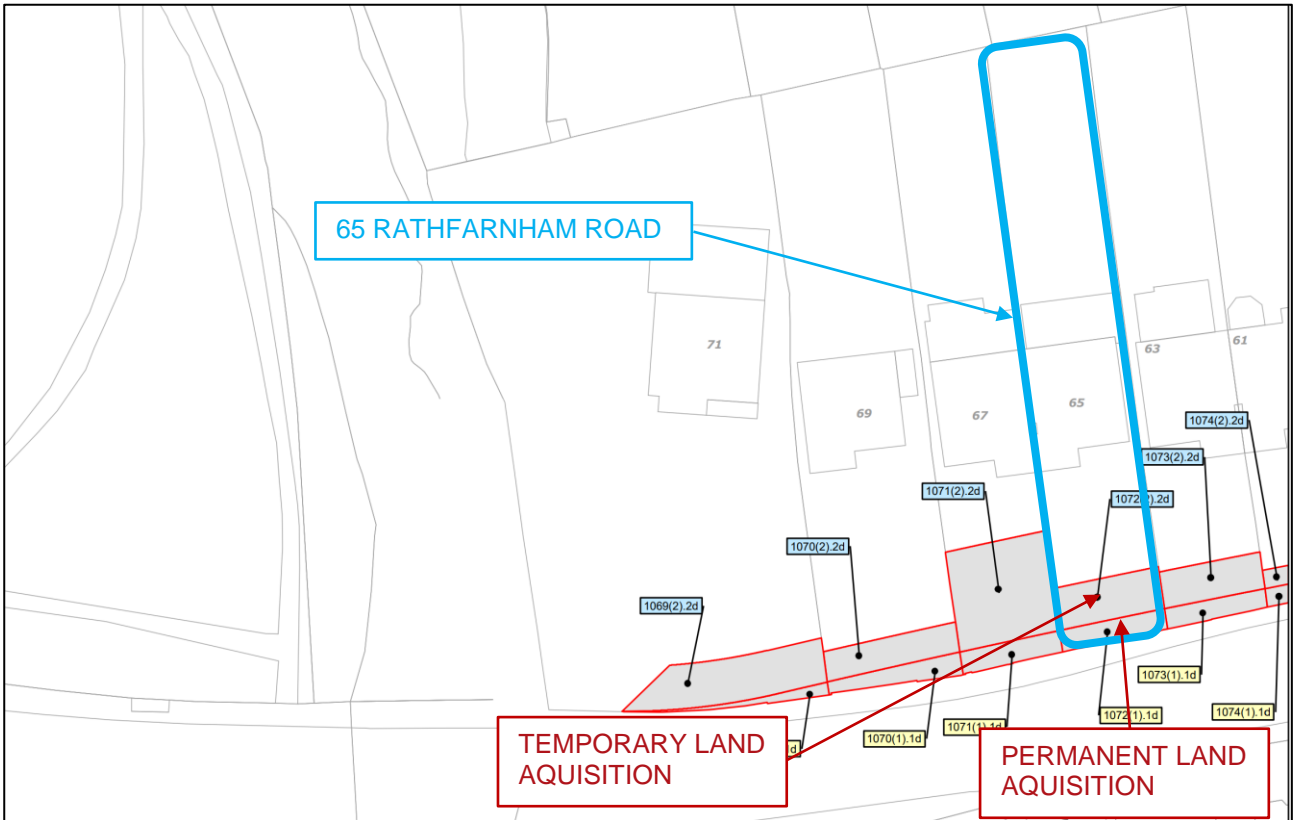


Figure 3.24.3 Extract from CPO Deposit Maps adjacent to 65 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.24.4.



Figure 3.24.4 Proposed Land Acquisition lines adjacent to 65 Rathfarnham Road
The existing property frontage is shown in Figure 3.24.5.



Figure 3.24.5 Existing frontage of 65 Rathfarnham Road (Image source: Google)

3.24.2 Summary of the Points of Objection to the CPO by Jane Neill

This Objection raises the same concerns as CPO-01. Please refer to Section 3.1.3 for responses to these items.

3.25 CPO-25 – Joan Scully– 61 Rathfarnham Road

3.25.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.0m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.25.1.

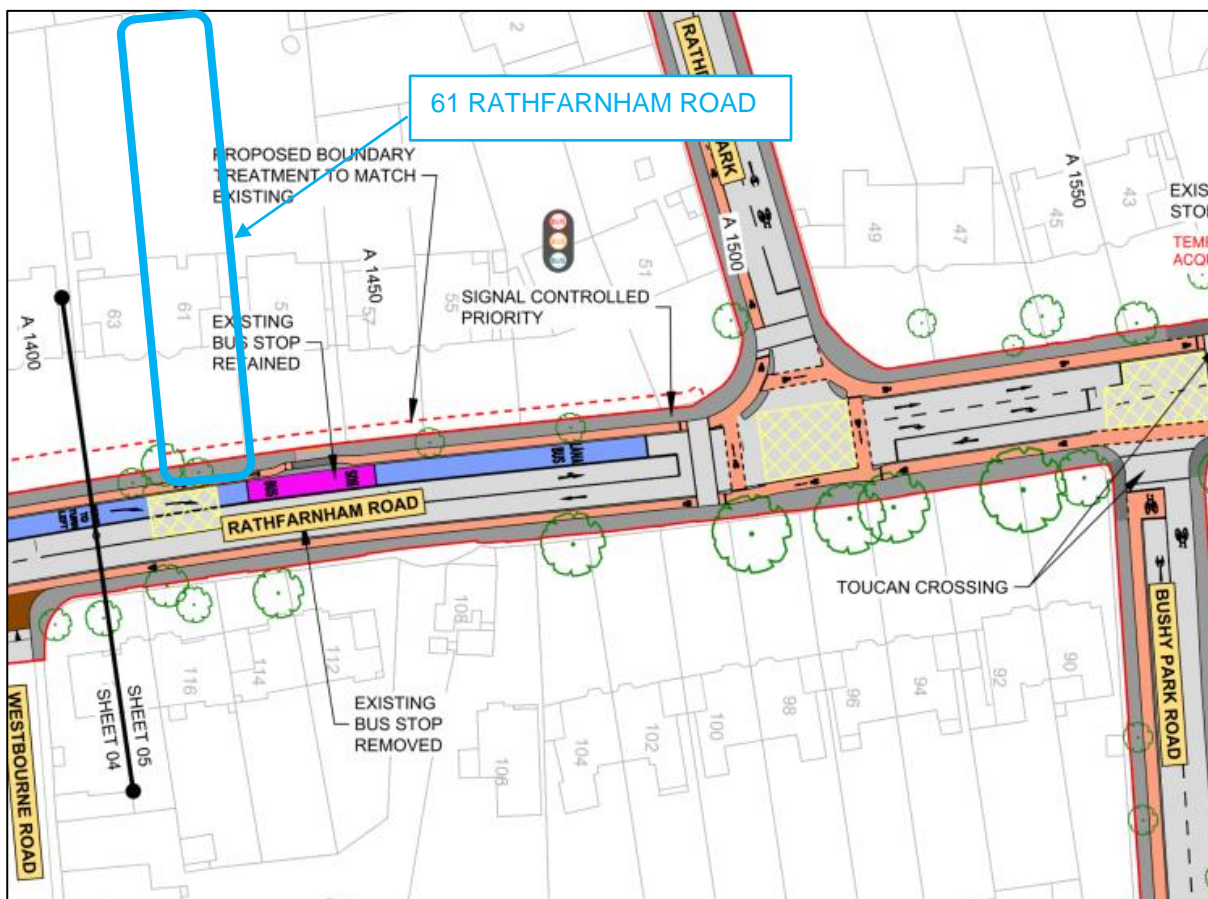


Figure 3.25.1 General Arrangement of Proposed Scheme adjacent to 61 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.25.2.

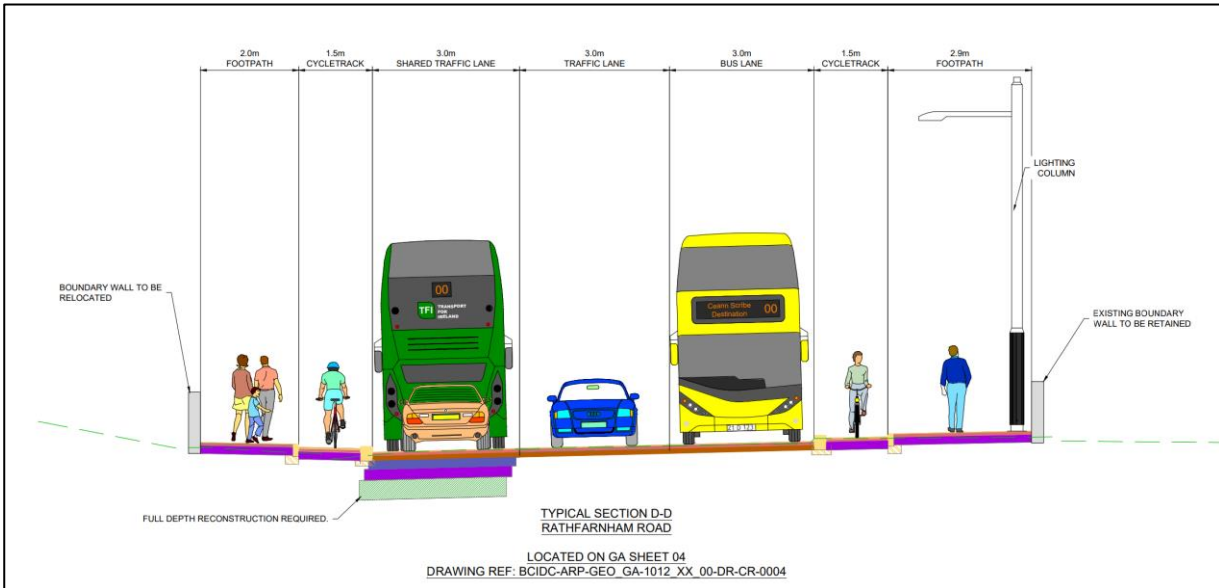


Figure 3.25.2 Typical Cross-Section adjacent to 61 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 61 Rathfarnham Road is shown in Figure 3.25.3.

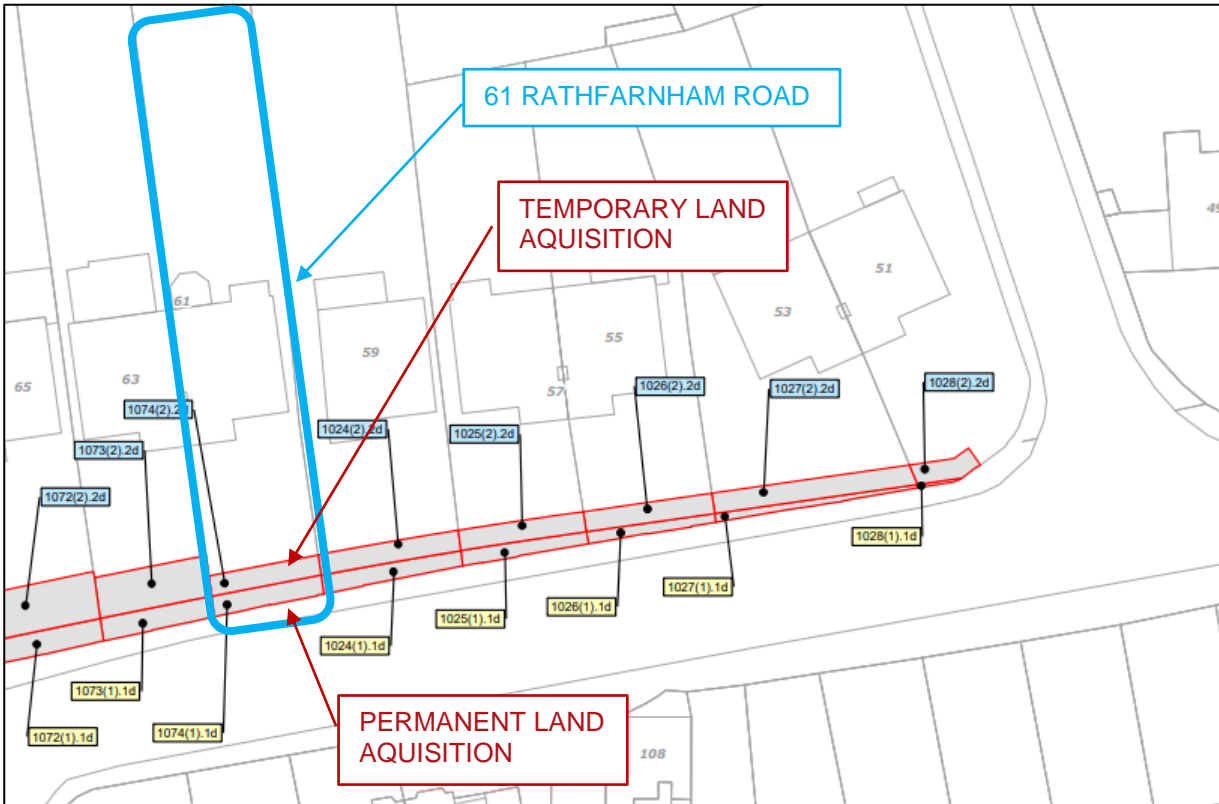


Figure 3.25.3 Extract from CPO Deposit Maps adjacent to 61 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.25.4.



Figure 3.25.4 Proposed Land Acquisition lines adjacent to 61 Rathfarnham Road

The existing property frontage is shown in Figure 3.25.5



Figure 3.25.5 Existing frontage of 61 Rathfarnham Road (Image source: Google)

3.25.2 Summary of the Points of Objection to the CPO by Joan Scully

This submission objected to CPO for the reasons summarised in the following section.

i. Impact of CPO

The submission noted that it is difficult to determine the full impact of the CPO on the property from the CPO and planning documents.

ii. Egressing from driveway

The submission expressed concerns about the safety implications of reversing from the driveway, adding that driveway gradients add to the concern.

iii. Increase in air and noise pollution.

The submission asserts that the proposed widening will result in vehicles travelling closer to the property, contributing to air and noise pollution.

iv. Removal of trees

The tree notes concern with the removal of trees and parts of gardens.

3.25.3 Responses to the Points of Objection

i. Impact of CPO

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3D road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

It is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.18m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);

- Retaining existing footpath gradient at this location;
- Some minor regrading within the property over a distance of 2.0m which would result in a gradient no greater than the maximum existing gradient within the property. It is noted that this is incorporated into the temporary land acquisition presented in the Deposit Maps.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate the no increase to the gradients within these properties.

ii. Egress from Driveway

The permanent acquisition will result in the loss of 2.0m of lands with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The front boundary wall, including gate and entrance pillars will be at least 15m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme and that this should not hinder the availability of parking in the driveway nor the ability to turn within the driveway.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.



iii. Increase in Air and Noise Pollution

In relation to noise pollution, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.” Table 9.39 lists these roads and Rathfarnham Road is not identified, indicating that there are no potential significant noise impacts envisaged along Rathfarnham Road.

In relation to air pollution, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme’s operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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.*

In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

Furthermore, it is noted that at this location, the edge of the bus lane would not be moving any closer to this property as a result of the Proposed Scheme.

iv. Removal of Trees

In EIAR Chapter 17 Landscape (Townscape) and Visual, Section 17.1 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. In relation to the Rathfarnham Road, the following sections of Chapter 17 are relevant and demonstrate that a detailed and comprehensive assessment has been undertaken of the impacts associated with the Proposed Scheme.

Section 17.4.3 reports the assessment of the Construction Phase and Section 17.4.3.1.2 provides the impact on Townscape and Streetscape Character. It states that: *“The construction works will not alter the overall townscape character along this section of the Proposed Scheme, however, the works will detract from the streetscape character and amenity. The magnitude of change in the baseline environment is very high. The townscape / streetscape impact of the Construction Phase is assessed to be Negative, Very Significant and Temporary / Short-Term.”*

Landscaping 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 show the proposed landscaping along the Proposed Scheme. As can be seen in Figure 3.25.6, there are 7 No. Prunus Avium ‘PLENA’ Semi-Mature wild Cherry Trees proposed along the section of Rathfarnham Road between Nos 51-71.

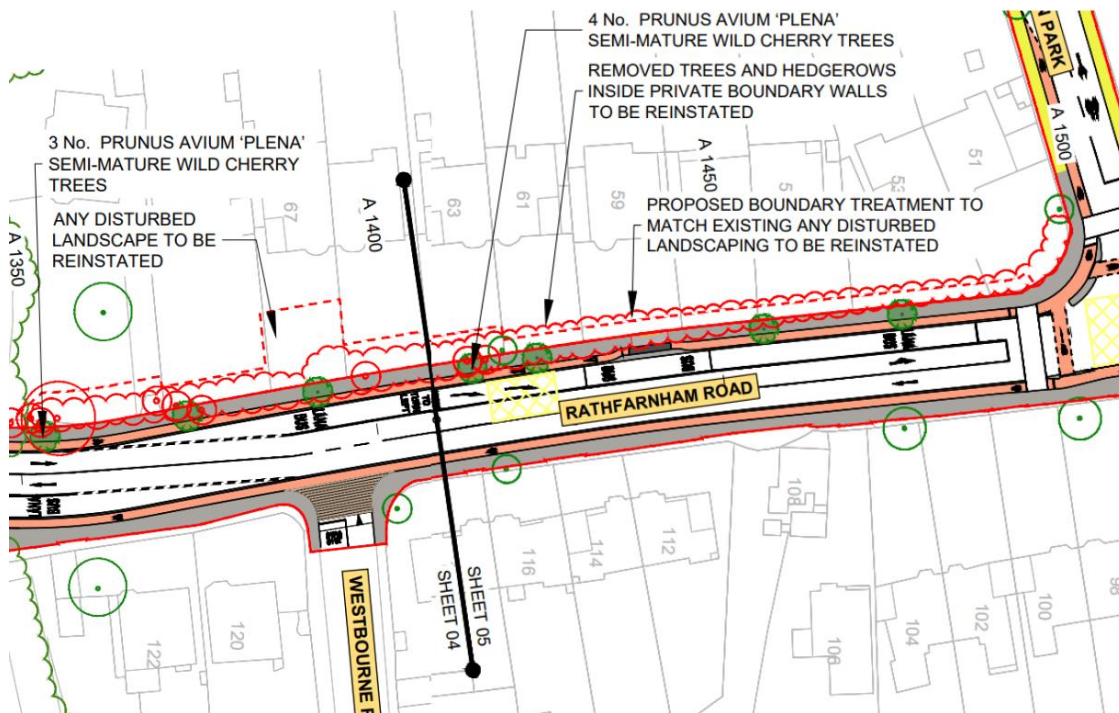


Figure 3.25.6 Extract from Landscaping General Arrangement Drawings (Combined Sheet 4 and 5)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

For the Nutgrove to Terenure Road North section of the Proposed Scheme Section 17.4.4 reports the assessment of the operational phase and Section 17.4.4.1.2 considers the impact on Townscape and Streetscape character in which it states *“The sensitivity of this section is high. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used. There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is very high.”*

In summary for the operational phase Section 17.4.4.1.2 states that *“The townscape / streetscape impact of the Operational Phase is assessed to be Negative, Very Significant and Short-Term becoming Neutral, Moderate and Long-Term.”*

A detailed response to the removal of trees generally across the scheme is presented in Section 2.1.1.

3.26 CPO-26 – John & Marian Deaton – 44 Richmond Street South

3.26.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.4.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Richmond Street South it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor.

At La Touche bridge it is proposed to provide an inbound bus lane and an outbound general traffic lane along with a high-quality segregated cycling facility, to facilitate connectivity with the Grand Canal cycleway. Inbound general traffic will be required to turn left onto Grove Road at this point. Outbound bus priority across the bridge will be provided through signal-controlled priority from a proposed traffic signal on Richmond Street South approximately 70m north of the bridge. On Richmond Street South, it is proposed to maintain the outbound traffic lane with a bus lane and cycle tracks in both directions. Immediately south of the junction of Harrington Street/Harcourt Road/Richmond Street South, the outbound bus lane will be curtailed due to space constraints. It is proposed to restrict movements into and out of Lennox Street to pedestrians and cyclists only through the introduction of planted buildouts. It is also proposed to upgrade the junction of Richmond Street South and Harrington Street through the provision of kerb protection for cyclists.

In order to accommodate this cross section, permanent land acquisition will be required at 44 Richmond Street South along the western side, with a maximum width of land to be permanently acquired of approximately 1.5m from the property's private landing. Temporary Acquisition of the basement area beneath the footpath is also required.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.26.1.

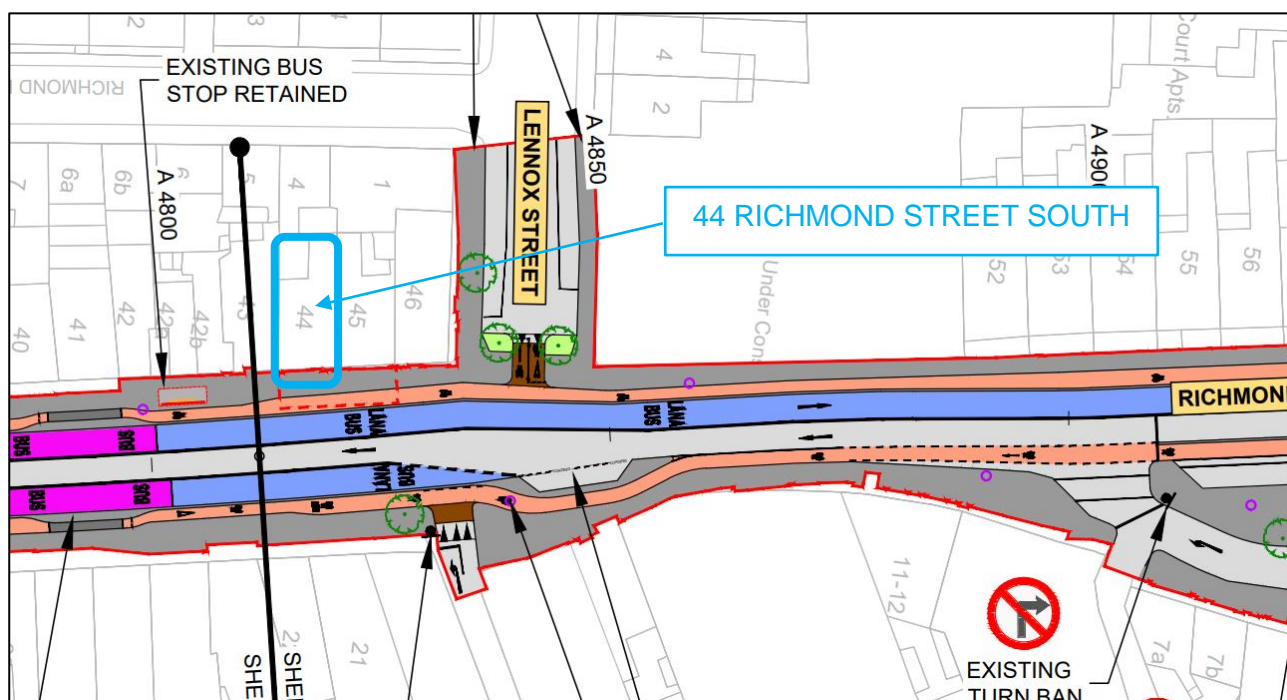


Figure 3.26.1 General Arrangement of Proposed Scheme adjacent to 44 Richmond Street South (Sheet 15)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.26.2.

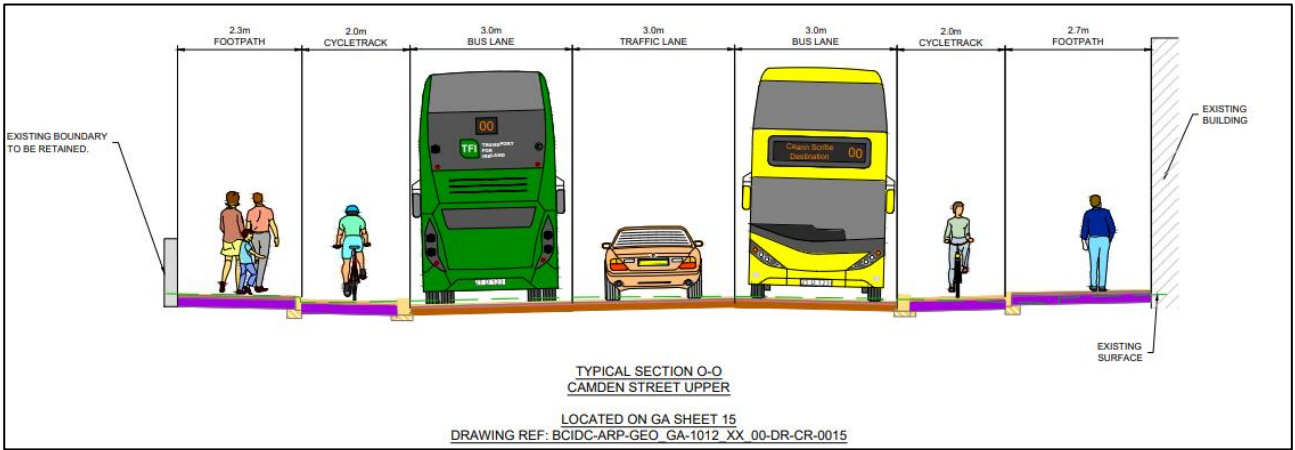


Figure 3.26.2 Typical Cross-Section adjacent to 44 Richmond Street South

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 44 Richmond Street South is shown in Figure 3.26.3.

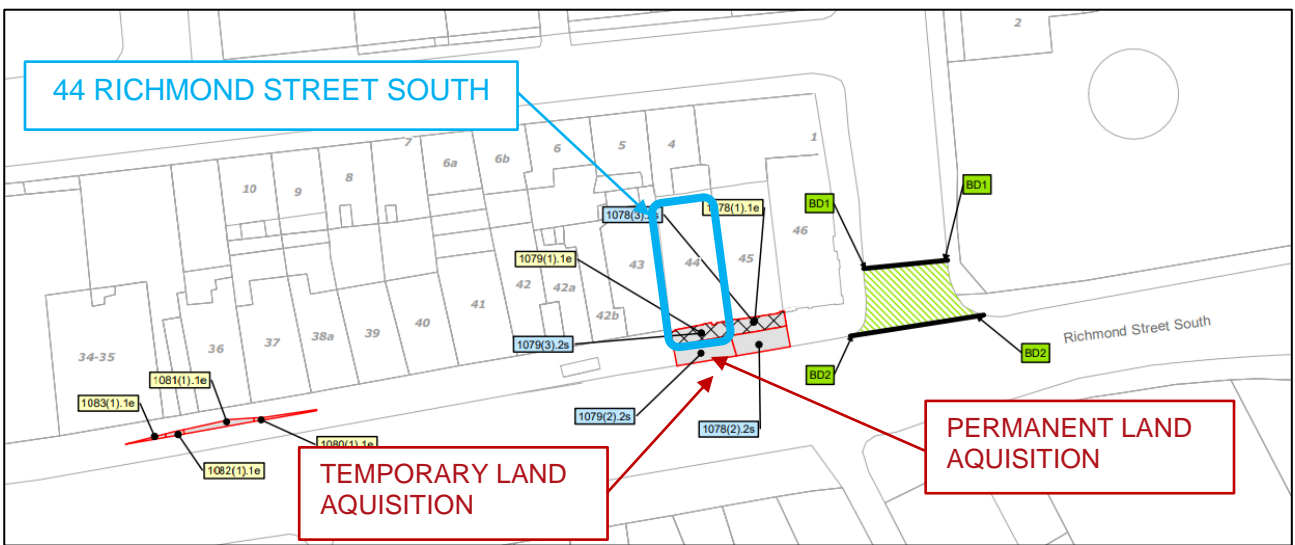


Figure 3.26.3 Extract from CPO Deposit Maps adjacent to 44 Richmond Street South

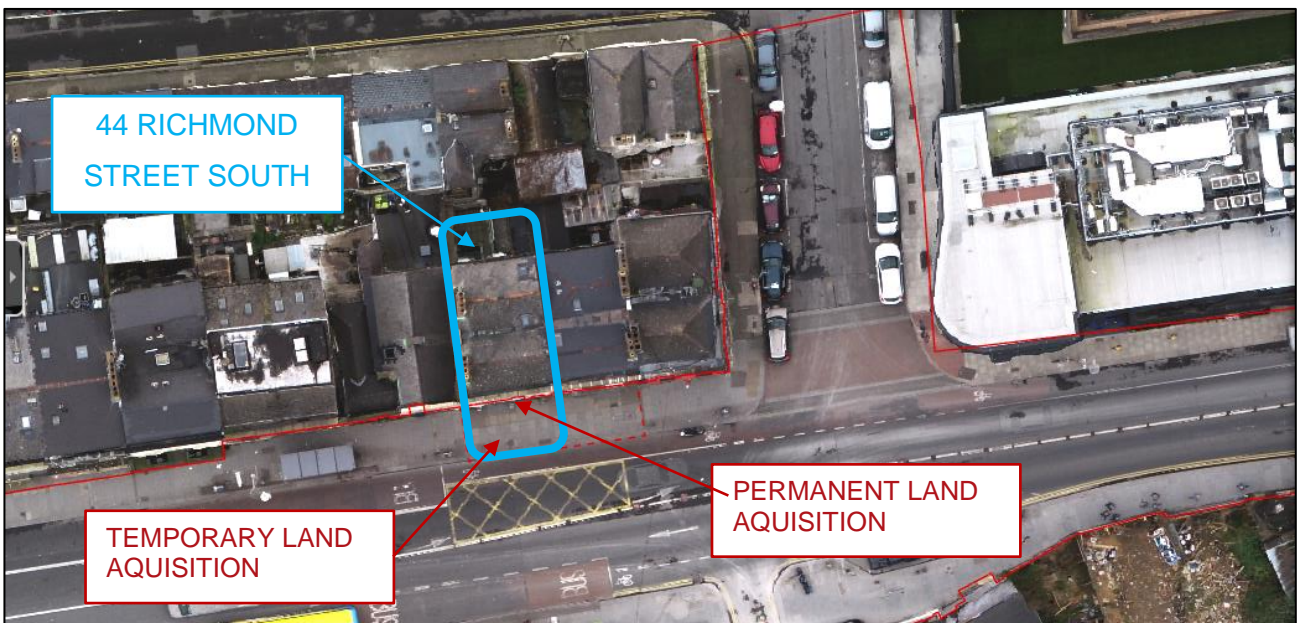


Figure 3.26.4 Proposed Land Acquisition lines adjacent to 44 Richmond Street South

The existing property frontage is shown in Figure 3.26.5.



Figure 3.26.5 Existing view of 44 Richmond Street South (Image source: Google)

3.26.2 Summary of the Points of Objection to the CPO by John & Marian Deaton

This submission objected to CPO for the reasons summarised in the following section.

i. Retention of light well

The submission requests that the lighting grill, which is located directly outside the store window of 44 South Richmond Street, is retained as it provides natural light to the canteen underneath. In addition, the submission expressed concerns about the construction quality related to the works outside the premises. Emphasising that the newly constructed landing should not allow water to seep underneath.

ii. Cast iron coalholes.

The submission indicates the presence of two cast iron lids outside the premises, historically serving as coalholes. Although these coalholes have remained unused for many years, the submission suggests the possibility of utilising them in the future to facilitate deliveries of wood pellets for a wood pellet boiler—an alternative deemed suitable to the currently expensive electric night storage heating system in place. The submission asserts the need to retain the coalholes for potential future deliveries.

iii. Deliveries

The submission queried the cycle track protection arrangement and how deliveries will be made to the premises, adding that if on-street deliveries are prohibited it will render the premises unserviceable and unusable for retail purposes.

iv. Footpath width

The submission states that the reduction of the footpath width at 44 South Richmond Street of 2.3m and 2.0m at the Lennox Street corner is inadequate to cater for pedestrian traffic which is typical through that section. It also adds that the proposed footpath width will inhibit people from stopping and looking at the shop display for Mexican Shop Limited and therefore will impact on trade.

The submission also states that people tend to congregate outside the Fish and Chip shop, this accompanied with heavy footfall and reduced footpath width will result in a dangerous environment for pedestrians and cyclists.

v. Part M of the Building Regulations

The submission states that the Part M of the Building Regulations requires that all new developments and modifications are made accessible to all members of the public. Therefore, the submission requests that the step up to the entrance is removed by raising the back of footpath to entrance level.

vi. Contravention of Article 1 of the First Protocol to the European Convention on Human Rights

The submission suggests that the layout outside 44 South Richmond Street constitutes an unjust attack on the property rights of the owners. Referring to the proposed layout of the cycle track outside the premises. It also states that Article 1 of the Protocol 1 of the ECHR (A1P1) requires that the NTA must demonstrate that the proposals, with regard to CPO, must demonstrate that there is a public benefit associated with the proposed works.

vii. Cycle track layout

The submission has requested a modification to the cycle track arrangement by relocating it eastwards, moving it away from the premises and ensuring it lies outside the extent of the coal holes.

3.26.3 Responses to the Points of Objection

i. Retention of light well

As noted earlier, it is proposed to temporarily acquire the cellar at this property and the light well is considered to form part of the cellar. Any land temporarily acquired will only be utilised for the purposes of undertaking boundary works or accommodation works related to the land in question. If the CPO is confirmed by An Bord Pleanála, reinstatement of property 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. In the case of this property, if the CPO is confirmed by An Bord Pleanála the retention of the light well can be discussed as part of the detailed accommodation works plans to be prepared in consultation with the landowner.

ii. Cast Iron coalholes.

Section 16.5.1.7.4 of Chapter 16 of the EIAR Volume 2 Architectural Heritage describes the impact of construction, and mitigation associated with the coal holes outside 44 Richmond Street:

*Coal holes at 44 & 45 Richmond Street (CBC1012BTH425, CBC1012BTH427, CBC1012BTH428) will be directly impacted by a proposed land take necessitating their removal and relocation. The removal of the granite surrounds and covers will carry the potential risk of loss or damage. The proposal also removed the connection with the cellars beneath. The pre-mitigation Construction Phase impact is Direct, Negative, Significant and Temporary. Mitigation will be to record the coal holes in position prior to the works, labelling the affected fabric prior to their removal to safe storage, and the reinstatement of the coal hole surrounds and covers on the new line. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee the labelling, careful removal, storage and reinstatement of the affected kerbs. Works to coal holes 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 mitigation reduces the magnitude of impact from High to medium. The proposed mitigation will retain the relationship of the coal holes to the associated buildings and streetscape post mitigation but the connection to the associated cellars will be lost. The predicted residual Construction Phase impact is **Direct, Negative, Moderate and Temporary**.*

As noted above, the proposal will sever the connection between the coal holes at the current locations and the cellar which would hinder the future use of the existing coal holes for delivering wood pellets into the basement. However, similar to light well, the coal holes form part of the existing cellar. If the CPO is confirmed by An Bord Pleanála, reinstatement of property 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. In the case of this property, if the CPO is confirmed by An Bord Pleanála the possible provision of replacement coal holes to the cellar can be discussed as part of the detailed accommodation works plans to be prepared in consultation with the landowner.

iii. Deliveries

Section 6.4.6.1.5.4 of Chapter 6 in Volume 2 of the EIAR assesses the impact of changes to parking and loading facilities on Richmond Street South as a result of the Proposed Scheme. The overall changes in this area are presented in Table 6.41, an extract of which is presented below.

Richmond Street South (between Lennox Street and Harcourt Road and Richmond Street)	Pay & display: commercial	8	8	0
	Loading Bays	3 loading bays (6 spaces)	3 loading bays (6 spaces)	0

Figure 3.26.6 Extract from Table 6.41 of the EIAR Chapter 6

In terms of loading facilities, it is proposed to retain the 3 loading bays (6 spaces) on Richmond Street South, between Lennox Street and Harcourt Road and Richmond Street. As depicted in the extract from the General Arrangement Drawing in Figure 3.26.6 below, it is proposed to retain the loading bay directly opposite 44 Richmond Street South. It is not expected that the Proposed Scheme will have an impact on the delivery activities to the premises.

The cycle tracks will have vertical and horizontal protection with a raised kerb above the road. In addressing the concern raised in the submission, stating that prohibiting on-street deliveries would make the premises unserviceable and unsuitable for retail purposes, it is noted that the current situation outside the premises includes a 24-hour mandatory cycle lane. This lane prohibits vehicles, including delivery vehicles, from stopping on the cycle lanes at any time. The Proposed Scheme intends to retain this prohibition.

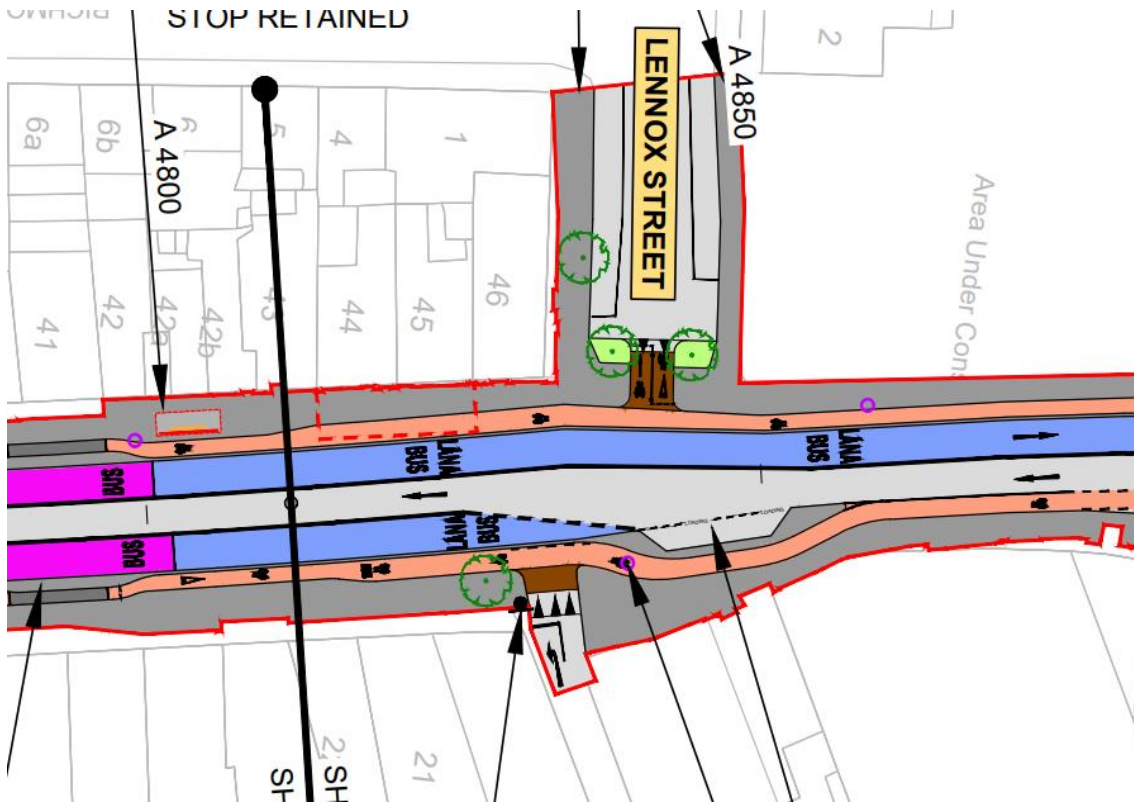


Figure 3.26.7 Extract from General Arrangement Drawings at Richmond Street (Sheet 15 of 42)

iv. Footpath width

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath. This sets the desirable footpath width of 2.0m for footpaths, and absolute minimum footpath width of 1.8m. The proposed footpath width between the 44 Richmond Street South and the Lennox Street Junction ranges between 1.9m and 2.8m.

The proposed width is therefore above the minimum requirements outlined in the BusConnects PDGB. It is noted that the footpath width at this location represents a localised pinch point with widths increasing either side of this.

v. Part M of the Building Regulations

The Proposed Scheme will generally retain existing footpath gradients through this area and as such it is not proposed to remove the step that currently exists at the threshold to the building.

vi. Contravention of Article 1 of the First Protocol to the European Convention on Human Rights

Article 1 of the First Protocol to the European Convention on Human Rights states that:

Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

There has been no contravention of Article 1 of the First Protocol which itself qualifies the right to peaceful enjoyment of possessions by reference to the concept of public or general interest. This is also in keeping with Article 40.3.2 of the Constitution which recognises that the exercise of property rights ought to be regulated by the principles of social justice and that the State may delimit the exercise of property rights with a view to reconciling their exercise with the exigencies of the common good.

The Proposed Scheme is being pursued cognisant 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 including that the impact on an individual's right to private property occasioned by a compulsory acquisition must be justified or necessitated by the exigencies of the common good, and that the impairment of an individual's rights must not exceed that which is necessary to attain the legitimate object sought to be pursued i.e. it must be proportionate to the ends sought to be achieved.

In this regard, all of the lands included in the Templeogue/Rathfarnham to City Centre Core Bus Corridor Compulsory Purchase Order 2023 are necessary and required for the construction and/or operation of the Proposed Scheme (being for the provision of public transport infrastructure) and to meet the objectives of the Proposed Scheme which are as detailed in section 1.2 of Chapter 1 of the EIAR as follows:-

- *“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.”*

It is therefore clear that the Proposed Scheme is in accordance with the concept of public or general interest and is according with 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. Section 2.1 of Chapter 2 of the EIAR, sets out that the Proposed Scheme aims to meet growth demand by:

“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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.”

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.

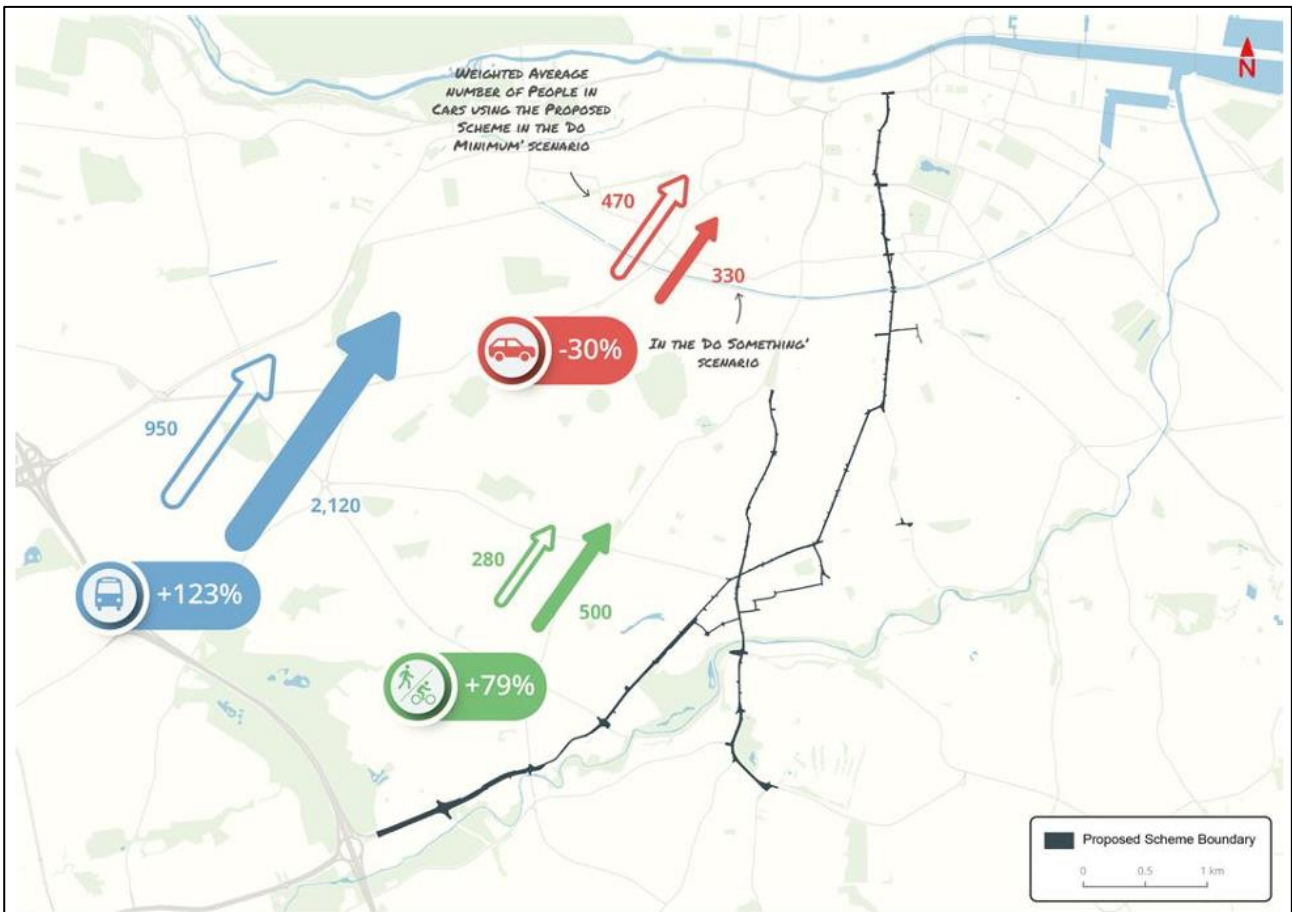


Image 2.12 People Movement by Mode during 2028 AM Peak Hour

In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.

The significant benefits of the scheme are elaborated upon throughout the EIAR with a summary of the key benefits presented in Section 2.1.1 of this response. 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.

Consideration of Alternatives

Article 5(1)(d) of Directive 2011/92/EU as amended by Directive 2014/52/EU (“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’.

Chapter 3 of EIAR Volume 2 provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme.

1. **Feasibility and Options Reports**, which were associated with the Proposed Scheme (Rathfarnham to City Centre Core Bus Corridor (CBC) Feasibility Study and Options Assessment Report and Terenure to Tallaght CBC Feasibility Study and Options Assessment Report), were prepared in 2017 and set out the initial route options and concluded with the identification of the Emerging Preferred Route;
2. A first round of non-statutory **Public Consultation** was undertaken on the Emerging Preferred Route from 23 January 2019 to 30 April 2019;
3. Development of **Draft Preferred Route Option** (April 2019 to March 2020). Informed by feedback from the first round of public consultation, stakeholder 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. Further development of an updated **Draft Preferred Route Option** was undertaken subsequent to the second round of public consultation, which took account of submissions received, continuing stakeholder engagement and additional design information;
6. 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

- Finalisation of the **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.

Section 3.3.2.2.3 of Chapter 3 outlines the route option assessment for Section 3: Charleville Road to Dame Street:

Following the Stage 1 sifting process, two viable route options for Section 3 were taken forward for assessment and further refinement:

Option CC1- A route option via Richmond Street, Camden Street and Wexford Street; and

Option CC2 - A route option via Richmond Street, South Circular Road, Clanbrassil Street and New Street South.



Figure 3.26.8 Section 3 Route Options extracted from ‘Rathfarnham to City Core Bus Corridor CBC Feasibility Study and Options Assessment Report’

An MCA has been undertaken of the principal route options along this section of the scheme in order to determine the most appropriate scheme for this section of the Proposed Scheme. These options are briefly summarised below.

- Route Option CC1 would include the provision of segregated bus facilities along Richmond St/Camden St/Wexford St between La Touche Bridge/Richmond Street South and Wexford Street/Kevin Street Lower junction (with the exception of a 75m section of Richmond Street and a 60m section of Wexford Street). Cyclists would be catered for via a parallel cycle route along Martin Street/Heytesbury Street/Bride Street; and

- *Route Option CC2 would include the provision of segregated bus facilities along Richmond Street/South Circular Road/Clanbrassil Street/Patrick Street between La Touche Bridge/Richmond Street South and New Street South/Kevin Street Upper junction (with the exception of a 75m section of Richmond Street). Cyclists would be catered for via a parallel cycle route along Grove Road (existing cycle facilities)/Longwood Avenue/Emorville Avenue and would reconnect with the CBC route at Lombard Street West.*

Option CC1 was identified as having moderate benefits over other options in relation to Capital Cost, Transport Quality and Reliability, Cycle Network Integration, Key Trip Attractors, Road Safety, Pedestrians Safety, Flora and Fauna and Landscape and Visual. Option CC1 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Section 4.5.2.1 of the EIAR describes the general overview of the Proposed Scheme at Section 4: *Charleville Road to Dame Street*. At the section adjacent to 44 Richmond Street South it is proposed to maintain the outbound traffic lane with a bus lane and cycle tracks in both directions. Immediately south of the junction of Harrington Street/Harcourt Road/Richmond Street South, the outbound bus lane will be curtailed due to space constraints.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

At the specific area outside 44 Richmond Street South, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath, cycle tracks, bus lane and carriageway. The desirable cycle track width is defined as 2.0m in the PDGB, and as such, this width was provided along the Proposed Scheme where feasible.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

vii. Cycle track layout

As detailed in Chapter 3 of the EIAR, the Proposed Scheme has evolved through a comprehensive options assessment and design iterations with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. The proposed cross-section was developed to best achieve the project's objectives, and the associated land acquisition is deemed necessary to facilitate the implementation of this cross-section.

The suggested alternative in this area would be to retain the existing kerb on the western side of Richmond Road South outside no. 44 Richmond Street South and either shift the proposed cross-section lanes westwards or eliminate the proposed cycle track and/or bus lane. To shift the cross-section lanes west would result in either the removal of the loading bay on the western side of the road, or a removal in the length of outbound bus lane. It would also impact on private landings on this side of the road. In term of the bus lane length, this is currently only 60m in length and as this is necessary for a bus priority signal further to the south, it is important that the current proposed length is retained to ensure bus priority is maintained. Equally, the retention of the loading bay at this location is important as it is the only loading bay in the area and serves numerous businesses in the vicinity.

It is an objective of the Proposed Scheme to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable, and it is proposed on Richmond Street South to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor to achieve this objective in addition to the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements.

On balance, it was therefore determined that the scheme as proposed represents the optimum arrangement in this area to achieve the scheme objectives.

3.27 CPO-27 – Joseph Phelan – 78 Terenure Road East

3.27.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both sides of Terenure Road East.

To accommodate this cross section, land acquisition is proposed on the northern and southern side of the Terenure Road East between Saint Joseph's Church and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 78 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 3.7m and temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.27.1.

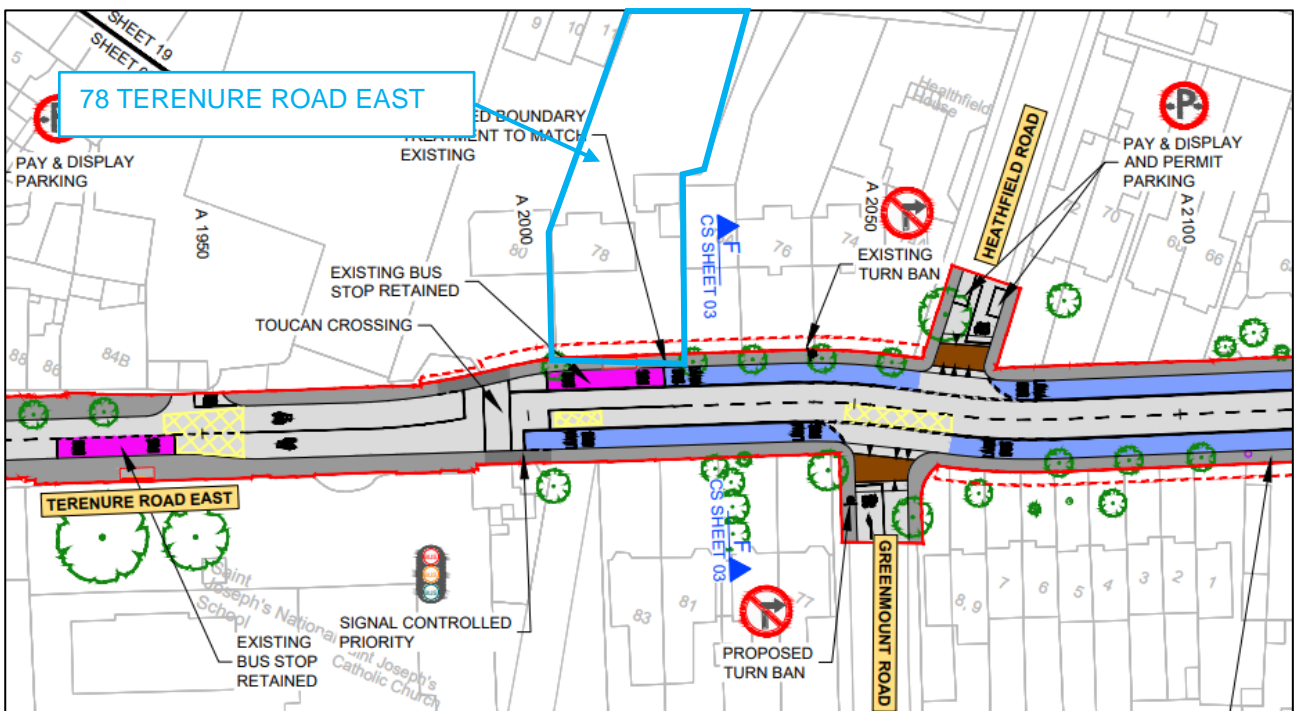


Figure 3.27.1 General Arrangement of Proposed Scheme adjacent to 78 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.27.2.

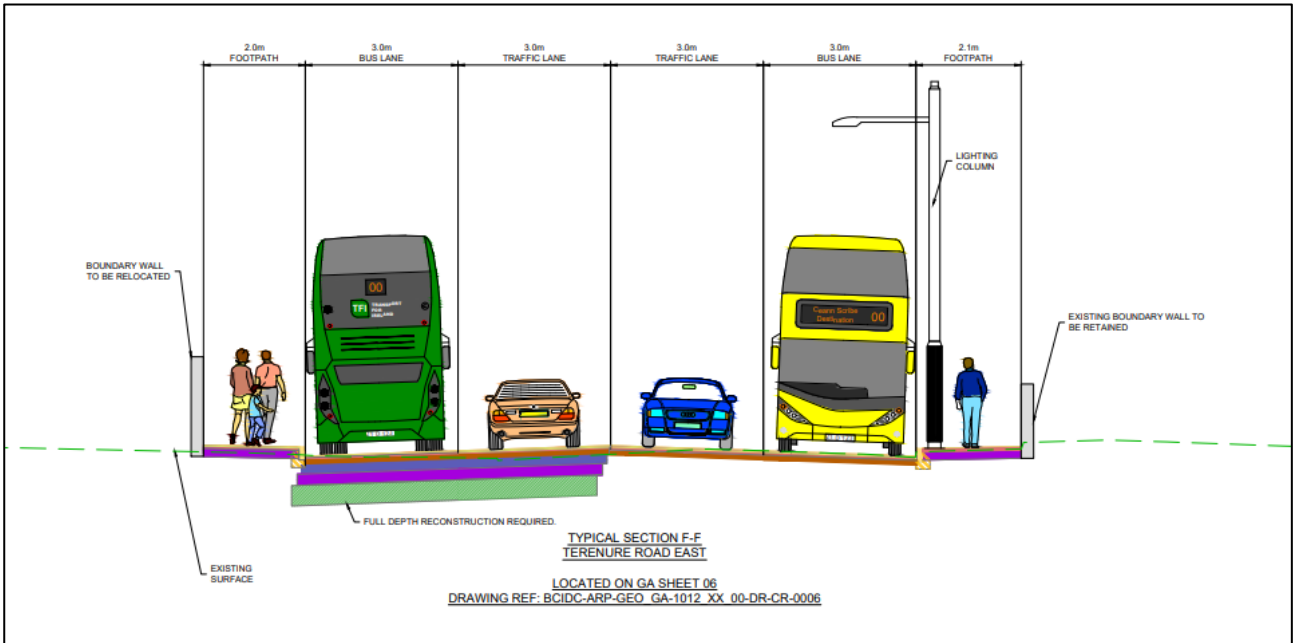


Figure 3.27.2 Typical Cross-Section adjacent to 78 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 78 Terenure Road East is shown in Figure 3.27.3.

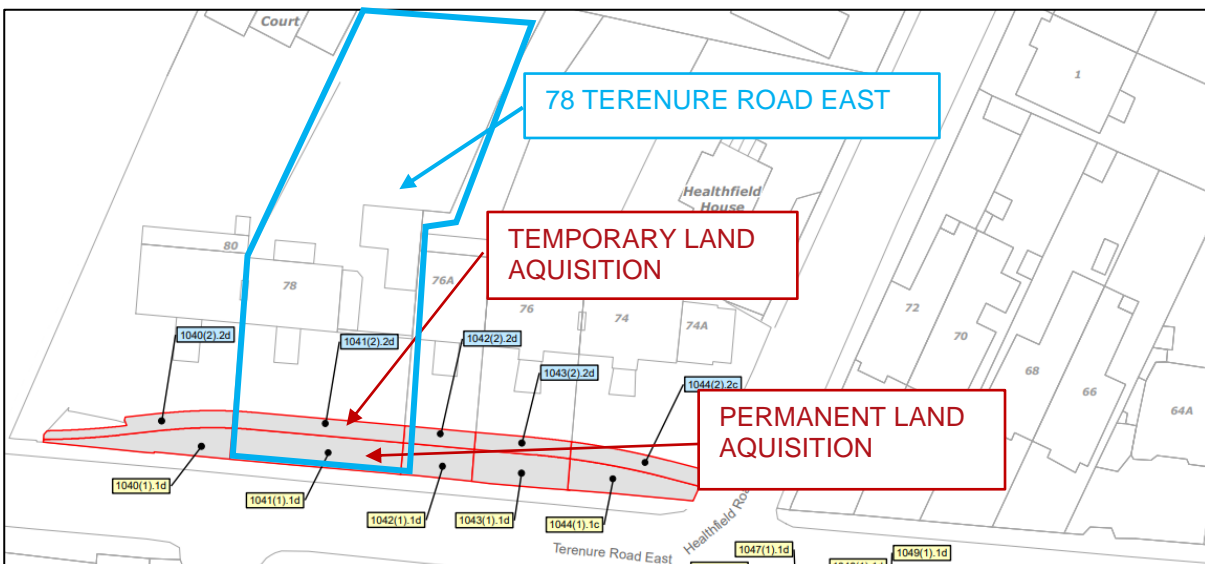


Figure 3.27.3 Extract from CPO Deposit Maps adjacent to 78 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.27.4.



Figure 3.27.4 Proposed Land Acquisition lines adjacent to 78 Terenure Road East

The existing property frontage is shown in Figure 3.27.5.



Figure 3.27.5 Existing frontage of 78 Terenure Road East (Image source: Google)

3.27.2 Summary of the Points of Objection to the CPO by Joseph Phelan

This submission objected to CPO for the reasons summarised in the following section.

- i. Impact on protected structures on Terenure Road East

The submission has concerns over 78 Terenure Road East being a protected structure in Dublin City Council Record of Protected Structures reg. nr. 8121. The submission also queries the impact on the historical features of the proposed.

- ii. Impact on property value
- iii. Reduced privacy

The submission states that the works associated with the Proposed Scheme will result in reduced privacy.

- iv. Need for road widening along Terenure Road East

The submission states that they fail to see the rationale for road widening on Terenure Road East.

3.27.3 Responses to the Points of Objection

- i. Protected structure and impact on the historical environs on Terenure Road East

A detailed response to this item is presented in Section 2.4.2

- ii. Impact on property value

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, including on Terenure Road East, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact 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. and

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 on Templeogue 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.

- iii. Impact on Privacy

The proposed permanent acquisition will result in the loss of 3.7m at the roadside of the back garden, with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden. Upon completion of the permanent works, the temporary land take area will be handed back to the property owner. The edge of the proposed carriageway (bus lane) will be 3.8m closer to the residence than the edge of the existing general traffic lane.

If the CPO is confirmed by An Bord Pleanála, 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.

- iv. Need for road widening along Terenure Road East

A detailed response to this item is presented in Section 2.3.2 and 2.4.3.

3.28 CPO-28 – Joseph Turley – 45 Terenure Road East

3.28.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the laneway west of 45 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 1.4m and a maximum width of temporary acquisition of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.28.1.

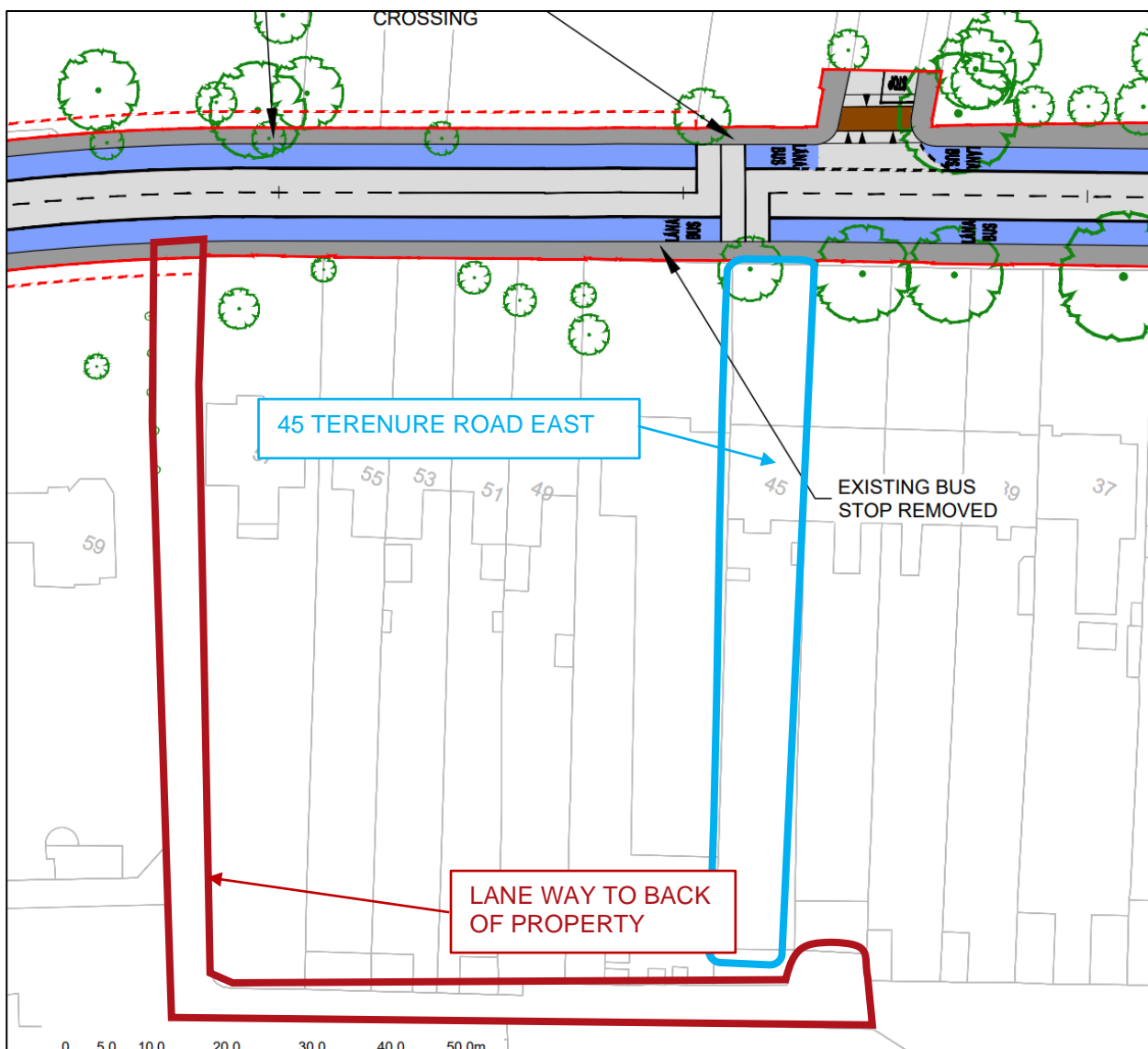


Figure 3.28.1 General Arrangement of Proposed Scheme at laneway adjacent to 45 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.28.2.

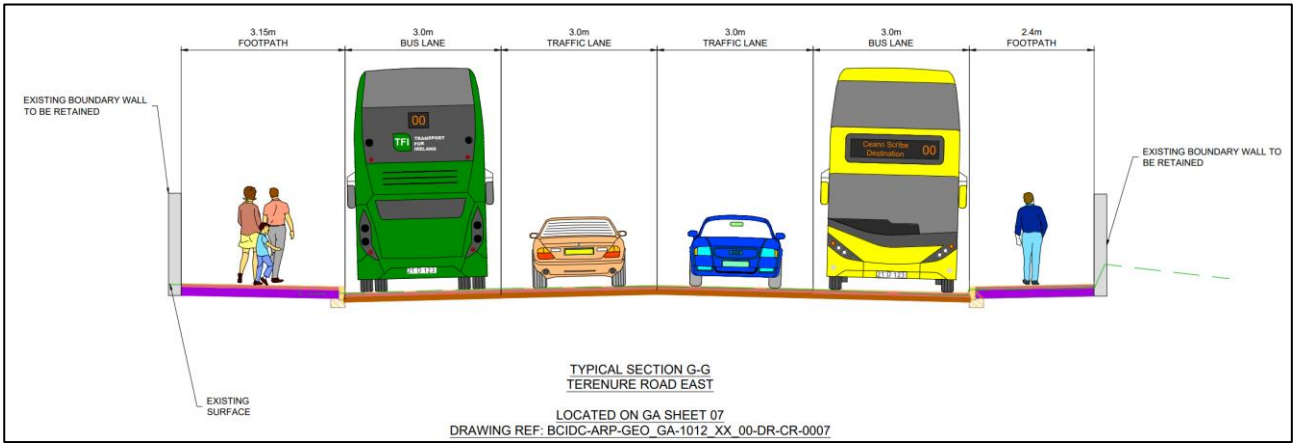


Figure 3.28.2 Typical Cross-Section at laneway adjacent to 45 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at the laneway to the west of 45 Terenure Road East is shown in Figure 3.28.3.

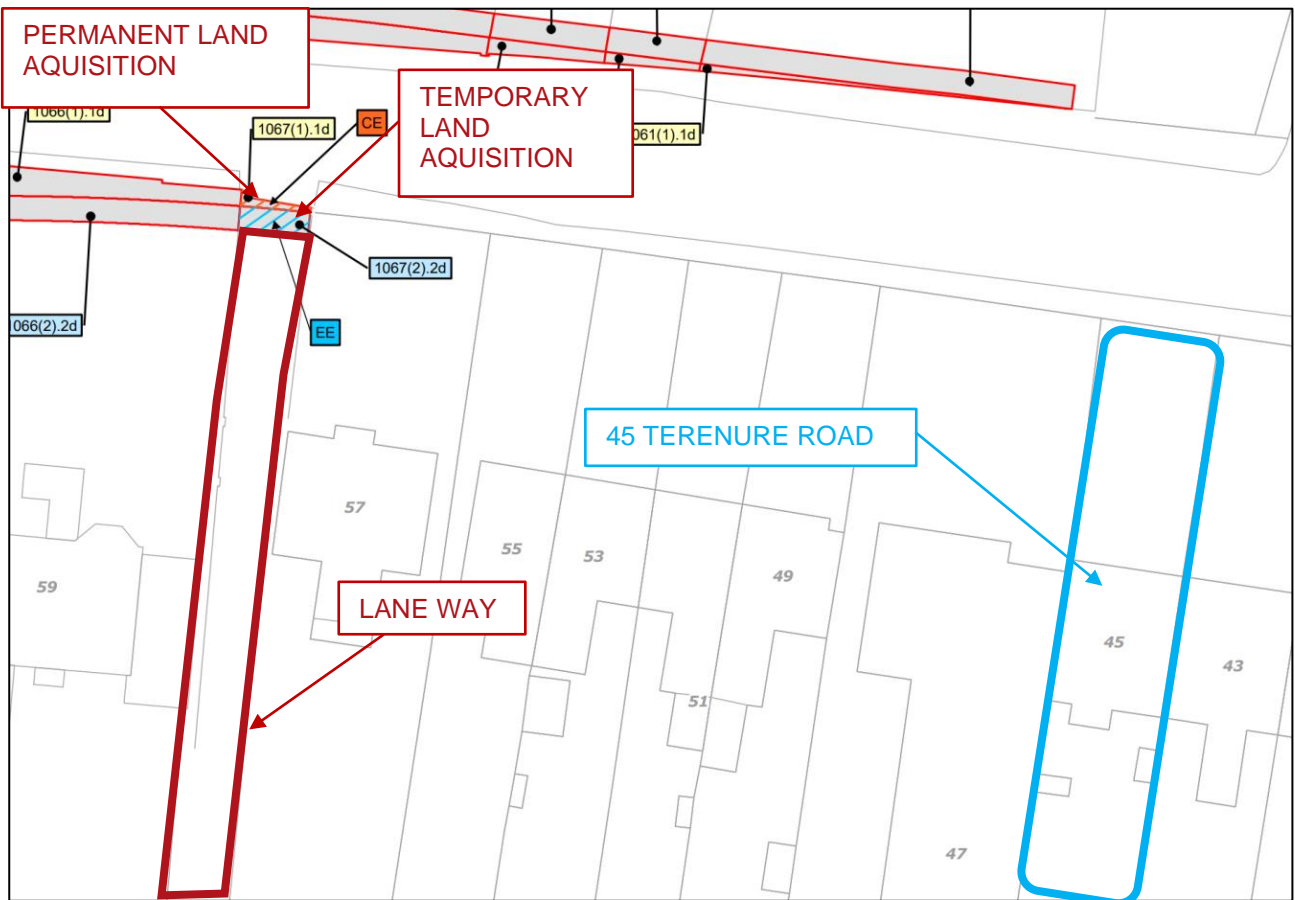


Figure 3.28.3 Extract from CPO Deposit Maps at laneway adjacent to 45 Terenure Road East



Figure 3.28.4 Proposed Land Acquisition lines at laneway adjacent to 45 Terenure Road East
The existing laneway frontage is shown in Figure 3.28.5.



Figure 3.28.5 Existing laneway to the west of 45 Terenure Road East (Image source: Google)

3.28.2 Summary of the Points of Objection to the CPO by Joseph Turley

This submission objected to CPO for the reasons summarised in the following section.

- i. Impact on protected structures on Terenure Road East

The submission expresses concern about the impact of the Proposed Scheme on protected structures on Terenure Road East.

- ii. Existing signal-controlled priority on Terenure Road East is sufficient

The submission notes that the current signal-controlled bus priority system on Terenure Road East (TRE) is running smoothly, it also notes that any enhancements made in the bus efficiency on TRE will be offset by the bottlenecks in Terenure and Rathgar Village.

- iii. Implications of Tree Removal on Terenure Road East

The submission states that the proposed removal of trees on TRE will have negative implications on the visual appeal, noise pollution and wildlife habitat.

3.28.3 Responses to the Points of Objection

- i. Impact on Protected Structures on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

- ii. Existing signal-controlled priority on Terenure Road East is sufficient

A detailed response to this item is presented in Section 2.4.2.

- iii. Implications of Tree Removal on Terenure Road East

A detailed response to this item is presented in Section 2.4.2

3.29 CPO-29 – Karen Lynch– 8 Rathfarnham Wood

3.29.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 0.6m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.29.1.

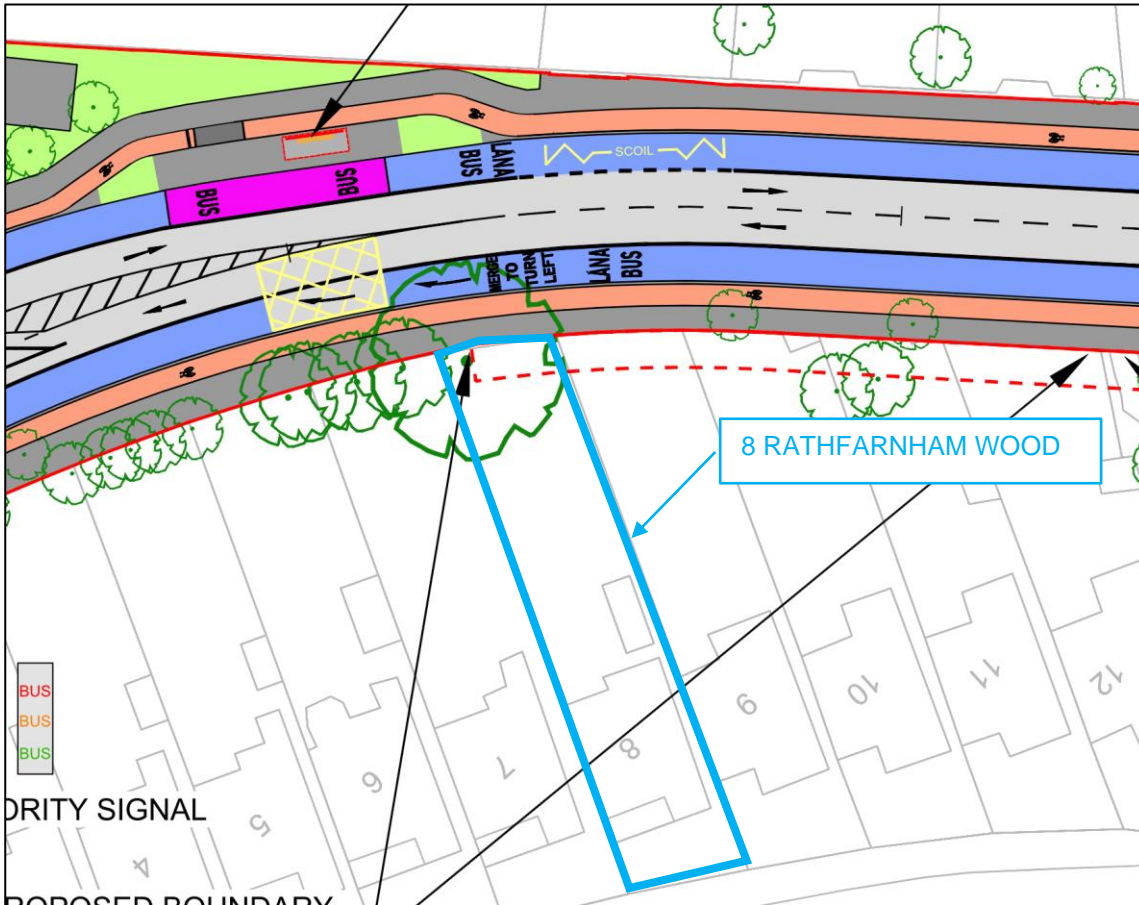


Figure 3.29.1 General Arrangement of Proposed Scheme adjacent to 8 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.29.2

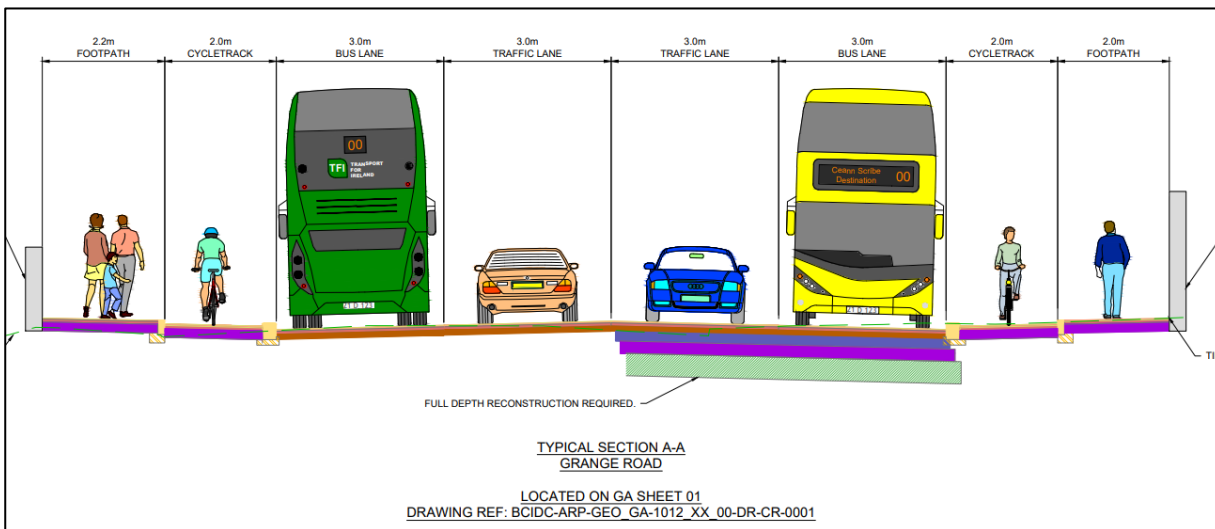


Figure 3.29.2 Typical Cross-Section adjacent to 8 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 8 Rathfarnham Wood is shown in Figure 3.29.3.

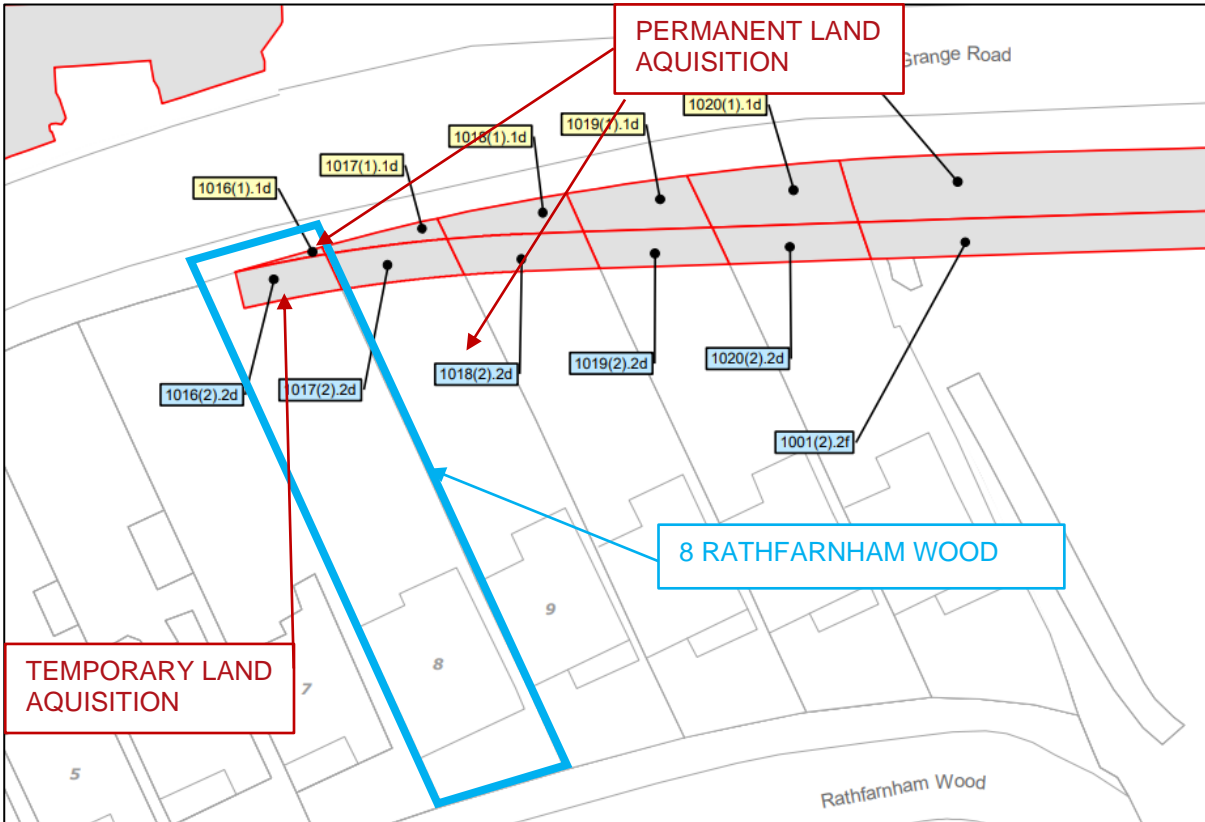


Figure 3.29.3 Extract from CPO Deposit Maps adjacent to 8 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.29.4.

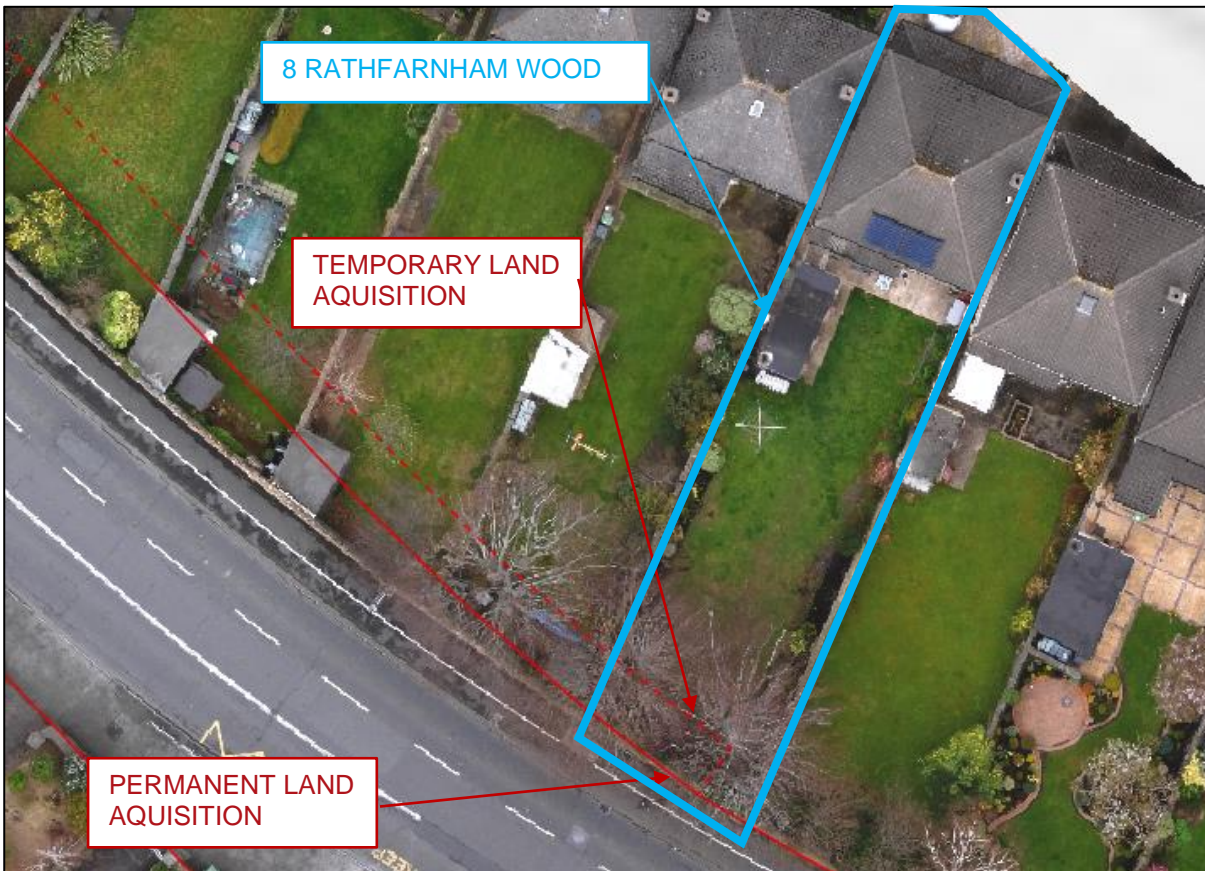


Figure 3.29.4 Proposed Land Acquisition lines adjacent to 8 Rathfarnham Wood

The existing property backage is shown in Figure 3.29.5.

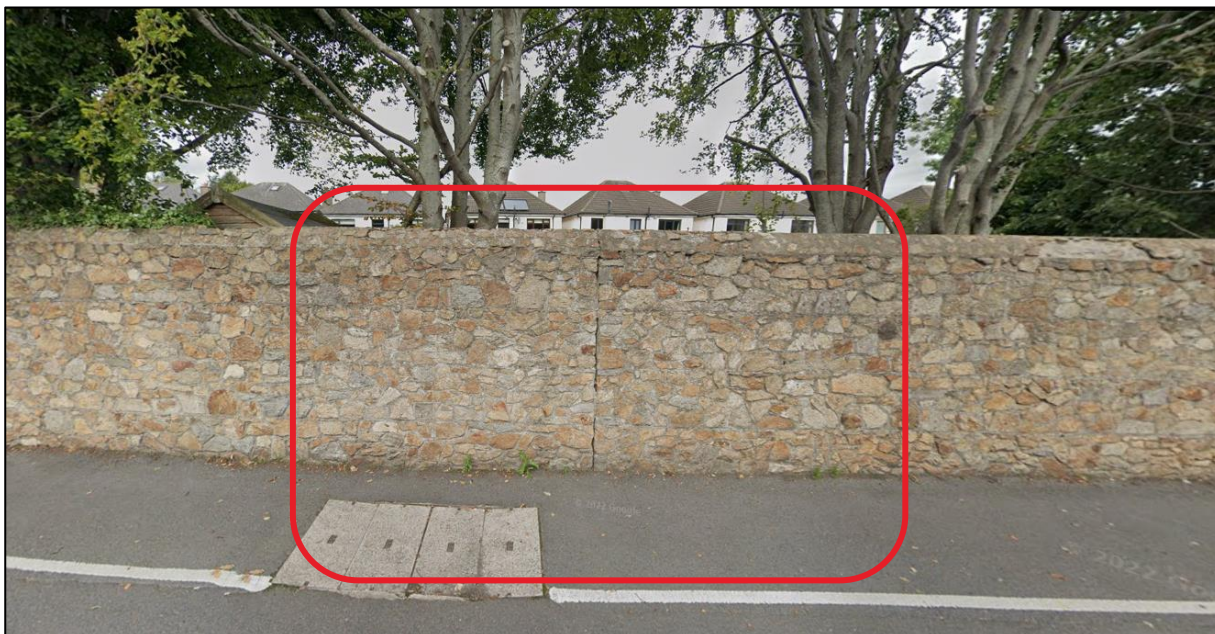


Figure 3.29.5 Existing frontage of 8 Rathfarnham Wood (Image source: Google)

3.29.2 Summary of the Points of Objection to the CPO by Karen Lynch

This submission objected to CPO for the reasons summarised in the following section.

i. Necessity of road widening

The submission states that road widening adjacent to 8 Rathfarnham Wood are unnecessary, adding that the environmental impact involved relocating the granite wall are unnecessary. It also states that the land acquisition could be avoided by deviating from the standard footpath and cycle track widths.

ii. Removal of trees

The submission expressed concerns regarding the removal of a tree from the back garden of 8 Rathfarnham Wood, it also noted that the removal of the Beech tree will likely negatively impact the surrounding trees.

iii. No consideration of Glin River

The submission notes that the Environmental Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin river to the area.

iv. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, The submission goes on to suggest using bus priority as an alternative to reduce land take need.

v. Climate Impact of Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

vi. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

vii. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use.

viii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife.

3.29.3 Responses to the Points of Objection

Items iii – viii raises the same concerns as CPO-08. Please refer to Section 3.8.3 for responses to these items. See below for response to item i and ii.

i. Necessity of road widening

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

For the section between adjacent to 8 Rathfarnham Road, three options (SA1 to SA3) have been developed during the development of the Emerging Preferred Route (EPR). The assessment process of three options is described in section 5.4 of the Rathfarnham to City Centre Core Bus Corridor Feasibility Study and Options Assessment (FSOA), included in appendix I2 of the supplementary documents submitted alongside the planning application.

Following the review of the EPR and submissions received as part of the public consultation within the section between Nutgrove Avenue to Willbrook Road, it was decided that alternative options could be feasible within this section of the Proposed Scheme. For this reason, two alternative options (RC1 and RC2) have been developed. The alternative options are described in detail in section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application.

A detailed response to the optioneering process complete for Grange Road and Rathfarnham Road is provided in Section 2.3.2.

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the desirable width of 2.0m for footpaths and desirable width of 2m for cycle tracks. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

Providing the optimum cross-section described in the above paragraphs achieves the project objectives of enhancing the potential for cycling and walking by providing safe infrastructure. EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling and pedestrian infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.29.6 Section 2- Significance of Effects for Pedestrian Impact during Operational Phase (table 6.27 of EIAR Chapter 6)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28 (Figure 3.29.7 below), in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.29.7 Section 2 - Cycling Impact during Operational Phase (Table 6.28 of EIAR Chapter 6)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Further details on the significant benefits of the Proposed Scheme are presented in Section 2.1.1.

ii. Removal of Tree

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is one tree proposed to be removed at No. 8 Rathfarnham Wood. This tree has been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- An 16m tall mature Beech displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the eastern section of Rathfarnham Road between entrance to Rathfarnham Wood residential estate and Willbrook Road it is proposed to plant 13 No. Acer Campestre 'Elsrijk' Semi-Mature Field Maple Trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17.

As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

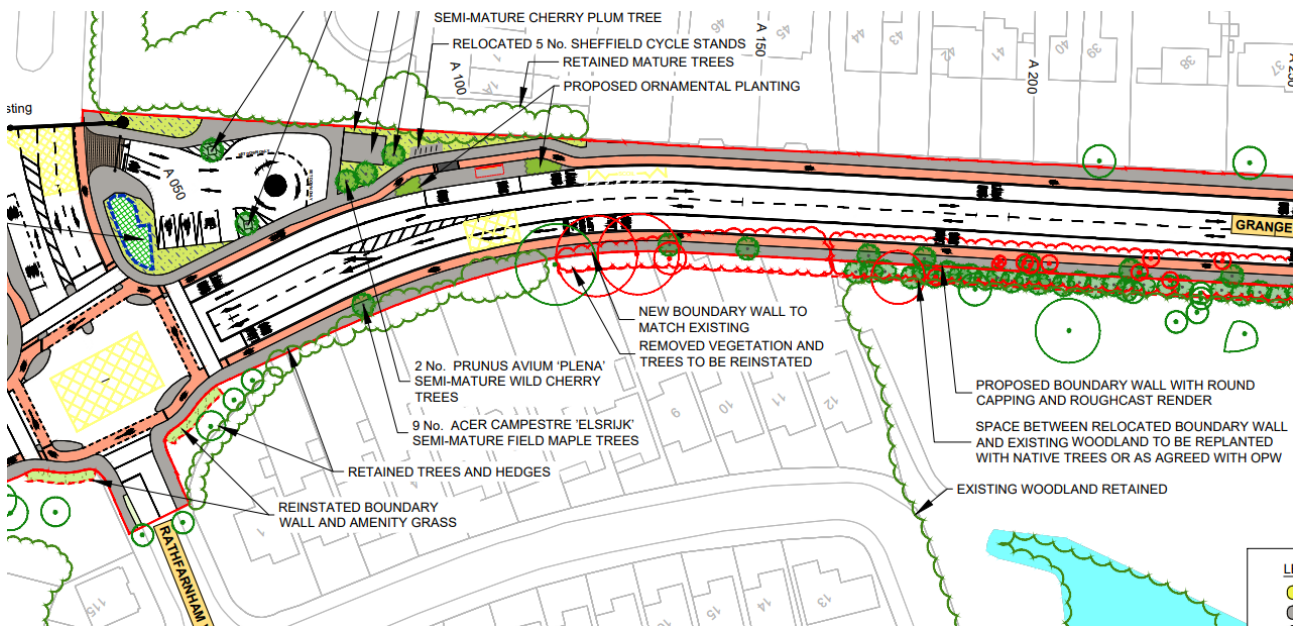


Figure 3.29.8 Extract from Landscaping General Arrangement Drawings (Sheet 1)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

In relation to the concern raised relating to impact on trees within proximity of the tree proposed for removal.

A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities.

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. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*
- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g. Cellweb or equivalent), installed without excavation using no dig techniques.*

- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*
- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*
- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

Further details on the removal of trees along the Proposed Scheme are presented in Section 2.1.1.

3.30 CPO- 30 – Kathleen and Peter McManamon – 71 Rathfarnham Road

3.30.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 1.4m and, 4.8m of the land is to be temporarily acquired.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.30.1.

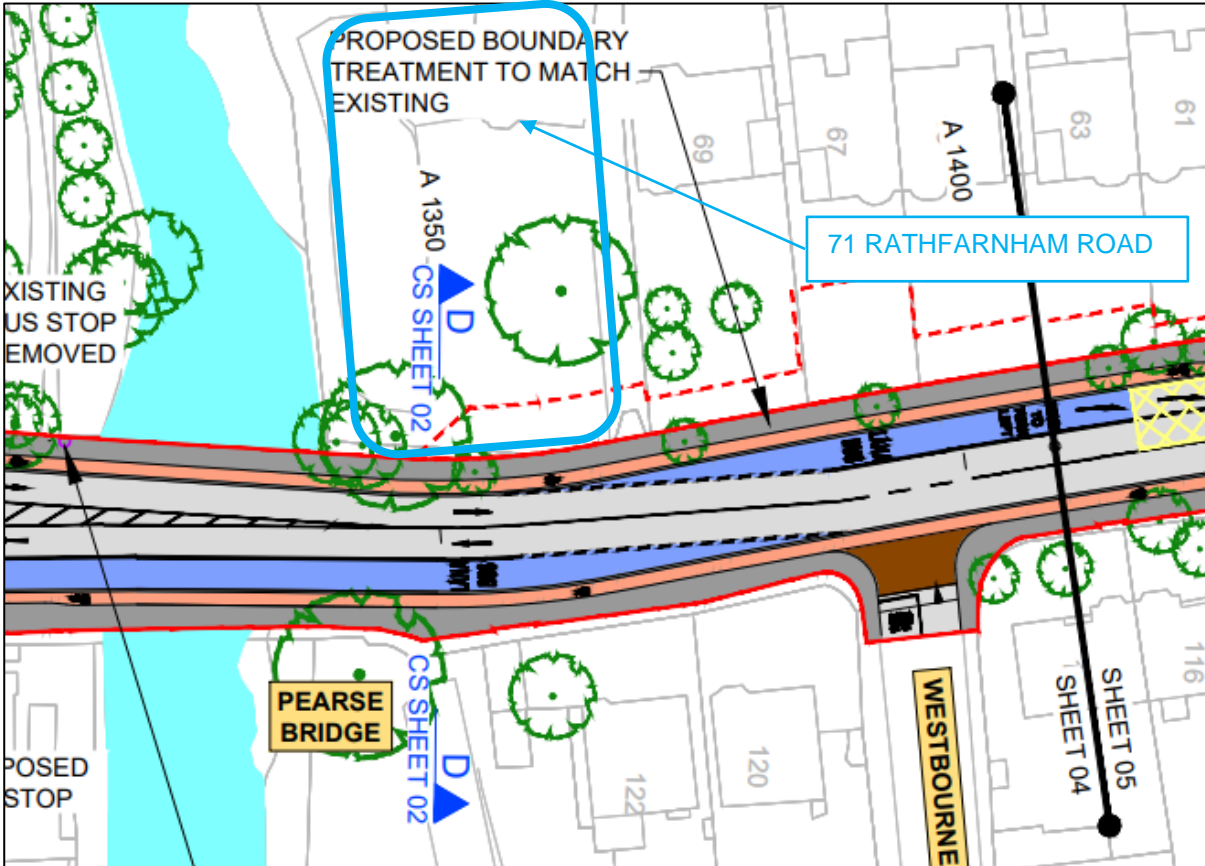


Figure 3.30.1 General Arrangement of Proposed Scheme adjacent to 71 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.30.2.

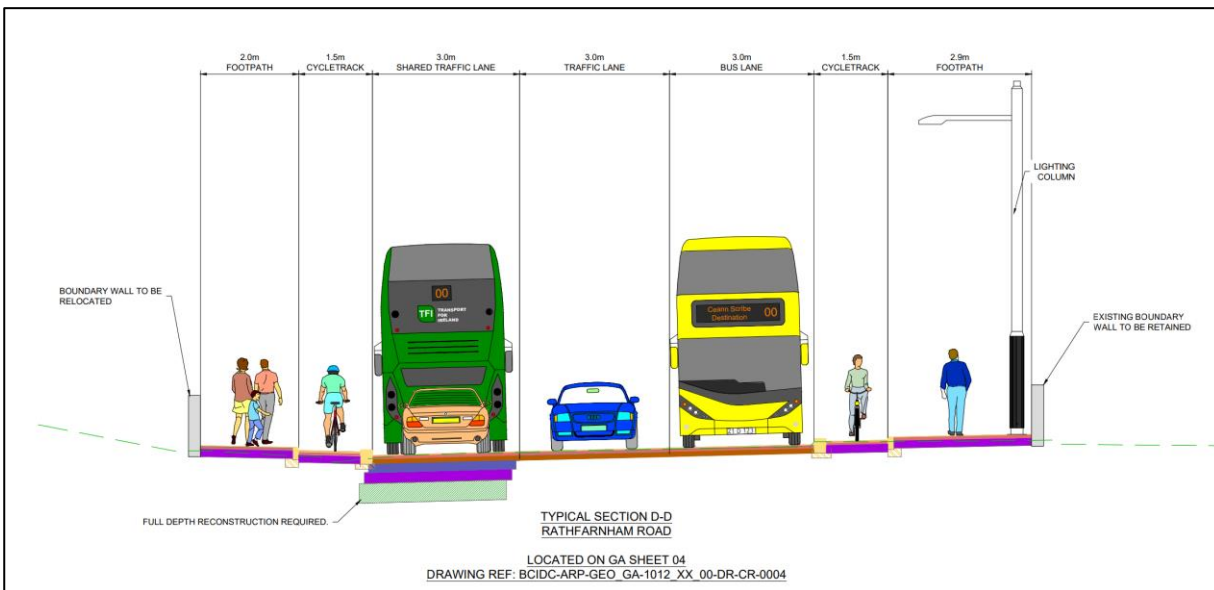


Figure 3.30.2 Typical Cross-Section adjacent to 71 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 71 Rathfarnham Road is shown in Figure 3.30.3.

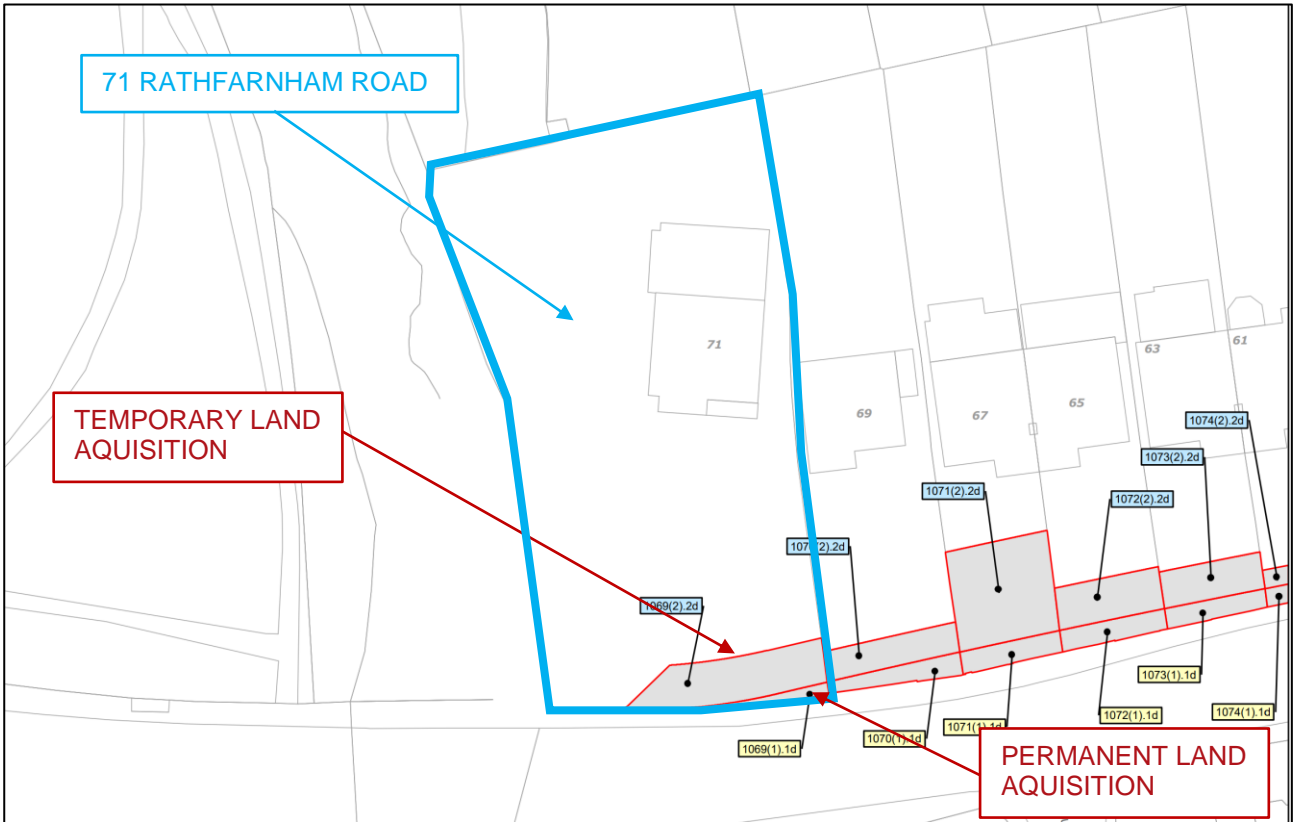


Figure 3.30.3 Extract from CPO Deposit Maps adjacent to 71 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.30.4.



Figure 3.30.4 Proposed Land Acquisition lines adjacent to 71 Rathfarnham Road

The existing property frontage is shown in Figure 3.30.5.



Figure 3.30.5 Existing frontage of 71 Rathfarnham Road (Image source: Google)

3.30.2 Summary of the Points of Objection to the CPO by Katheen and Peter McManamon

This submission objected to CPO for the reasons summarised in the following section.

i. Consultation process

The submission noted that the consultation process was insufficient.

ii. Need for the scheme and benefits

The submission states that there is no merit for the scheme between Pearse Bridge and Rathdown Park Junction, it notes that the disruptions and environmental impacts associated with the Proposed Scheme do not serve the interests of the "Overall Public Good".

iii. Removal of trees

The submission states that the Proposed Scheme will have a negative impact on trees and wildlife, it also noted that a Beech Tree in the front garden of No. 71 will be impacted.

iv. Increase in traffic

The submission noted that the Proposed Scheme will result in an increase in traffic on Rathfarnham Road.

v. Combined impact of BusConnects Schemes

The submission suggests that the impact assessment for the Proposed Scheme was complete in isolation and did not consider the knock-on environmental impacts from other BusConnects Schemes.

vi. Driveway gradient contradictory to Part M

The submission states land acquisition associated with the proposed works will result in an increased driveway gradient, which is contradictory to Part M of the Building Regulations. The submission refers to a technical report prepared by RW Nowlan in relation to driveway gradients.

3.30.3 Responses to the Points of Objection

i. Consultation Process

A detailed response to this item is presented in Section 2.1.1.

ii. Need for the Scheme and Benefits

A detailed response to this item is presented in Section 2.1.1 and 2.3.2.

iii. Removal of trees

Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the Proposed Scheme. The survey was undertaken between the 10th and 13th August 2020. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold's Cross Road section and the of the Proposed Scheme. The below impact assessment report is based on the British standard BS 5837:2012 Trees in relation to design, demolition and construction recommendations. This standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the Proposed Scheme to identify trees that may be impacted on by the proposed development based on the proposed design.

Section 6 of Appendix A17.1 states: *This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.*

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there are Five trees proposed to be removed at No. 71 Rathfarnham Road. These trees have been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- Group of large mature sycamores, displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

If the CPO is confirmed by An Bord Pleanála, 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.

In addition, tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the section of Rathfarnham Road, the Dodder River and Rathdown Park, it is proposed to plant 7 No. Prunus Avium 'PLENA' Semi-Mature wild Cherry Trees along the section of Rathfarnham Road.

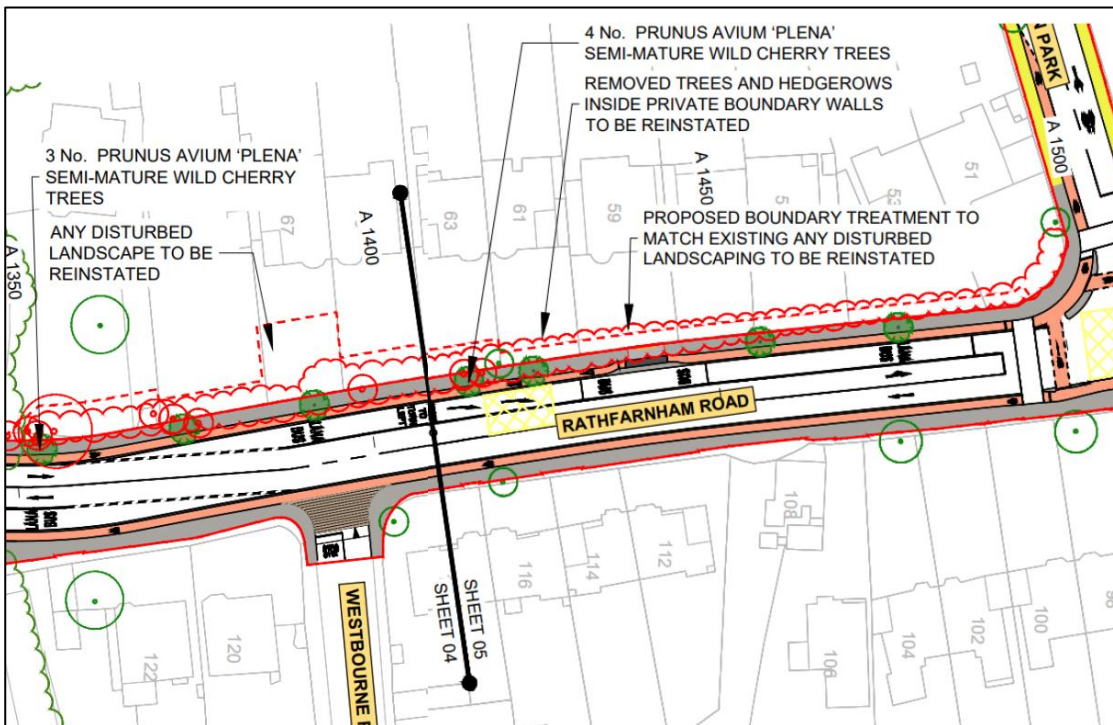


Figure 3.30.6 Extract from Landscaping General Arrangement Drawings (Combined Sheet 4 and 5)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

The impact of the Proposed Scheme on habitat loss and loss of breeding / resting site has been assessed and are reported in Chapter 12 Biodiversity of Volume 2 of EIAR. Section 12.4.3.5.1.1 states that *“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”.*

iv. Increase in Traffic

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland’s (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the *Traffic and Transport Assessment Guidelines (TII 2014)*:

‘a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences’.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

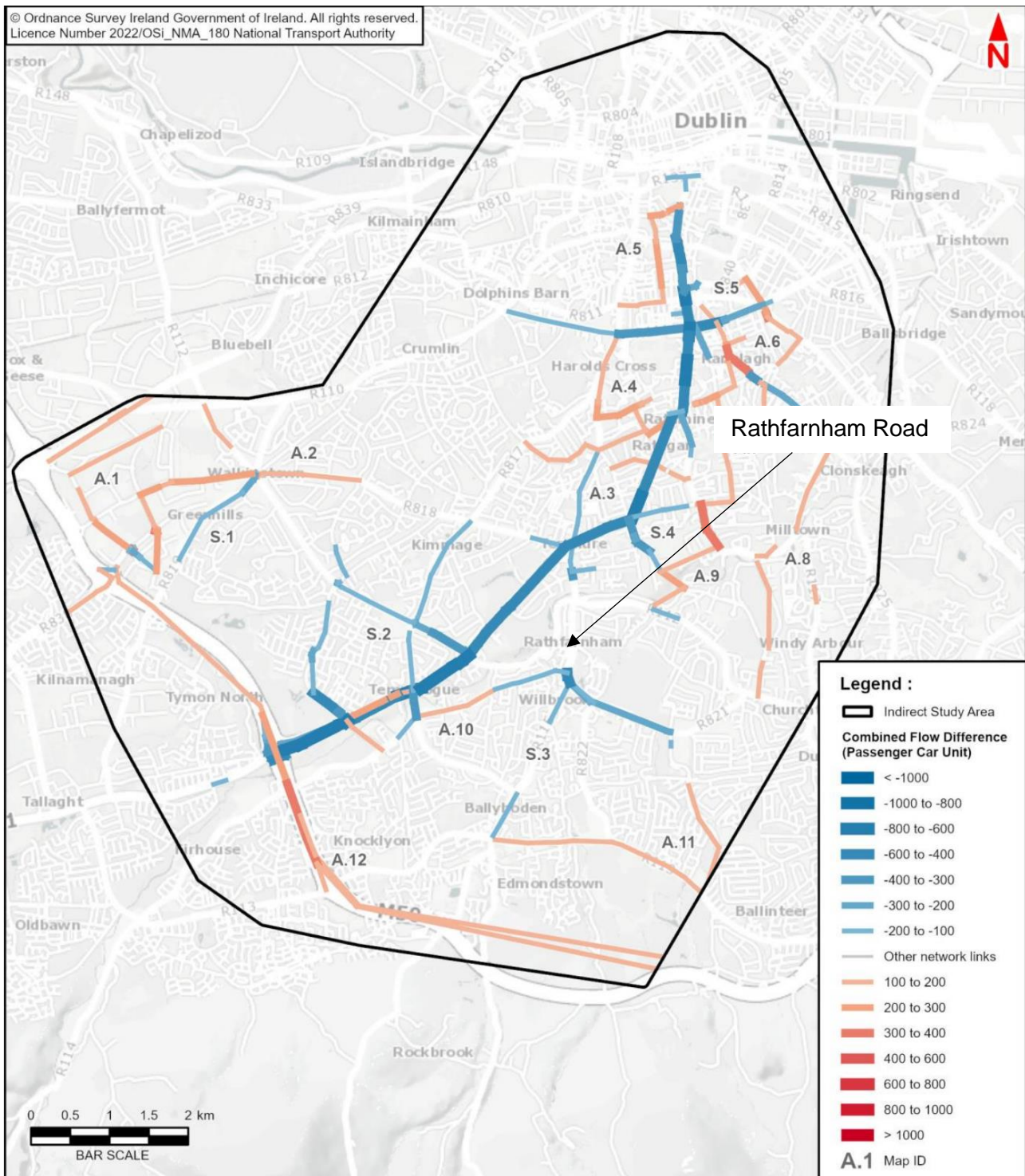


Figure 3.30.7 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

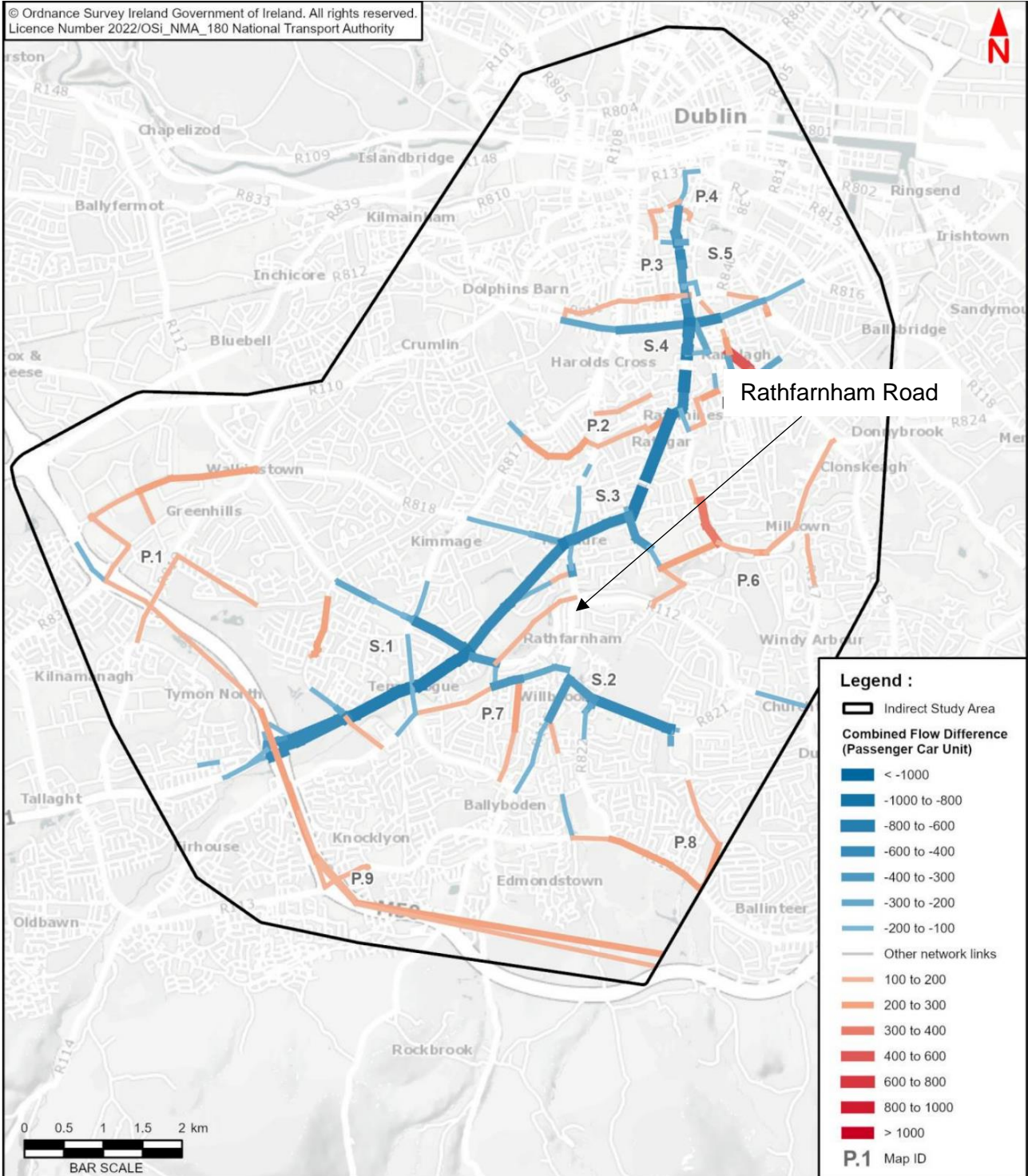


Figure 3.30.8 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

As can be seen in these figures, the traffic modelling undertaken does not identify any significant material change in traffic volumes on Rathfarnham Road during the AM and PM peak as a result of the Proposed Scheme i.e. any changes in traffic volumes along Rathfarnham Road are less than 100 passenger car units per hour.

Further details on the traffic impact in this area are presented in Section 2.3.2 of this report.

v. Combined Impact of BusConnects Schemes

A detailed response to this item is presented in Section 2.1.1.

vi. Driveway Gradient Contradictory to Part M

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3D road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

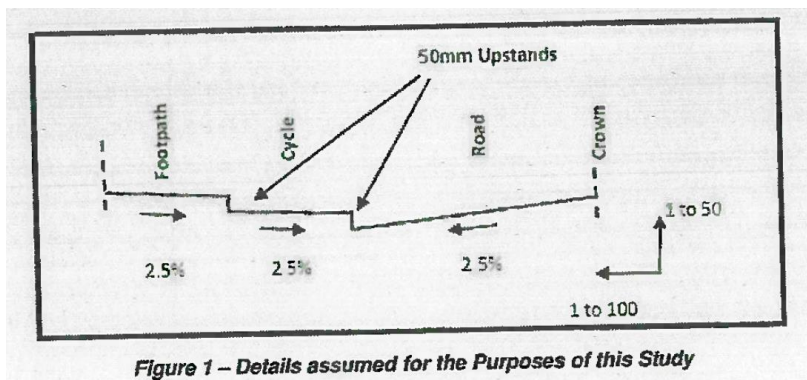
This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

It is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.025m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Providing footpath cross-fall gradient above that which is typically provided for new built schemes, however not exceeding the existing gradient.
- Some minor regrading within the property over a distance of 2.8m which would result in a gradient no greater than the maximum existing gradient within the property. It is noted that this is incorporated into the temporary land acquisition presented in the Deposit Maps.

It is noted that the submission from Mrs and Mr McManamon refers to a report prepared by NRB Consulting Engineers which although not submitted with this specific submission, is appended to submissions made by their neighbours and has been used to inform this response. In terms of the submission calculations prepared by NRB, it is important to note that these have been based on an assumed road cross-section as set out below in figure 1 of their submission - *Details assumed for the Purpose of this Study*.



As noted earlier, in order to minimise impacts on adjacent properties, existing footpath gradients are being retained (which are significantly greater than the above in some cases) so the underlying assumption above is incorrect.

It is further noted the NRB calculations also used the proposed centreline level of 41.282, taken at chainage A 1360 from the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR. While the chainage A 1360 is adjacent to 71 Rathfarnham Road it is located to the south of the property plot, rather than at the driveway location which is to the north which is of most relevance to the points being raised. The proposed centreline level at chainage A 1368 is 41.59, some 0.308m higher than the value used by NRB in their assessment.

Furthermore, as part of the assessment, the calculation used the existing centreline level at chainage c. A 1370 of 41.61

So, in summary, the assessment is based on an existing road level at the driveway and a proposed level at chainage A 1360 which is 8m away from the driveway.

The factors outlined above contribute to an inaccurate estimate of the proposed level at the back of the new footpath and therefore misrepresents the effect of the Proposed Scheme on the driveway gradients.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate no increase to the maximum gradients within these properties.

3.31 CPO-31 – Liam Bell – 63 Terenure Road East

3.31.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at 63 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 3.8m and temporarily acquired of 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.31.1.

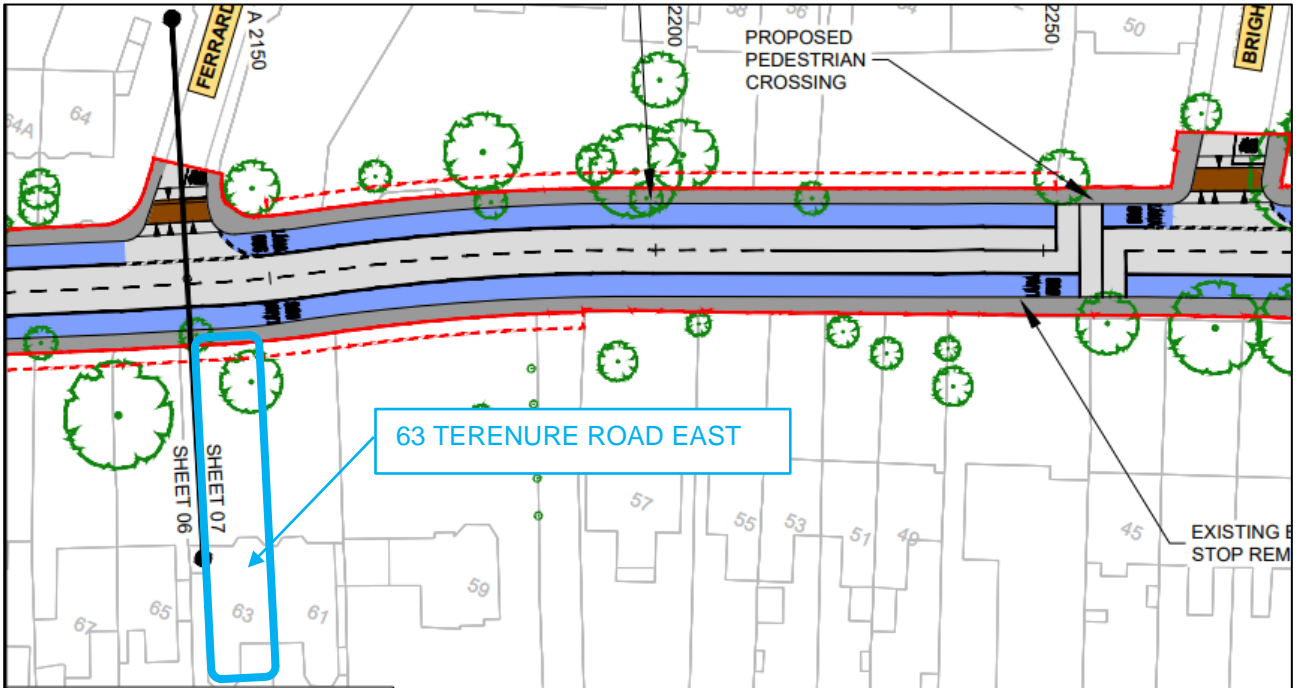


Figure 3.31.1 General Arrangement of Proposed Scheme at 63 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.31.2.

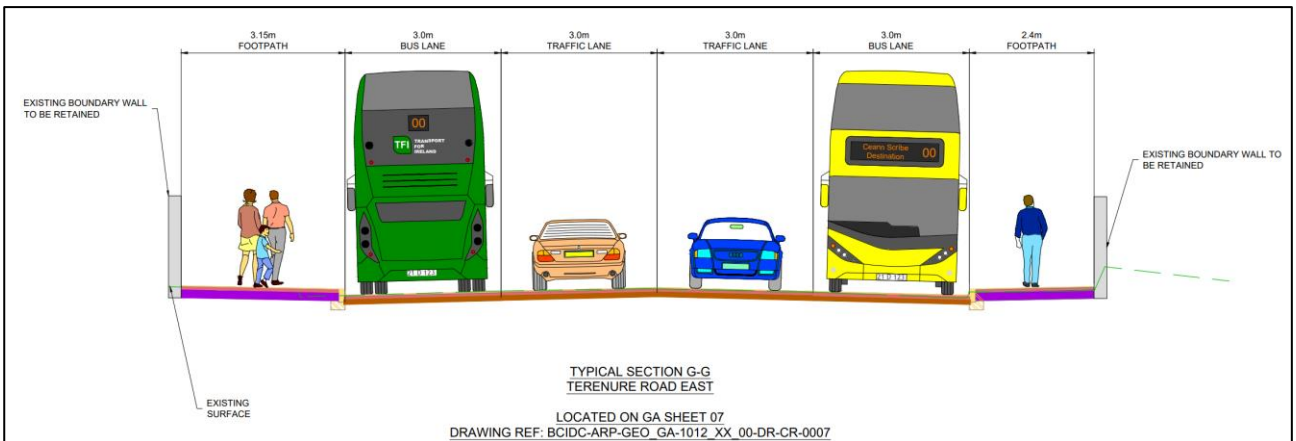


Figure 3.31.2 Typical Cross-Section adjacent to 63 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 63 Terenure Road East is shown in Figure 3.31.3.

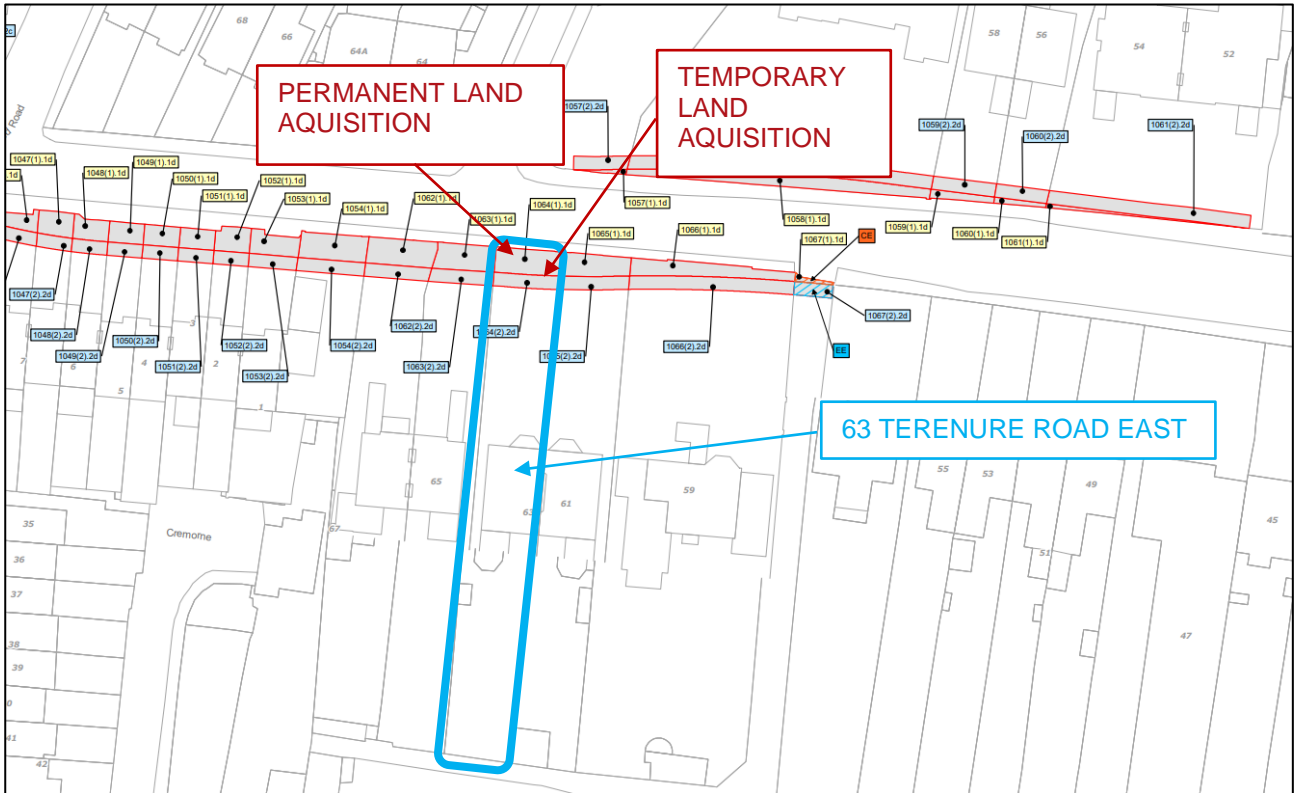


Figure 3.31.3 Extract from CPO Deposit Maps at 63 Terenure Road East



Figure 3.31.4 Proposed Land Acquisition lines at 63 Terenure Road East

The existing property frontage is shown in Figure 3.31.5.



Figure 3.31.5 Existing frontage at 63 Terenure Road East (Image source: Google)

3.31.2 Summary of the Points of Objection to the CPO by Liam Bell

This submission objected to CPO for the reasons summarised in the following section.

i. Removal of trees

The submission raised concerns about the implications on wildlife from the proposed tree removal on Terenure Road East. The submission notes that the Proposed Scheme drawings do not identify some trees that will be impacted by the proposals namely an elm tree within the grounds of 63 Terenure Road East, trees in Beaumont House, a tree in Argos House and trees at number 61 Terenure Road East.

ii. Traffic data out of date due to Covid

The suggests notes that the basis of the traffic assessment is out of date due to changes in travel patterns as a result of Covid.

iii. Section 51 and CPO Application should not be made concurrently

The submission notes concern over the appropriateness of the NTA making (i) an Application for Confirmation of the CPO and (ii) an Application for Approval of the Proposed Scheme under Section 51 of the Roads Act 1993 (as amended) and the Board making its decisions at the same time.

iv. NTA has not demonstrated need for the scheme and the CPO

The submission notes that the NTA has not established that there is a need for the Scheme or that the lands to be acquired are required. The submission also notes that no alternative solutions have been considered.

v. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

vi. Inadequate Consultation

The submission notes that the consultation process was inadequate. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

vii. Cost Benefit Analysis is Required

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'.

viii. Implementation of other BusConnects measures first.

The submission suggests that less intrusive measures that form part of the BusConnects programme should be implemented first (e.g. cashless fares). It is also suggested that the benefits delivered by the infrastructure and other measures of the programme are separated to identify the benefits as a result of the infrastructure alone.

ix. Metro is more suitable for this corridor.

The submission notes concern that a metro option has not been considered by the NTA for the Rathfarnham corridor.

x. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

xi. Congestion at Terenure Cross due to proposed changes

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create issues with the operation of the junction resulting in congestion.

xii. Impact on Businesses due to loss of parking/loading

The submission states that businesses in Rathgar and Terenure will lose access to their customers due to the removal of parking and loading facilities in these areas.

xiii. Bus Gate Hours of Operation

The submission suggests that consideration should be given to reducing the hours of operation of the bus gates on the Proposed Scheme.

xiv. Proposed Cycle Facilities are Insufficient.

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about facilities provided on alternative routes. The submission also raised concerns about cycle tracks being blocked by vehicles e.g. delivery vehicles.

xv. Traffic Impact as a result of Traffic Management Measures

The submission raises a number of concerns about the impact of proposed traffic management measures (namely bus gates and proposed one-way on Rathgar Road) on the surrounding road network. Specific concerns included:

- Traffic rerouting from current corridor to residential streets and impact on these streets
- Traffic rerouting to other routes and resulting congestion (e.g. through Harold's Cross and Ranelagh)

- New access routes to/from the city following implementation of traffic management measures

The submission suggest that the effect of rerouting traffic has not been considered in the modelling undertaken.

xvi. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

The submission noted traffic modelling should include immediately adjacent BusConnects routes and should be presented in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

3.31.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-20. Please refer to Section 3.20.3 for responses to these items.

Further elaboration on item i is provided below.

i. Removal of trees

The submission notes that the proposals do not indicate the removal of trees within 63 Terenure Road East, 61 Terenure Road East, 60 Terenure Road East (Beaumont House), and a tree in 59 Terenure Road East (Argos House).

The Landscape General Arrangement drawings in Volume 3 of the EIAR identify trees required to be removed to facilitate the Proposed Scheme. An extract of the area of interest is presented below:

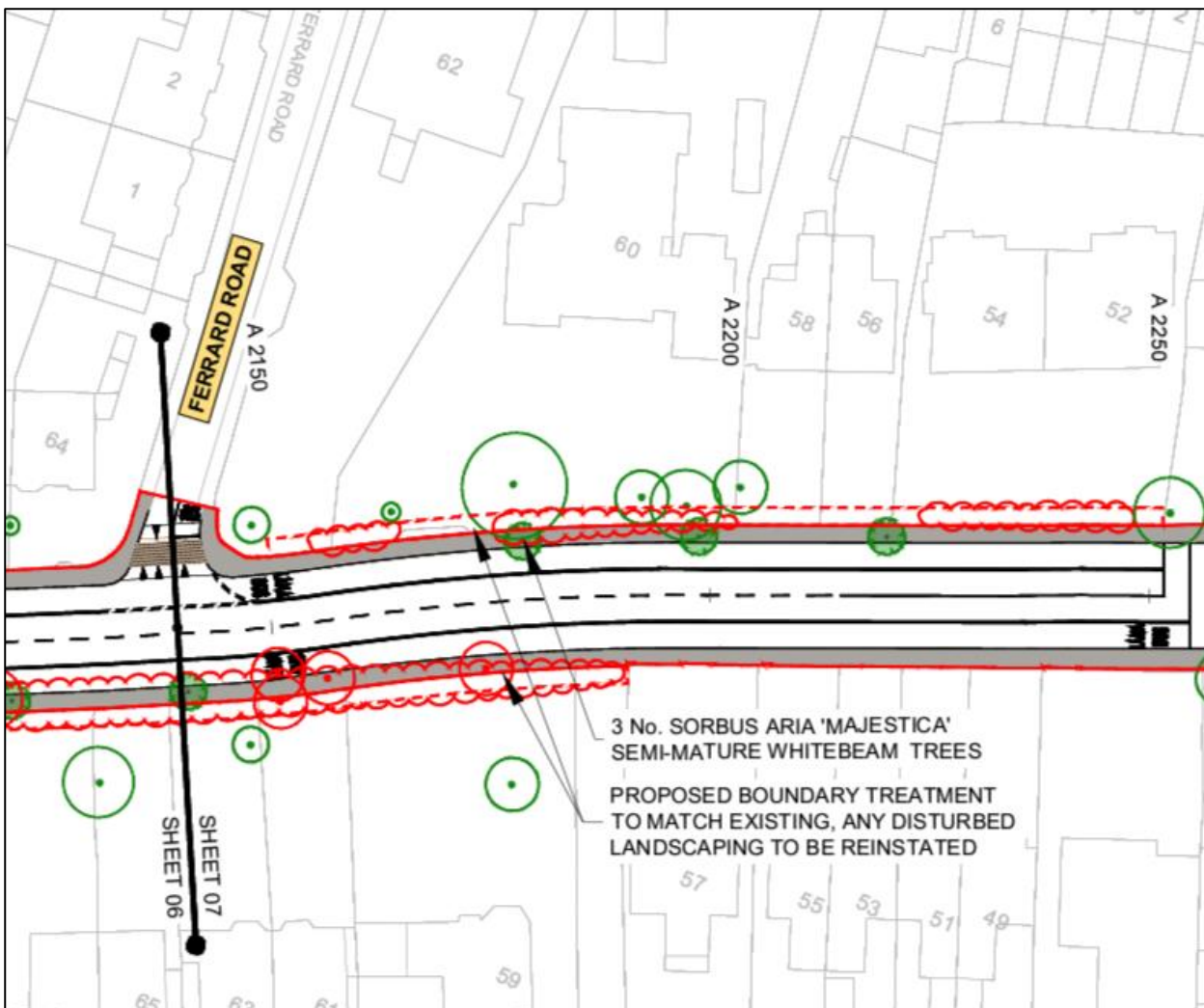


Figure 3.31.6 Landscape General Arrangement Drawings at Terenure Road East

In order to assess the impact of the Proposed Schemes on trees, a tree survey was undertaken in August 2020. The survey and resulting assessment of the impact of the scheme is presented in the Arboricultural Impact Assessment Report, which is included as Appendix A17.1 of EIAR. The methodology for the survey is set out in section 1.2 of Appendix A17.1

“An initial tree survey and visual condition assessment was undertaken on the 24th and 25th of August 2020. As part of this report and in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction - recommendations, only trees with diameters of 75mm or greater were surveyed. Also, in accordance with section 4.4.2.3 of the British standard document, where trees formed obvious groups, these were assessed and recorded as groups. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold’s Cross Road section and the Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road section of the Proposed Scheme.

In relation to 63 Terenure Road East, no trees are identified for removal. While there are a number of small trees to west of the vehicular entrance close to the boundary wall, the diameters of these were less than 75mm and as such were not surveyed.

In terms of 61 Terenure Road East, 3 no. trees are identified for removal.

In terms of 60 Terenure Road East (Beaumont House) no trees are identified for removal.

A response to trees in Argos House is provided in Section 3.20.3.

3.32 CPO-32 – Linda & James Hennessey – 50 Rathfarnham Road

3.32.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing Rathfarnham carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. This will require localised land acquisition on the eastern boundaries to the existing carriageway.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.0m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.32.1.

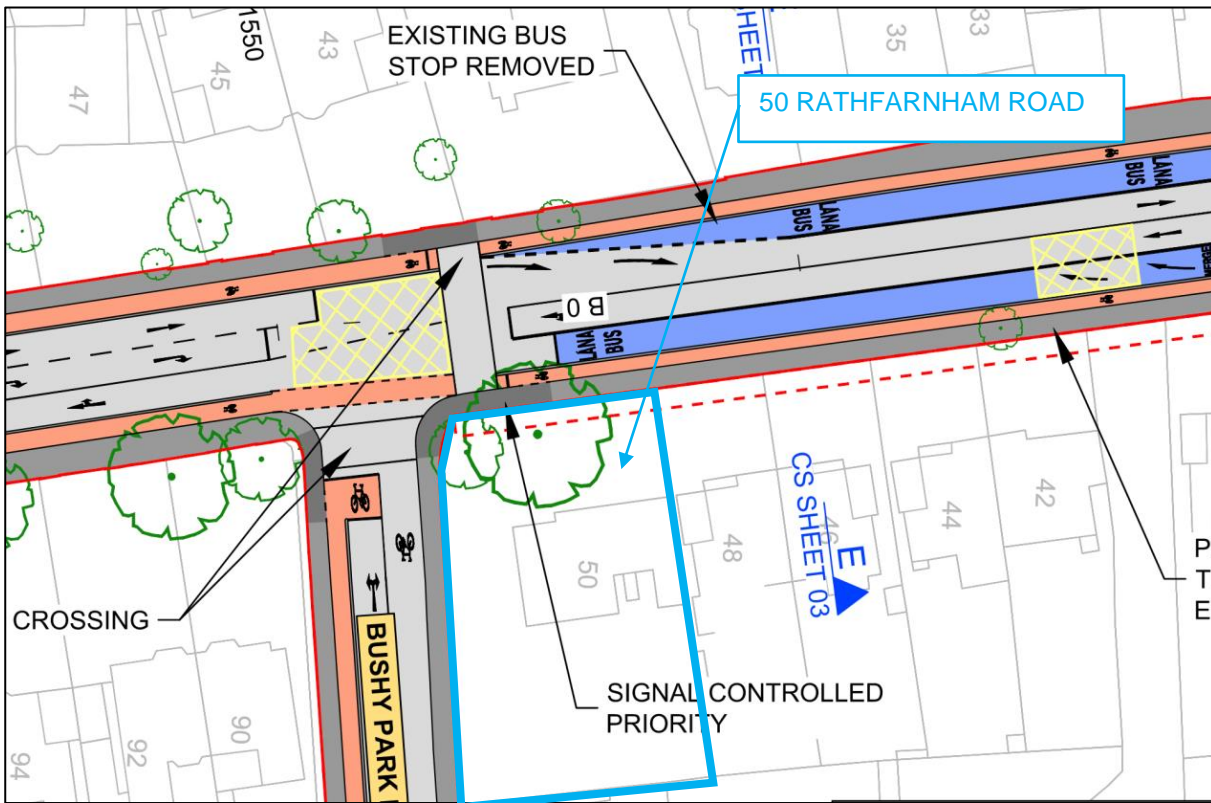


Figure 3.32.1 General Arrangement of Proposed Scheme adjacent to 50 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.32.2.

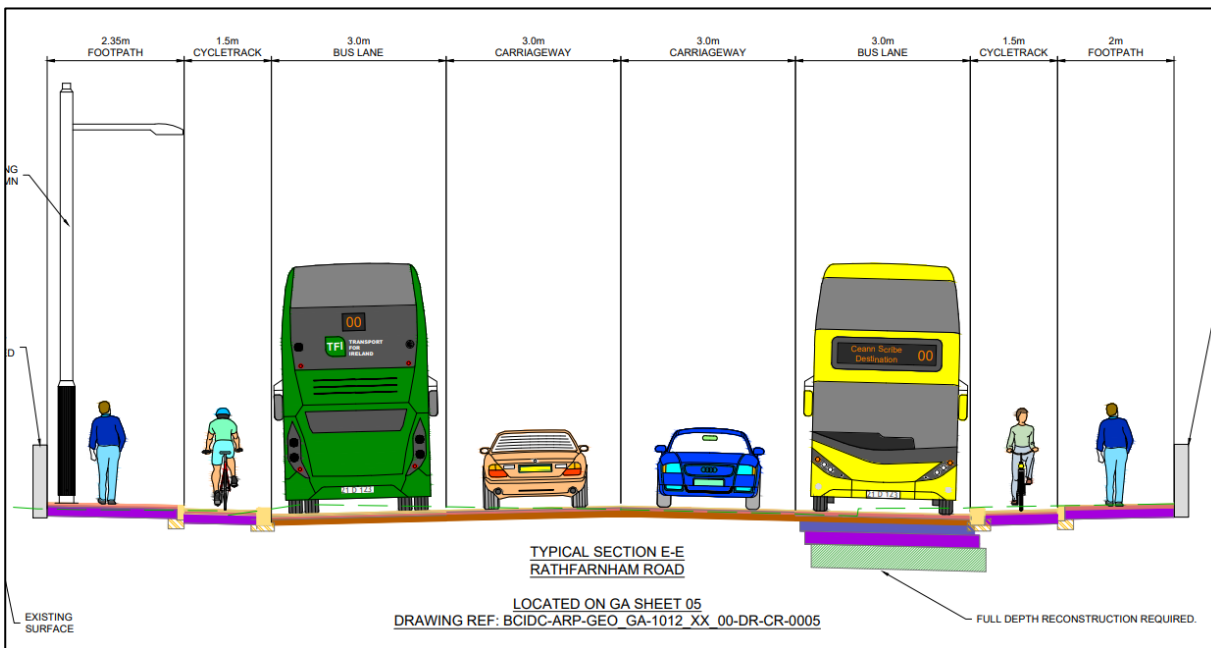


Figure 3.32.2 Typical Cross-Section adjacent to 50 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 50 Rathfarnham Road is shown in Figure 3.32.3.

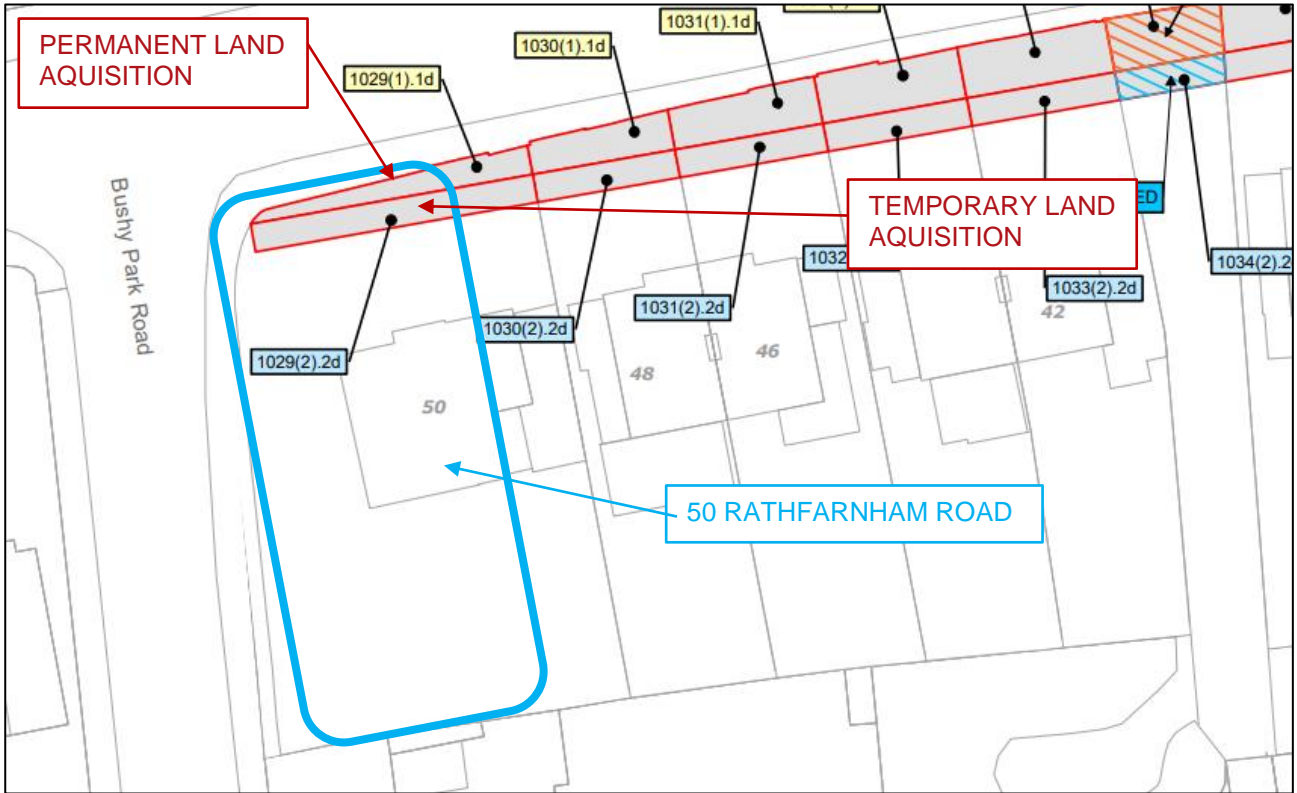


Figure 3.32.3 Extract from CPO Deposit Maps adjacent to 50 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.32.4.

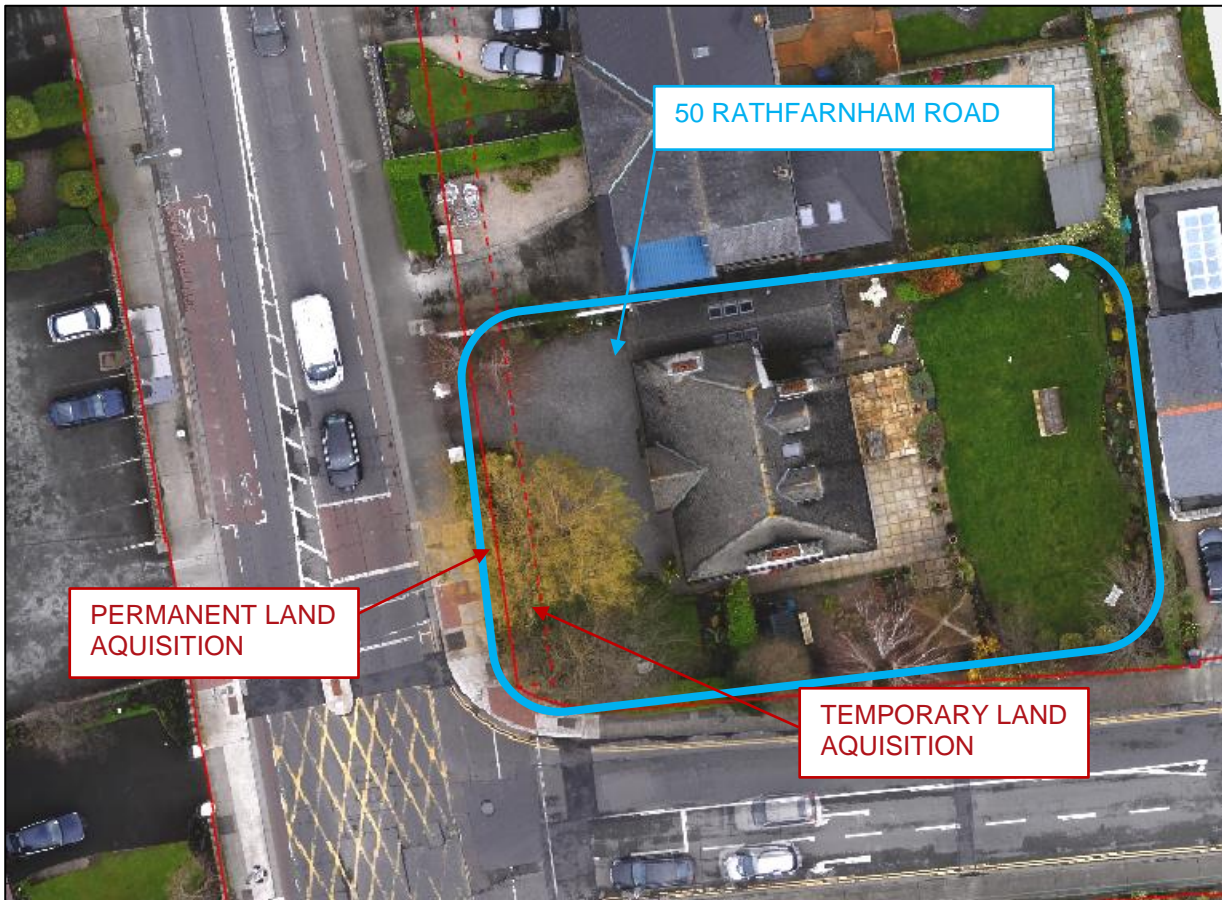


Figure 3.32.4 Proposed Land Acquisition lines adjacent to 50 Rathfarnham Road

The existing property frontage is shown in Figure .



Figure 3.32.5 Existing frontage of 50 Rathfarnham Road (Image source: Google)

3.32.2 Summary of the Points of Objection to the CPO by Linda & James Hennessey

This submission objected to CPO for the reasons summarised in the following section.

i. Inadequate Cumulative Impact Assessment

The submission noted that the cumulative impact of the Proposed Scheme and the broader BusConnects project are insufficiently described and assessed in the EIAR. It stated that the Proposed Scheme should be considered in conjunction with the other BusConnects projects, in particular the Kimmage to City Centre Bus Corridor Scheme and the Belfield/Blackrock to City Centre Core Bus Corridor Scheme.

ii. Legal principles related to compulsory acquisition.

The submission suggests that the NTA has not complied with the legal requirements to the compulsory acquisition of private property as identified by the Supreme Court in *Rein v Industrial Development Agency* [2015], stating that the proposed road layout as presented, and the proposed compulsory acquisition has not been justified or necessitated by the need for improved public transport infrastructure.

iii. Benefits of proposals in this area do not justify the CPO.

The submission states that the savings represented by the 300-meter section between Bushy Park Road to Terenure Road North represents a fraction of the expected time savings and does not warrant the acquisition of land in this area. The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications acquiring the land. The submission noted that the Proposed Scheme will contribute towards noise and air pollution and deprive the residents of the use and enjoyment of land proposed for temporary and permanent acquisition.

iv. Changes to work patterns due to the COVID-19 pandemic

The submission states that the modelled data did not take into account adjusted hybrid working practices following the COVID-19 epidemic.

v. Inability to turn a car within the driveway.

Shortening the driveway will inhibit the resident's ability to turn their car around in the driveway and will require them to reverse across into the new road cross-section.

- vi. Proposed Scheme Out of Character for Urban Village

The submission suggests that the Proposed Scheme is unsuitable for an urban village.

3.32.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-13. Please refer to Section 3.13.3 for responses to these items i – iv and vi. A response to Item v is provided below.

- v. Inability to turn a car within the driveway.

The permanent acquisition will result in the loss of up to approximately 2.0m of lands with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be approximately 1.0m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including pillars and entrance between the pillars will be at least 9.5m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar to the current scenario and that this should not hinder the ability to park within the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

3.33 CPO-33 – Lissenfield Management Company CLG

3.33.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.4.1 of Chapter 4 of Volume 2 of the EIAR. Proposed Scheme Description between Castlewood Avenue and Grove Road, a general traffic lane and a cycle track in each direction are proposed, with the provision of a Bus Gate between Richmond Hill and Lissenfield which will restrict general traffic movements during the hours of operation of the Bus Gate (06:00 – 20:00 - 7 days a week). This proposal also allows for some increase to footpath widths through Rathmines and the provision of 2m wide cycle tracks in each direction through the village. It is proposed to reverse the existing one-way traffic regime on Williams Park to facilitate traffic to turn off of the Proposed Scheme main corridor at Military Road in advance of the Bus Gate and return via Williams Park. It is proposed to provide a mini roundabout outside of St Mary's College to facilitate school drop off.

In order to achieve the desired design for the Proposed Scheme, temporary land acquisition is proposed at this property, with a maximum width of land to be temporary acquired of approximately 4.9m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.33.1.

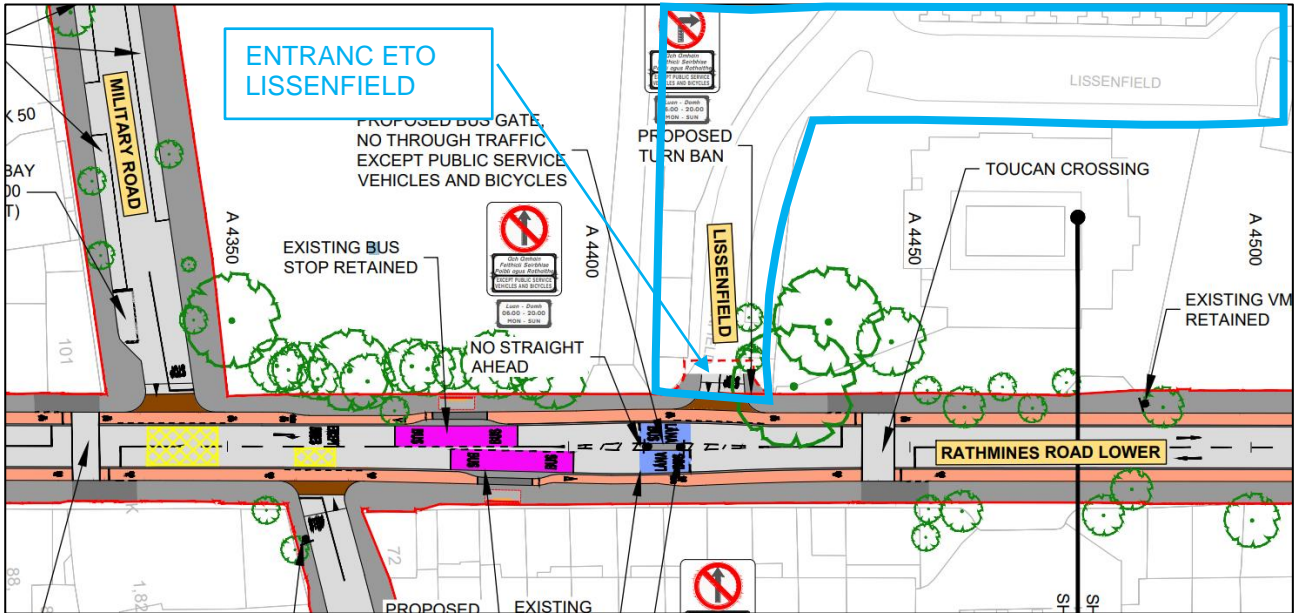


Figure 3.33.1 General Arrangement of Proposed Scheme adjacent at Lissenfield (Sheet 13)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.33.2.

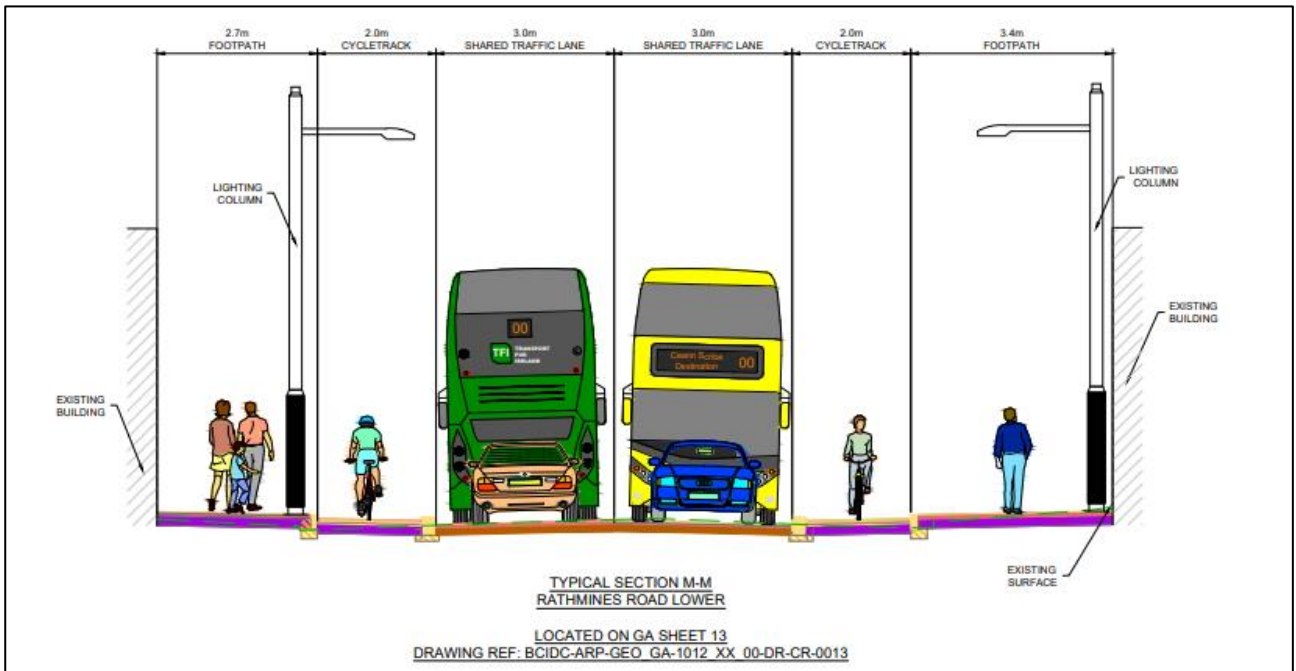


Figure 3.33.2 Typical Cross-Section adjacent to Lissenfield

The relevant extract from the CPO Deposit Maps showing the proposed temporary land acquisition areas at Lissenfield is shown in Figure 3.33.3.

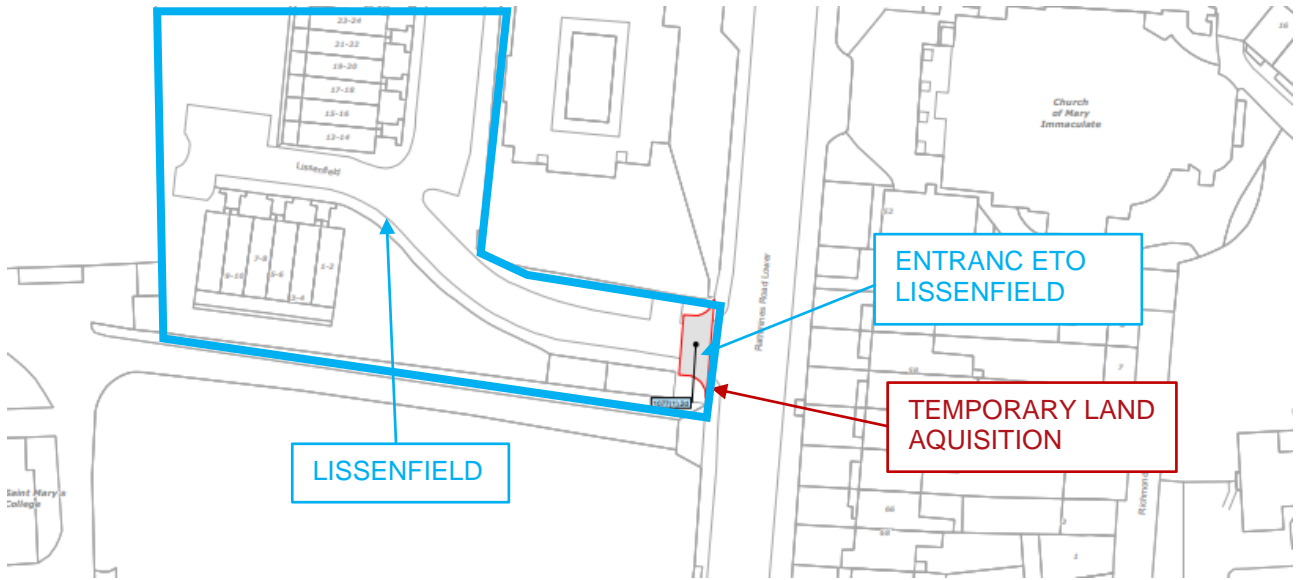


Figure 3.33.3 Extract from CPO Deposit Maps adjacent to Lissenfield.

The proposed temporary land acquisition lines overlain on aerial photography is shown in Figure 3.33.4.

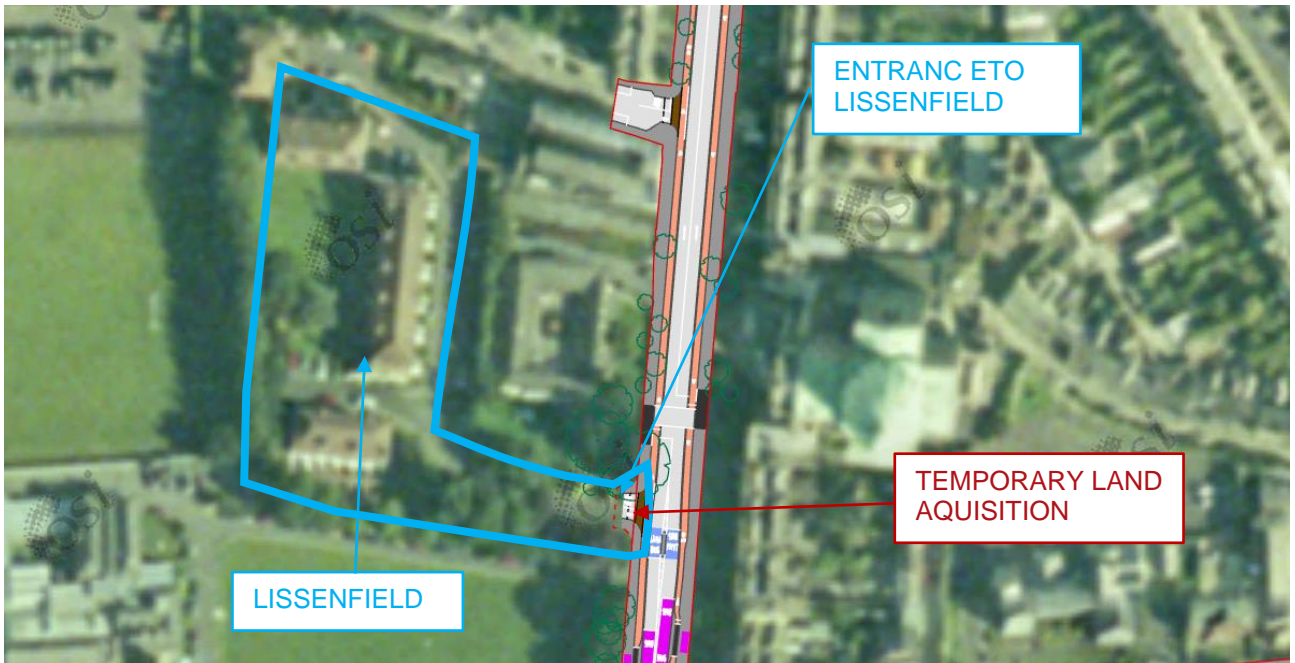


Figure 3.33.4 Proposed Land Acquisition lines adjacent to Lissenfield)

The existing property frontage is shown in Figure 3.33.5.

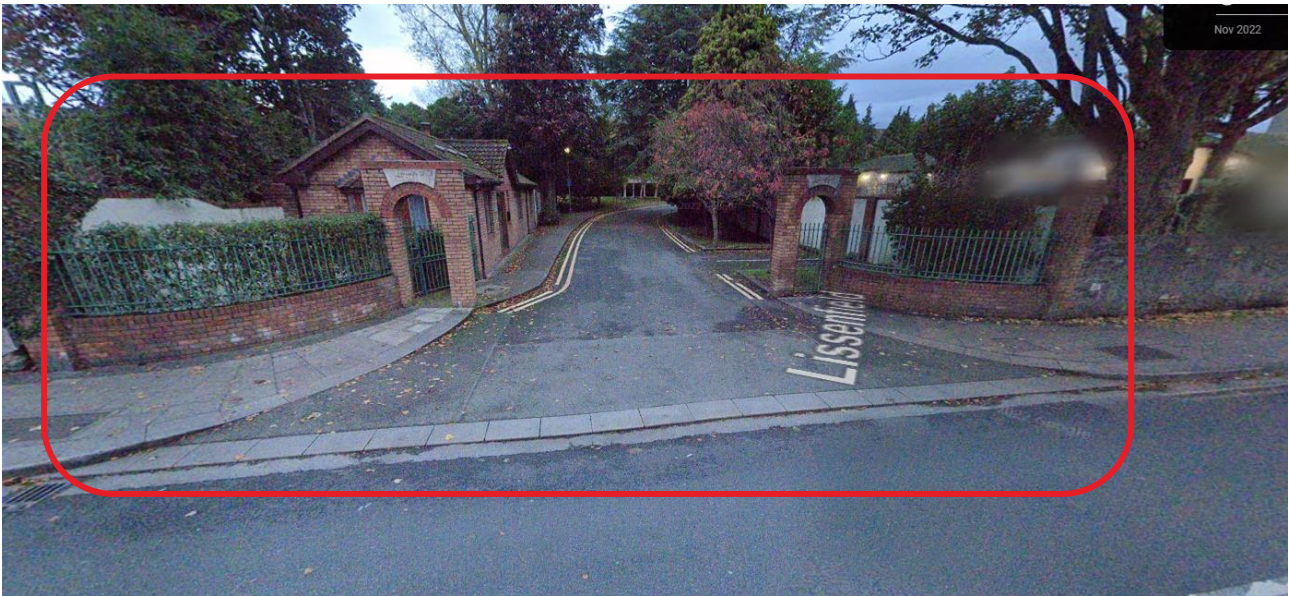


Figure 3.33.5 Existing entrance to Lissenfield (Image source: Google)

3.33.2 Summary of the Points of Objection to the CPO by Lissonfield Management Company CLG

This submission objected to CPO for the reasons summarised in the following section.

- i. Bus gate at Rathmines Road Lower

The submission objected to the proposed bus gate on Rathmines Road Lower, it included a reference to a submission to Section 51 application prepared by Jim Brogan on behalf of Lissonfield Management Company CLG in relation to the proposed bus gate. This submission raised concerns around the proposed bus gate and the impact this would have on access routes to and from Lissenfield as well as impact on access to the Church of Mary Immaculate Refuge of Sinners. A number of alternative options are put forward including relocation of the proposed bus gate north of Church of Mary Immaculate, Refuge of Sinners.

3.33.3 Responses to the Points of Objection

- i. Bus Gate on Rathmines Road Lower

A detailed response to this submission is included in Section 2.5.2.

3.34 CPO-34 – Little Sisters of the Assumption – 42 Rathfarnham Road

3.34.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing Rathfarnham carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. This will require localise land acquisition on the eastern boundaries to the existing carriageway.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.7m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.34.1.

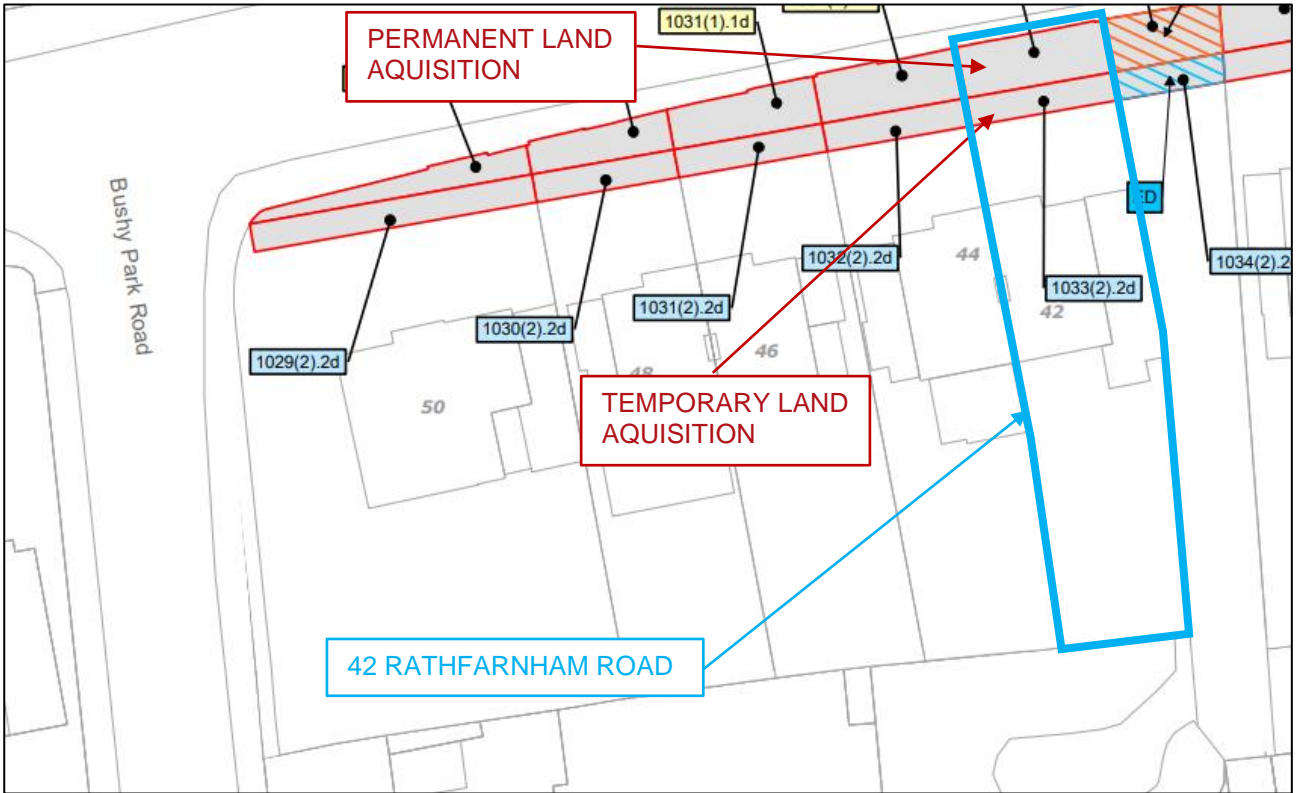


Figure 3.34.3 Extract from CPO Deposit Maps adjacent to 42 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.34.4.

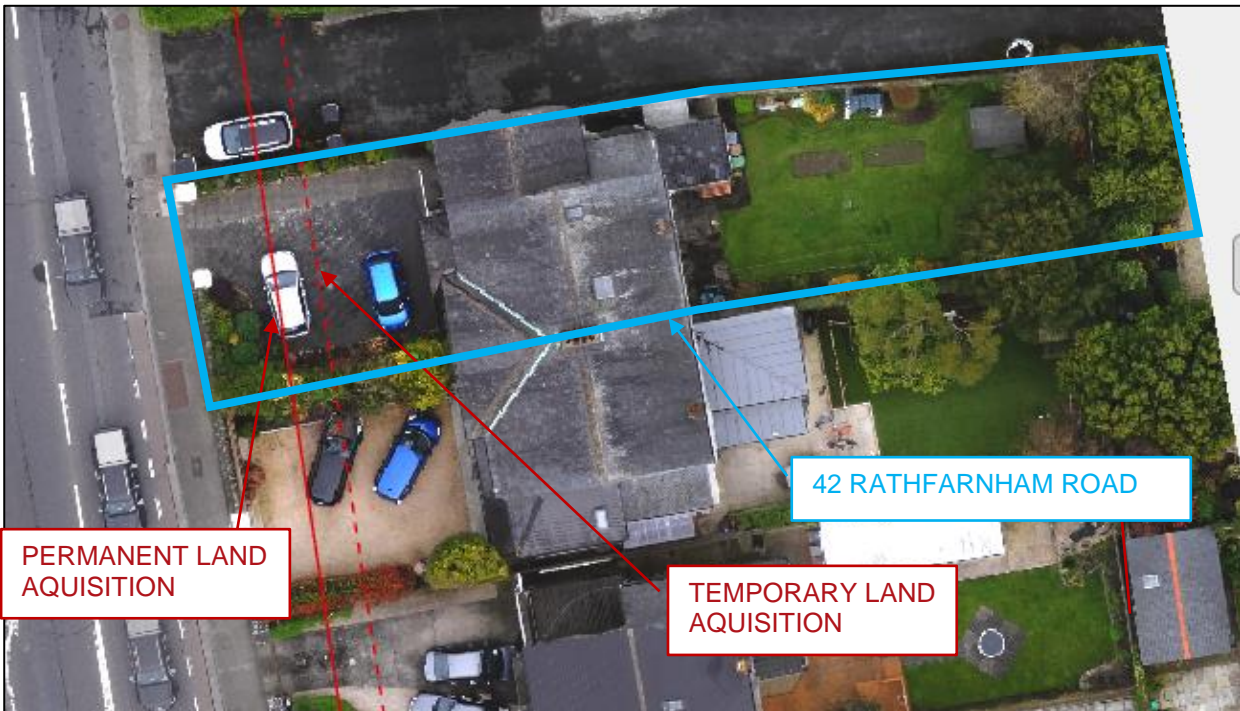


Figure 3.34.4 Proposed Land Acquisition lines adjacent to 42 Rathfarnham Road

The existing property frontage is shown in Figure 3.34.5.

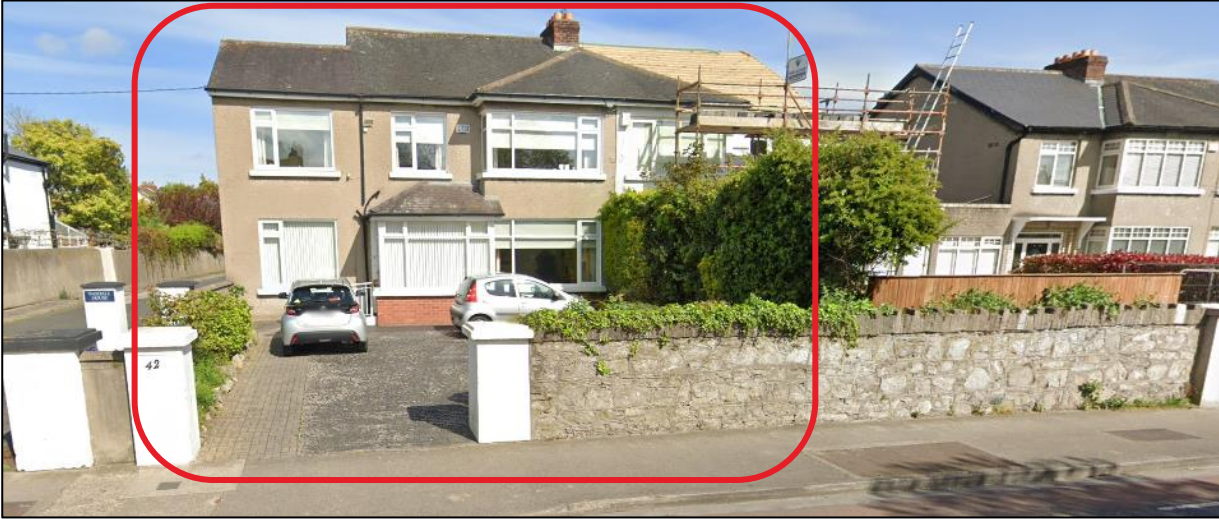


Figure 3.34.5 Existing frontage of 42 Rathfarnham Road (Image source: Google)

3.34.2 Summary of the Points of Objection to the CPO by Little Sisters of the Assumption

This submission objected to CPO for the reasons summarised in the following section.

i. Inadequate Cumulative Impact Assessment

The submission noted that the cumulative impact of the Proposed Scheme and the broader BusConnects project are insufficiently described and assessed in the EIAR. It stated that the Proposed Scheme should be considered in conjunction with the other BusConnects projects, in particular the Kimmage to City Centre Bus Corridor Scheme and the Belfield/Blackrock to City Centre Core Bus Corridor Scheme.

ii. Legal principles related to compulsory acquisition.

The submission suggests that the NTA has not complied with the legal requirements to the compulsory acquisition of private property as identified by the Supreme Court in *Rein v Industrial Development Agency* [2015], stating that the proposed road layout as presented, and the proposed compulsory acquisition has not been justified or necessitated by the need for improved public transport infrastructure.

iii. Benefits of proposals in this area do not justify the CPO.

The submission states that the savings represented by the 300-meter section between Bushy Park Road to Terenure Road North represents a fraction of the expected time savings and does not warrant the acquisition of land in this area. The submission stated out that the proposed road layout and the compulsory acquisition lands appear disproportionate. The perceived imbalance lied in the fact that the anticipated benefits do not seem commensurate with the adverse implications acquiring the land. The submission noted that the Proposed Scheme will contribute towards noise and air pollution and deprive the residents of the use and enjoyment of land proposed for temporary and permanent acquisition.

iv. Changes to work patterns due to the COVID-19 pandemic

The submission states that the modelled data did not take into account adjusted hybrid working practices following the COVID-19 epidemic.

v. Inability to turn a car within the driveway.

Shortening the driveway will inhibit the resident's ability to turn their car around in the driveway and will require them to reverse across into the new road cross-section.

vi. Proposed Scheme Out of Character for Urban Village

The submission suggests that the Proposed Scheme is unsuitable for an urban village.

3.34.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-13. Please refer to Section 3.13.3 for responses to these items i – iv and vi. A response to Item v is provided below.

- v. Inability to turn a car within the driveway.

The permanent acquisition will result in the loss of up to approximately 3.7m of lands with an additional 2m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be approximately 2.5m closer to the residence than the kerb of the existing general traffic lane. The front boundary wall, including pillars and entrance between the pillars will be at least 8m from the front of the house. This would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar to the current scenario and that this should not hinder the ability to park within the driveway.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a cycle lane/cycle track and footpath.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users. All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

3.35 CPO-35 – Lorna Callanan– 55 Rathfarnham Road

3.35.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 1.2m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.35.1.

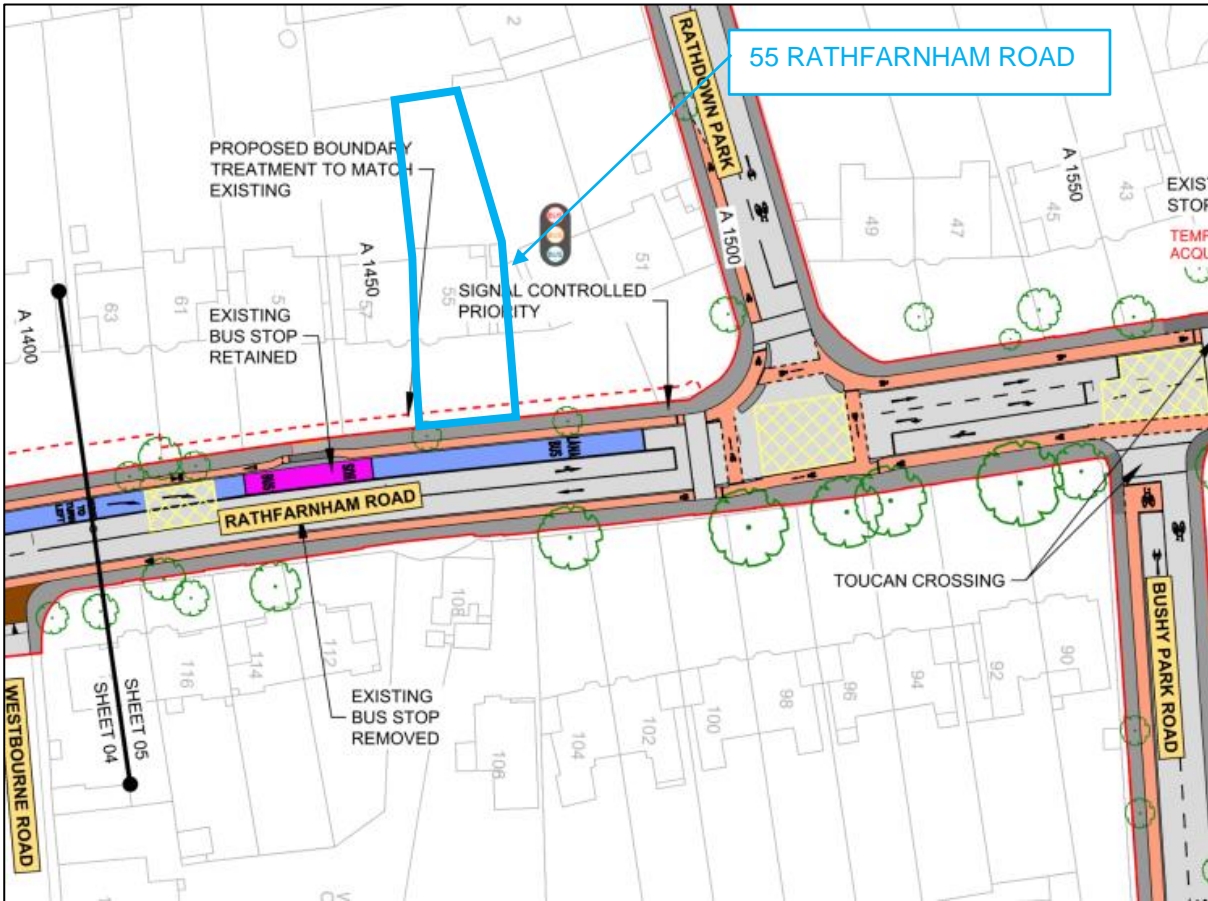


Figure 3.35.1 General Arrangement of Proposed Scheme adjacent to 55 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.35.2.

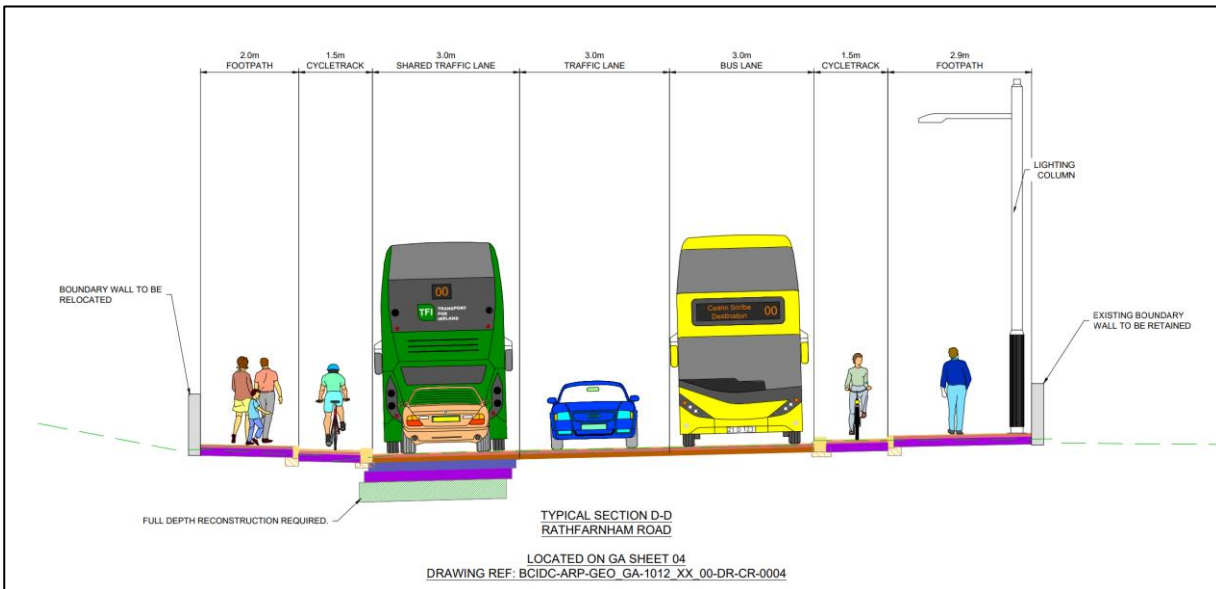


Figure 3.35.2 Typical Cross-Section adjacent to 55 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 55 Rathfarnham Road is shown in Figure 3.35.3.

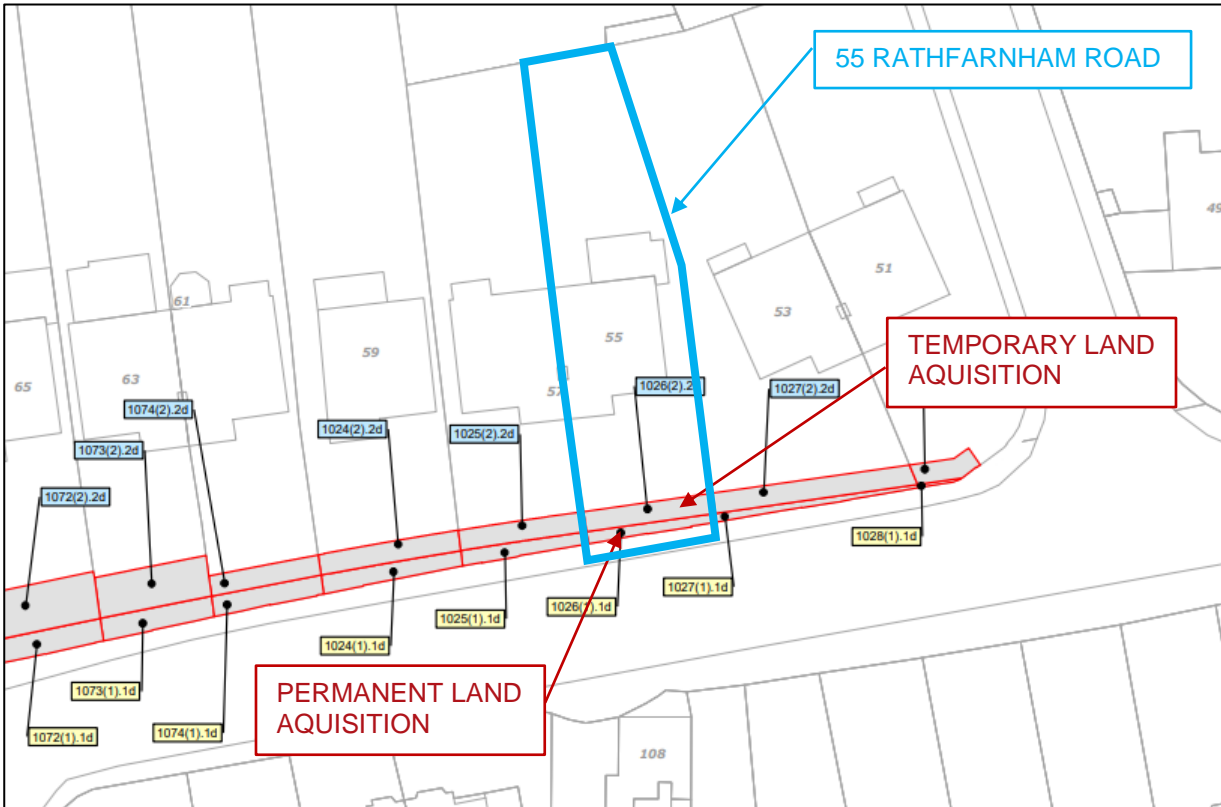


Figure 3.35.3 Extract from CPO Deposit Maps adjacent to 55 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.35.4.

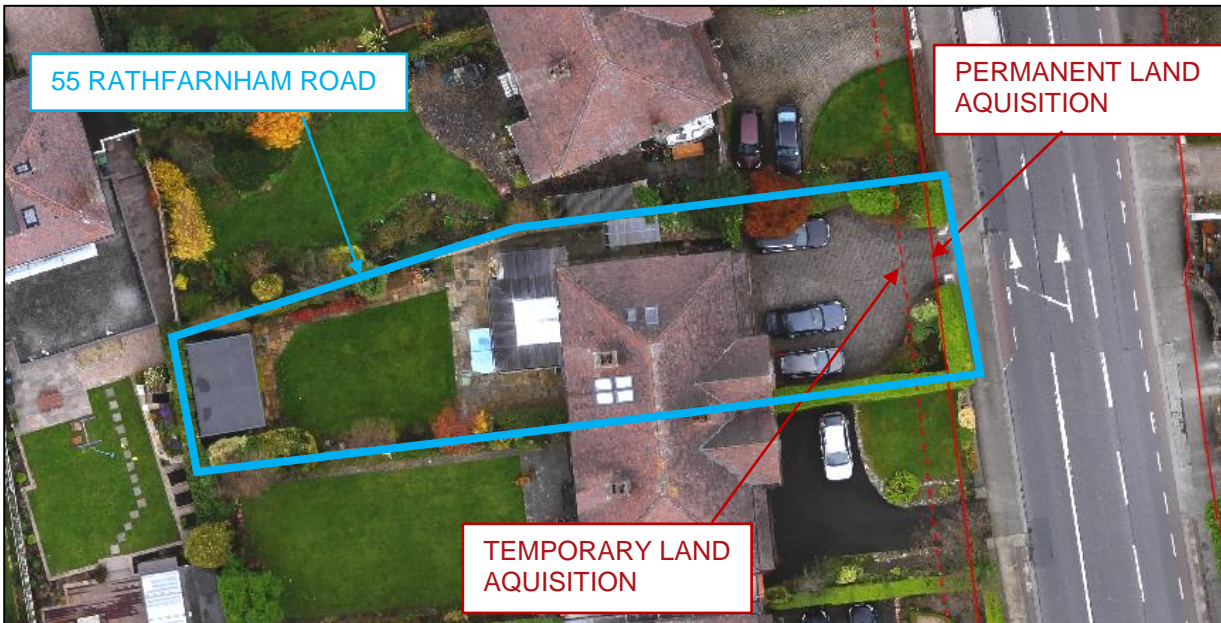


Figure 3.35.4 Proposed Land Acquisition lines adjacent to 55 Rathfarnham Road

The existing property frontage is shown in Figure 3.35.5.



Figure 3.35.5 Existing frontage of 55 Rathfarnham Road (Image source: Google)

3.35.2 Summary of the Points of Objection to the CPO by Lorna Callanan

This submission objected to CPO for the reasons summarised in the following section.

i. Driveway gradients

The submission states that the land acquisition associated with the Proposed Scheme will be a direct breach of Part M of the Building Regulations due to the resulting changes to the gradients on the approach to the residential houses.

ii. Road widening and Consideration of alternatives.

The submission states that the proposed CPO between Rathfarnham Road, between Pearse Bridge and Rathdown Park is disproportionate given the impact on streetscape, amenity and environment. The submission also states that alternative solutions have not been adequately considered. Outlining the following alternatives to CPO:

- a. Shared outbound cycle and bus lane
- b. Off-line cycle alternative, including a new cycle bridge of the Dodder adjacent to Rathdown Park.
- c. One-way systems and bus gates
- d. "Dovetailing bus lanes' North of Bushy Park

iii. Existing Signal Controlled Priority on Terenure Road East is Adequate

The submission states that the existing Signal Controlled Bus Priority adjacent to 55 Terenure Road East for outbound traffic has not been analysed in the traffic assessment. It also noted that the existing signal-controlled bus priority is the most effective and least destructive option.

iv. Impact on Heritage Properties on Terenure Road East

The submission raised concerns about the impact on heritage, natural environment and village character of Terenure Road East, noting that some properties along TRE are protected.

v. Benefits of Scheme do not justify the impacts

The submission states that the resultant impacts of the Proposed Scheme are not proportionate to the associated improvements in journey times. It also notes that the Proposed Scheme will only improvements in journey times until 2040.

vi. Consideration of alternative transport solutions (Luas or Metro)

The submission states that the Environmental Impact Assessment Report (EIAR) has not adequately considered alternative transport solutions such as the Luas or Metro.

vii. Park and Ride Facilities

The submission states that the Proposed Scheme does not facilitate any park and ride facilities along the proposed route.

viii. Cumulative traffic impact

The submission noted that an integrated traffic modelling of immediately adjacent BusConnects routes should be included in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

It also notes that the traffic data used in the assessment was collected pre COVID-19 pandemic and therefore it is no longer accurate.

ix. Commercial traffic

The submission states that the Proposed Scheme fails to consider the traffic impact of commercial vehicles, impact on local commercial interest and impact of rerouting of heavy vehicles onto unsuitable roads.

The submission also states that the Proposed Scheme does not facilitate suburban distribution facilities or last mile deliveries.

x. Templeogue Road Bus Gate

The submission states that the proposed Bus Gate on Templeogue Road is overly restrictive for residents accessing their homes and local amenities and subsequently, it will result in congestion along diverted routes.

xi. Turning Bans

The submission states that the proposed turning bans from Templeogue Road onto Rathdown Avenue and Rathdown Park from Templeogue Road are restrictive for residents accessing their homes and local amenities, and subsequently, it will result in congestion along diverted routes.

xii. Contravention of Dublin City Development Plan

The submission noted that the Proposed Scheme contradicts Dublin City's objectives regarding Z2 – Residential Neighbourhoods (Conservation Areas), which aims to protect the area from unsuitable development that would negatively impact the architectural quality and amenity of the area. The submission also states that the proposals are at odds with the Dublin City Development Plan regarding protection of built heritage.

xiii. Terenure Village – Public Realm

The submission states that the footpath width outside the Post Office / Centra on Terenure Road North is significantly reduced under the Proposed Scheme. It also recommends that an alternative road surface for Terenure Village, which would differentiate the village from the rest of the scheme.

3.35.3 Responses to the Points of Objection

i. Driveway Gradients

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3d road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

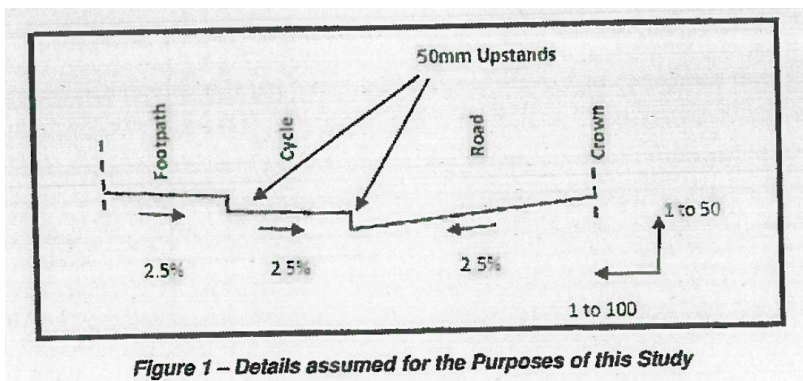
This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

Notwithstanding the above, it is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.15m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Providing footpath cross-fall gradient above that which is typically provided for new built schemes, however not exceeding the existing gradient.

In terms of the submission calculations prepared by NRB; it is important to note that these have been based on an assumed road cross-section as set out below in figure 1 of their submission - *Details assumed for the Purpose of this Study*.



As noted earlier, in order to minimise impacts on adjacent properties, existing footpath gradients are being retained (which are significantly greater than the above in some cases) so the underlying assumption above is incorrect.

It is further noted the NRB calculations also used the proposed centreline level of 43.961, taken at chainage A 1460 from the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR. While the chainage A 1460 is adjacent to 55 Rathfarnham Road it is located to the south of the property plot, rather than at the driveway location which is to the north which is of most relevance to the points being raised. The proposed centreline level at chainage A 1464 is 44.03, some 0.069m higher than the value used by NRB in their assessment.

So, in summary, the assessment is based on a proposed level at chainage A 1460 which is 4m away from the driveway.

The factors outlined above contribute to an inaccurate estimate of the proposed level at the back of the new footpath and therefore misrepresents the effect of the Proposed Scheme on the driveway gradients. It is noted that the NRB assessment indicated that the gradients in the driveway to 55 Rathfarnham Road would be improved as a result of the Proposed Scheme, but this is not the case – existing gradients within the property will be retained as per the existing situation.

In relation to table 1 – *Summary of Design Review of Access Gradients*, included in the appended report by NRB Consulting Engineer which includes a summary of increased driveway gradients between Nos 55-71 Rathfarnham Road. A detailed response to each CPO submission received in relation to driveway gradients, where the NRB assessment concluded that the driveway gradient is either *steeper or significantly steeper*, has been prepared. The response to this submission can be found in the response to points of objection of CPO-01, CPO-19, CPO-25, CPO-30 and CPO-36.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate no increase to the maximum gradients within these properties.

ii. Road widening and Consideration of alternatives.

A detailed response to the optioneering process completed for Rathfarnham Road is presented in Section 2.3.2.

Alternative recommendation a - Shared outbound cycle and bus lane

In relation to the alternative proposal mentioned in the submission, which would include an inbound segregated cycle track and shared outbound lane between buses and cyclists. To accommodate the shared bus and cycle facility in the outbound direction, a southbound bus lane would be required between Rathdown Park and Dodder View Road. However, this adjustment would require the removal of the inbound bus lane.

The bus priority setup proposed for outbound buses between Rathdown Park and Dodder View Road as part of the Proposed Scheme relies on signal-controlled bus priority at the Bushy Park Road junction. Outbound buses subsequently transition into a dedicated bus lane starting south of Westbourne Road, approximately 200m from the bus priority. Inbound buses, on the other hand, receive priority at the Dodder View Road junction through signal-controlled bus priority and then merge into a dedicated bus lane 130m north of the Dodder View Road.

It's important to note that for this signal-controlled priority to function optimally, a bus lane is required at the approach to each junction. If the proposed outbound bus lane is implemented, leading to the removal of the inbound bus lane, this would result in the loss of signal-controlled priority. It is important to recognise that signal-controlled priority is effective only over a short distance and where there is limited access to the route from side roads. Given this alternative would require bus priority to be controlled over 380m with a complex junction in the middle at Rathfarnham Road/Rathdown Drive/Bushy Park Road. For these reasons, this alternative proposal was not considered to be a feasible option.

It is an objective of the Proposed Scheme to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable, and it is proposed on Rathfarnham Road to widen the existing carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor to achieve this objective.

For these reasons, this alternative proposal was not considered to be a feasible option.

Alternative recommendation b - Off-line cycle alternative, including a new cycle bridge of the Dodder adjacent to Rathdown Park.

In response to the recommendation made in the submission including an offline cycle facility including a new cycle bridge over the Dodder into Rathdown Park. Section 3.4.1.1.2.1 of EIAR Chapter 3 Consideration of Reasonable Alternatives describes the assessment of parallel cycle route options following the completion of the Public Consultation in relation to the Emerging Preferred Route. 10 Parallel Cycle Route Options were assessed (PC1 to PC10) between Grange Road and Rathdown Park. Following a detailed Multi-Criteria Analysis (MCA), sub-option PC8 was identified as the preferred option. As detailed in section 3.4.3.2 of Chapter 3, following the second round of Public Consultation additional 9 options (RF1 to RF9) between Grange Road and Rathdown Park were developed and assessed. The parallel cycle route sub-option PC2 was further incorporated into sub-option RF2:

Option RF2: Two bus lanes and two general traffic lanes provided on Rathfarnham Road south of Brookvale Road with cyclists diverted to the preferred parallel route as identified during the initial assessment of parallel cycle route options of the route selection process. Between Brookvale Road and the River Dodder, two general traffic lanes and an inbound bus lane would be provided with outbound bus priority being maintained through use of signal-controlled priority. Two bus lanes, two general traffic lanes on Rathfarnham Road north of the River Dodder as far as Terenure Cross with two 1.5m wide cycle tracks provided north of Rathdown Park where the parallel cycle route re-joins the CBC;

Following a detailed MCA, option RF5 was identified as the preferred option as it best aligned with the objectives of the Proposed Scheme by balancing the provision of physical bus priority and segregated cycle with engineering and construction constraints.

In terms of the sub-criteria under the Environment criterion, Option RF5 performed marginally better than other options in terms of Archaeology and Cultural Heritage due to fact that this option would not impact on Pearse Bridge. In terms of Architectural Heritage, RF5 performed marginally better than other options as it would not impact on Pearse Bridge or Rathfarnham War Memorial Hall. Option RF5 performed significantly better than other options under the Flora and Fauna criterion due to the significantly fewer number of trees impacted. In terms of Landscape and Visual, Option RF5 performed significantly better than other options due to the impacts associated with the construction of a new bridge crossing the River Dodder. In terms of Air Quality and Noise and Vibration, Option RF5 performed marginally worse than other options due to the fact that traffic is not diverted from the main CBC. Under all other criteria, Option RF5 performed equally to the other options.

Further assessment of the sub-options is included in section 4.4.1.2.4 of the Preferred Route Option Report included in the supplementary documents:

In terms of Capital Cost, Options RF2 would be the most expensive option due to the significant infrastructure costs associated with delivering the alternative cycle facilities coupled with land acquisition costs. Option RF9 would have a higher cost than other options, but slightly lower than RF2 due to lower levels of land acquisition.

Options RF1, RF2 and RF9 perform worse than other options under flora and fauna due to the significantly higher number of trees that would be impacted. These trees would be impacted due to road widening that would be required to deliver these options, as well as the construction of the boardwalk at the Pearse bridge and the parallel cycle route, respectively.

In addition to the impact on trees, Option RF2 and RF9 would have the potential to impact on the habitats of bats, badgers, otters and kingfishers which are present in the vicinity of the proposed bridge locations.

Options RF2 and RF9 perform the worst under the landscape and visual criterion due to the likely impacts that would be associated with the construction of new bridge structures as well as the land acquisition impacts. All remaining options perform the best under this criterion as they would not require the construction of new bridge structures.

Further details on the large number of options considered in this area are presented in Section 2.3.2.

Alternative recommendation c - One-way systems and bus gates

In response to the recommendation made in the submission relating an alternative option consisting of one-way systems or bus gates. Section 4.4.1.2.3.2.1 of the Preferred Route Option Report, included in the supplementary documents alongside the planning application describes options considered in between Grange Road and Terenure Cross but were not carried forward. Both options consisted of bus gates along Rathfarnham Road.

Option of a bus gate along Rathfarnham Road between Castleside Drive and Dodder Park Road. *This option was not considered practicable as through traffic would be required to undertake a diversion of up to 2km to continue beyond the bus gate, resulting in a route almost four times as long when compared to the most direct route. Similarly, local access for residents along Rathfarnham Road could be increased by up to 2.5km resulting in a route almost 10 times as long for some residents compared to the most direct route. This diversion length is considered to be too disruptive in this area and as such a bus gate at this location was not considered further.*

Option of a bus gate along Rathfarnham Road between Dodder Park Road and Rathdown Park. *A variety of bus gate options were considered in this area. A two-way bus gate was not considered practicable as through traffic in each direction would be required to undertake a diversion of up to 3km to continue beyond the bus gate, resulting in a route almost six times as long when compared to the most direct route.*

Similarly, local access for residents along Rathfarnham Road could be increased by up to 2.5km resulting in a route over 10 times as long for some residents compared to the most direct route.

Given the constraints in this area, the provision of a one-way bus gate in this location was given further consideration. In light of the proposal to provide an inbound bus gate along Templeogue Road (where physical space is not available for other options) as part of the Templeogue to Terenure section, an outbound bus gate was considered to be the most appropriate option, and this option was brought through to the MCA.

As noted above, a bus gate option was progressed to the MCA as detailed below.

Option RF7: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Main Street Rathfarnham and Terenure Cross. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. An outbound bus gate provided on Rathfarnham Road, north of Dodder Park Road.

The submission suggests that the Proposed Scheme has been designed to facilitate increased traffic associated with traffic rerouting from bus gates on Templeogue Road and the Kimmage to City Centre Scheme. However, the traffic assessment shows that in both the standalone scheme assessment, and the cumulative assessment, traffic volumes along Rathfarnham Road will either reduce compared the do-minimum scenarios or result in no material change. Further details on the traffic volumes along Rathfarnham Road for the standalone scheme assessment and the cumulative assessment are presented in Section 2.3.2.

Alternative recommendation d - "Dovetailing bus lanes' north of Bushy Park

The submission suggests that between Bushy Park Road and Beechlawn Way the provision of dovetailing bus lanes (partially inbound and partially outbound) would eliminate the need for land acquisition and provide effective bus priority.

As outlined in the submission, this option would provide 125m of inbound bus lane on approach to Terenure Road East and 125m of outbound bus lane on approach to Bushy Park Road. This option is not considered appropriate for the following reasons:

- Inbound bus lane would be reduced from c.250m to 125m. Reduction in physical inbound priority, in combination with bus priority signals at both Rathdown Drive and Dodder Park Road introduces a risk to bus journey times and journey time reliability;
- Outbound bus lane would be reduced from c. 160m to 125m. Maximum amount of physical outbound priority required in this area in order to manage priority signal from Terenure Road East and through Terenure Cross. Any extension of the distance between the bus priority signal at St. Joseph's and the bus lane on Rathfarnham Road would significantly compromise bus journey times and journey time reliability through this section.

It is noted that this option would not remove the need for land take through this section.

- iii. Existing Signal Controlled Priority on Terenure Road East is Adequate

A detailed response to this item is provided in Section 2.4.2.

- iv. Impact on Heritage Properties on Terenure Road East

A detailed response to this item is provided in Section 2.4.2.

- v. Benefits of Scheme do not justify the impacts

As stated in Section 2.1 of Chapter 2 of the EIAR, the Proposed Scheme aims to meet growth demand by:

"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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment."

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e., walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.

- vi. Consideration of alternative transport solutions (Luas or Metro)

A detailed response to this item is provided in section 2.1.1.

- vii. Park and Ride Facilities

A detailed response to this item is provided in section 2.1.1.

- viii. Cumulative traffic impact

A detailed response to this item is provided in section 2.1.1.

- ix. Commercial traffic

In relation the claim made in the submission stating that commercial traffic behaviour, and therefore traffic impacts, have not been considered in the EIAR.

EIAR Volume 2 Chapter 6 Traffic & Transport *considered the potential traffic & transport impacts associated with the Construction and Operational Phases of the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme).*

The traffic and transport assessment developed for the Proposed Scheme has taken into account a growth in economic activity along the route and subsequently the increase in good vehicles (HGVs and LGVs). Section 6.4.6.1.15.1 of EIAR Chapter:

The assessment also assumes that goods vehicles (HGVs and LGVs) continue to grow in line with forecasted economic activity with patterns of travel remaining the same. For example, the assessment assumes a 45% and 77% increase in goods traffic versus the base year in 2028 and 2043 respectively. This is considered a very conservative assumption.

It is not expected that the Proposed Scheme will not have any adverse effects on the accessibility of commercial vehicles to local villages and businesses with access by vehicle retained to all destinations but by alternative routes compared to the current situation. These routes are explained in section 2.2.2, 2.4.2 and 2.5.2.

In relation to the concern raised regarding rerouting of Heavy Good Vehicles through suitable road. The Traffic Signs and Road Markings Drawings which are provided as an appendix to Chapter 4 Proposed Scheme Description in Part 1 of 3 of Volume 3 of the EIAR present the signage to be included as part of the proposed scheme. The signage strategy, in combination with the supplementary traffic management measures ensure that traffic, including commercial vehicles, are limited to roads suitable for dealing with the traffic.

x. Impact of Templeogue Road Bus Gate

A detailed response to this item is provided in Section 2.2.2.

xi. Turning Bans from Templeogue Road to Rathdown Avenue and Rathdown Park.

A detailed response to this item is provided in Section 2.2.2.

xii. Contravention of Dublin City Development Plan

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

Section 16.3.1.5 of EIAR Volume 2 Chapter 16 Architectural Heritage describes Conservation Areas in the context of the Dublin City Development Plan 2022-2028 (DCC (2022)).

Conservation Areas are areas which, while not to be confused with ACAs, do afford some protection to the architectural heritage under the Dublin City Development Plan 2022-2028 (DCC 2022), specifically under Policy BHA9:

'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. Development within or affecting a Conservation Area must contribute positively to its character and distinctiveness and take opportunities to protect and enhance the character and appearance of the area and its setting, wherever possible. Enhancement opportunities may include:

- 1. Replacement or improvement of any building, feature or element which detracts from the character of the area or its setting.*
- 2. Re-instatement of missing architectural detail or important features.*
- 3. Improvement of open spaces and the wider public realm and reinstatement of historic routes and characteristic plot patterns.*
- 4. Contemporary architecture of exceptional design quality, which is in harmony with the Conservation Area.*
- 5. Retention of buildings and features that contribute to the overall character and integrity of the Conservation Area.*
- 6. Changes of use will be acceptable where in compliance with the zoning objectives and where they make a positive contribution to the character, function and appearance of the Conservation Area and its setting. The Council will consider the contribution of existing uses to the special interest of an area when assessing change of use applications, and will promote compatible uses which ensure future long-term viability'.*

Policy BHA10 states: 'There is a presumption against the demolition or substantial loss of a structure that positively contributes to the character of a Conservation Area, except in exceptional circumstances where such loss would also contribute to a significant public benefit'.

A review of the Dublin City Development Plan 2016 to 2022 (DCC 2016a) indicates that the Proposed Scheme traverses through four CAs. These areas contain structures of Local to National importance and of Low to High Sensitivity. They are described briefly in Table: 16.8 and Section 16.3.1.5.1 to Section 16.3.1.5.4. Further information on each CA is provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. There are no equivalent Conservation Areas in the South Dublin or in Dún Laoghaire-Rathdown.

The status of the buildings in this area is acknowledged and assessed in the EIAR.

The proposed land take on the west side of the Rathfarnham Road will directly impact the boundary treatments to 51 to 71 Rathfarnham Road (CBC1012BTH039, CBC1012BTH040) which are of low sensitivity. These largely consist of cement rendered walls and piers with concrete capping's. Although some interventions have occurred in the past such as the widening of gateways, the boundary treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries would have a negative impact. The pre-mitigation Construction Phase impact will be Direct, Negative, Slight Temporary.

The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 to Low. The predicted residual impact is Direct, Negative, Not Significant, Temporary

xiii. Terenure Village – Public Realm

Urban realm refers to the everyday street spaces that are used by people to shop, socialise, play, and use for activities such as walking, exercise, or commute to/from work. The urban realm encompasses all streets, squares, junctions, and other rights-of-way, whether in residential, commercial, or civic use. When well designed and laid out with care in a community setting, it enhances the everyday lives of residents and those passing through. It typically relates to all open-air parts of the built environment where the public has free access. It would include seating, trees, planting, and other aspects to enhance the experience for all.

The landscape design for the Proposed Scheme is depicted on the Landscaping General Arrangement Drawings, in EIAR Volume 3. The specific design for Terenure Village is outlined in the extract below. The design intent at Terenure Village aims to improve the streetscape by replacing concrete footpaths with high quality paving, reinstating granite kerbs, planting of semi-mature street trees (9 No.), and incorporating stone/concrete sett paving at pedestrian crossing, loading bays and access roads. Terenure Road East will incorporate wider footpaths within the village core and reduced carriageways so as to enhance pedestrian facilities. Widened footpaths will be built using quality material commensurate with that of the built context of the village so as to enhance the character of the village locality.

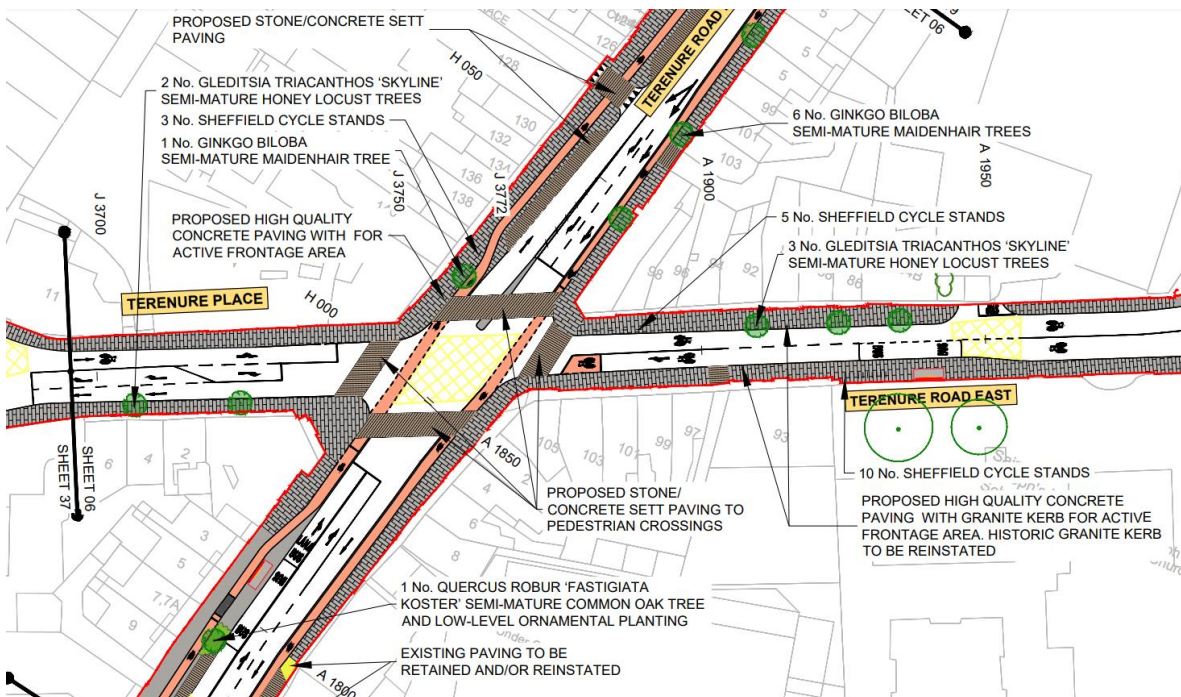


Figure 3.35.6 Landscaping General Arrangement Drawings (Sheet 06 of 37)

The proposed footpath width directly outside nos. 128 to 138 Terenure Road North, next to the reconfigured loading bay and on-street parking, is between 2.2 and 3.0m which is above the Design Manual for Urban Roads and Streets (DMRUS) recommended desirable footpath width of 2.0m and only marginally narrower than the existing width of 2.3 to 3.2m. However, this proposal provides significantly enhanced cycle facilities through this area.

3.36 CPO-36 – Marcus Purcell & Family– 67 Rathfarnham Road

3.36.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 2.4m and temporarily acquired of approximately 10.9m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.36.1.

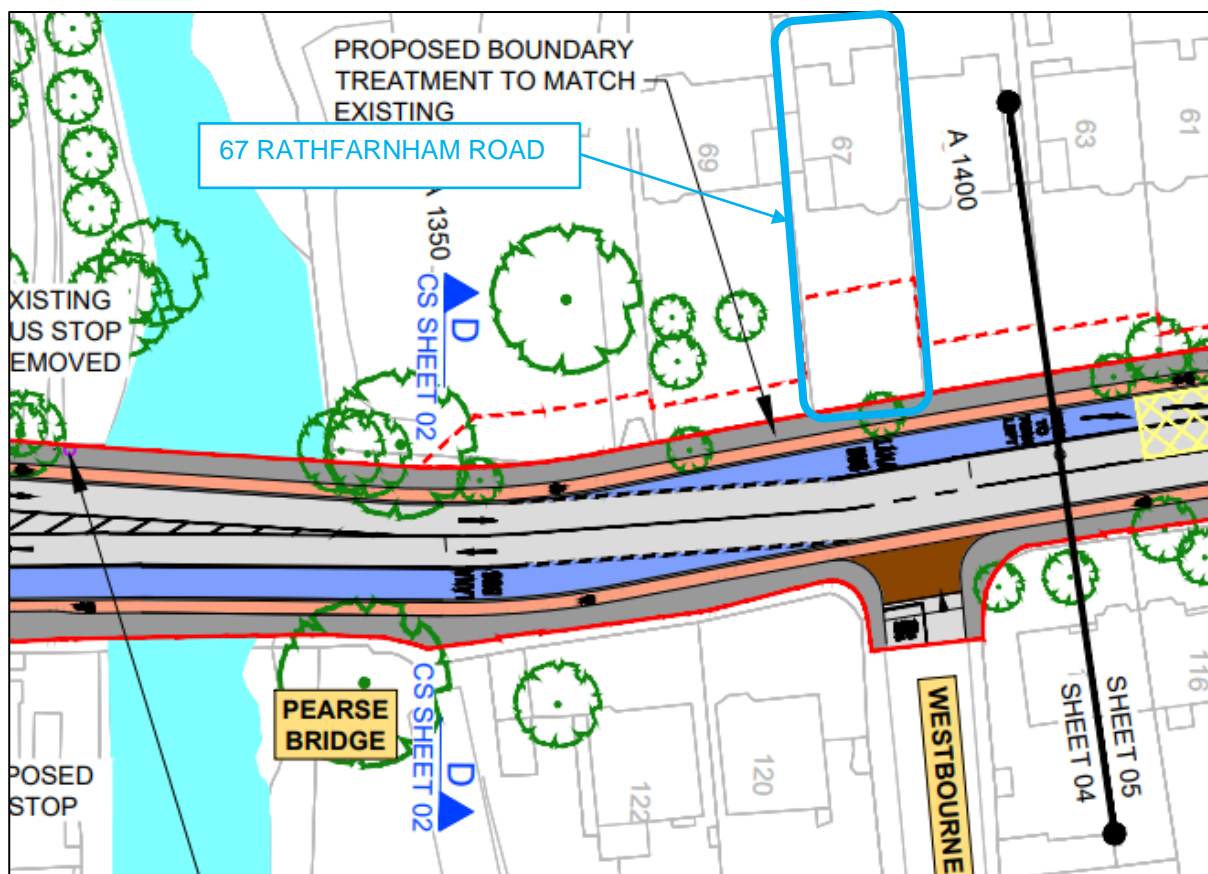


Figure 3.36.1 General Arrangement of Proposed Scheme adjacent to 67 Rathfarnham Road (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.36.2.

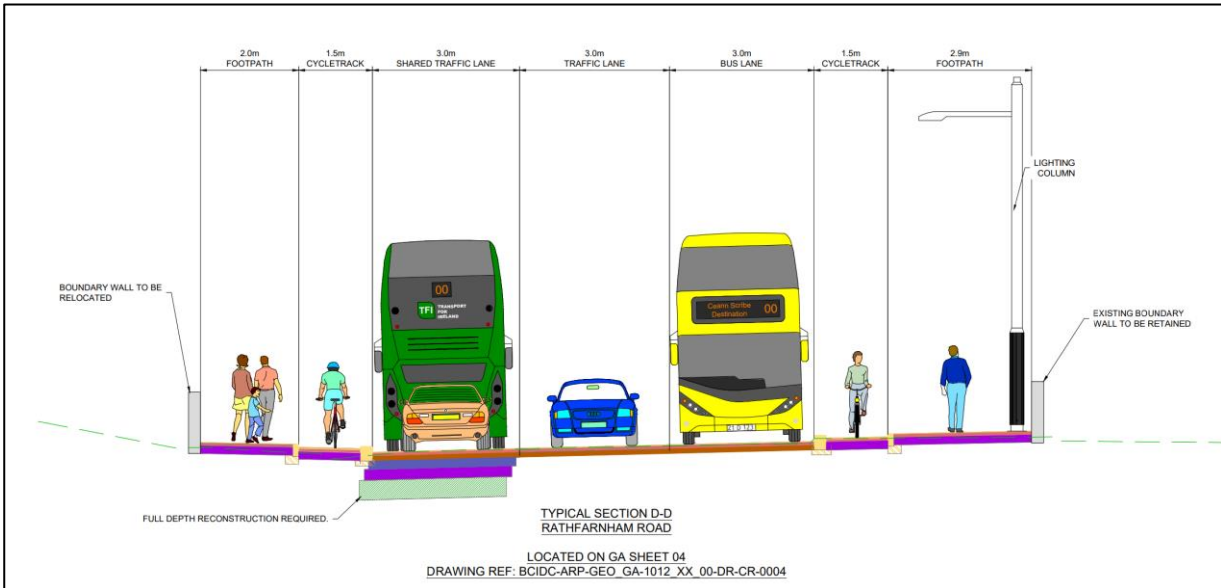


Figure 3.36.2 Typical Cross-Section adjacent to 67 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 67 Rathfarnham Road is shown in Figure 3.36.3.

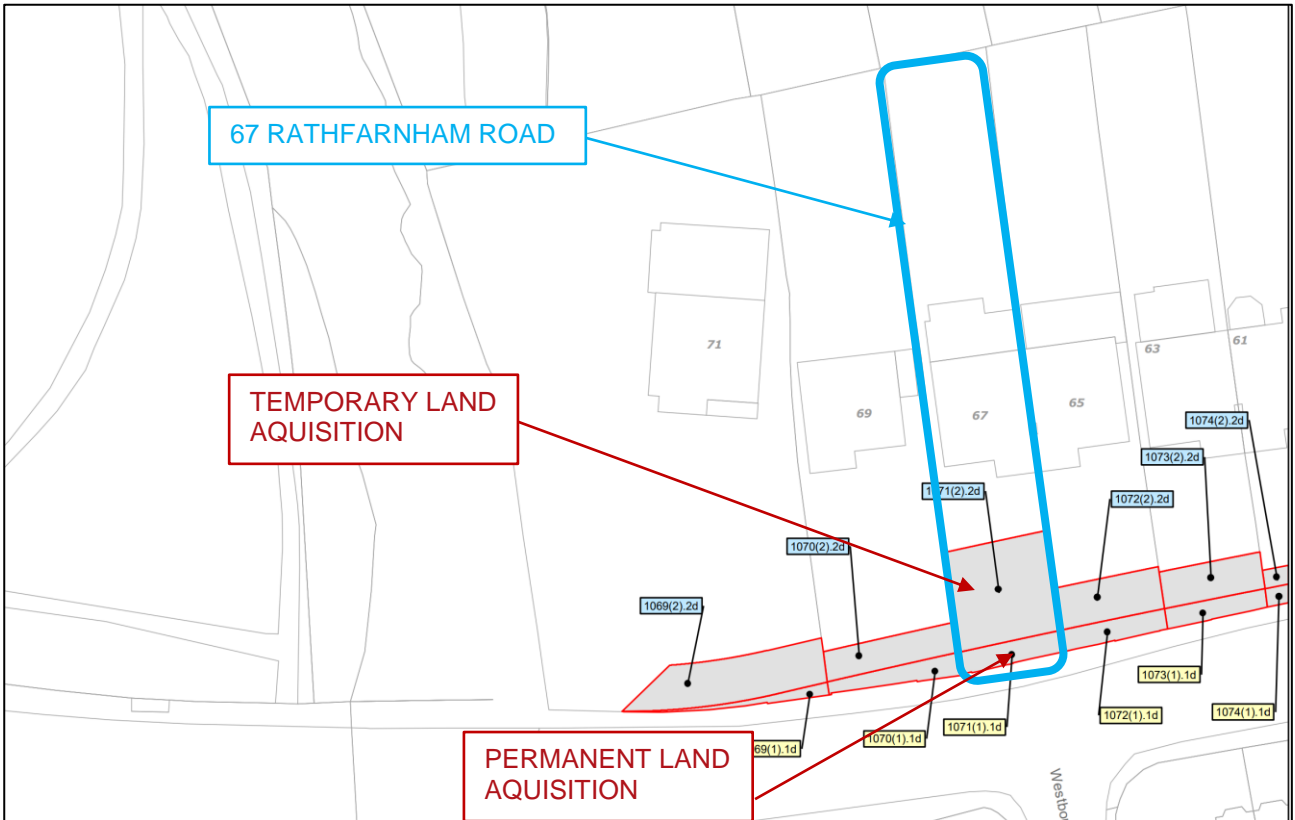


Figure 3.36.3 Extract from CPO Deposit Maps adjacent to 67 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.36.4.



Figure 3.36.4 Proposed Land Acquisition lines adjacent to 67 Rathfarnham Road
 The existing property frontage is shown in Figure 3.36.5.



Figure 3.36.5 Existing frontage of 67 Rathfarnham Road (Image source: Google)

3.36.2 Summary of the Points of Objection to the CPO by Marcus Purcell & Family

This submission objected to CPO for the reasons summarised in the following section.

i. Driveway Gradients

The submission raised a concern that the Proposed Scheme will result in increased driveway gradients resulting in unsafe gradients.

ii. Necessity of Road Widening

The submission questions the necessity of CPO at this section of Rathfarnham Road, suggesting that there are no environmental differences between the section outside No 51-71 Rathfarnham Road and 91-129 Rathfarnham Road, where a shared bus and cyclists' space is proposed.

iii. Congestion from bus priority on Rathfarnham Road

The submission noted that the bus priority measures at Dodder Park Road and Rathdown Park are only 260m apart and are likely to cause significant traffic congestion. It also noted that the need for bus priority measures is not clear. The submission referenced the RW Nowlan & Associates Report which recommends a longer green time at the Rathdown Park junction instead of the bus priority, stating that it will benefit buses while alleviating congestion.

iv. Clarification on Temporary Acquisition

v. Removal and replacement of Trees

The submission expressed their concern in relation to the proposed removal of trees along the Proposed Scheme, stating that it will negatively impact the environment. It also notes that the proposed removal of trees will result in increased air and noise pollution.

The submission notes that the NTA has not provided sufficient detail around the replacement of trees at Rathfarnham Road.

vi. Traffic data out of date due to Covid

The submission notes that the basis of the traffic assessment is out of date due to changes in travel patterns as a result of Covid.

vii. Section 51 and CPO Application should not be made concurrently

The submission notes concern over the appropriateness of the NTA making (i) an Application for Confirmation of the CPO and (ii) an Application for Approval of the Proposed Scheme under Section 51 of the Roads Act 1993 (as amended) and the Board making its decisions at the same time.

viii. NTA has not demonstrated need for the scheme and the CPO

The submission notes that the NTA has not established that there is a need for the Scheme or that the lands to be acquired are required. The submission also notes that no alternative solutions have been considered.

ix. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

x. Inadequate Consultation

The submission notes that the consultation process was inadequate. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

xi. Cost Benefit Analysis is Required

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'.

xii. Implementation of other BusConnects measures first

The submission suggests that less intrusive measures that form part of the BusConnects programme should be implemented first (e.g. cashless fares). It is also suggested that the benefits delivered by the infrastructure and other measures of the programme are separated to identify the benefits as a result of the infrastructure alone.

xiii. Metro is more suitable for this corridor

The submission notes concern that a metro option has not been considered by the NTA for the Rathfarnham corridor.

xiv. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

xv. Congestion at Terenure Cross due to proposed changes

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create issues with the operation of the junction resulting in congestion.

xvi. Impact on Businesses due to loss of parking/loading

The submission states that businesses in Rathgar and Terenure will lose access to their customers due to the removal of parking and loading facilities in these areas.

xvii. Bus Gate Hours of Operation

The submission suggests that consideration should be given to reducing the hours of operation of the bus gates on the Proposed Scheme.

xviii. Proposed Cycle Facilities are Insufficient

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about facilities provided on alternative routes. The submission also raised concerns about cycle tracks being blocked by vehicles e.g. delivery vehicles.

xix. Traffic Impact as a result of Traffic Management Measures

The submission raises a number of concerns about the impact of proposed traffic management measures (namely bus gates and proposed one-way on Rathgar Road) on the surrounding road network. Specific concerns included:

- Traffic rerouting from current corridor to residential streets and impact on these streets
- Traffic rerouting to other routes and resulting congestion (e.g. through Harold's Cross and Ranelagh)
- New access routes to/from the city following implementation of traffic management measures

The submission suggest that the effect of rerouting traffic has not been considered in the modelling undertaken.

xx. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

The submission noted traffic modelling should include immediately adjacent BusConnects routes and should be presented in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

3.36.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-20 and CPO-07. Please refer to CPO-07 in Section 3.7.3 above for responses to items ii, iii and v and to CPO-20 in Section 3.20.3 for responses to items vi to xx. Items i and iv are responded to below.

i. Driveway Gradients

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3D road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

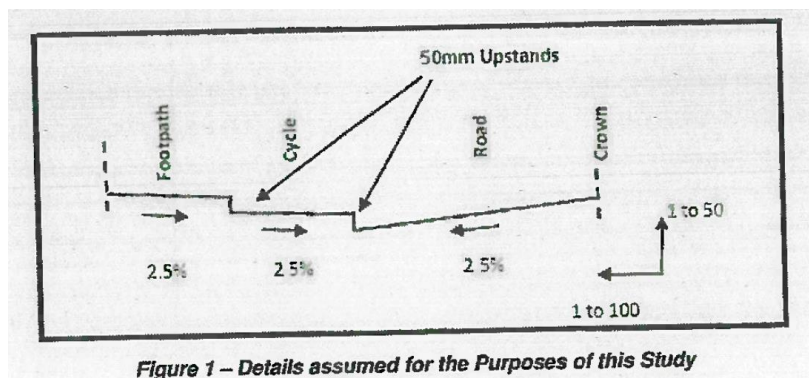
This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

It is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.06m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Retaining existing footpath gradient at this location;
- Regrading within the property over a distance of 9.6m which would result in a gradient no greater than the maximum existing gradient within the property. It is noted that this is incorporated into the temporary land acquisition presented in the Deposit Maps.

In terms of the submission calculations prepared by NRB, it is important to note that these have been based on an assumed road cross-section as set out below in figure 1 of their submission - *Details assumed for the Purpose of this Study*.



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 EIAR Volume 2 Chapter 6 to Chapter 21 and are summarised in Chapter 22 (Summary of Mitigation & Monitoring Measures) of this EIAR.

3.37 CPO-37 – Margaret Silke – 67 Terenure Road East

3.37.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph's Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.8m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.37.1.

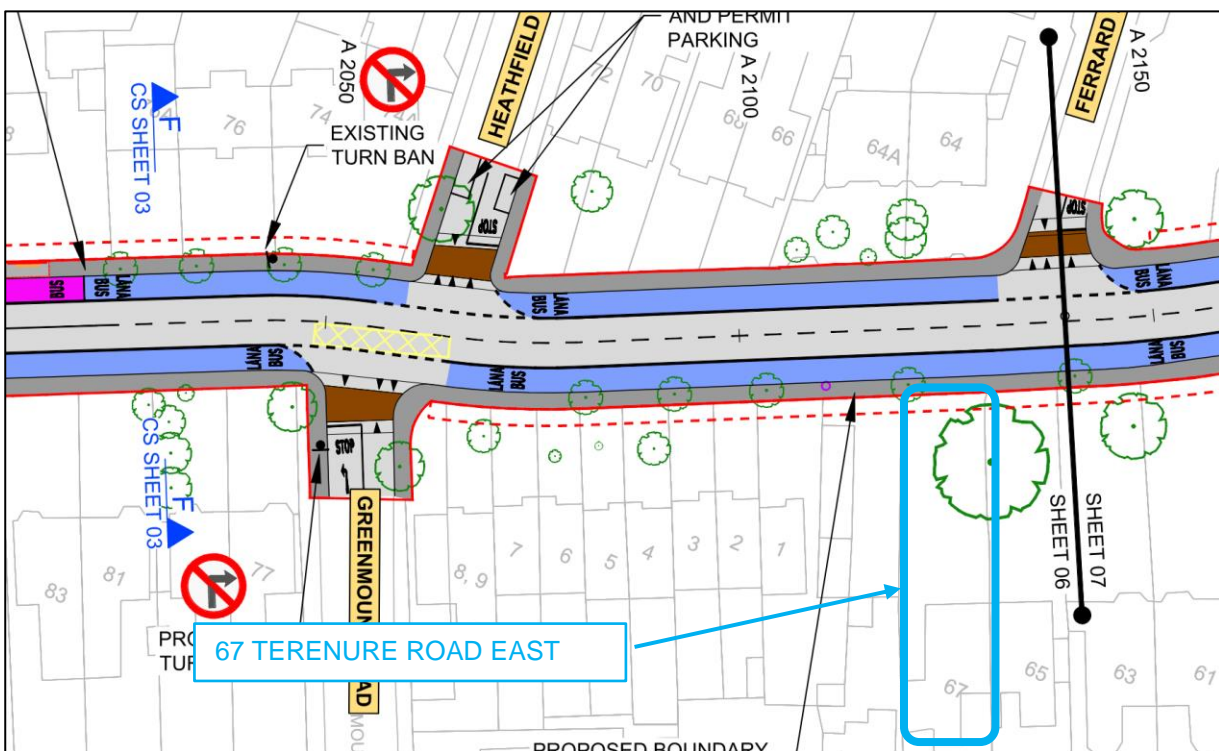


Figure 3.37.1 General Arrangement of Proposed Scheme adjacent to 67 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.37.2.

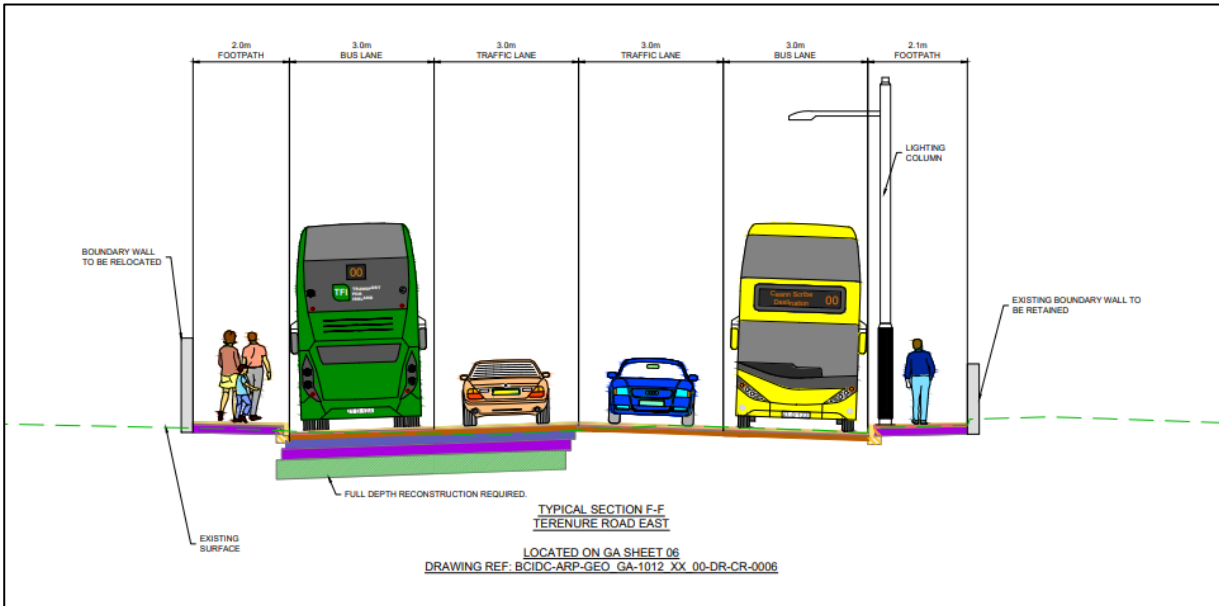


Figure 3.37.2 Typical Cross-Section adjacent to 67 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas 67 Terenure Road East is shown in Figure 3.37.3.

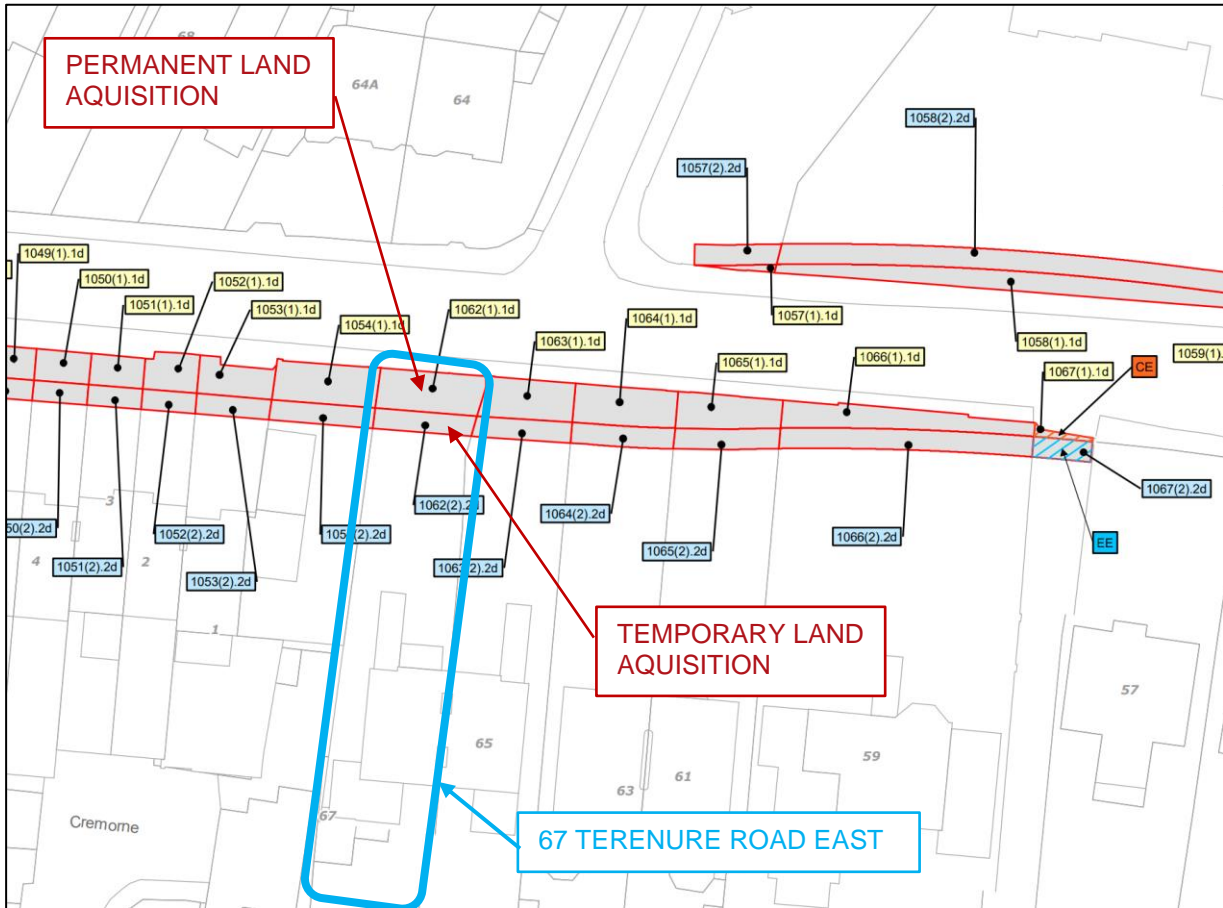


Figure 3.37.3 Extract from CPO Deposit Maps adjacent to 67 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.37.4.



Figure 3.37.4 Proposed Land Acquisition lines adjacent to 67 Terenure Road East
The existing property frontage is shown in Figure 3.37.5.



Figure 3.37.5 Existing frontage of 67 Terenure Road East (Image source: Google)

3.37.2 Summary of the Points of Objection to the CPO by Margaret Silke

- i. Traffic data out of date due to Covid

The submission notes that the basis of the traffic assessment is out of date due to changes in travel patterns as a result of Covid.

- ii. Section 51 and CPO Application should not be made concurrently

The submission notes concern over the appropriateness of the NTA making (i) an Application for Confirmation of the CPO and (ii) an Application for Approval of the Proposed Scheme under Section 51 of the Roads Act 1993 (as amended) and the Board making its decisions at the same time.

- iii. NTA has not demonstrated need for the scheme and the CPO

The submission notes that the NTA has not established that there is a need for the Scheme or that the lands to be acquired are required. The submission also notes that no alternative solutions have been considered.

- iv. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

- v. Inadequate Consultation

The submission notes that the consultation process was inadequate. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

vi. Cost Benefit Analysis is Required

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'.

vii. Implementation of other BusConnects measures first

The submission suggests that less intrusive measures that form part of the BusConnects programme should be implemented first (e.g. cashless fares). It is also suggested that the benefits delivered by the infrastructure and other measures of the programme are separated to identify the benefits as a result of the infrastructure alone.

viii. Metro is more suitable for this corridor

The submission notes concern that a metro option has not been considered by the NTA for the Rathfarnham corridor.

ix. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

x. Congestion at Terenure Cross due to proposed changes

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create issues with the operation of the junction resulting in congestion.

xi. Impact on Businesses due to loss of parking/loading

The submission states that businesses in Rathgar and Terenure will lose access to their customers due to the removal of parking and loading facilities in these areas.

xii. Bus Gate Hours of Operation

The submission suggests that consideration should be given to reducing the hours of operation of the bus gates on the Proposed Scheme.

xiii. Proposed Cycle Facilities are Insufficient

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about facilities provided on alternative routes. The submission also raised concerns about cycle tracks being blocked by vehicles e.g., delivery vehicles.

xiv. Traffic Impact as a result of Traffic Management Measures

The submission raises a number of concerns about the impact of proposed traffic management measures (namely bus gates and proposed one-way on Rathgar Road) on the surrounding road network. Specific concerns included:

- Traffic rerouting from current corridor to residential streets and impact on these streets
- Traffic rerouting to other routes and resulting congestion (e.g. through Harold's Cross and Ranelagh)
- New access routes to/from the city following implementation of traffic management measures

The submission suggest that the effect of rerouting traffic has not been considered in the modelling undertaken.

xv. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

The submission noted traffic modelling should include immediately adjacent BusConnects routes and should be presented in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

3.37.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-20. Please refer to refer to Section 3.20.3 for responses to these items.

3.38 CPO-38 – Maria Blair – 10 Rathfarnham Wood

3.38.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with maximum permanent land acquisition of up to approximately 3.3m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.38.1.



Figure 3.38.1 General Arrangement of Proposed Scheme adjacent to 10 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.38.2.

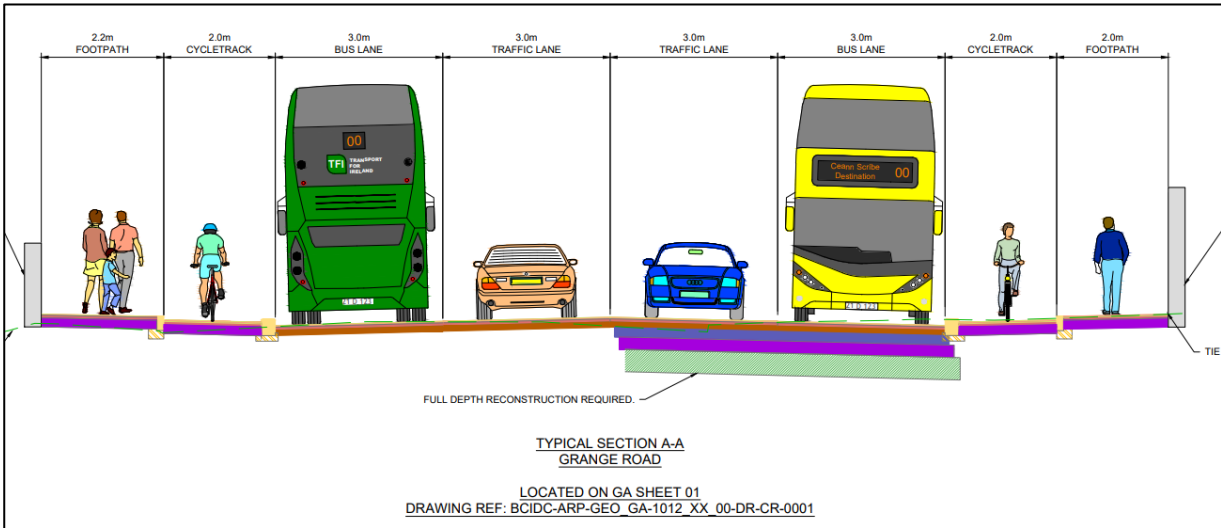


Figure 3.38.2 Typical Cross-Section adjacent to 10 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 10 Rathfarnham Wood is shown in Figure 3.38.3.

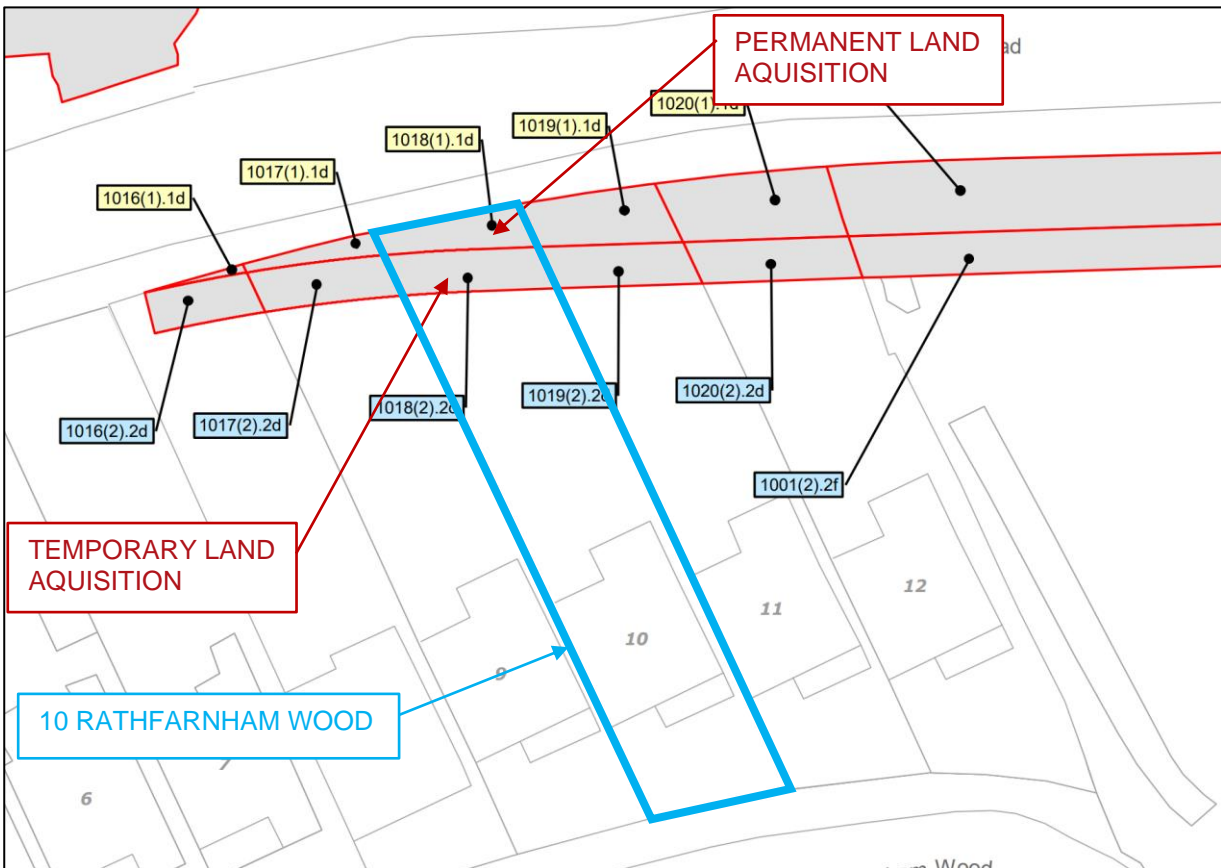


Figure 3.38.3 Extract from CPO Deposit Maps adjacent to 10 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.38.4.

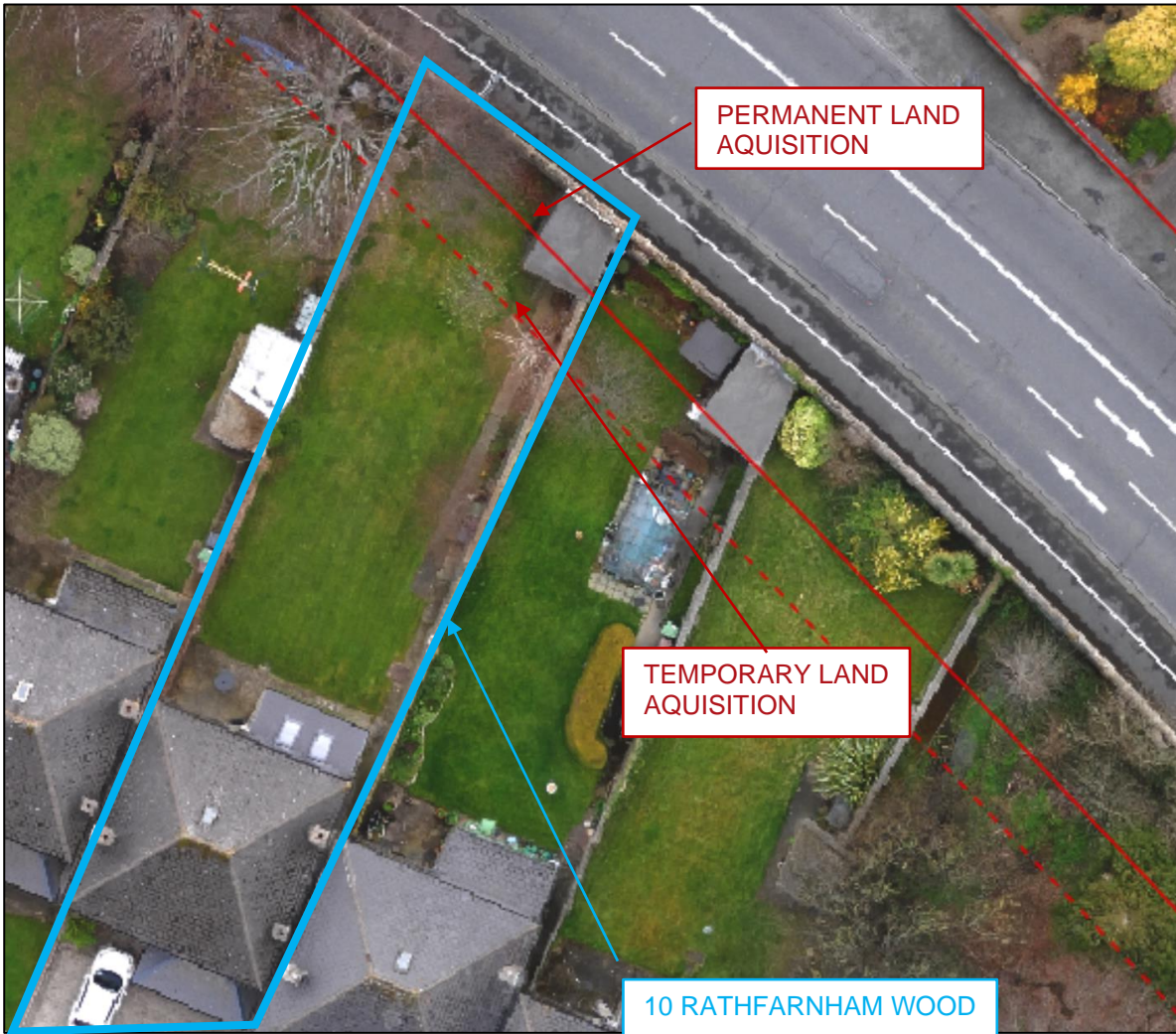


Figure 3.38.4 Proposed Land Acquisition lines adjacent to 10 Rathfarnham Wood

The existing property rear boundary is shown in Figure 3.38.5.



Figure 3.38.5 Existing property rear boundary of 10 Rathfarnham Wood (Image source: Google)

3.38.2 Summary of the Points of Objection to the CPO by Maria Blair

This submission objected to CPO for the reasons summarised in the following section.

i. Necessity of road widening

The submission states that road widening adjacent to 10 Rathfarnham Wood are unnecessary, adding that the environmental impact involved relocating the granite wall are unnecessary. It also states that the land acquisition could be avoided by deviating from the standard footpath and cycle track widths.

ii. Removal of tree

The submission expressed concerns regarding the removal of a tree from the back garden of 10 Rathfarnham Wood.

iii. No consideration of Glin River

The submission notes that the Environmental Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin river to the area.

iv. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, The submission goes on to suggest using bus priority as an alternative to reduce land take need. In addition the following options are suggested:

- a) Terminate Proposed Scheme at Butterfield Avenue – the submission suggests stopping the scheme at the Butterfield Avenue junction to avoid impacting the Rathfarnham Castle Park
- b) Acquire land from the houses on the southern side of Grange Road
- c) Cyclists share bus lanes as proposed elsewhere on the scheme

v. Climate Impact of Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

vi. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

vii. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use.

viii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife.

ix. Replacement of the Castle Wall

The submission contends that proposed roughcast render wall will be aesthetically inferior to the existing granite wall. It also goes on suggest that the EIAR is misleading in the description of this.

x. Impact on woodland playground

It also notes the impact on the Woodland playground close to the boundary wall along Grange Road which particularly important resource for children with autism.

- xi. Request to improve Nutgrove Avenue cycle facilities

A number of concerns in relation to the poor quality of the existing Nutgrove Avenue cycle facilities and a request to upgrade them as part of the scheme.

- xii. Bus Stops

The submission notes that there is a reduction in the number of bus stops along in the area. The submission states that the Proposed Scheme proposes to reduce the number of bus stops from 18 to 15 according to Table 6.29 and is considered a regressive step.

- xiii. Courtyard/stables redevelopment

The submission notes that there are other proposals for the northern area of the Rathfarnham Castle Park by others. It notes that this development has been mooted for some time and is not considered by the BusConnects project. The submission contends that cumulative effects of the courtyard development and BusConnects proposal is too significant an incursion into the park.

- xiv. Nutgrove Avenue/Grange Road Junction Signals

The submission notes that Section 6.4.6.1.3.1 of EIAR states as an advantage of BusConnects that a signalised crossing would be added to the western arm of the R821 Nutgrove Avenue/R821 Grange Road/R822 Grange Road signalised junction, the submission notes that the scheme documentation states that this is a benefit when in fact it is already in existence.

3.38.3 Responses to the Points of Objection

Items iii – xv raises the same concerns as CPO-08. Please refer to Section 3.8.3 for responses to these items. See below for response to item i and ii.

- i. Necessity of road widening and Optioneering

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

For the section between adjacent to 11 Rathfarnham Road, three options (SA1 to SA3) have been developed during the development of the Emerging Preferred Route (EPR). The assessment process of three options is described in section 5.4 of the Rathfarnham to City Centre Core Bus Corridor Feasibility Study and Options Assessment (FSOA), included in appendix I2 of the supplementary documents submitted alongside the planning application.

Following the review of the EPR and submissions received as part of the public consultation within the section between Nutgrove Avenue to Willbrook Road, it was decided that alternative options could be feasible within this section of the Proposed Scheme. For this reason, two alternative options (RC1 and RC2) have been developed. The alternative options are described in detail in section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application.

A detailed response to the optioneering process complete for Grange Road and Rathfarnham Road is provided in Section 2.3.2.

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the desirable width of 2.0m for footpaths and desirable width of 2m for cycle tracks. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

Providing the optimum cross-section described in the above paragraphs achieves the project objectives of enhancing the potential for cycling and walking by providing safe infrastructure. EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling and pedestrian infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlaw Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.38.6 Extract from EIAR Chapter 6 (Table 6.27)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.38.7 Section 2 – Cycling Impact during Operational Phase (Table 6.28 of EIAR Chapter 6)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Further details on the significant benefits of the Proposed Scheme are presented in Section 2.1.1.

ii. Removal of Tree

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is one tree proposed to be removed at No. 10 Rathfarnham Wood. This tree has been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- Whitebeam tree displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the eastern section of Rathfarnham Road between entrance to Rathfarnham Wood residential estate and Willbrook Road it is proposed to plant 13 No. Acer Campestre 'Elsrijk' Semi-Mature Field Maple Trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17.

As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

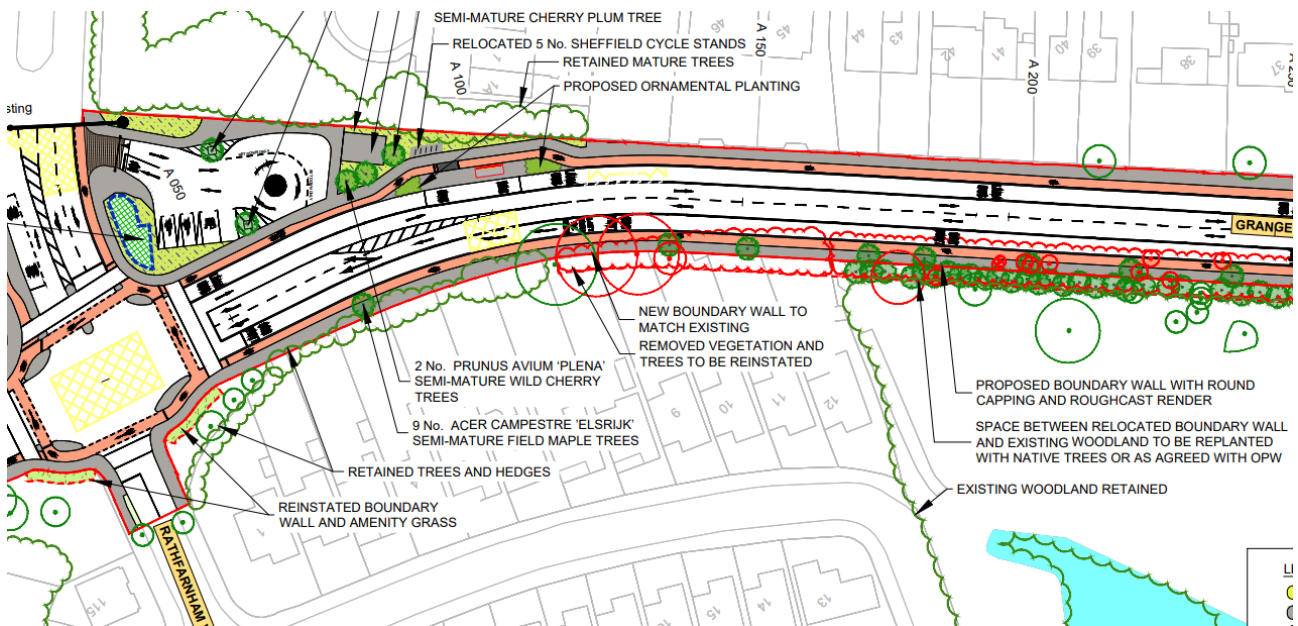


Figure 3.38.8 Extract from Landscaping General Arrangement Drawings (Sheet 1)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

Further details on the removal of trees along the Proposed Scheme are presented in Section 2.1.1.

3.39 CPO-39 – Mark Fitzgerald– 149 Rathfarnham Road

3.39.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 0.6m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.39.1.

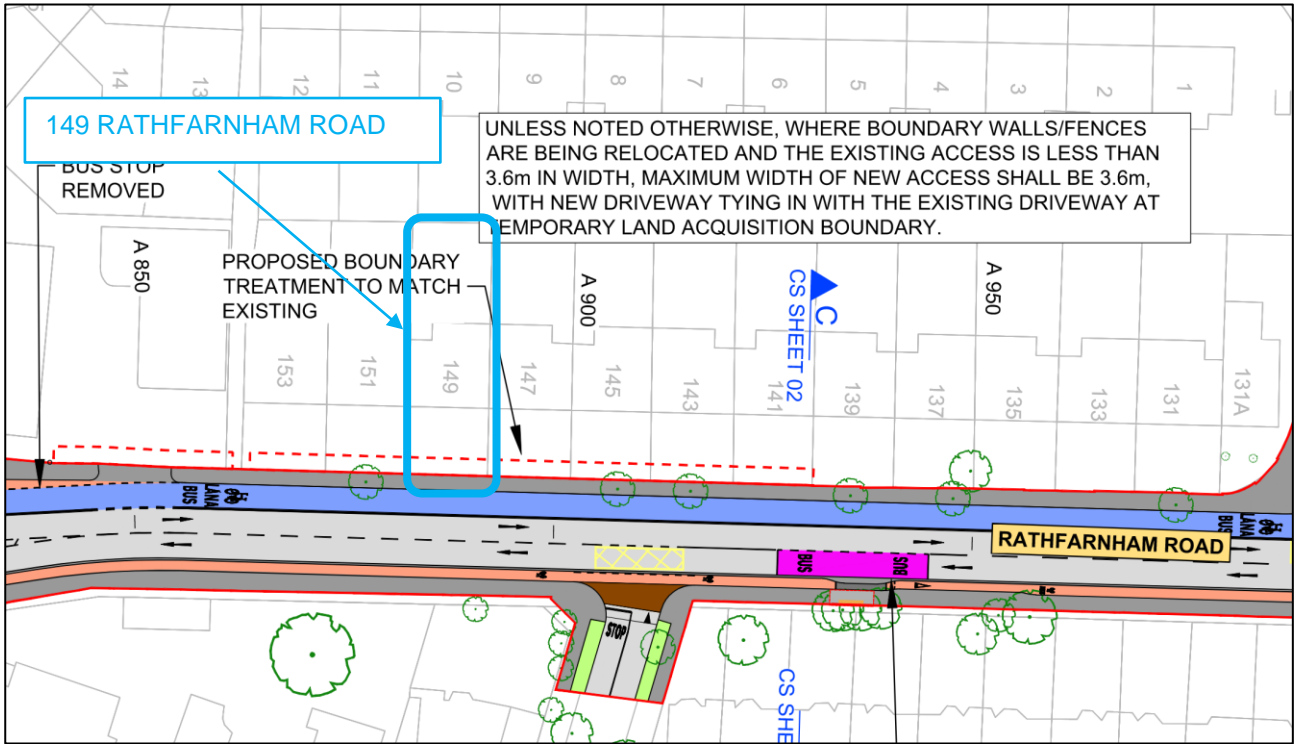


Figure 3.39.1 General Arrangement of Proposed Scheme adjacent to 149 Rathfarnham Road (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.39.2.

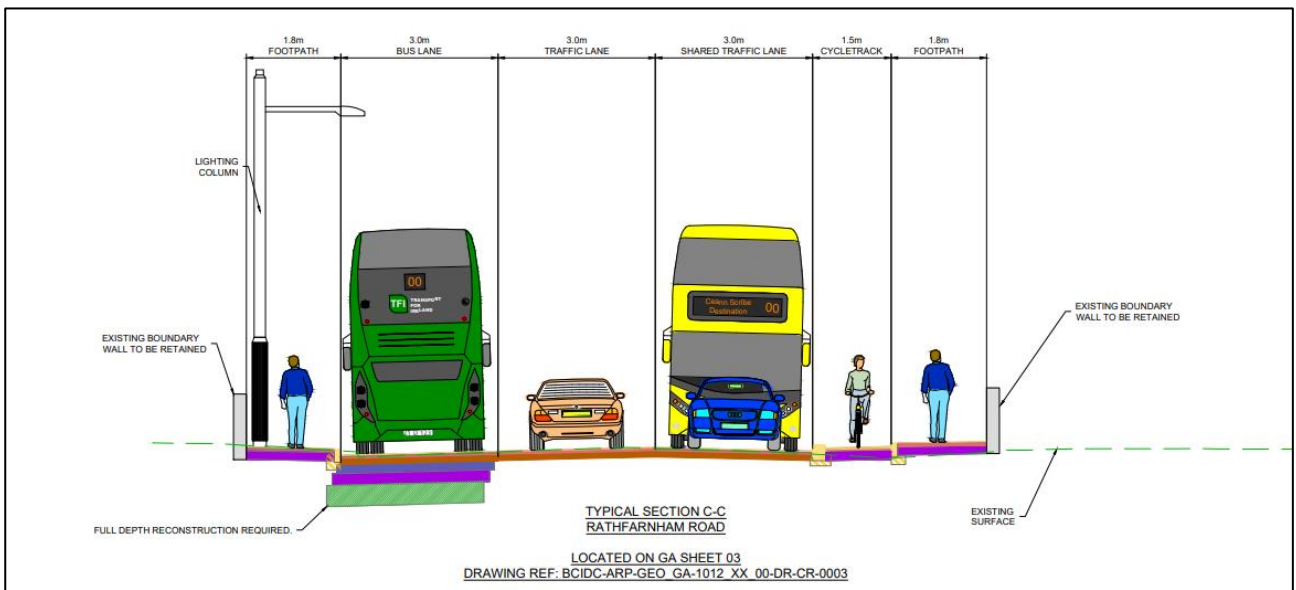


Figure 3.39.2 Typical Cross-Section adjacent to 149 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 149 Rathfarnham Road is shown in Figure 3.39.3.

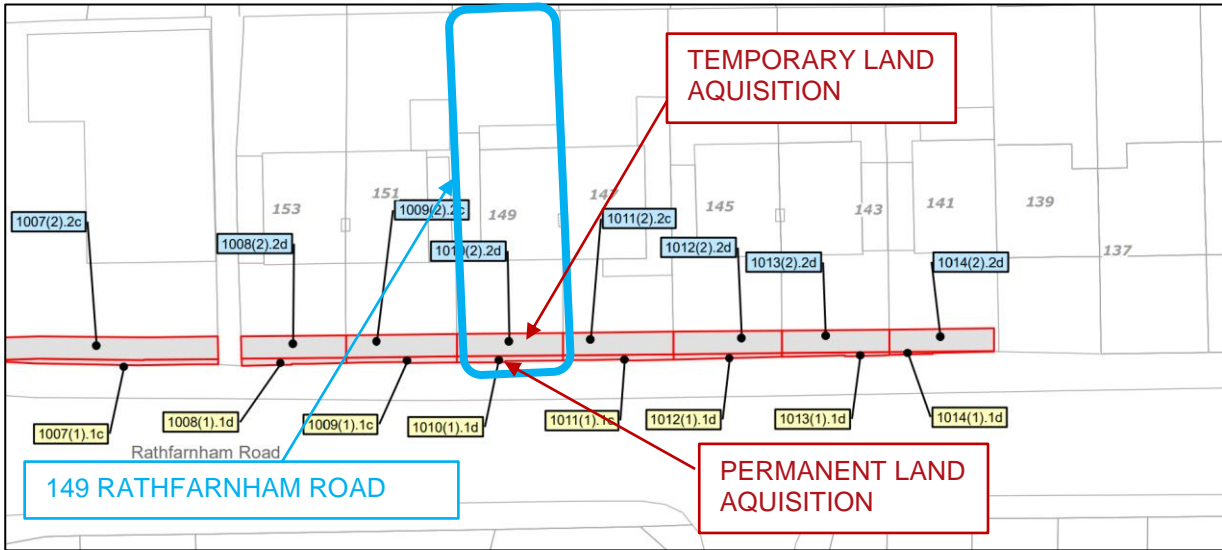


Figure 3.39.3 Extract from CPO Deposit Maps adjacent to 149 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.39.4.

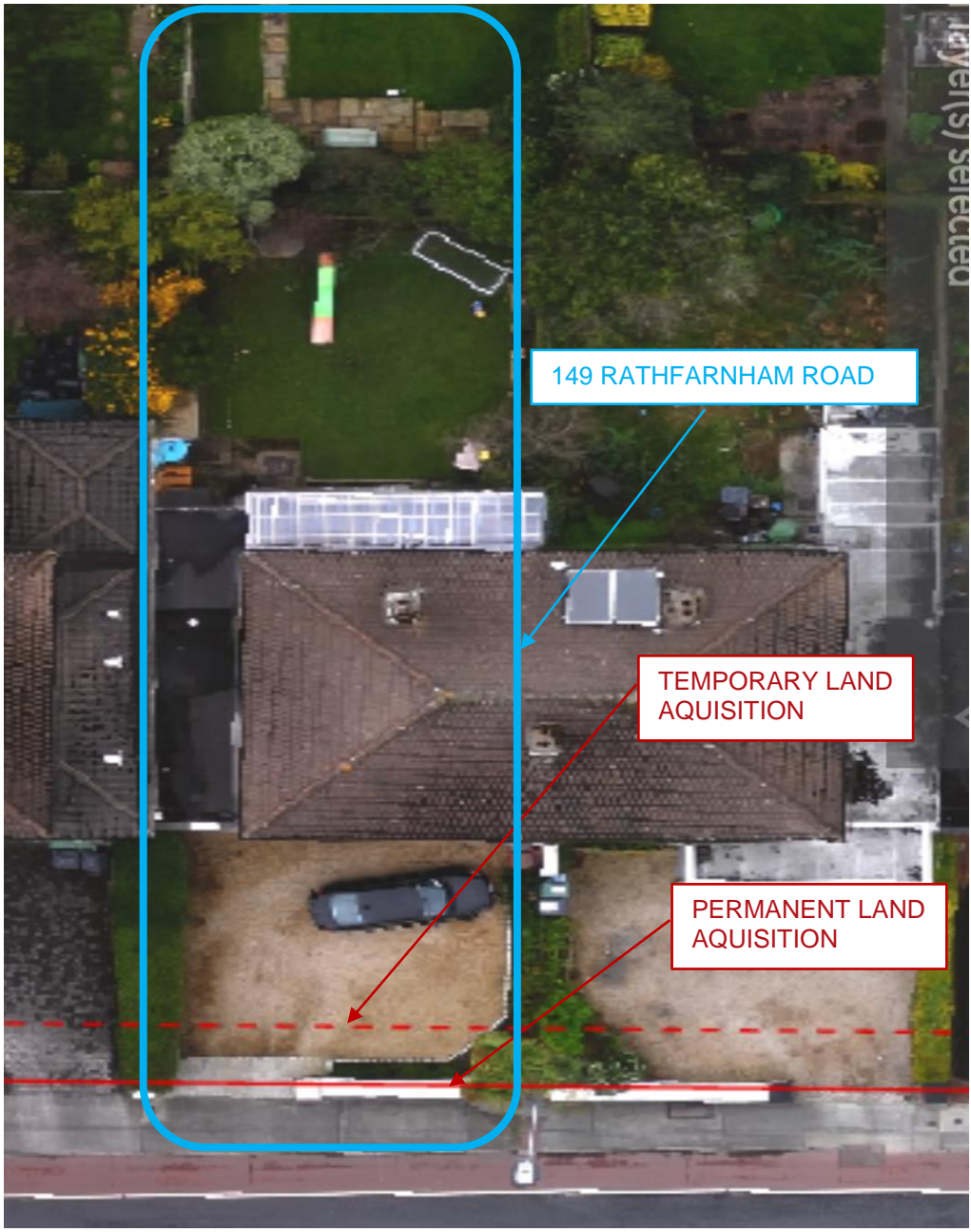


Figure 3.39.4 Proposed Land Acquisition lines adjacent to 149 Rathfarnham Road
The existing property frontage is shown in Figure 3.39.5.



Figure 3.39.5 Existing frontage of 149 Rathfarnham Road (Image source: Google)

3.39.2 Summary of the Points of Objection to the CPO by Mark Fitzgerald

This submission objected to CPO for the reasons summarised in the following section.

- i. Increase in air and noise pollution

The submission states that by widening the road adjacent to their property will result in an increased level of noise and air pollution due to the reduced proximity between buses and the property.

- ii. Safety concerns

The submission states that the increase in traffic congestion due to the Proposed Scheme will result in more accidents and fatalities.

- iii. Devaluation of property

The submission states that the Proposed Scheme will devalue the property due to the increase in air and noise pollution, as well as increase in traffic congestion.

- iv. Changes to work patterns due to the COVID-19 pandemic

The submission states alternative solutions should be considered due to the change in traffic patterns because of the Covid-19 Pandemic.

3.39.3 Responses to the Points of Objection

- i. Increase in Air and Noise Pollution

In relation to air quality, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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.*

In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

In relation to noise levels, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”*

Section 9.6.2 states that: *Once operational, there will be a direct, positive, imperceptible to slight impact along the Proposed Scheme due to a reduction in traffic volumes during both the year of Opening Year (2028) and the Design Year (2043).*

It is noted that at this property the nearest traffic lane (bus lane) will move approximately 700mm closer to the house.

ii. Safety Concerns Associated with Increased Traffic

The submission states that the Proposed Scheme will result in an increase in traffic and therefore negatively impact on safety in the community.

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

‘a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences’.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

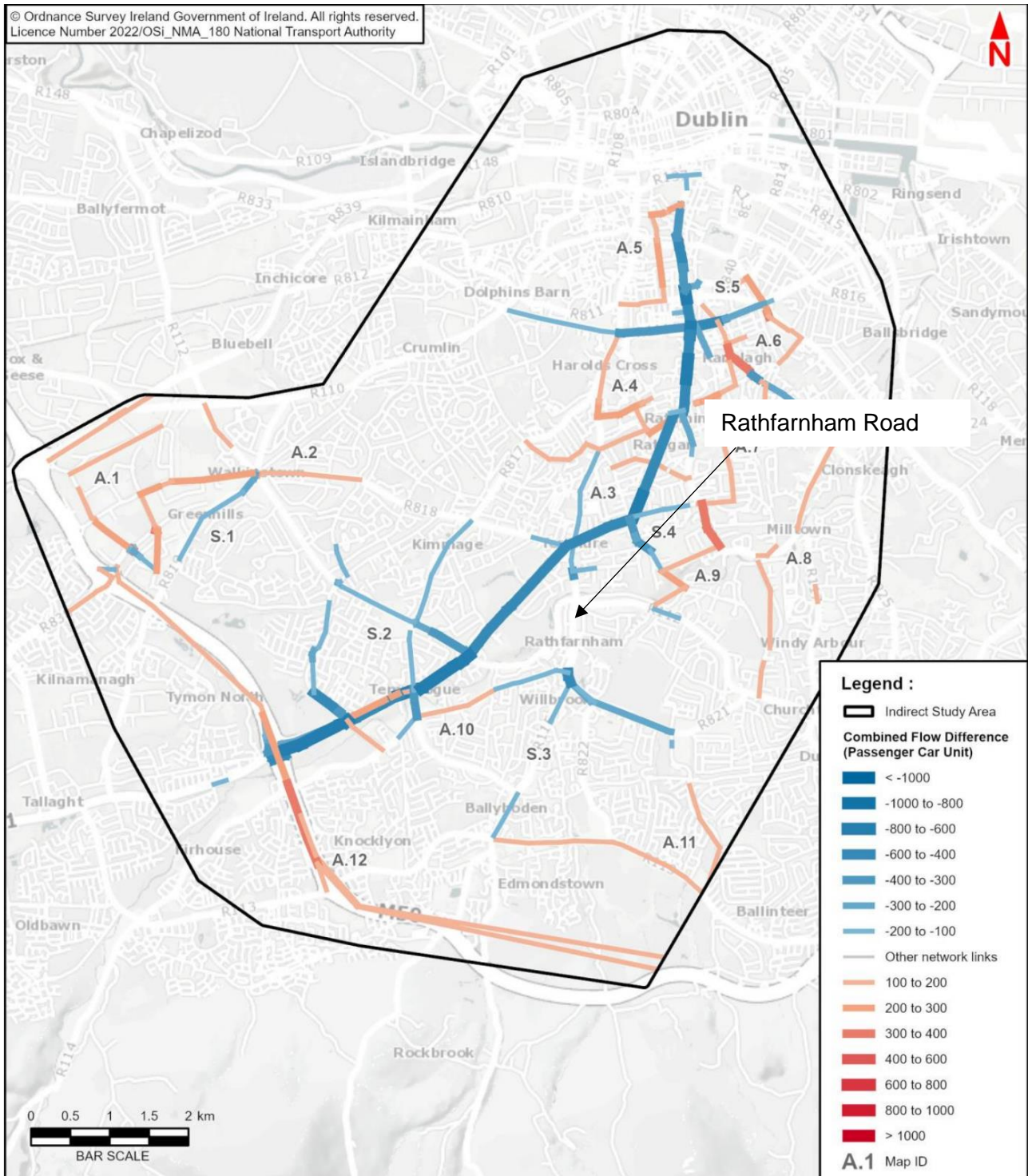


Figure 3.39.6 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

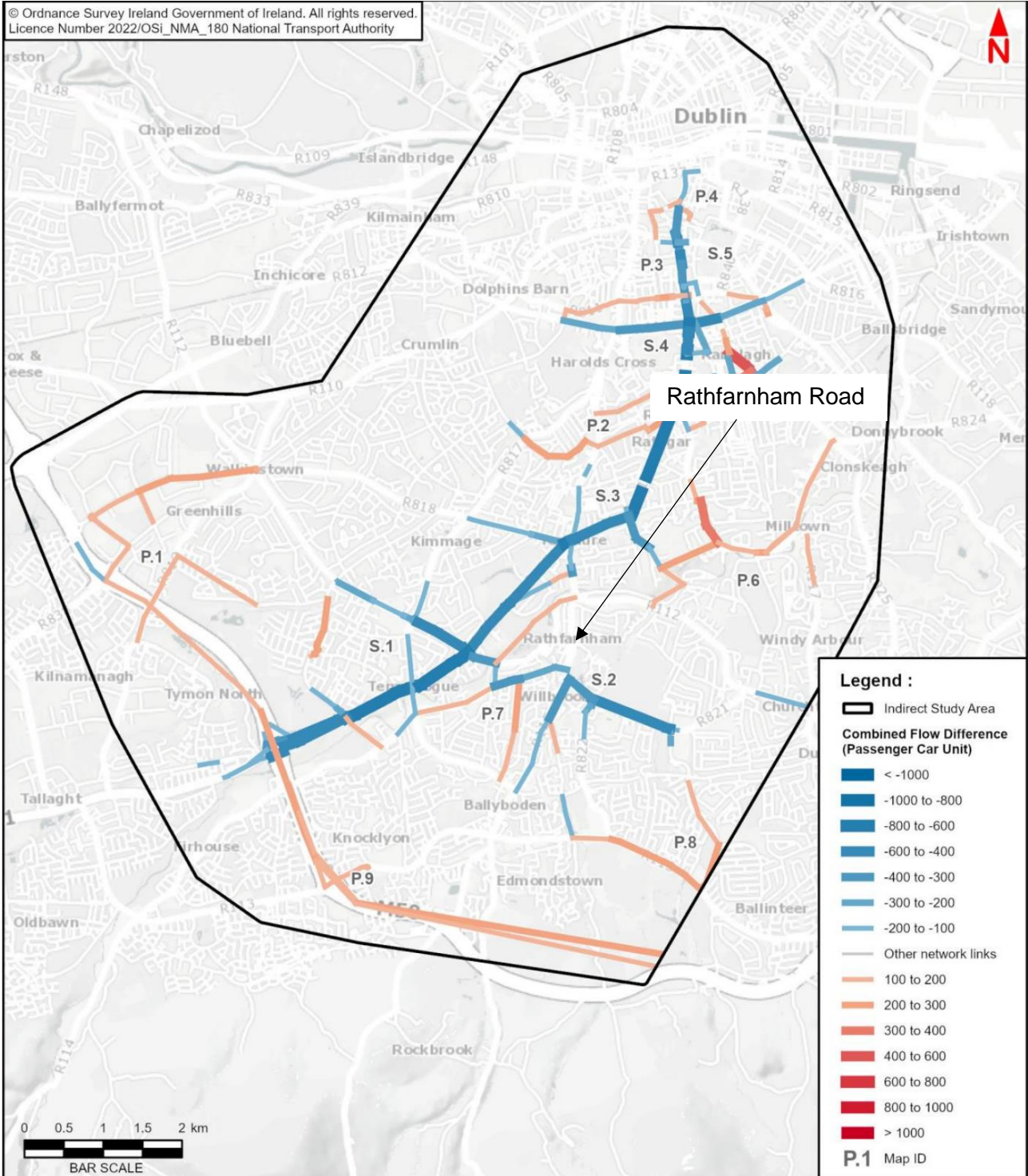


Figure 3.39.7 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

As can be seen in these figures, the traffic modelling undertaken does not identify any significant material change in traffic volumes along Rathfarnham Road during the AM and PM peak as a result of the Proposed Scheme i.e. any changes in traffic volumes along Rathfarnham Road than 100 passenger car units per hour.

Further details on the traffic impact in this area are presented in Section 2.3.2.

As seen in the General Arrangement Drawings provided in Volume 1 of the Environmental Impact Assessment Report (EIAR), there is a proposed reduction in the speed limit to 30km/h for Rathfarnham Road north of Main Street. Furthermore, the Proposed Scheme aims to decrease the width of traffic lanes on Rathfarnham Road to 3.0 meters concurrently also increasing the presence of street trees. These combined measures collectively create a perception of a slower-paced environment, thereby contributing to reduced driving speeds and improved safety.

iii. Devaluation of Property

As described in response to point of objection *i. Increase in air and noise pollution* and *ii. Safety concerns associated with increased traffic*, the EIAR assessment concluded that there will be a neutral and long-term residual effect on air pollution and *direct, positive, imperceptible to slight impact* noise pollution along the Proposed Scheme. Similarly, the assessment complete in the EIAR Chapter 6 determined that there will not be a significant material change in traffic volumes along Rathfarnham Road.

In addition to the above, 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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: "*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.*" and "*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 on Rathfarnham Road.

iv. Changes to work patterns due to the COVID-19 pandemic

A detailed response to this issue is presented in Section 2.1.1.

3.40 CPO-40 – Mary O'Mahony – 9 Rathfarnham Wood

3.40.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 1.6m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.40.1.

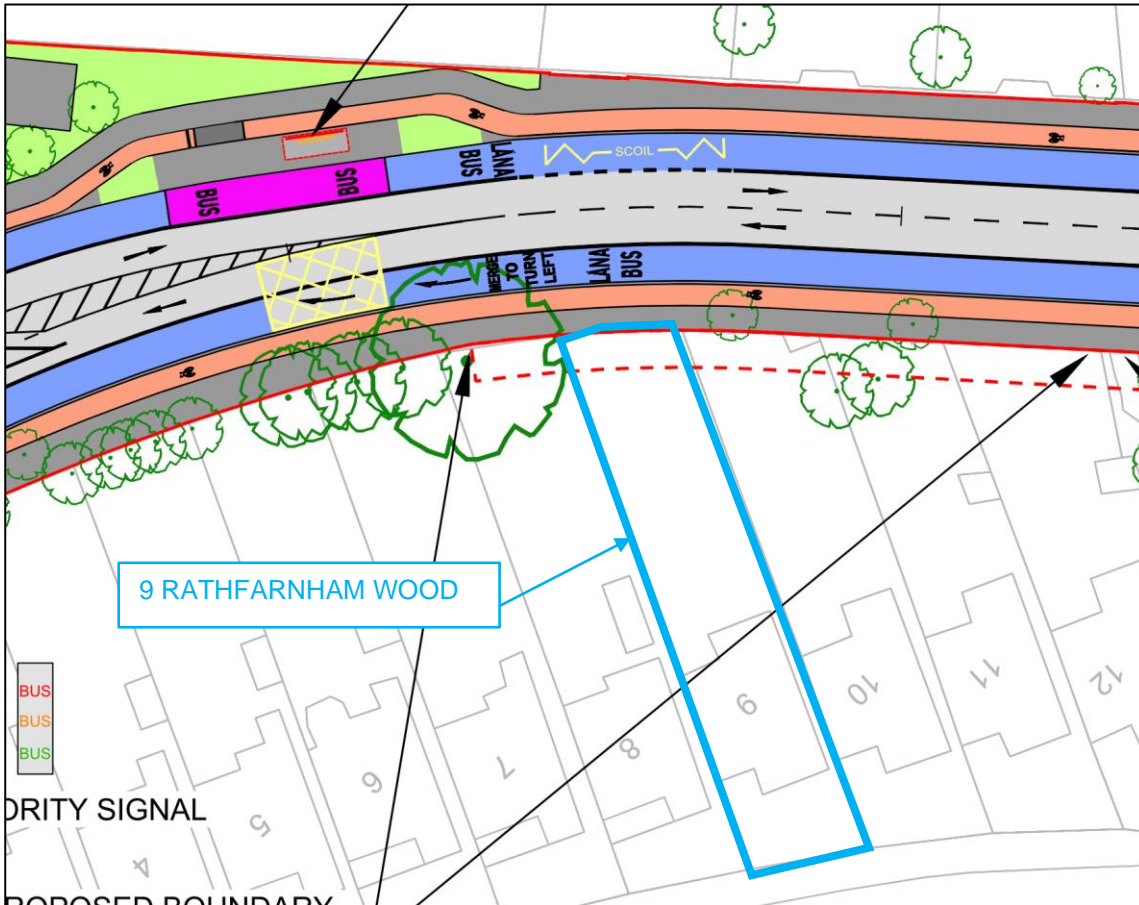


Figure 3.40.1 General Arrangement of Proposed Scheme adjacent to 9 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.40.2.

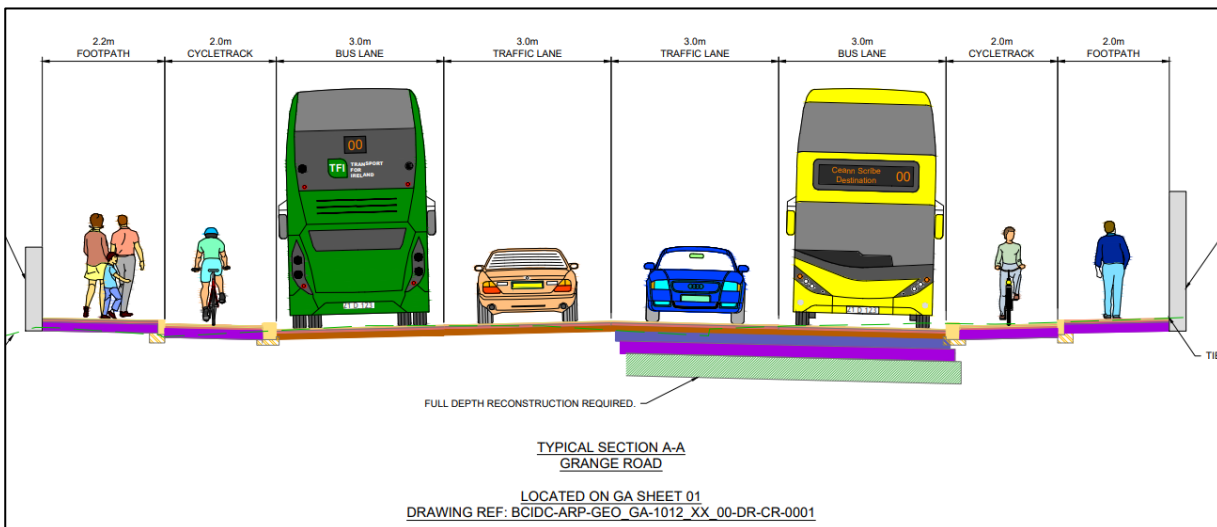


Figure 3.40.2 Typical Cross-Section adjacent to 9 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 9 Rathfarnham Wood is shown in Figure 3.40.3

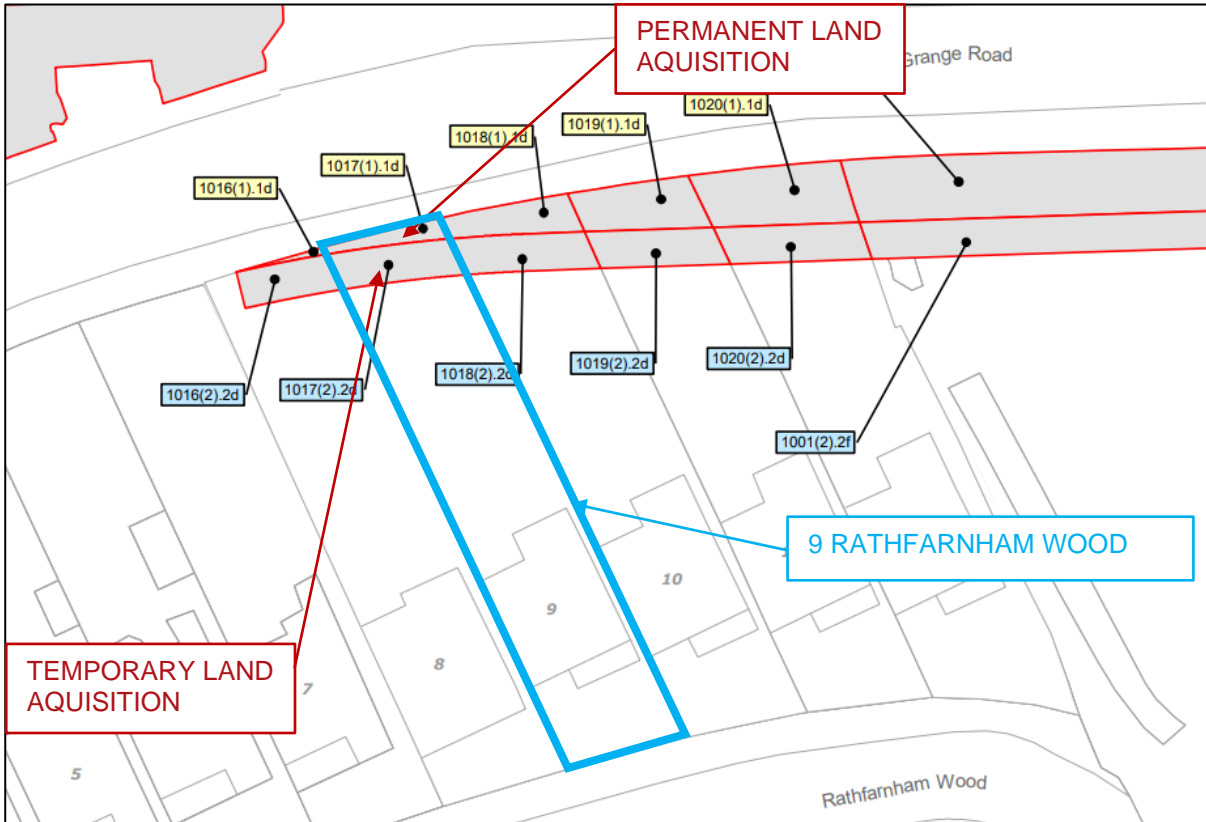


Figure 3.40.3 Extract from CPO Deposit Maps adjacent to 9 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.40.4.

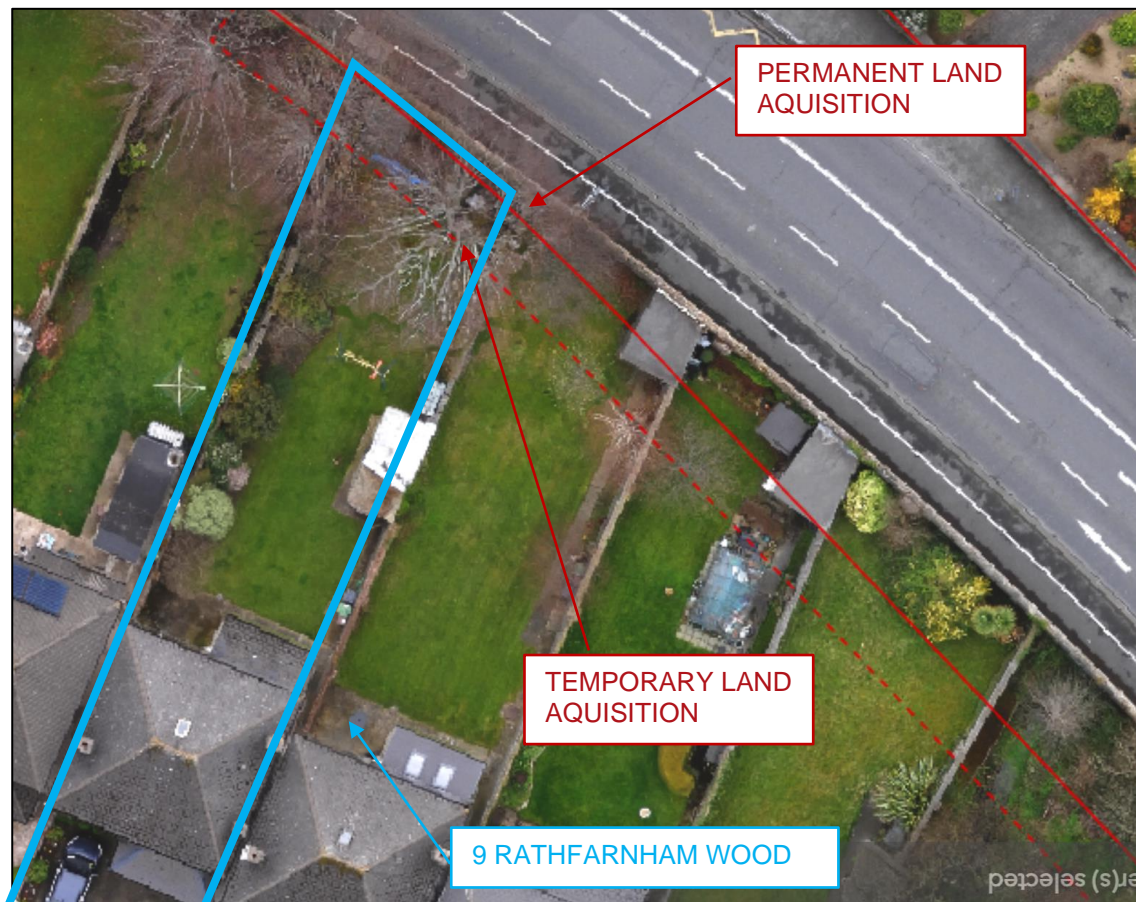


Figure 3.40.4 Proposed Land Acquisition lines adjacent to 9 Rathfarnham Wood

The existing property rear boundary is shown in Figure 3.40.5.

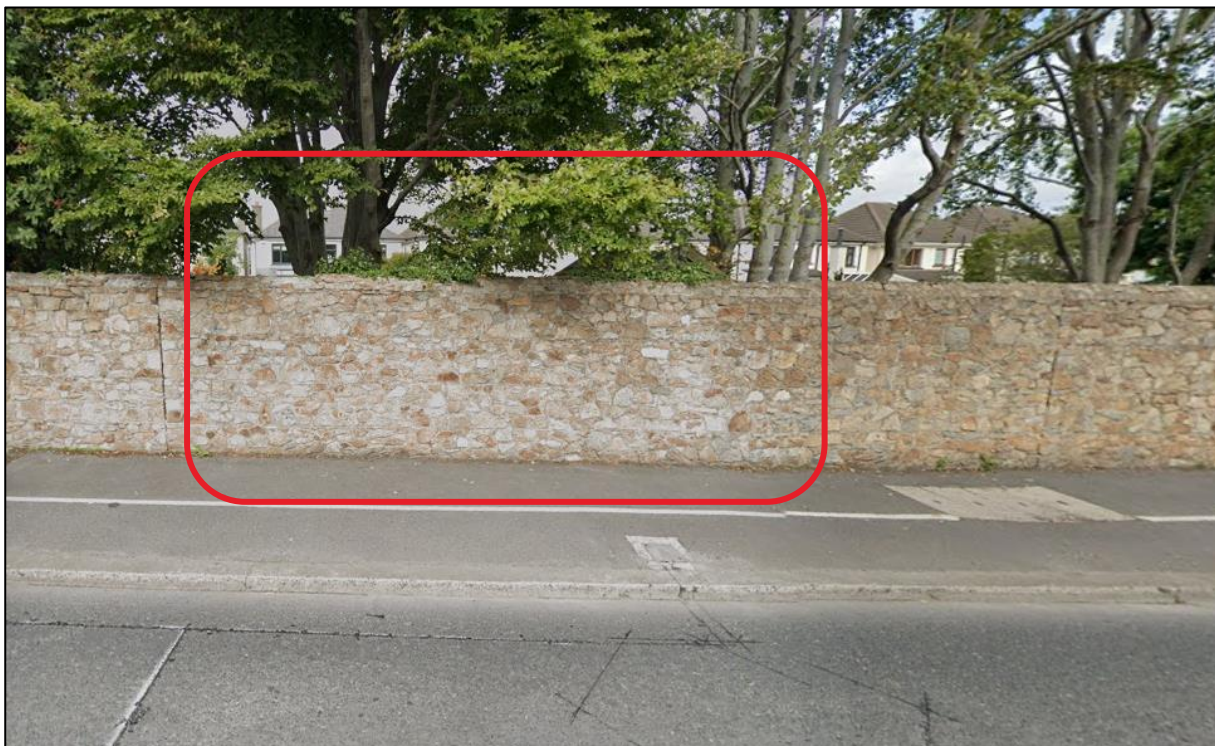


Figure 3.40.5 Existing property rear boundary of 9 Rathfarnham Wood (Image source: Google)

3.40.2 Summary of the Points of Objection to the CPO Mary O'Mahony

i. Necessity of road widening

The submission states that road widening adjacent to 9 Rathfarnham Wood are unnecessary, adding that the environmental impact involved relocating the granite wall are unnecessary. It also states that the land acquisition could be avoided by deviating from the standard footpath and cycle track widths.

ii. Removal of tree

The submission expressed concerns regarding the removal of a tree from the back garden of 9 Rathfarnham Wood, it also noted that the removal of the Beech tree will likely negatively impact the surrounding trees.

iii. No consideration of Glin River

The submission notes that Environmental, Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin River to the area.

iv. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, particularly when there is no realistic opportunity to install bus lanes on either Nutgrove Avenue or Grange Road beyond the Nutgrove Avenue/Grange Road junction given the existing physical constraints. The submission goes on to suggest using bus priority as an alternative to reduce landtake need.

v. Climate Impact of Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

vi. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

vii. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use. It also notes the impact on the Woodland playground.

viii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife and woodland playground within the park

3.40.3 Response to the Points of Objection

Items iii – viii raises the same concerns as CPO-08. Please refer to Section 3.8.3 for responses to these items. See below for response to item i and ii

i. Necessity of road widening

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the proposed scheme. It also outlines the different stages that were undertaken during the development of the proposed scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

For the section between adjacent to 9 Rathfarnham Road, three options (SA1 to SA3) have been developed during the development of the Emerging Preferred Route (EPR). The assessment process of three options is described in section 5.4 of the Rathfarnham to City Centre Core Bus Corridor Feasibility Study and Options Assessment (FSOA), included in appendix I2 of the supplementary documents submitted alongside the planning application.

Following the review of the EPR and submissions received as part of the public consultation within the section between Nutgrove Avenue to Willbrook Road, it was decided that alternative options could be feasible within this section of the Proposed Scheme. For this reason, two alternative options (RC1 and RC2) have been developed. The alternative options are described in detail in section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application.

A detailed response to the optioneering process complete for Grange Road and Rathfarnham Road is provided in Section 2.3.2.

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the desirable width of 2.0m for footpaths and desirable width of 2m for cycle tracks. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

Providing the optimum cross-section described in the above paragraphs achieves the project objectives of enhancing the potential for cycling and walking by providing safe infrastructure. EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling and pedestrian infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.40.6 Section 2 – Summary of Effects for Pedestrian Impact during Operational Phase (Table 6.27 of EIAR Chapter 6)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant
R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.40.7 Section 2 – Cycling Impact during Operational Phase (Table 6.28 of EIAR Chapter 6)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Further details on the significant benefits of the Proposed Scheme are presented in Section 2.1.1.

ii. Removal of Tree

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is one tree proposed to be removed at No. 9 Rathfarnham Wood. This tree has been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- An 16m tall mature Beech displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the eastern section of Rathfarnham Road between entrance to Rathfarnham Wood residential estate and Willbrook Road it is proposed to plant 13 No. Acer Campestre 'Elsrijk' Semi-Mature Field Maple Trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17. As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

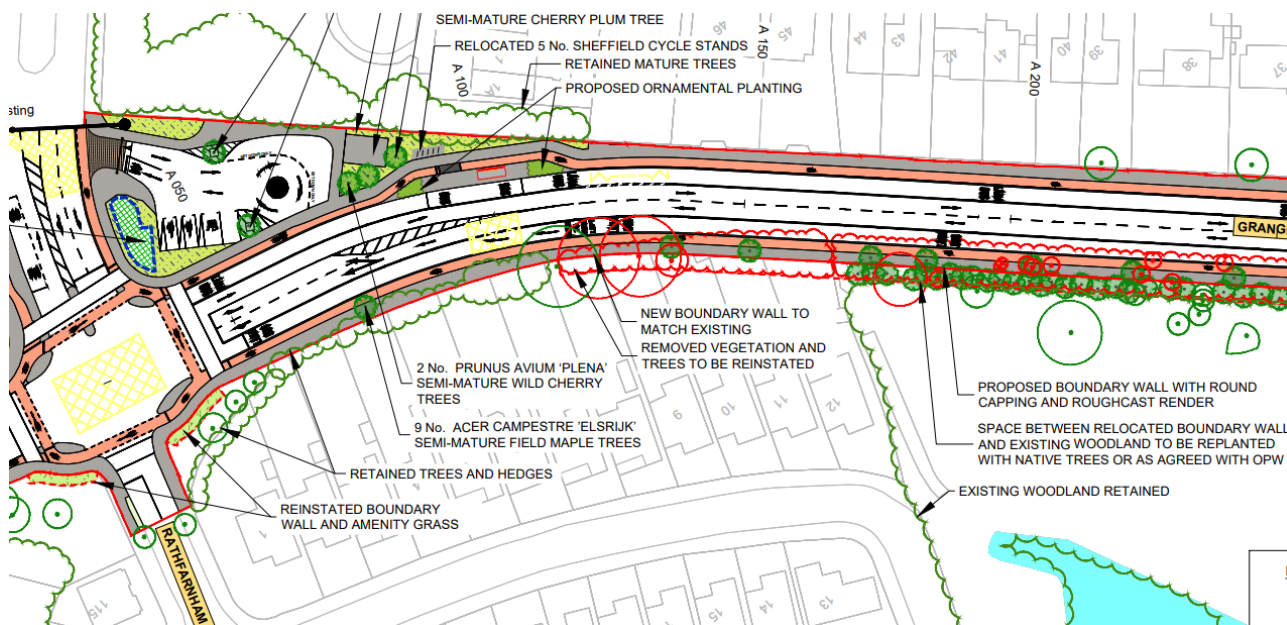


Figure 3.40.8 Extract from Landscaping General Arrangement Drawings (Sheet 1)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

In relation to the concern raised relating to impact on trees within proximity of the tree proposed for removal. A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities.

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. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*

- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g. Cellweb or equivalent), installed without excavation using no dig techniques.*
- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*
- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*
- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

3.41 CPO-41 – Maureen Egan – 311 Templeogue Road

3.41.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus lanes and traffic lanes in each direction. To accommodate this cross section, land acquisition will be required along the northern side of the Templeogue Road.

Dedicated cycle facilities are provided on the approach to the Cypress Grove Road junction, however these will terminate approximately 100m from the junction where cyclists will share the bus lane in an inbound direction and the general traffic lane in an outbound direction over a short distance. To improve safety for cyclists, it is proposed to introduce a 30kph speed limit between Cypress Grove Road and Templeogue Village.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.0m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.41.1.

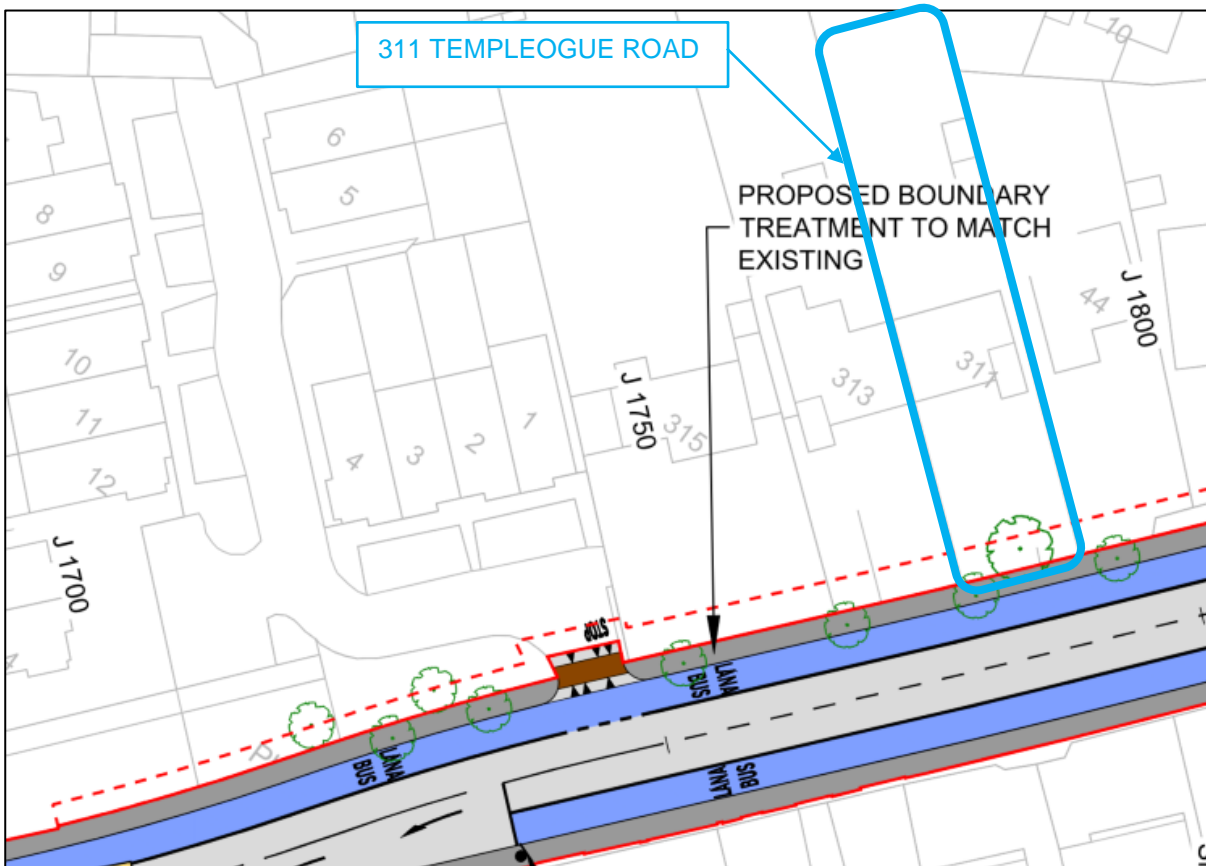


Figure 3.41.1 General Arrangement of Proposed Scheme adjacent to 311 Templeogue Road (Sheet 32)

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 311 Templeogue Road is shown in Figure 3.41.2.

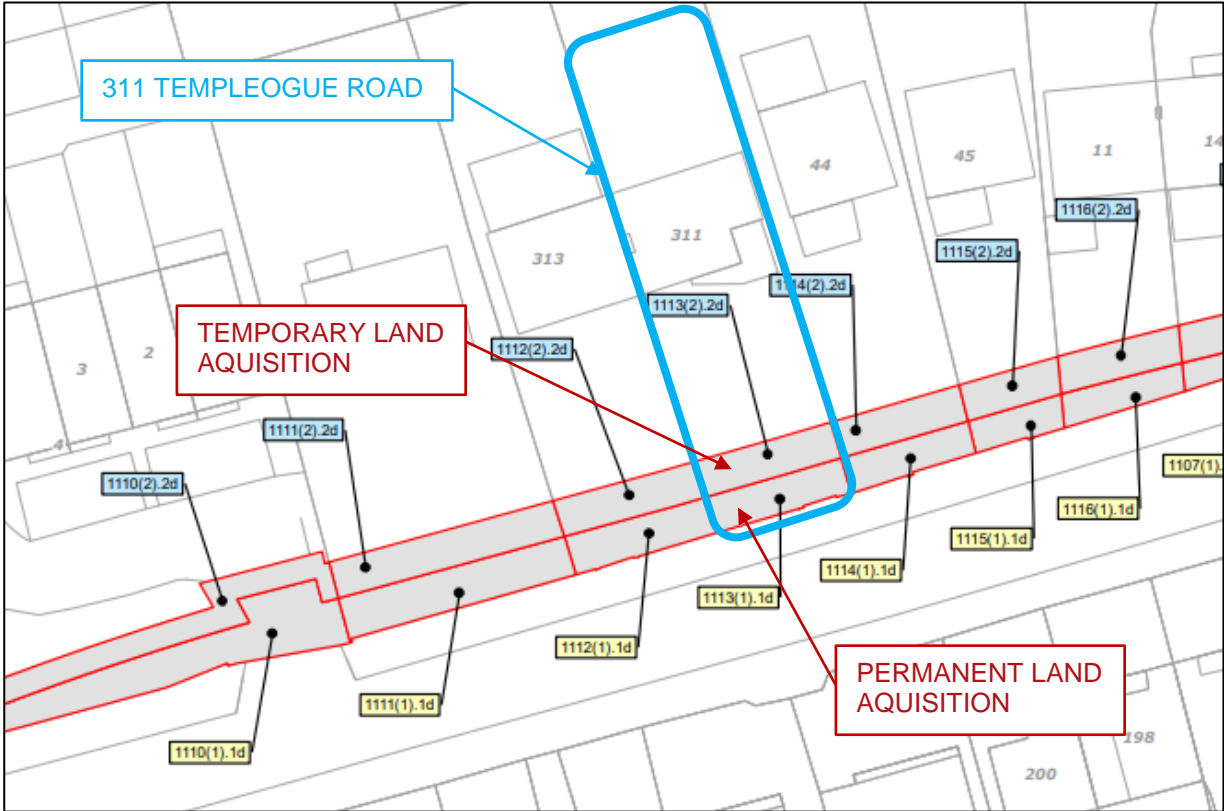


Figure 3.41.2 Extract from CPO Deposit Maps adjacent to 311 Templeogue Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.41.3.



Figure 3.41.3 Proposed Land Acquisition lines adjacent to 311 Templeogue Road
The existing property frontage is shown in Figure 3.41.4.



Figure 3.41.4 Existing frontage of 311 Templeogue Road (Image source: Google)

3.41.2 Summary of the Points of Objection to the CPO Maureen Egan

- i. Removal of trees and impact on air quality, noise and visual appeal

The submission expressed concern about the extent of tree removal along the Proposed Scheme. It also states that the removal of vegetation within the front garden of 311 will result in increased noise and air pollution, and, that the vegetation contributes towards the visual appeal of the property.

- ii. Necessity of Road widening

The submission states that the proposed land acquisition at 311 Templeogue Road is unnecessary, it also states that priority through the section of Templeogue Road, adjacent to no 311 could be achieved through signal-controlled bus priority.

- iii. Access to property

The submission states that access to the property will be hindered by the Proposed Scheme.

- iv. Loss of privacy

The submission states that the loss of vegetation and land acquisition, which will bring the road closer to the property, will result in the loss of privacy.

- v. Changes to working patterns due to the COVID-19 Pandemic

The submission expressed concerns that the traffic modelling complete in the traffic impact assessment for the Proposed Scheme is flawed due to the impact of Covid 19 on society and developments of hybrid working.

- vi. Benefits of the proposals are not justified

The submission states that the benefits of the Proposed Scheme are not justify the impacts, noting that the reduced in journey time will be minimal.

3.41.3 Response to the Points of Objection

- i. Removal of Trees and impact on air quality, noise and visual appeal

Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the Proposed Scheme.

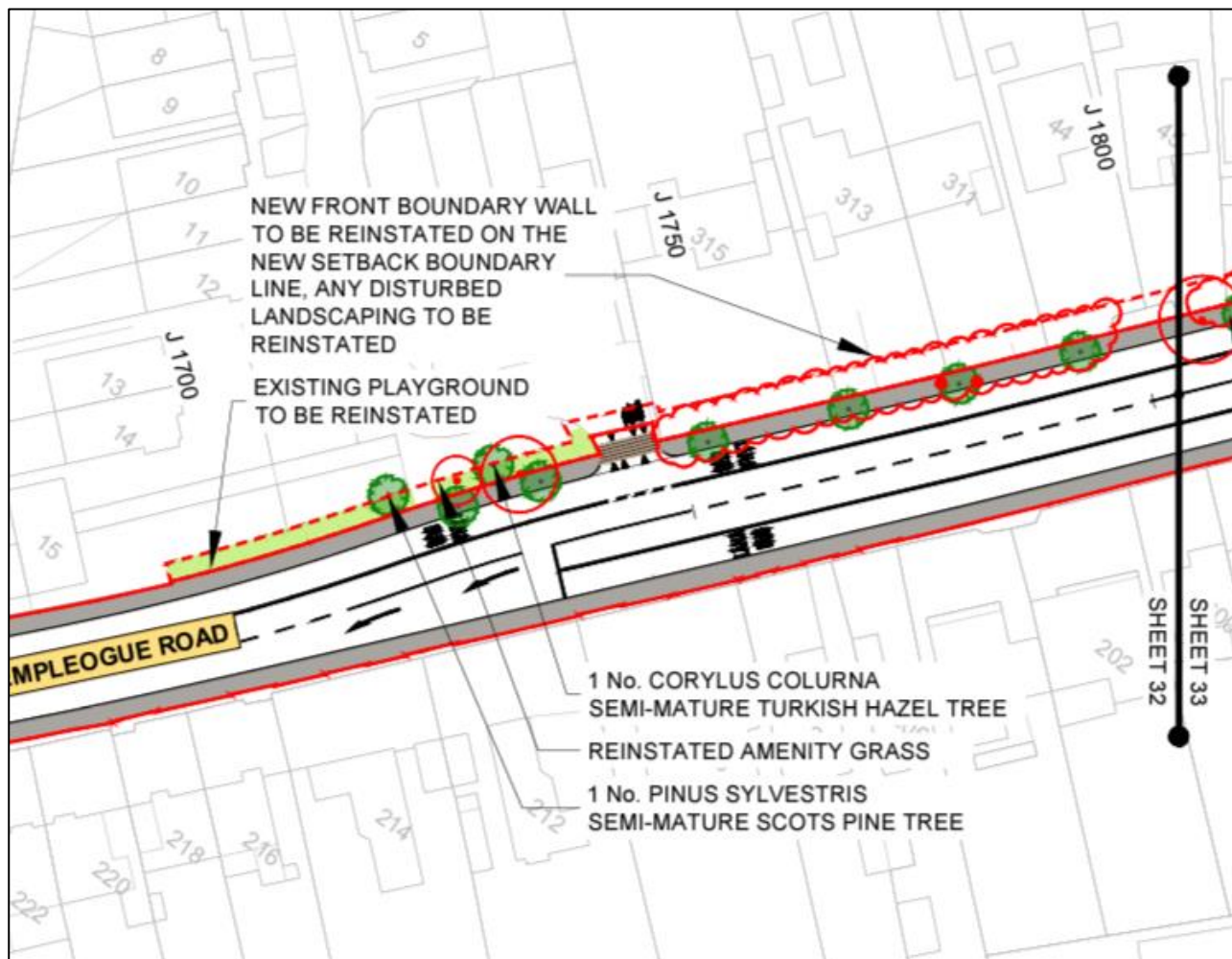
The survey was undertaken between the 10th and 13th August 2020. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold's Cross Road section and the of the Proposed Scheme. The below impact assessment report is based on the British standard BS 5837:2012 Trees in relation to design, demolition, and construction recommendations. This standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges, and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan.

The Arboricultural Impact Assessment and a tree protection plan was prepared for the Proposed Scheme to identify trees that may be impacted on by the proposed development based on the proposed design.

Section 6 of Appendix A17.1 states: *This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.*

In EIAR Chapter 17 Landscape (Townscape) and Visual, Section 17.1 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. In relation to the Templeogue Road, the following sections of Chapter 17 are relevant and demonstrate that a detailed and comprehensive assessment has been undertaken of the impacts associated with the Proposed Scheme.

Figure 3.41.5 presents an extract from the Landscaping 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 which shows the proposed landscaping along Templeogue Road in the vicinity of 311 Templeogue Road.



Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and localised removal of trees and planting. There will be land take from 15 residential properties on Templeogue Road involving permanent loss of garden area, setting back of boundaries, construction of retaining wall, and removal of trees hedges and other garden planting. There will be substantial works to Spawell roundabout where the existing roundabout junction will be upgraded to a four-arm signalised junction. The central island and splitter islands and associated vegetation of the roundabout will be removed and there will be a rearrangement and general expansion of the outer landscape areas. There will be more minor works to verges and other roadside landscape areas throughout this section with some limited loss of trees to accommodate new or realigned cycle tracks. There will be works to the surrounds of the historic folly of Templeogue Arch for the purposes of permanently enhancing the setting of the structure and providing public access. The construction works will not alter the overall townscape character along this section of the Proposed Scheme but there will be temporary disturbance to the landscape and visual amenity of the streetscape. The magnitude of change in the baseline environment is **high**.

The townscape / streetscape impact of the Construction Phase is assessed to be **Negative, Moderate Temporary / Short-Term**, west of Templeogue and **Negative, Significant / Very Significant and Temporary / Short-Term** through Templeogue to Rathfarnham Road.

Section 17.4.4.2 of the EIAR presents an assessment of the impact on Streetscape Elements and Visual Impacts, with 17.4.4.2.9 presenting the impact on trees.

The design of the Proposed Scheme has sought to avoid impacts on trees as far as practicable, however, some trees will have been removed during the Construction Phase. The most significant loss occurs from sections of streets and gardens of residential properties. In some locations the loss will be particularly evident such as on Terenure Road East, where trees are mature and visually prominent in the streetscape. The Operational Phase of the Proposed Scheme will not impact directly on additional trees but there will be continuing effects resulting from the loss of trees lost during construction. The effect will become positive over the long-term as proposed tree planting matures resulting in a net gain in tree canopy coverage. The sensitivity **high** and the magnitude of change is **medium**.

The townscape and visual impact of the Operational Phase on trees and plantings is assessed to be **Negative, Moderate and Short-Term** becoming **Positive, Moderate and Long-Term**.

The impact of the Proposed Scheme on habitat loss and loss of breeding / resting site has been assessed and are reported in Chapter 12 Biodiversity of Volume 2 of EIAR. Section 12.4.3.5.1.1 states that “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”.

A detailed response to the removal of trees generally across the scheme is provided in Section 2.1.1.

Noise

In relation to noise pollution, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.” Table 9.39 lists these roads and Templeogue Road is not identified, indicating that there are no potential significant noise impacts envisaged along Templeogue Road.

Air Quality

In relation to air pollution, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Templeogue Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

Furthermore, it is noted that at this location, the edge of the bus lane would not be moving any closer to this property as a result of the Proposed Scheme.

In terms of the deterioration of the visual appeal of the property, Section 17.4.4.2.8 in Chapter 17 of the EIAR sets out the impact on streetscape elements and visual impacts during operation.

Operation of the Proposed Scheme will require the permanent acquisition from 72no. residential properties:

- Nos. 317, 319, 321, 323, 325 and 327 Templeogue Road (6no.);
- Nos. 311, 313 and 315 Templeogue Road (3no.);
- Nos. 44 and 45 Templeogue Road (2no.);
- 11, 14 and 15 Fortrose Park (3no.);
- Nos. 8, 9, 10, 11 and 12 Rathfarnham Wood (5no.);
- Nos. 141, 143, 145, 147, 149, 151 and 153 Rathfarnham Road (7no.);
- Nos. 51, 53, 55, 57, 59, 61, 63, 65, 67, 69 and 71 Rathfarnham Road (11no.);
- Nos. 34, 36, 38, 40, 42, 44, 46, 48, 50 Rathfarnham Road (9no.);
- No. 80 Earls Court, Terenure Road (1no.); • Nos. 74, 74A, 76, 76A and 78 Terenure Road East (5no.);
- Nos. 1, 2, 3, 4, 5, 6, 7, 8 and 9 Town Houses, Terenure Road East (9no.);
- Nos. 59, 61, 65, 67 and 69 Terenure Road East (5no.); and
- Nos. 52, 54, 56, 58, 60 and 62 Terenure Road East (6no.).

*The houses have matured established gardens with boundary railings / walls, entrances / gates and associated lawns and plantings. There will be continuing effects from permanent loss of land area and trees which were removed during the Construction Phase. However, there will be like-for-like reinstatement of boundaries, planting and, in most cases, the planting of new street trees in similar locations to those removed, which will reduce negative effects over the long-term. The sensitivity is **high**, and the magnitude of change is **very high**.*

*The potential townscape / streetscape and visual impact of the Operational Phase on these residential properties is assessed to be **Negative, Very Significant and Short-Term** becoming **Negative, Moderate / Significant and Long-Term**.*

Reinstatement of property frontage including boundary walls, gates, railings 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.

ii. Necessity of Road Widening

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. Section 3.3.2.1.1 describes the five scheme options (S1-1 to S1-5) considered for the section of Templeogue Road between Wellington Lane and Templeville Road. Following an MCA, sub-option S1-5 was identified as the preferred option for this section.

Option S1-5 would consist of providing continuous bus lanes in each direction along Templeogue Road between the Cypress Grove Road/Old Bridge Road junction and the Springfield Avenue / Templeville Road junction. Cycle lanes would be provided along each side of the carriageway on the approaches to/from Templeogue Road/Cypress Grove Road/Old Bridge Road junction and the Templeogue Road/Springfield Avenue /Templeville Road junction. The inbound cycle lane would terminate approximately 70m northeast of the Templeogue Road/Cypress Grove Road/Old Bridge Road junction after which cyclists would join the adjacent bus lane. Cyclists would continue in the inbound bus lane for approximately 300m, where they would then be provided with a segregated cycle track. This cycle track would continue for approximately 135m where it would then merge with a shared pedestrian/cycle track for a distance of 70m (approx.). An on-road cycle lane would then be provided up to and through the junction. Outbound from the Templeogue Road/Springfield Avenue / Templeville Road junction there would be a cycle lane provided for approximately 95m. Cyclists would then continue in the outbound bus lane until a cycle lane would be provided approximately 100m from the Templeogue Road/Cypress Grove Road/Old Bridge Road junction.

The Multi Criteria Analysis (MCA) concluded that sub-option S1-5 “was identified as having significant benefits over other options in relation to Transport Reliability and Quality, Traffic Network Integration, Road Safety, Archaeology and Cultural Heritage and Land Use Character. Option S1-5 was therefore identified as the preferred option for this section and was brought forward into the Emerging Preferred Route”.

Following the completion of the public consultation process 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. In this area, further consideration was given to the scheme proposals in this area. Option TG2 which proposed the provision of bus priority traffic signals provided on either side of Templeogue Village, with signal controlled priority provided through the village - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme and would minimise the impact on the village of Templeogue through the use of bus priority traffic signals to provide virtual bus priority over a short distance.

This assessment considered provision of a signal-controlled priority system for inbound buses through this section of Templeogue Road as suggested in the submission. This option was assessed in the Preferred Route Option Report, included in the Supplementary Information submitted to ABP as part of the planning application. The option was considered but was not carried forward for the reasons outlined in section 3.4.1.2.1 of the report:

“A sub option was also considered between Cypress Grove Road and Templeogue Village which sought to minimise the impact on properties this section. This option proposed curtailing the inbound bus lane at Cypress Grove Road and re-commencing it at the north-eastern side of Templeogue Village. However, it was considered that in combination with vehicular activity in Templeogue Village, this distance (~500m) was too much to give guaranteed bus priority through use of signal-controlled priority. It was considered that this option would not be in line with the objectives of the scheme and, as such, this option was not considered any further.”

“An additional option considered curtailing the inbound bus lane at Cypress Grove Road and re-commencing it at after Ashfield Place. However, under this option, no cycle facility would be provided between Cypress Grove Road and Ashfield Place meaning cyclists would have to share with general traffic. It was considered that this option would not be in line with the objectives of the scheme and, as such, this option was not considered any further.”

iii. Access to Property

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively with more detail presented in Table 6.60 and 6.64. These diagrams and tables are reproduced below.

3.42 CPO-42 – Michael Bermingham – 6 The Townhouses, Terenure Road East

3.42.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph's Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.1m and temporarily acquired of approximately 2m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.42.1.

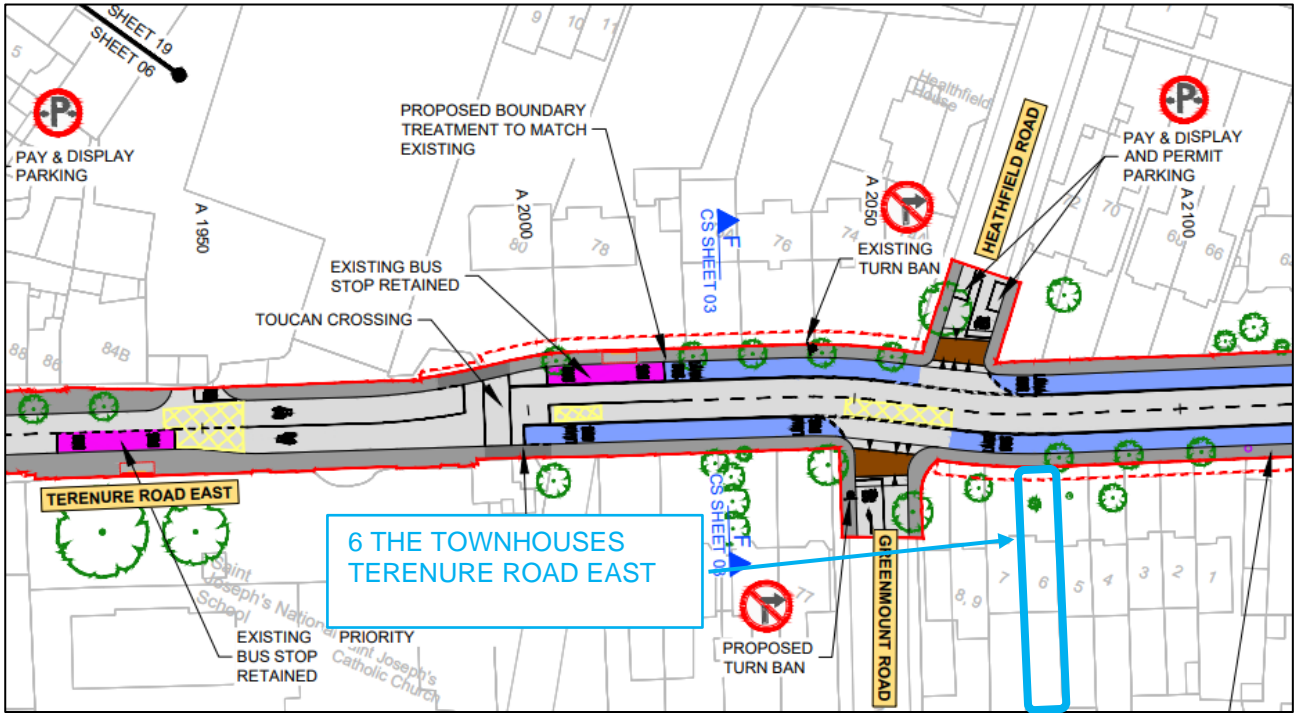


Figure 3.42.1 General Arrangement of Proposed Scheme adjacent to 6 The Townhouses Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.42.2.

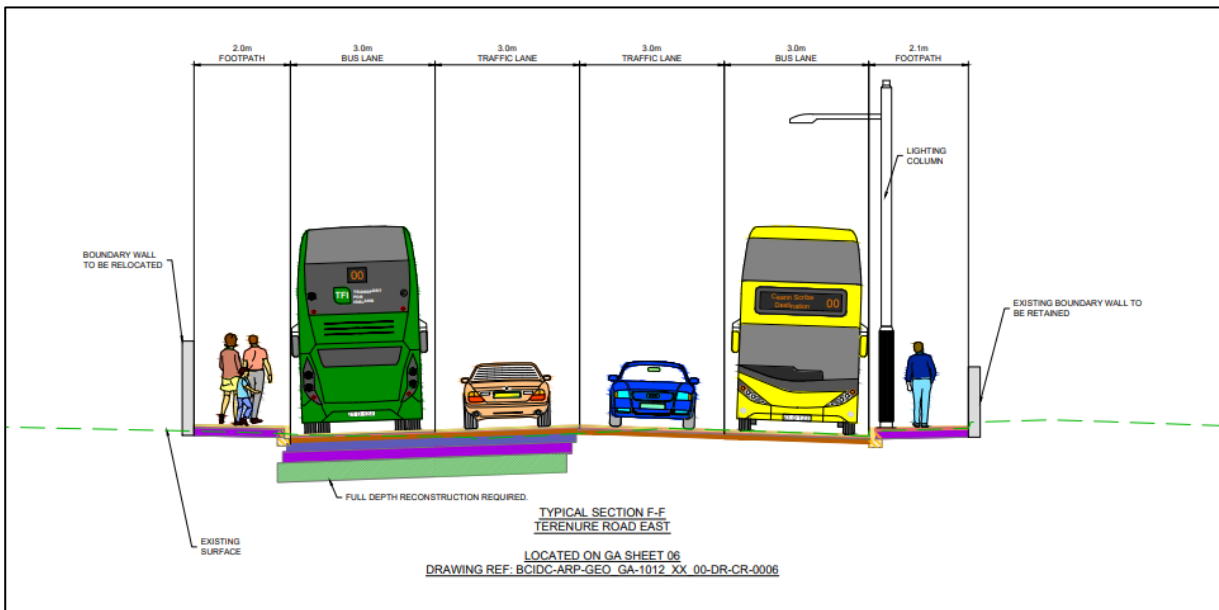


Figure 3.42.2 Typical Cross-Section adjacent to 6 The Townhouses Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 6 Terenure Road East is shown in Figure 3.42.3.

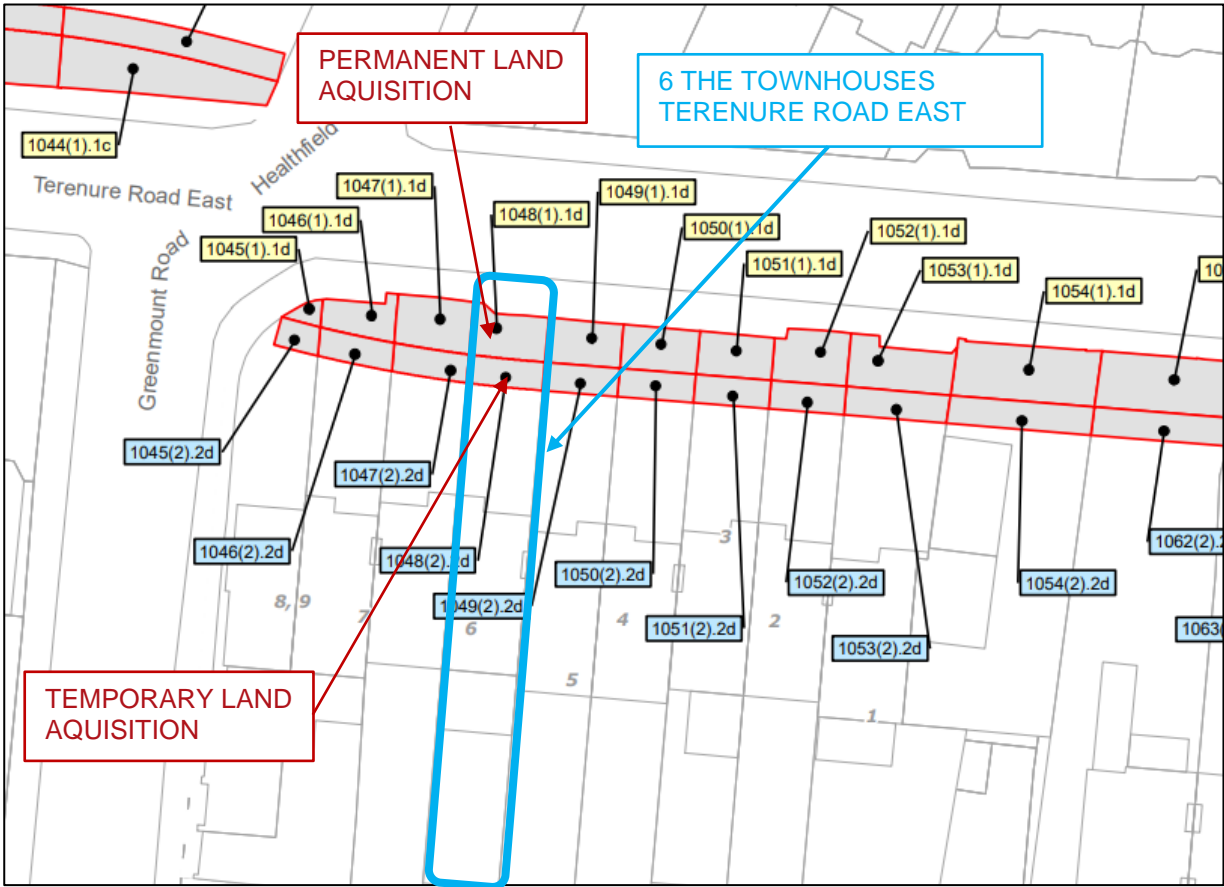


Figure 3.42.3 Extract from CPO Deposit Maps adjacent to 6 The Townhouses Terenure Road East
 The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.42.4.

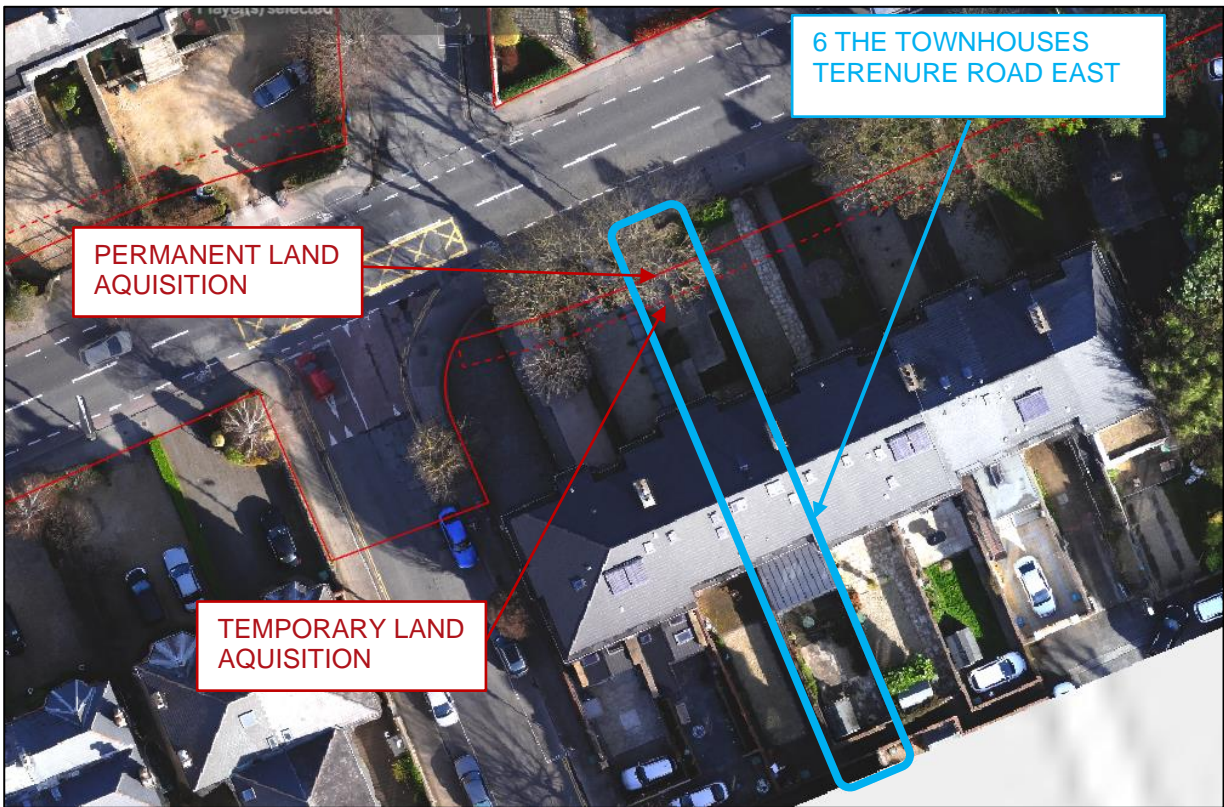


Figure 3.42.4 Proposed Land Acquisition lines adjacent to 6 The Townhouses Terenure Road East

The existing property frontage is shown in Figure 3.42.5.



Figure 3.42.5 Existing frontage of 6 The Townhouses Terenure Road East (Image source: Google)

3.42.2 Summary of the Points of Objection to the CPO Michael Bermingham

i. Lack of clarity around land acquisition

The submission raised a concern regarding the proposed temporary and permanent land acquisition of their property, stating at it is difficult to comprehend the full impact of the Compulsory Purchase Order.

ii. Consultation Process

The submission notes that the consultation process was neither fair nor inclusive. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making. It also underscores that not all neighbours received revised plans concurrently, resulting in an unfair, incomplete, and unequal consultation process.

iii. Impact on Heritage Properties

The submission asserts that the Proposed Scheme failed to engage with conservation authorities from Dublin City Council and South Dublin County Council concerning its impact on the historic suburban villages. Furthermore, it contends that the BusConnects proposals directly contradict the objectives outlined in the Dublin City Development Plan 2016-2023 concerning the future development of Dublin's historic urban villages and their local communities.

- iv. Existing bus priority signal on Terenure Road East is adequate

This submission states that the traffic volume on Terenure Road East is insufficient to justify the existing proposals for that section. It goes on to suggest that the already established and successful priority bus signalling system is adequate for achieving the projects objectives associated with bus infrastructure.

- v. Removal of trees on Terenure Road East

The submission also highlights that the current proposals for Terenure Road East will have a detrimental effect on the visual and environmental aspects of the road. This is primarily due to the planned tree removal associated with land acquisition, as well as the potential harm to the root systems of trees beyond the scope of the land acquisition from the proposed construction activities.

- vi. Changes to work patterns due to the COVID-19 pandemic

The submission states alternative solutions should be considered due to the change in traffic patterns because of the Covid-19 Pandemic.

- vii. Cost Benefit Analysis

The submissions states that there was no cost benefit analysis complete for the Proposed Scheme.

- viii. Alternative, less intrusive measures

The submission states alternative less intrusive measures should be considered along the Proposed Route, such as cashless payment system, congestion charges and improved bus frequency.

- ix. Metro and light rail is more appropriate.

- x. Right turn from Rathfarnham Road onto Terenure Road East

The submission raised a concern about the safety and congestion implication of introducing a right turn from Rathfarnham Road onto Terenure Road East. It notes that the right turn will have safety implications for cyclists and pedestrians.

- xi. Traffic disruption due to traffic management proposals

The submission states that the proposed traffic management proposals such as bus gates and one-way systems will redirect traffic through smaller residential roads. It continues to state that the redirected traffic will contribute towards noise pollution, decrease in safety for pedestrians and cyclists. It also states that the bus gate at Military Road and one-way system on Rathgar Road will severely limit options for residents, the submission gives an example of returning home by car from Rathmines to Rathgar or Terenure Road East.

The submission notes that the NTA has not set out the traffic modelling clearly, making it difficult to critically analyse the full impact of the scheme.

3.42.3 Response to the Points of Objection

This Objection raises the same concerns as CPO-16. Please refer to Section 3.16.3 for responses to these items.

3.43 CPO- 43 – Michael McAuley – 143 Rathfarnham Road

3.43.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions.

It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 0.3m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.43.1.

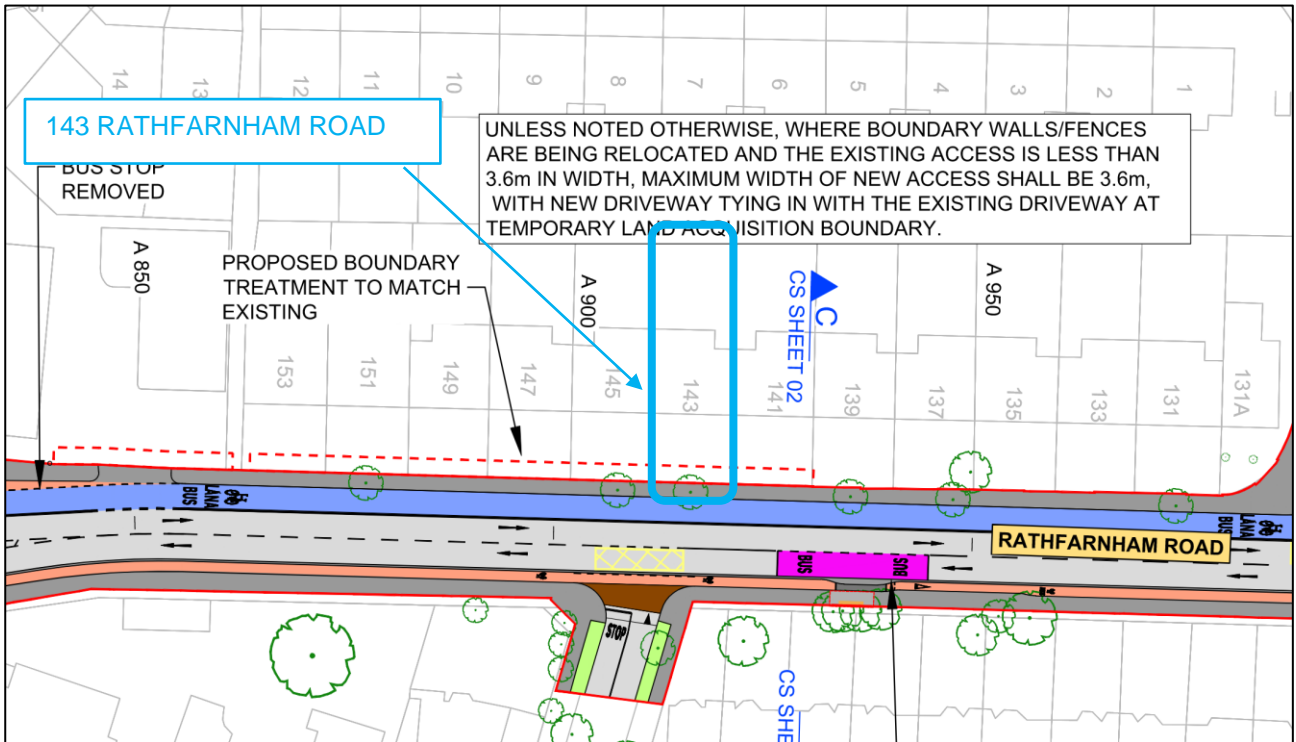


Figure 3.43.1 General Arrangement of Proposed Scheme adjacent to 143 Rathfarnham Road (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.43.2.

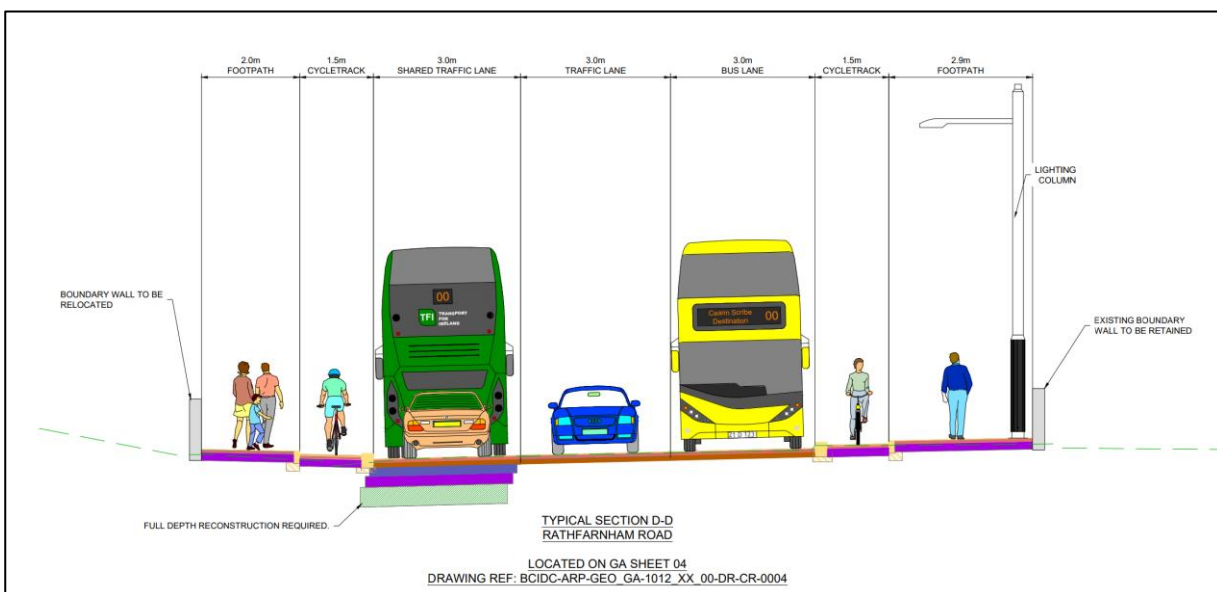


Figure 3.43.2 Typical Cross-Section adjacent to 143 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 143 Rathfarnham Road is shown in Figure 3.43.3.

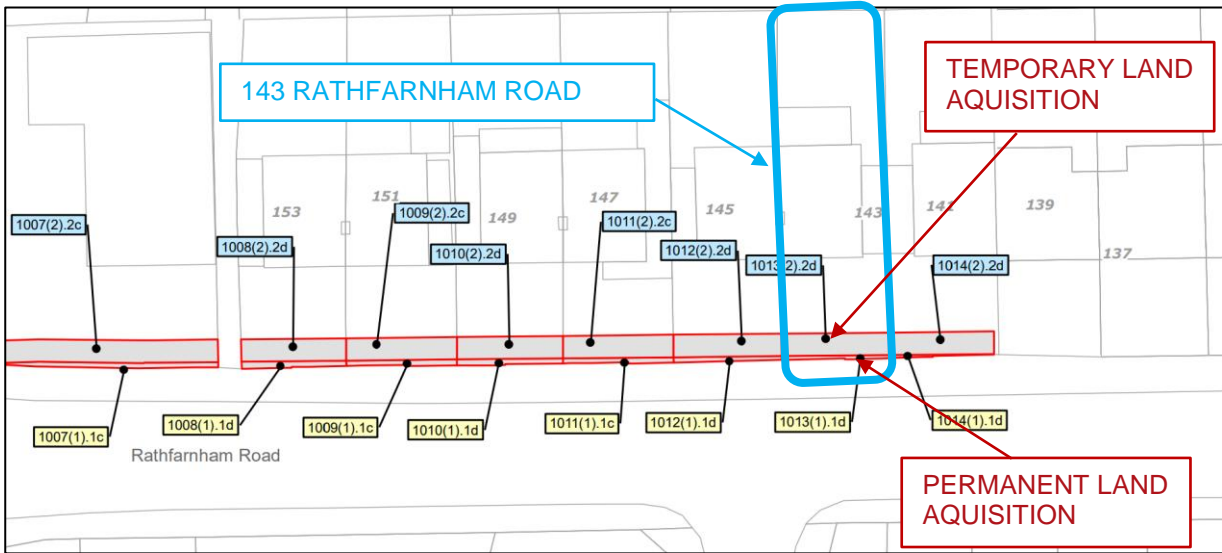


Figure 3.43.3 Extract from CPO Deposit Maps adjacent to 143 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.43.4.

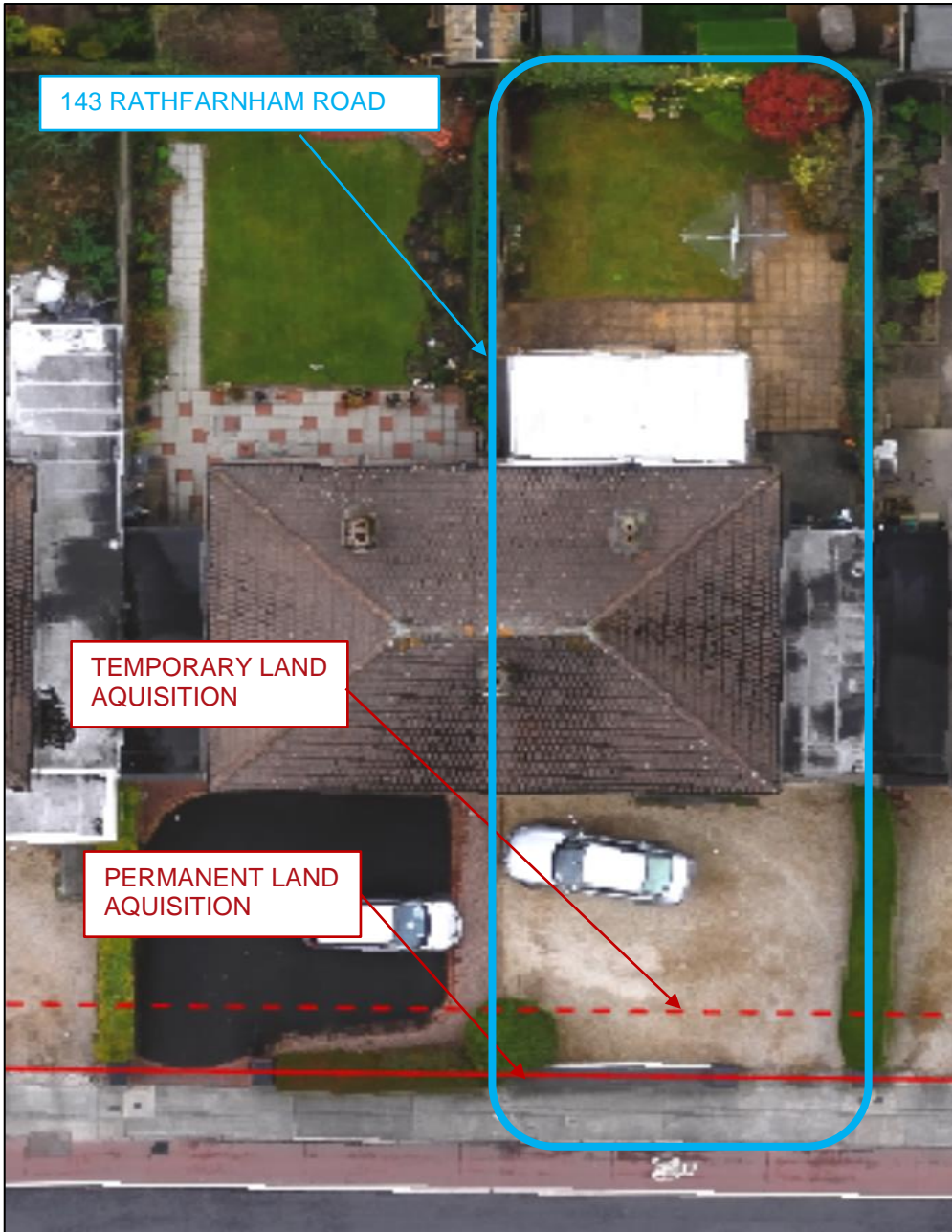


Figure 3.43.4 Proposed Land Acquisition lines adjacent to 143 Rathfarnham Road
The existing property frontage is shown in Figure 3.43.5.



Figure 3.43.5 Existing frontage of 143 Rathfarnham Road (Image source: Google)

3.43.2 Summary of the Points of Objection to the CPO Michael McAuley

This submission objected to CPO for the reasons summarised in the following section.

i. Increase in air and noise pollution

The submission states that by widening the road adjacent to their property will result in an increased level of noise and air pollution due to the reduced proximity between buses and the property.

ii. Safety concerns

The submission states that the increase in traffic congestion due to the Proposed Scheme will result in more accidents and fatalities.

iii. Devaluation of property

The submission states that the Proposed Scheme will devalue the property due to the increase in air and noise pollution, as well as increase in traffic congestion.

iv. Changes to work patterns due to the COVID-19 pandemic

The submission states alternative solutions should be considered due to the change in traffic patterns because of the Covid-19 Pandemic.

3.43.3 Response to the Points of Objection

i. Increase in Air and Noise Pollution

In relation to air quality, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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.*

In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

In relation to noise levels, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”*

Section 9.6.2 states that: *Once operational, there will be a direct, positive, imperceptible to slight impact along the Proposed Scheme due to a reduction in traffic volumes during both the year of Opening Year (2028) and the Design Year (2043).*

It is noted that at this property the nearest traffic lane (bus lane) will move approximately 300mm closer to the house.

ii. Safety Concerns Associated with Increased Traffic

The submission states that the Proposed Scheme will result in an increase in traffic and therefore negatively impact on safety in the community.

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, *to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).*

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

‘a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences’.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively. These diagrams are reproduced below.

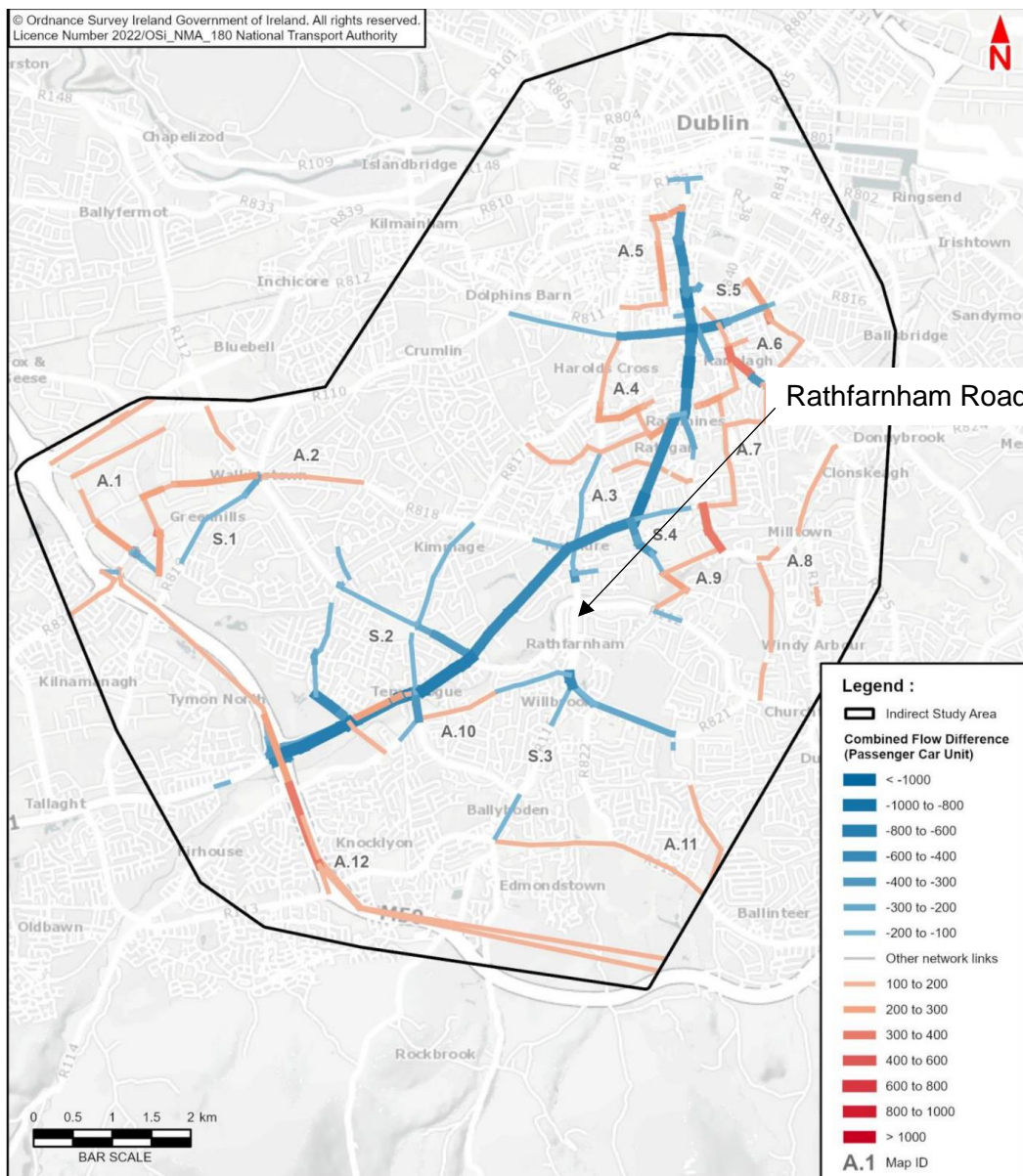


Figure 3.43.6 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

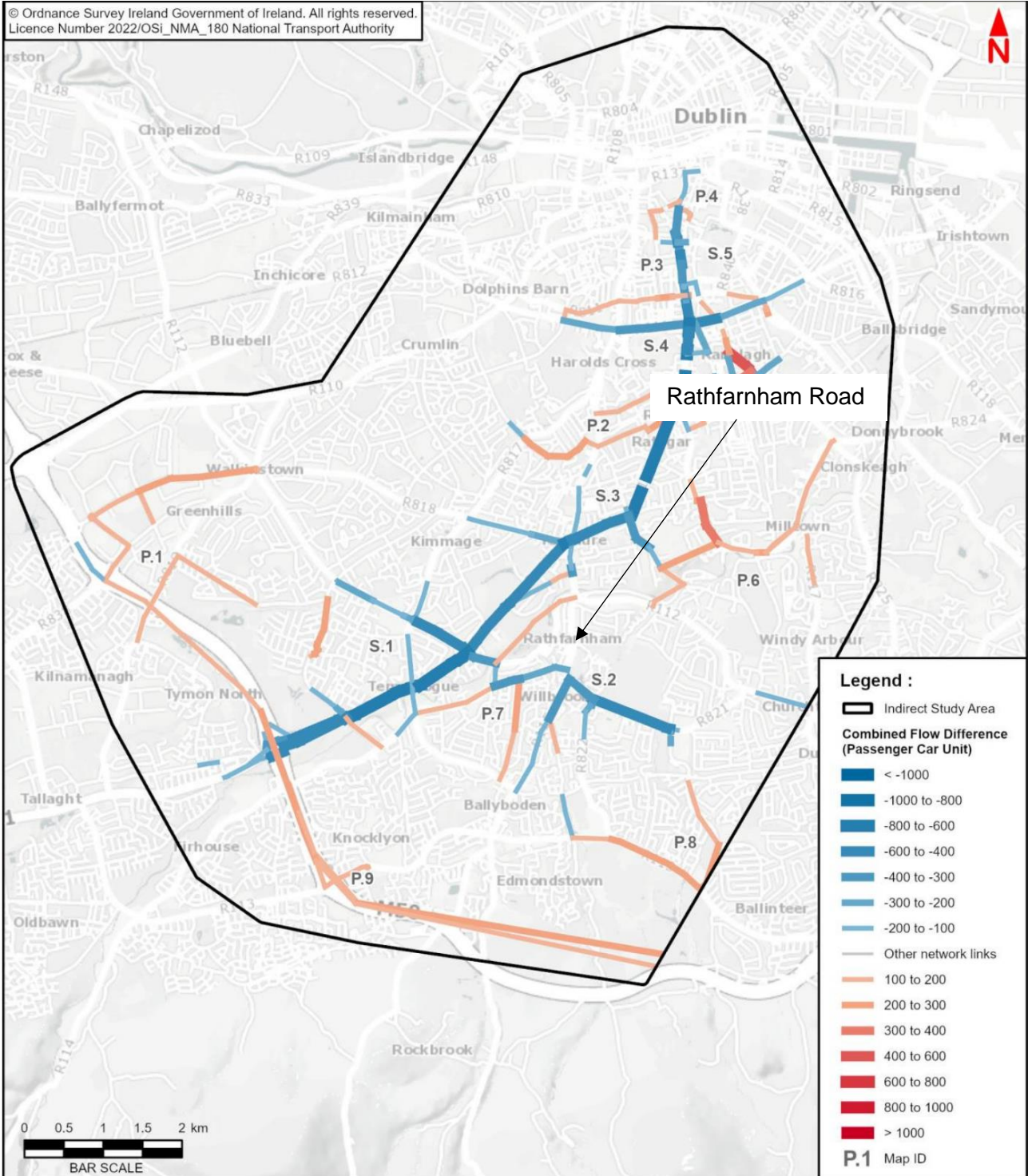


Figure 3.43.7 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

As can be seen in these figures, the traffic modelling undertaken does not identify any significant material change in traffic volumes along Rathfarnham Road during the AM and PM peak as a result of the Proposed Scheme i.e. any changes in traffic volumes along Rathfarnham Road than 100 passenger car units per hour.

Further details on the traffic impact in this area are presented in Section 2.3.2.

As seen in the General Arrangement Drawings provided in Volume 1 of the Environmental Impact Assessment Report (EIAR), there is a proposed reduction in the speed limit to 30km/h for Rathfarnham Road north of Main Street. Furthermore, the Proposed Scheme aims to decrease the width of traffic lanes on Rathfarnham Road to 3.0 meters concurrently also increasing the presence of street trees. These combined measures collectively create a perception of a slower-paced environment, thereby contributing to reduced driving speeds and improved safety.

iii. Devaluation of Property

As described in response to point of objection *i. Increase in air and noise pollution* and *ii. Safety concerns associated with increased traffic*, the EIAR assessment concluded that there will be a neutral and long-term residual effect on air pollution and *direct, positive, imperceptible to slight impact* noise pollution along the Proposed Scheme. Similarly, the assessment complete in the EIAR Chapter 6 determined that there will not be a significant material change in traffic volumes along Rathfarnham Road.

In addition to the above, 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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: "*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.*" and "*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 on Rathfarnham Road.

iv. Changes to work patterns due to the COVID-19 pandemic

A detailed response to this issue is presented in Section 2.1.1

3.44 CPO- 44 – Michael O'Donoghue – 61 Terenure Road East

3.44.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at 61 Terenure Road East, with the maximum width to be permanently acquired of approximately 3.6m and a maximum width of land to be temporarily acquired of approximately 2.0m.

At the adjacent laneway, it is proposed to permanently acquire a maximum of approximately 1.4m and a maximum width of land to be temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.44.1.

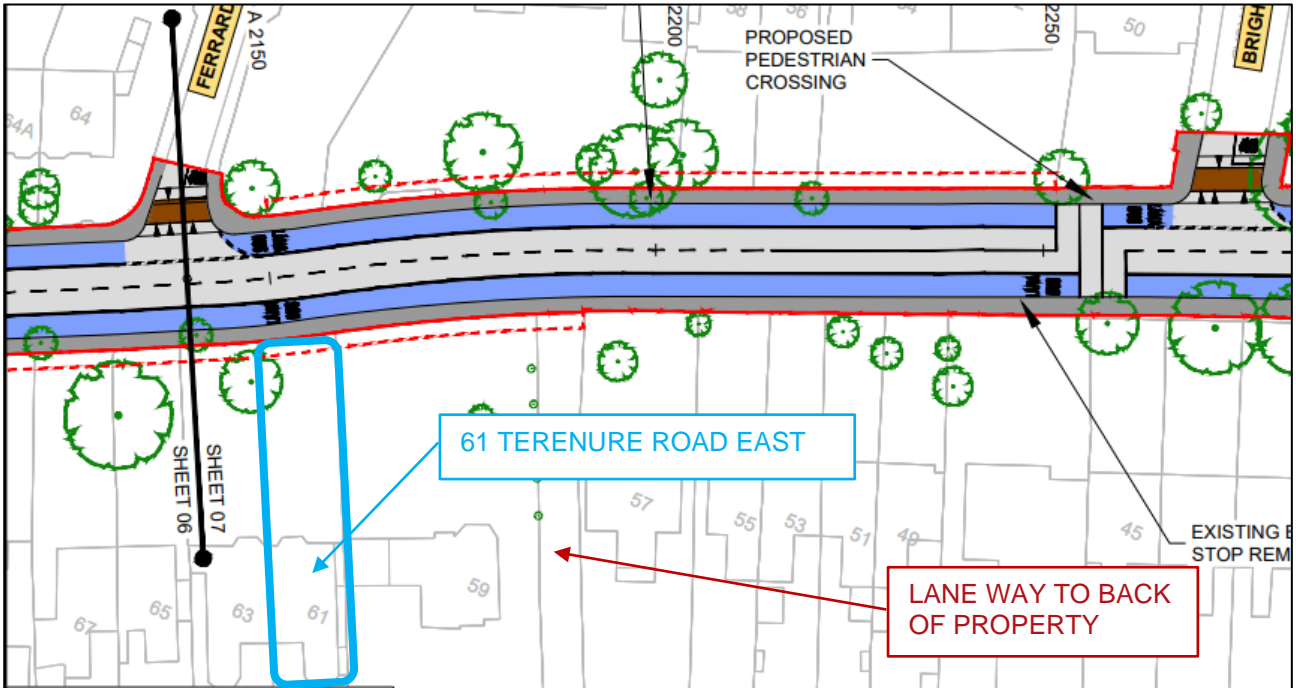


Figure 3.44.1 General Arrangement of Proposed Scheme at laneway adjacent to 61 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.44.2.

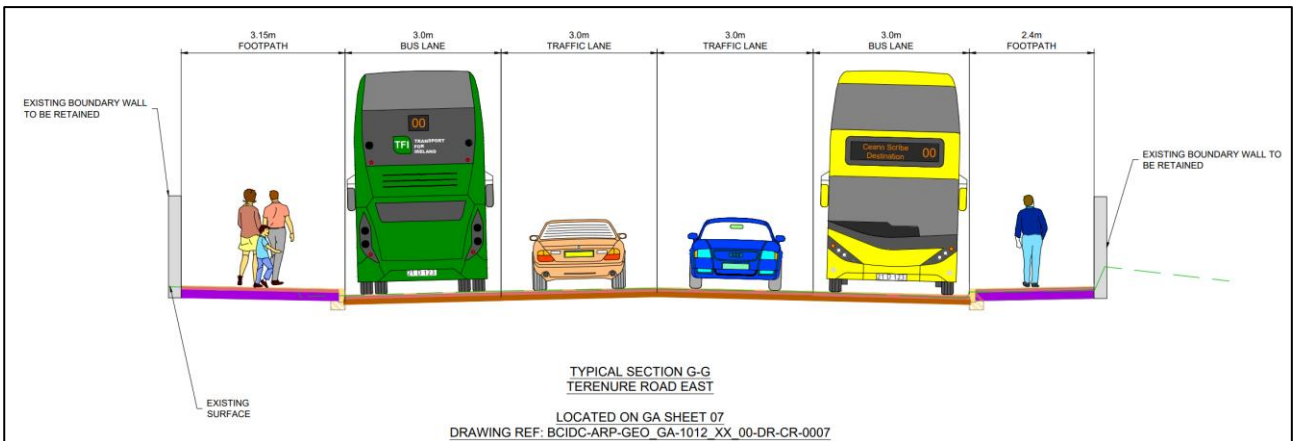


Figure 3.44.2 Typical Cross-Section at laneway adjacent to 61 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 61 Terenure Road East is shown in Figure 3.44.3.

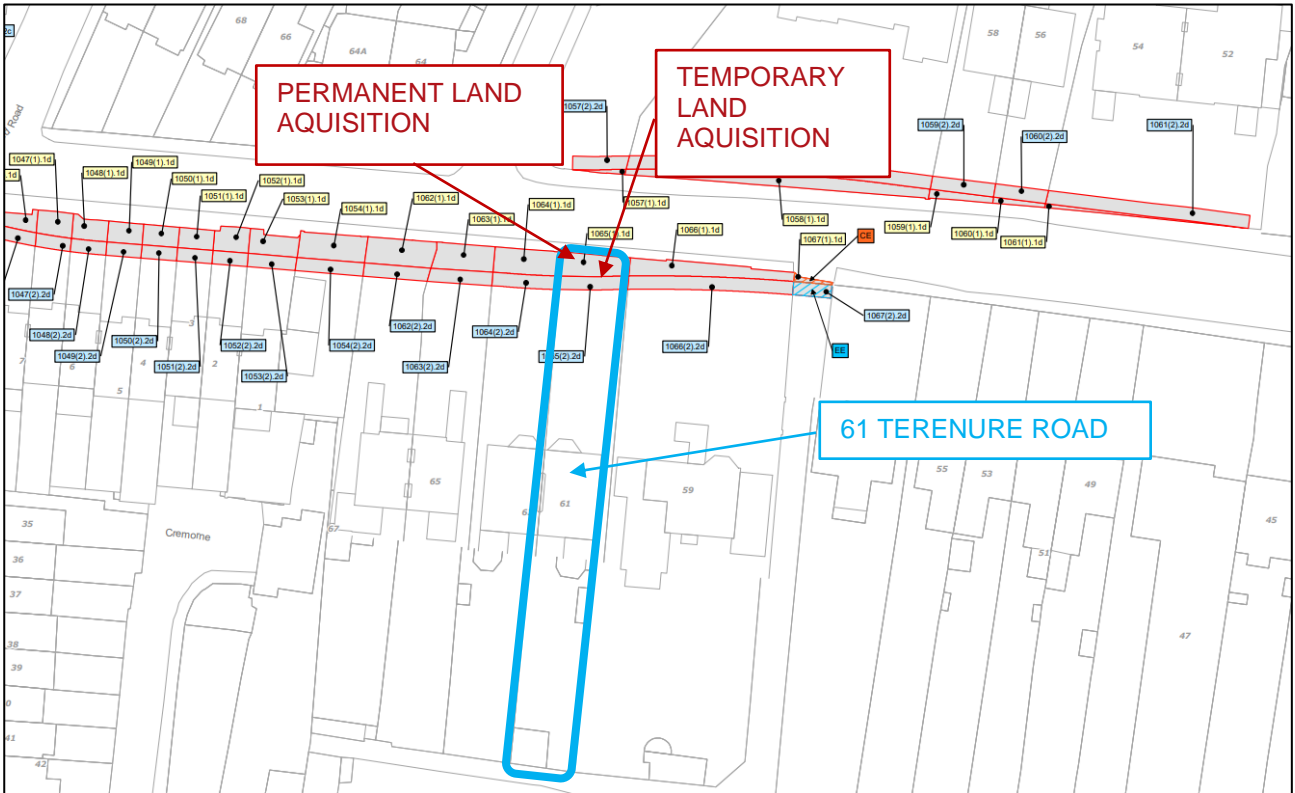


Figure 3.44.3 Extract from CPO Deposit Maps at laneway adjacent to 61 Terenure Road East



Figure 3.44.4 Proposed Land Acquisition lines at laneway adjacent to 61 Terenure Road East
 The existing property frontage is shown in Figure 3.44.5.



Figure 3.44.5 Existing frontage at 61 Terenure Road East (Image source: Google)

3.44.2 Summary of the Points of Objection to the CPO Michael O'Donoghue

This submission objected to CPO for the reasons summarised in the following section.

- i. Noise and air pollution

The submission states that the Proposed Scheme will result in an increase in noise and air pollution.

- ii. Increase in traffic along Terenure Road East

The submission states that the proposed cross-section at Terenure Road East will result in an increase in private vehicles.

- iii. Pedestrian safety

The submission states that widening of Terenure Road East will result in faster driving and result in difficulties for pedestrians to cross the road.

- iv. Removal of trees

The submission expressed concerns regarding the proposed removal of trees on Terenure Road East.

- v. Insufficient consultation

The submission notes disappointment in the consultation process and that Aarhus Convention rights have not been respected.

- vi. Alternative route along Harolds Cross Road

The submission includes a reference to a report prepared by Dr Roger's outlining an alternative route for the Proposed Scheme along Harolds Cross Road.

- vii. Benefits do not outweigh the impacts.

The submission states that the bus time savings do not justify the expenditure and disruption. It also noted that work journey time savings should not come at the expense of comfortable and healthy living.

- viii. Changes to work/travel patterns due to the Covid-19 pandemic

The submission states that the Covid-19 pandemic has resulted in changes to workplace commuting.

ix. Impact on heritage and protected structures on Terenure Road East

The submission expressed concerns regarding the impact of the Proposed Scheme on the heritage and protected structures along Terenure Road East.

x. Existing bus priority signal is adequate.

The submission states that the existing bus priority signal on Terenure Road East is sufficient and no road widening is required.

xi. Extent of land acquisition

The submission states that the information provided in the Deposit Maps in relation to land acquisition is insufficient in the context of understanding the full impact on the property.

xii. No time limit on temporary land acquisition

The submission notes that no time limit has been put on the temporary acquisition of land to undertake the works.

xiii. Land valuation costs

The submission states that there has been no offer to discharge legal and land valuation professionals necessitated by the CPO process. The submission also notes that the deposit maps prepared do not show the granite staircases at houses 61 and 63 Terenure Road East and the extent to which they take up space. It is submitted that this could mislead the compensation process.

3.44.3 Response to the Points of Objection

i. Increase in Air and Noise Pollution

In relation to noise pollution, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 Proposed Scheme, a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact is calculated (Reference to Table 9.17). This is as a result of reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths. The largest increases in traffic noise level are 1 dB along the Proposed Scheme.*" 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*". Table 9.39 lists these roads and Terenure Road East is not identified, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

In relation to air pollution, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme's operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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.*

In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO2 concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet.

The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Terenure Road East. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

ii. Increase in traffic along Terenure Road East

As noted in section 6.2.2.1 of Chapter 6 of Volume 2 of the EIAR, to determine the traffic and transport impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken, with reference to Transport Infrastructure Ireland's (TII) most recent Traffic and Transport Assessment Guidelines (TII 2014).

This document is considered best practice guidance for the assessment of transport impacts related to changes in traffic flows due to proposed developments and is an appropriate means of assessing the impact of general traffic trip redistribution on the surrounding road network.

According to Section 1.3 of the Traffic and Transport Assessment Guidelines (TII 2014):

'a Traffic and Transport Assessment is a comprehensive review of all the potential transport impacts of a proposed development or re-development, with an agreed plan to mitigate any adverse consequences'.

The guidelines aim to provide a framework to promote an integrated approach to development, ensuring that proposals promote more efficient use of investment in transportation infrastructure which reduces travel demand and promotes road safety and sustainable travel.

The TIA, which supports this EIAR chapter, follows the Traffic and Transport Assessment Guidelines and offers an impartial description of the likely impacts of the Proposed Scheme, outlining both its positive and negative aspects.

Section 6.4.6.1.15 of Chapter 6 of Volume 2 of the EIAR presents the results of the traffic assessment undertaken. Diagram 6.40 and 6.41 illustrates the flow difference (Do Minimum vs. Do Something) on road links in the study area during the 2028 AM and PM peak hours respectively with further details presented in Table 6.60 and 6.64. These diagrams and extracts from the tables are reproduced below.

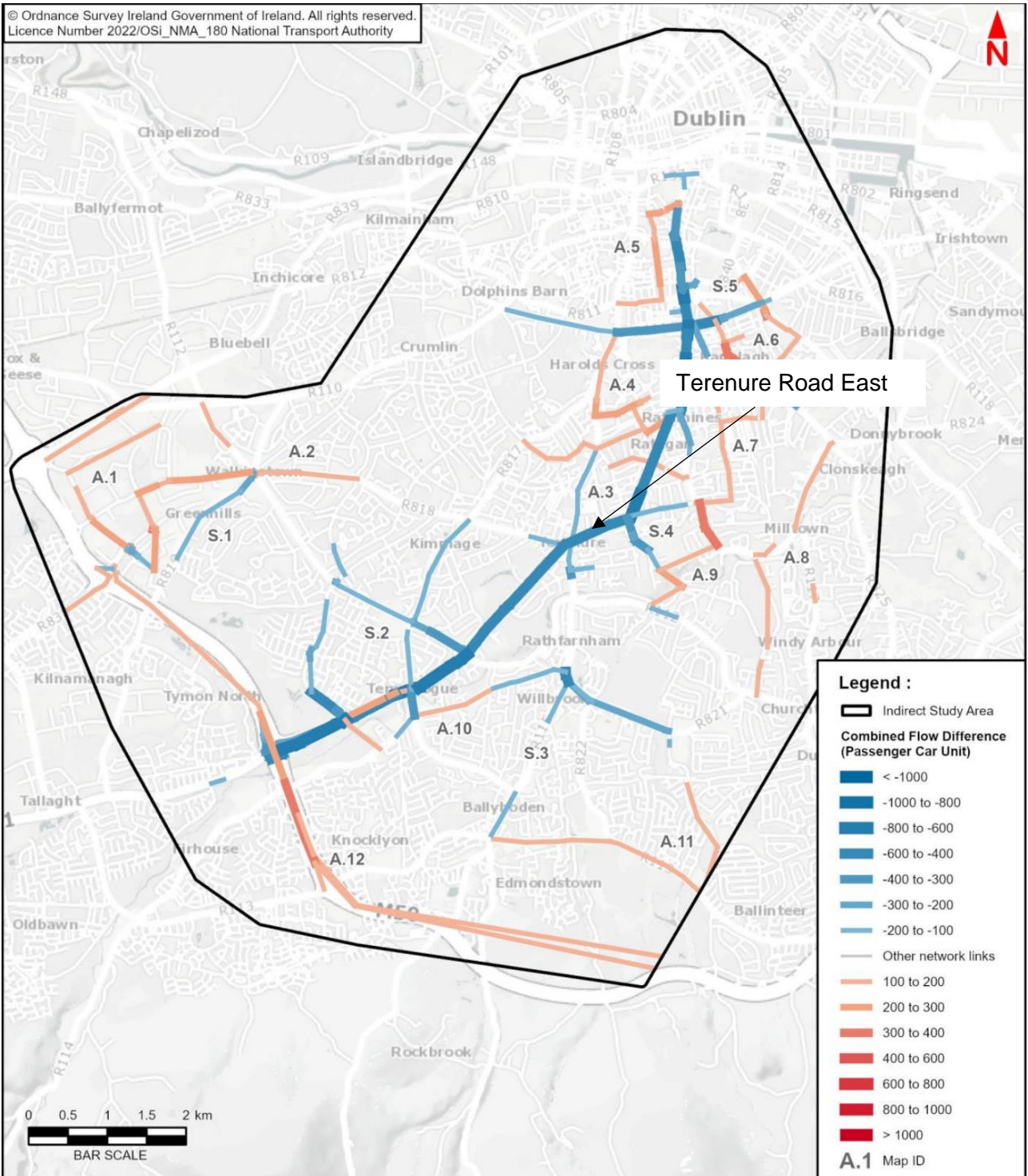


Figure 3.44.6 Flow Difference on Road Links (Do Minimum vs. Do Something), AM Peak Hour, 2028 Opening Year (Diagram 6.40 from Chapter 6 of the EIAR)

Table 6.60: Road Links that Experience a Reduction of ≥ 100 Combined Flows during AM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.2	Cypress Grove Road	1,108	926	-182
		Old Bridge Road	1,333	983	-350
		Tallaght Road	1,675	1,400	-275
		Templeville Road	1,036	689	-348
		Wellington Lane	2,141	1,851	-291
	S.4	Templeogue Road	665	212	-453
		Terenure Place	1,345	759	-586
Terenure Road West		704	597	-107	
Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	S.3	Butterfield Avenue	979	822	-158
		Grange Road	606	484	-122
		Nutgrove Avenue	1,275	995	-280
		Rathfarnham Road	1,336	843	-493
		Willbrook Road	798	602	-196
	S.4	Bushy Park Road	441	301	-141
		Rathfarnham Road	950	837	-114
Section 3 - R137 Terenure Road North to Charleville Road	S.4	Highfield Road	633	456	-177
		Orwell Road	1,175	876	-299
		Rathfarnham Road	1,025	875	-150
		Rathgar Road	603	109	-494
		Terenure Road East	838	436	-401
		Terenure Road North	977	824	-153
Section 4 - Charleville Road to R137 Dame Street	S.4	Charleville Road	144	30	-114
		Rathgar Road	817	672	-144
		Rathmines Road Lower	1,225	849	-376
		Rathmines Road Upper	578	328	-249

Figure 3.44.7 Extracts from EIAR Chapter 6: Table 6.60

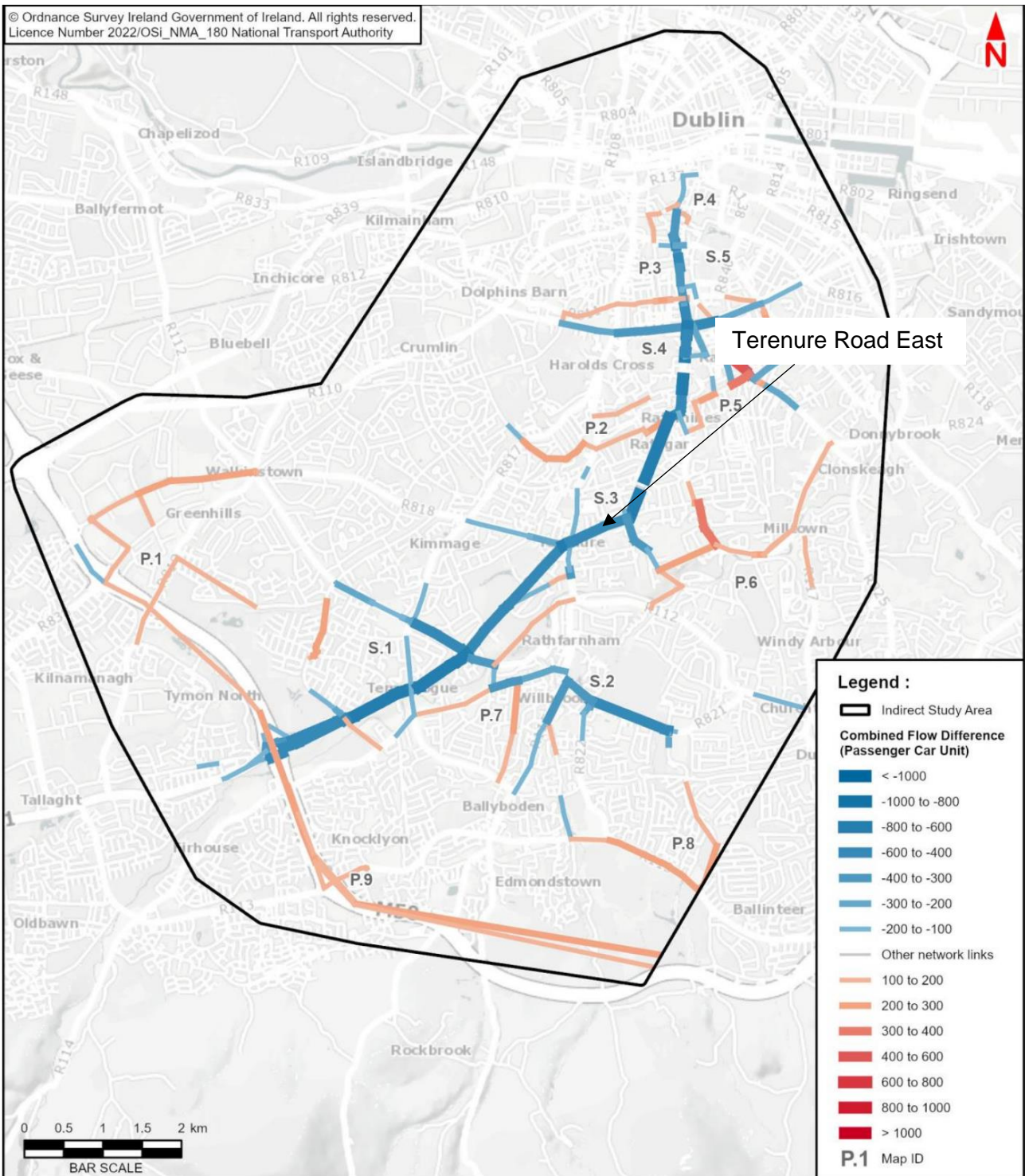


Figure 3.44.8 Flow Difference on Road Links (Do Minimum vs. Do Something), PM Peak Hour, 2028 Opening Year (Diagram 6.41 from Chapter 6 of the EIAR)

Table 6.64 Road Links that Experience a Reduction of ≥ 100 Combined Flows during PM Peak Hour (Direct Study Area)

Location	Map ID	Road Name	Do Minimum Flow (pcu)	Do Something Flow (pcu)	Flow Difference (pcu)
Section 1 - R137 Templeogue Road to R114 Rathfarnham Road	S.1	Cypress Grove Road	1,080	900	-180
		Old Bridge Road	1,242	1,087	-155
		Springfield Avenue	1,265	926	-339
		Tallaght Road	1,471	1,044	-427
		Templeogue Road	1,303	852	-451
		Templeville Road	972	558	-414
		Wellington Lane	2,241	1,960	-280
	S.2	Templeogue Road	864	462	-402
	S.3	Rathdown Park	171	30	-140
		Templeogue Road	864	462	-402
		Terenure Place	1,535	795	-740
		Terenure Road West	802	584	-218
	Section 2 - R821 Nutgrove Avenue to R137 Terenure Road North	S.2	Butterfield Avenue	894	630
Grange Road			711	496	-215
Nutgrove Avenue			1,279	736	-543
Rathfarnham Road			1,610	765	-845
Willbrook Road			979	667	-311
S.3		Rathfarnham Road	980	826	-154
Section 3 - R137 Terenure Road North to Charleville Road	S.3	Harold's Cross Road	1,091	983	-107
		Orwell Road	1,140	813	-327
		Rathfarnham Road	1,014	833	-182
		Rathgar Avenue	756	649	-107
		Rathgar Road	782	70	-712
		Terenure Road East	903	386	-516
		Terenure Road North	1,034	926	-108
Section 4 - Charleville Road to R137 Dame Street	S.4	Canal Road	1,087	605	-482
		Grove Road	1,002	658	-345

Figure 3.44.9 Extracts from EIAR Chapter 6: Table 6.64

The above extracts from the EIAR show the Proposed Scheme will result in an overall reduction in traffic along Terenure Road East in both the morning (-401 PCUs) and evening (-516 PCUs) peak periods.

iii. Pedestrian Safety

The aims and objectives outlined above 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 being the reduction of journey times for 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.

Section 6.4.6.1.4.1 of EIAR Volume 2 Traffic and Transport outlines the changes to pedestrian infrastructure along Section 3 R137 Terenure Road North to Charleville Road.

The key infrastructure changes to pedestrian links along Section 3 of the Proposed Scheme are summarised as follows:

- *Footways with a minimum running width of 2.0m where possible through the scheme;*
- *Provision of signalised crossings on Terenure Road East, to the west of Brighton Road and Rathgar Road and south of Wesley Road;*
- *Toucan crossings added to all arms at the R114 Rathgar Road / Highfield Road priority junction;*
- *Signalised crossings added on the eastern arm of the R114 Rathgar Road / Grosvenor Road / Charleville Road signalised junction;*
- *Raised tables added to minor junctions along Section 3; including those along specified quiet route for cyclists (Terenure Road North and Harold's Cross Road)*
- *Toucan crossings provided on all arms of the Harold's Cross Road / Kenilworth Park / Kenilworth Square / Rathgar Avenue.*

As seen above, it is proposed to provide an additional pedestrian crossing on Terenure Road East, to the west of Brighton Road and Rathgar Road.

Table 6.32 in section 6.4.6.1.4.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R137 Terenure Road North and Charleville Road.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R114 Terenure Road East / Heathfield Road / Greenmount Road priority junction	A2050	D	B	Medium	Low	Positive Moderate
R114 Terenure Road East / Ferrard Road priority junction	A2150	D	B	Medium	Low	Positive Moderate
R114 Terenure Road East / Brighton Road priority junction	A2250	C	A	Medium	Low	Positive Moderate
R114 Terenure Road East / Rathgar Park priority junction	A2450	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Orwell Road / R114 Terenure Road East / Rathgar Avenue signalised junction	A2500	B	A	Low	Moderate	Positive Moderate
R114 Rathgar Road / Highfield Road priority junction	A2550	F	A	High	Medium	Positive Very Significant
R114 Rathgar Road / Wesley Road priority junction	A2725	D	A	Medium	Low	Positive Moderate
R114 Rathgar Road / Winton Avenue priority junction	A2775	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Auburn Villas priority junction	A2825	C	B	Low	Low	Positive Slight
R114 Rathgar Road / Garville Mews priority junction	A2875	D	B	Medium	Low	Positive Moderate
R114 Rathgar Avenue / Belleville Avenue priority junction	A2950	C	B	Low	Low	Positive Slight
R114 Rathgar Avenue / Garville Avenue priority junction	A2975	D	B	Medium	Low	Positive Moderate

Figure 3.44.10 Extract from EIAR Chapter 6 (Table 6.32)

The LoS during the Do Minimum scenario ranges between B and F, with 14 of the 37 impacted junctions along this section being given a low D / F rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.17.

During the Do Something scenario, i.e., following the development of the Proposed Scheme, all of the impacted junctions along this section achieve the highest A / B ratings. This is as a result 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 footway and crossing widths. All proposed facilities have been designed in accordance with the principles of DMURS and 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 Positive, Significant 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 Volume 4 of this EIAR.

Table 6.1 of section 6.1 of EIAR Chapter described the changes which will be made to the existing transport environment along the Proposed Scheme. It notes that the number of Pedestrian Signal Crossings will be increased from 76 to 106 along the Proposed Scheme, representing a 39% increase in signalised crossings.

It is further noted that it is proposed to reduce the speed limit along Terenure Road East to 30kph resulting in a safer environment for all road users.

iv. Removal of Trees on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

v. Insufficient consultation

A detailed response to this item is presented in Section 2.1.1.

vi. Alternative route along Harolds Cross Road

A detailed response to this item is presented in Section 2.4.2.

vii. Benefits do not outweigh the impacts.

A detailed response to this item is presented in Section 2.1.1 where the benefits of the Proposed Scheme are summarised.

viii. Changes to work/travel patterns due to the Covid-19 pandemic

A detailed response to this item is presented in Section 2.1.1.

ix. Impact on heritage and protected structures on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

x. Existing bus priority signal is adequate.

A detailed response to this item is presented in Section 2.4.2.

xi. Extent of land acquisition

The submission notes that the maps received as part of the CPO notification do not include a scale. It is noted that the map provided with the notice does in fact include a scale which is clearly marked in the map title block as shown below is 1:500 at A3.

Lands to be Compulsorily Acquired Server Map			
Designed: CM	File Name:	Drawing No.	Rev.
Drawn: GM	BCIDC-CPO-PDV_SP-1012_XX_00-DR-GG-0068	1012-SM-0068	M01
Checked: DC	Scale: 1:500 (A3)		
Approved: DJC	Date: 05/04/23		

At 61 Terenure Road East it is proposed to permanently acquire between 2.7m to 3.6m of the property’s front garden to accommodate the construction of an outbound bus lane. In terms of the temporary acquisition, 2 meters from the proposed boundary wall will be required for the duration 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. If the CPO is confirmed by An Bord Pleanála, 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.

In relation to the adjacent laneway, it is proposed to permanently acquire between 0.4m to 1.4m. In terms of the temporary acquisition, 2 meters from the proposed boundary wall will be required for the duration of the works.

xii. No time limit on temporary land acquisition

As noted in response to item xi, 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.

Chapter 5 of the EIAR describes the construction activities associated with the Proposed Scheme. Table 5.2 (reproduced below) an indicative programme for the Proposed Scheme.

Table 5.2: Proposed Scheme Construction Programme

Section No.	Estimated Construction Duration	Approximate Length (m)	Year 1				Year 2			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Section 1a	2 months	480								
Section 1b	6 months	Roundabout								
Section 1c	3 months	700								
Section 1d	7 months	735								
Section 1e	3 months	635								
Section 1f	6 months	915								
Section 1g	3 months	1490								
Section 2a	8 months	850								
Section 2b	9 months	460								
Section 2c	9 months	630								
Section 2d	6 months	710								
Section 2e	8 months	830								
Section 3a	6 months	630								
Section 3b	9 months	1275								
Section 4a	8 months	920								
Section 4b	8 months	880								
Section 4c	6 months	720								
Section 4d	3 months	400								

Figure 3.44.11 Extract from Chapter 5 of the EIAR

Terenure Road East is contained with section 3a. As shown in Table 5.2, the expected construction duration will be approximately 6 months. It should be noted however, that construction activities at individual plots will have shorter durations and will be dependent on the extent of works required in consultation with the property owner/occupier. It is noted that access and egress to the property will be maintained at all times.

xiii. Land valuation costs

There has been no offer to discharge legal and land valuation professionals necessitated by the CPO process because such appointments are not required under the CPO process until the CPO is confirmed by An Bord Pleanála. 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 submission noted that the deposit maps did not indicate the presence of the granite stairs leading from the property. However, this will not impact on the compensation claim as part of the CPO process. The consideration of CPO compensation does not arise unless the CPO is confirmed by An Bord Pleanála, and consequently the consideration of the impact of the CPO on the property including the granite staircases will be considered when the landowner, whose land is being acquired, submits a claim for compensation following a Notice to Treat if the CPO is confirmed by An Bord Pleanála as part of this process.

3.45 CPO- 45 – Moto4u c/o Trevor Baker – 1a Main Street

3.45.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 6.3m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.45.1.

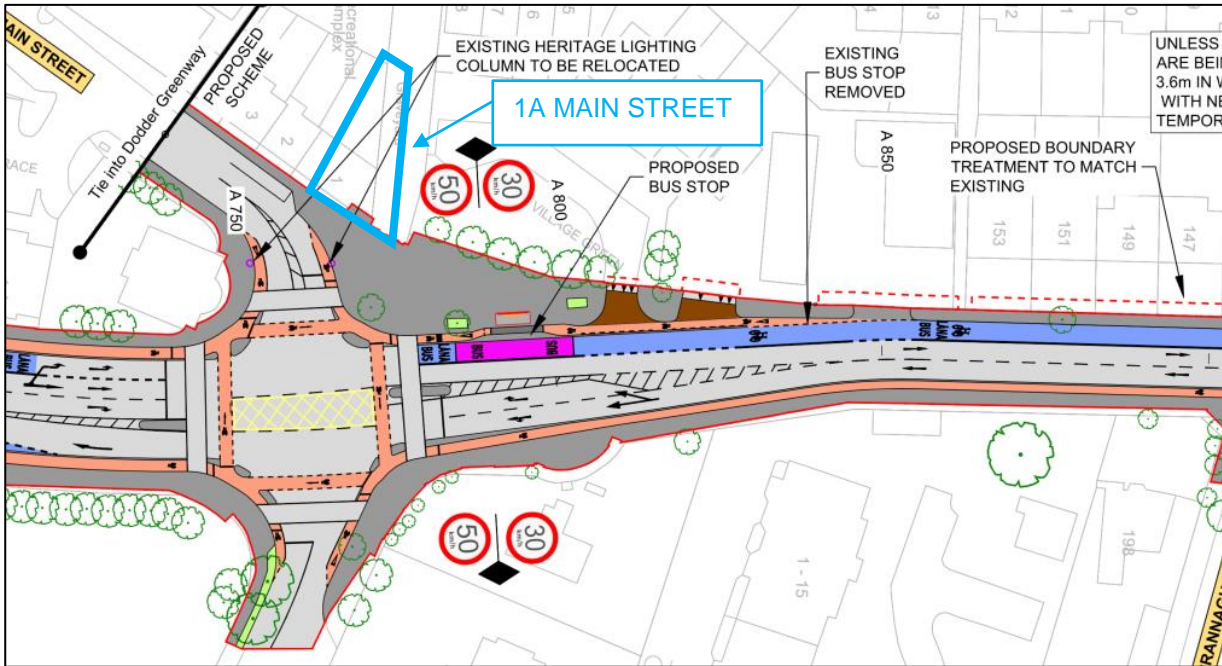


Figure 3.45.1 General Arrangement of Proposed Scheme adjacent to 1A Main Street (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.45.2.

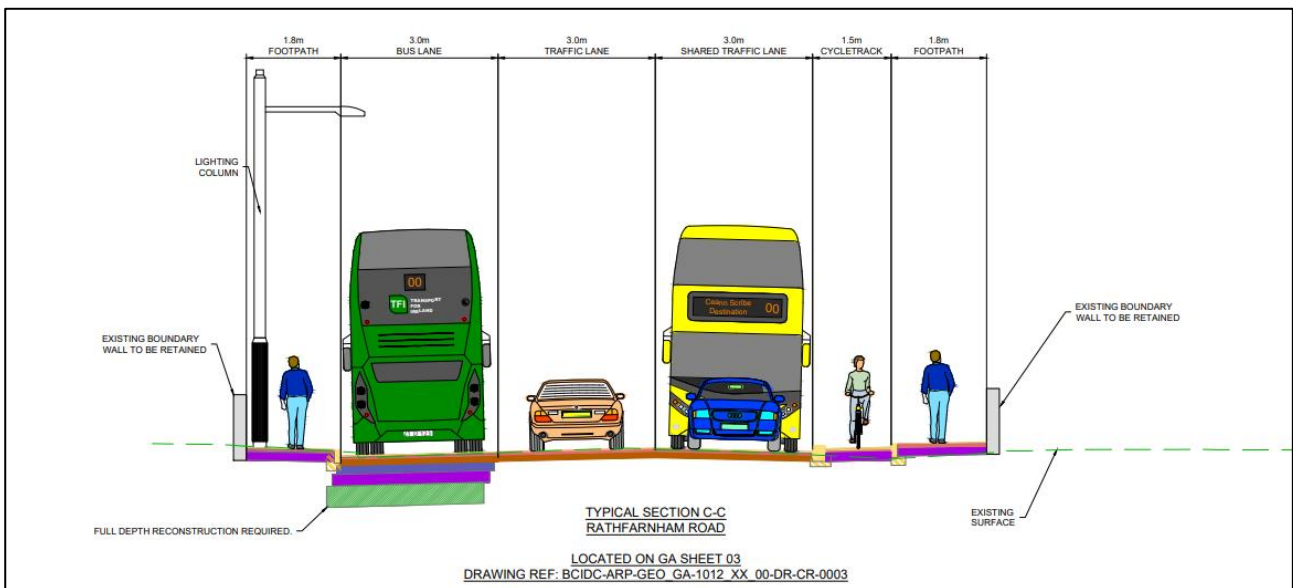


Figure 3.45.2 Typical Cross-Section adjacent to 1A Main Street

The relevant extract from the CPO Deposit Maps showing the proposed permanent land acquisition areas at 1A Main Street is shown in Figure 3.45.3.

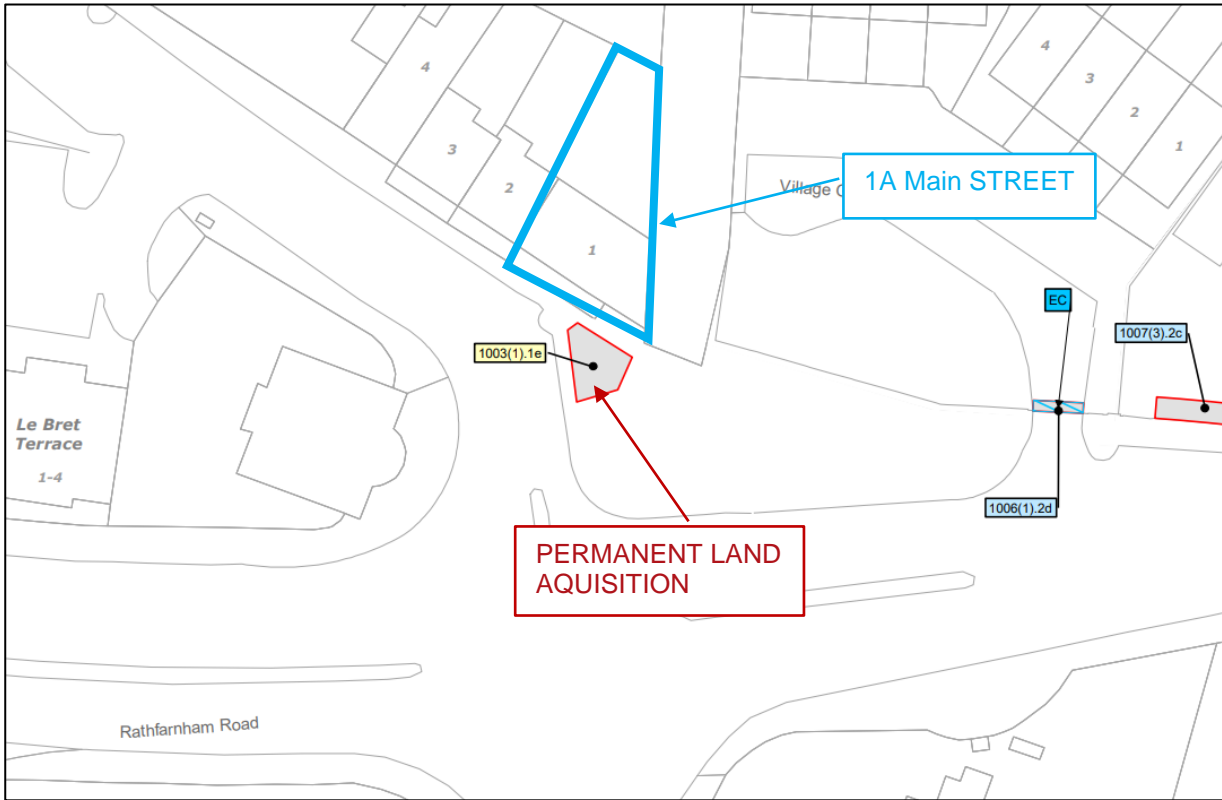


Figure 3.45.3 Extract from CPO Deposit Maps adjacent to 1A Main Street

The proposed permanent land acquisition lines overlain on aerial photography are shown in Figure 3.45.4.



Figure 3.45.4 Proposed Land Acquisition lines adjacent to 1A Main Street
The existing property frontage is shown in Figure 3.45.5.



Figure 3.45.5 Existing frontage of 1A Main Street (Image source: Google)

3.45.2 Summary of the Points of Objection to the CPO Motor4u c/o Trevor Baker

This submission objected to CPO for the reasons summarised in the following section.

i. Impact on display area

The submission states that the Proposed Scheme will eliminate the display area outside 1A Main Street, Rathfarnham.

ii. Impact on access

The submission states that the Proposed Scheme will eliminate vehicular access to the plaza outside 1A Main Street, Rathfarnham.

iii. Location of bus stop

The submission stated that the Proposed Scheme failed to consider alternative locations of the bus stop. It also stated that the proposed bus stop location will have a detrimental impact on the business.

3.45.3 Response to the Points of Objection

i. Impact on Display Area

Based on information available to the NTA, the extents of the plaza, including the area immediately outside MOTO4U which is currently being used for stock display is under the ownership of SDCC.

Notwithstanding the above, the works associated with Proposed Scheme at the plaza will not impede the use of the area outside 1A Main Street, Rathfarnham to be used for stock display.

ii. Impact on Access

1A Rathfarnham Main Street has an access gate to what is currently used as the MOTO4U business. There is a dropped kerb in proximity to the intersection of Main Street and Rathfarnham Road. A removable bollard is situated at the centre of this dropped kerb (See Figure 3.45.5). This route is used for maintenance vehicles accessing the adjacent cemetery (Church of Saints Peter and Paul).

As outlined on sheet 3 of 37 of EIAR Chapter 4 Landscaping General Arrangement it is proposed to *retain existing public plaza, including stone paving, planters, stainless steel bollards*. In addition, the existing dropped kerb arrangement will be reinstated in the same location, including the removable bollard. In summary, vehicular access arrangement into the plaza will be reinstated as per the existing condition as part of the Proposed Scheme.

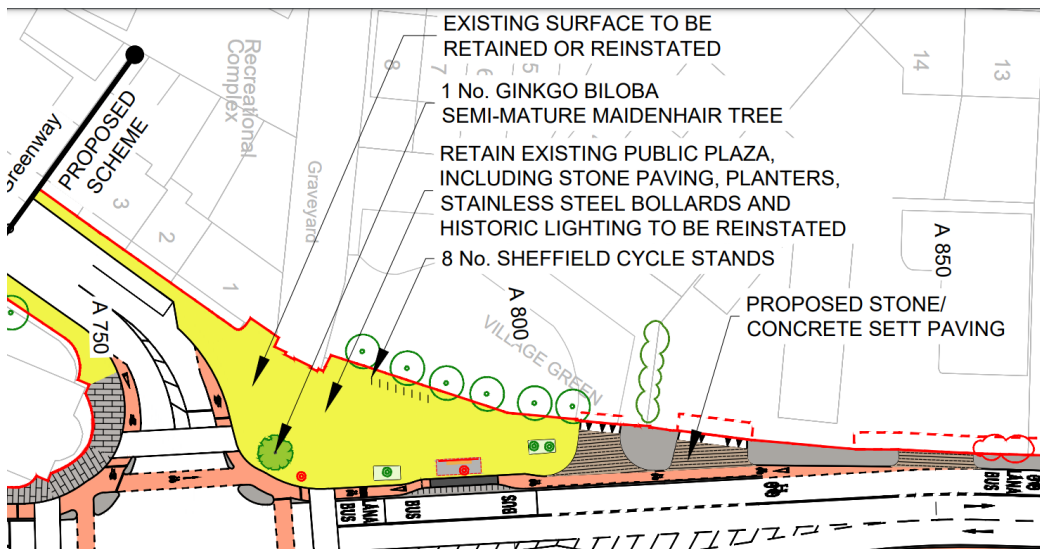


Figure 3.45.6 Landscaping General Arrangement, sheet 3 of 37

iii. Location of bus stop

As noted in Section 4.6.5.5 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 position and number of bus stops have been evaluated as part of a bus stop assessment.

The 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 bus interchange stops;*
- *Where ideally there is space for a bus shelter;*
- *Location in pairs, 'Tail to Tail' opposite sides of the road;*
- *Close to (and on exit side of) pedestrian crossings;*
- *Away from sites likely to be obstructed; and*
- *Adequate footpath 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 of route, dropping 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 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.

The Bus Stop Review Report notes the following in relation to the existing bus stops on Rathfarnham Road at this section of the Proposed Scheme:

Bus Stop 1332

Stop to be amended? Yes - stop to be moved 60m south.

Reason for decision: Although it is close to the junction, this location was considered to be more optimal than the existing location as there is more space for congregation and passing pedestrians in this location. It also has less impact on property entrances.

The proposal to relocate bus stop 1332 aligns with the bus stop location principles namely:

- It is in a less space constraint area allowing more space for congregation and passing pedestrians. The footpath width is available at proposed location is approximately 7.4m greater than at the current location.
- It is located closer to Rathfarnham Village and the junction with Main Street and Castleside Drive increasing accessibility from the larger residential catchment along, and accessed off, these roads as well as providing more direct access to the village centre.
- It is located closer to pedestrian crossings (c. 15m) facilitating safe access to the southern side of Rathfarnham Road– the existing stop is c. 90m from the nearest controlled crossing point;
- It facilitates better stop spacing with 270m between it and the prior stop, 380m between it and the subsequent bus stop – existing distance between stops is 260m (between stop 1332 and 1331 and 260m (between stop 1332 and 1333);

In relation to the impact of the proposed bus stop on the viability of MOTO4U, as described in response *ii. Impact on Display Area* and *iii. Impact on Access*, the Proposed Scheme will not impede operations of the business.

3.46 CPO- 46 – Mr Andrew Fahy and Mrs Denise (Boyle) Fahy – 325 Templeogue Road

3.46.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus lanes and traffic lanes in each direction. To accommodate this cross section, land acquisition will be required along the northern side of the Templeogue Road.

Dedicated cycle facilities are provided on the approach to the Cypress Grove Road junction; however these will terminate approximately 100m from the junction where cyclists will share the bus lane in an inbound direction and the general traffic lane in an outbound direction over a short distance. To improve safety for cyclists, it is proposed to introduce a 30kph speed limit between Cypress Grove Road and Templeogue Village.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to 1.0m, and temporarily acquisition of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.46.1.

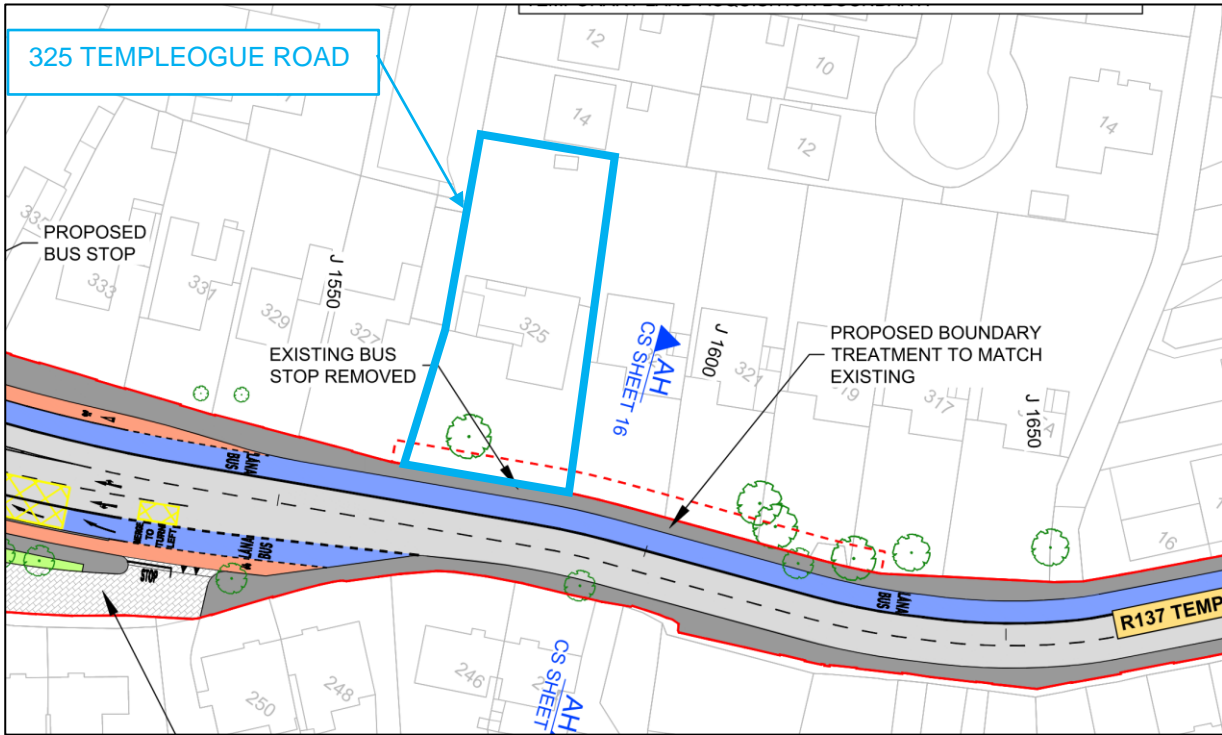


Figure 3.46.1 General Arrangement of Proposed Scheme adjacent to 325 Templeogue Road (Sheet 32)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.46.2.

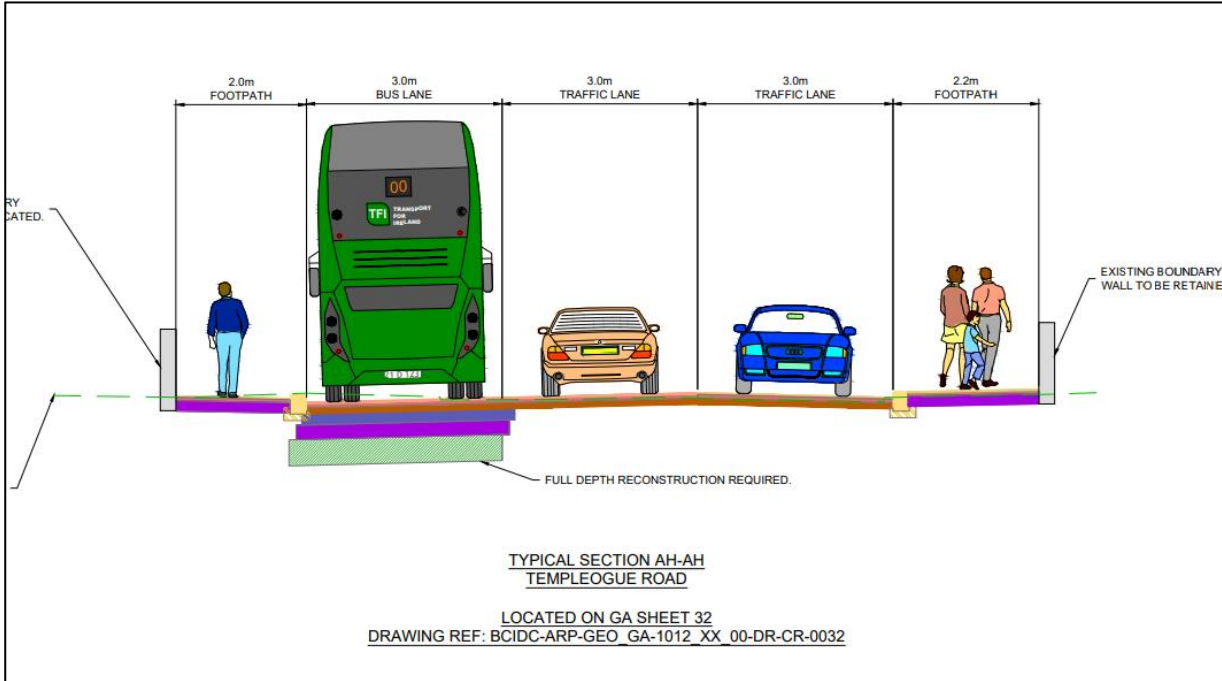


Figure 3.46.2 Typical Cross-Section adjacent to 325 Templeogue Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 325 Templeogue Road is shown in Figure 3.46.3.

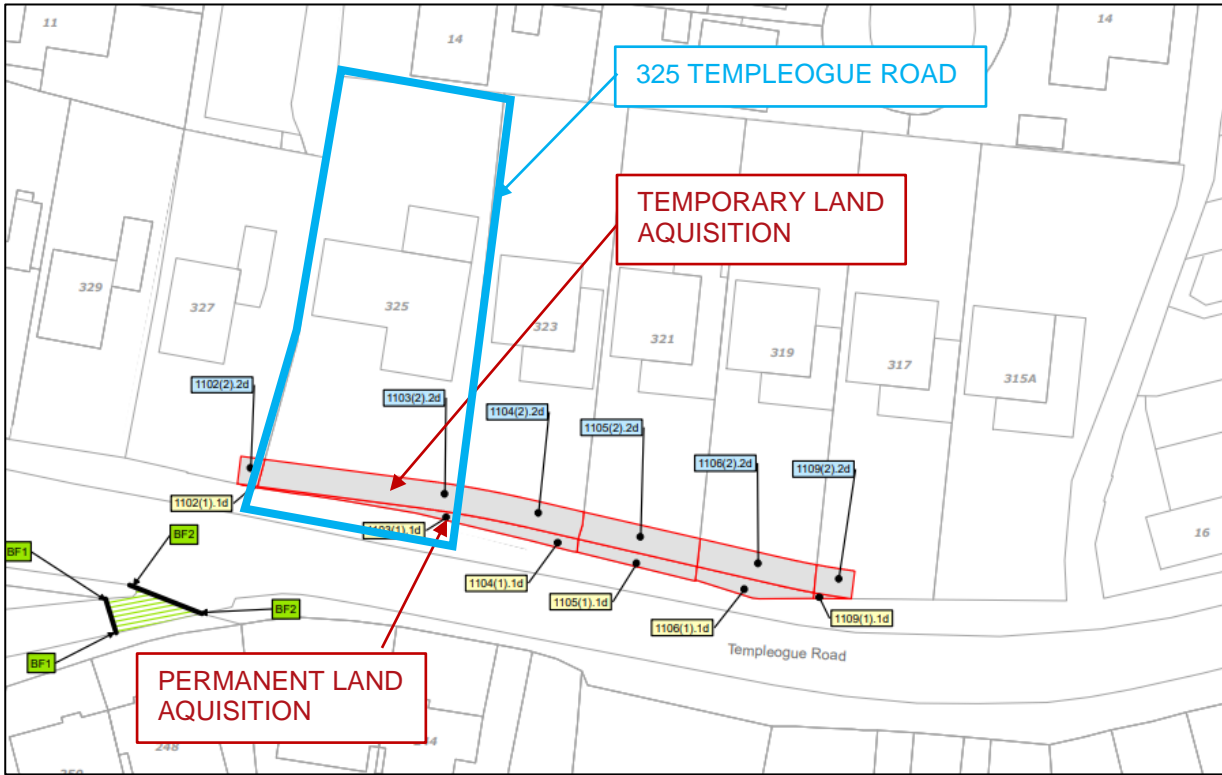


Figure 3.46.3 Extract from CPO Deposit Maps adjacent to 325 Templeogue Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.46.4.



Figure 3.46.4 Proposed Land Acquisition lines adjacent to 325 Templeogue Road

The existing property frontage is shown in Figure 3.46.5.

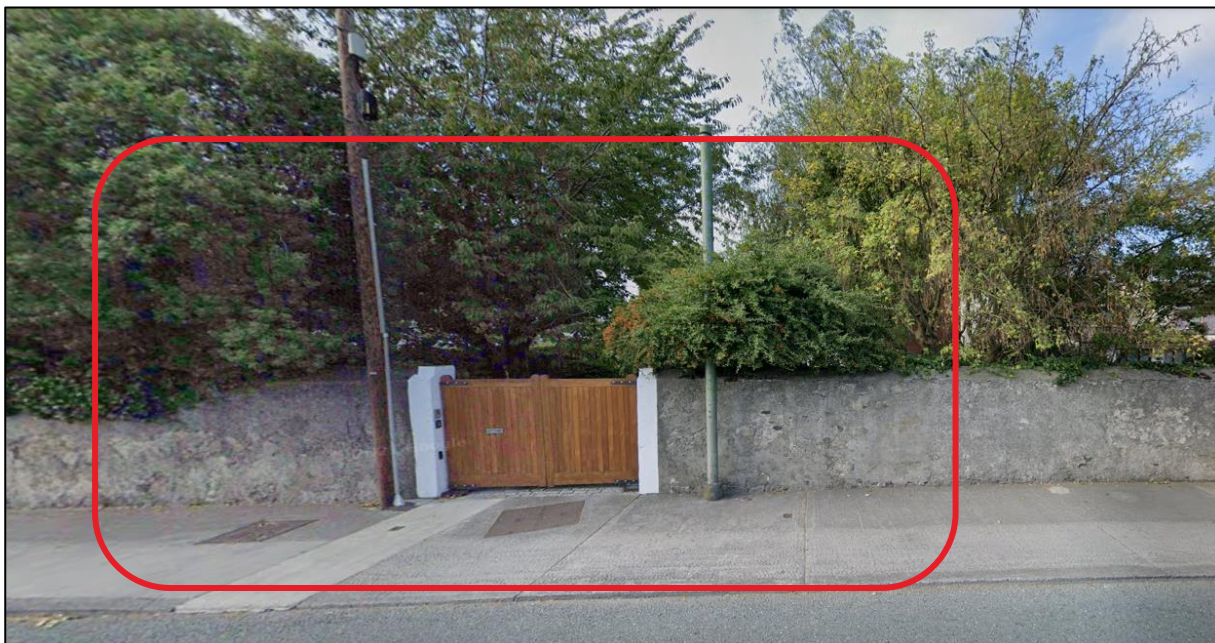


Figure 3.46.5 Existing frontage of 325 Templeogue Road (Image source: Google)

3.46.2 Summary of the Points of Objection to the CPO Andrew Fahy and Denise (Boyle) Fahy

i. Clarity on design

The submission states that insufficient information on the proposed design have been provided, in particular noting vertical and horizontal alignment. The submission added that due to the lack of information it was not possible for the residents to fully understand and comment on impact of the scheme on their property. The submission also requested that the following is provided a) Details of the final boundary treatment, type of wall etc. b) Details of final surface over the temporary acquisition area c) Details of the proposed reinstatement of the entrance to the property.

ii. Extent of land acquisition

The submission states that the proposed temporary acquisition is excessive and not required for the construction of the Proposed Scheme. It also states that the permanent acquisition is unnecessary if minor modifications to the scheme are made.

iii. Access to property

The submission states that no detail had been provided regarding continuous access to the property during construction.

iv. Construction impacts and mitigation measures

The submission states that insufficient consideration has been given to mitigation measures to protect the property during the construction phase. It also added that insufficient information is provided on the construction proposals and no consideration was given to the impact of the construction phase on residents.

v. Impact on trees within proximity of the construction area

The submission states that insufficient consideration is given to the protection of trees and gardens adjacent to the proposed construction area.

vi. Service connections into the property

The submission states that services into the property are connected through the front garden and requested confirmation that all services will be maintained through construction.

3.46.3 Response to the Points of Objection

i. Clarity on design

Section 4.5.1.1 of EIAR Volume 2 Chapter 4 Proposed Scheme Description describes the Proposed Scheme on Templeogue Road, between Cypress Grove Road junction and Ashfield Place:

Between the Cypress Grove Road junction and the Ashfield Place development it is proposed to provide bus lanes and traffic lanes in each direction. A limited amount of land take will be required from a number of residential properties on the northern side of the carriageway to achieve this cross section. Dedicated cycle facilities are provided on the approach to the Cypress Grove Road junction; however, these will terminate approximately 100m from the junction where cyclists will share the bus lane in an inbound direction and the general traffic lane in an outbound direction. To improve safety for cyclists, it is proposed to introduce a 30kph speed limit between Cypress Grove Road and Templeogue Village. Outside the Ashfield Place Development, there is insufficient space for a bus lane and a general traffic lane in each direction. Therefore, it is proposed to stop the outbound bus lane for a distance of approximately 170m and use Signal-controlled priority along this section.

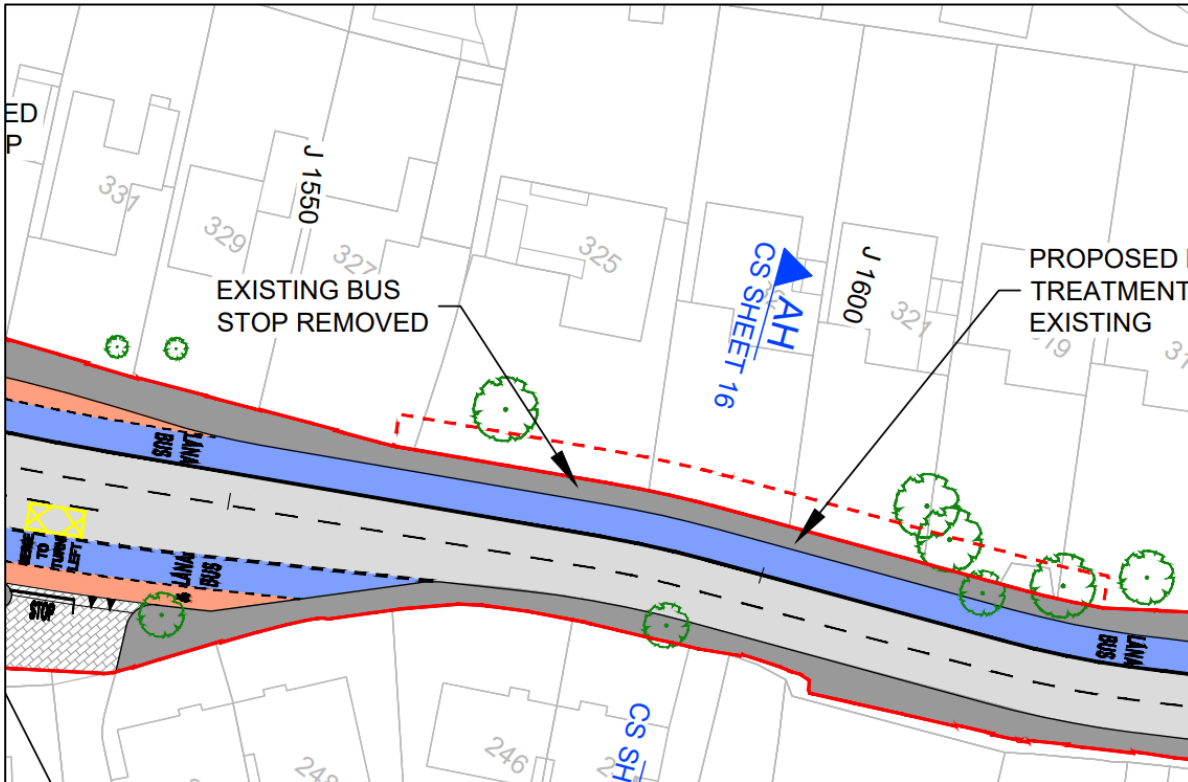
Both permanent and temporary land acquisition is required at this property, the extents of which are outlined in the Deposit Maps replicated in Figure 3.46.4 above. In terms land permanent acquisition, up to 1.0 meters will be required to achieve the optimum road cross-section, as described in Section 4.5.1.1 of EIAR Volume 2 Chapter 3 Proposed Scheme Description and General Arrangement Drawings. An additional 3.0m temporary acquisition is required for the duration of the works to facilitate reconstruction of the boundary treatment.

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.

In relation to boundary treatments and planting, section 4.6.13.5.2 states:

Impacted property boundaries will be reinstated following construction. In some instances, boundaries will be rebuilt along their original alignments. In other cases, boundaries will be re-built on a new setback alignment. In general, property boundaries will be reinstated on a 'like for like' basis, including any walls, piers, fences, railings, gates, driveway finishes and private landscaping. Private grounds that are utilised in part for construction access will be reinstated following completion of the works to match the existing landscaping of the property. Where private grounds are reduced by permanent land take required for the scheme, the remaining grounds will be reinstated to match the landscape and character of the existing grounds in consultation with the property owner.

EIAR Volume 1 General Arrangement Drawings include the General Arrangement Drawings for the Proposed Scheme, these drawings convey the design intent and project details.



EIAR Volume 3 Chapter 4 Mainline Plan and Profile include the horizontal and vertical alignment for the Proposed Scheme. The section adjacent to 325 Templeogue Road is described between chainage J 1570 and J 1590 and outlined on sheet 31 of 38. As can be seen in the Mainline Plan and Profile it is proposed to retain the existing vertical alignment along the section of Templeogue Road outside 325 Templeogue Road.

If the CPO is confirmed by An Bord Pleanála, 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.

ii. Extent of Land Acquisition

The submission states that the proposed temporary acquisition is excessive and not required for the construction of the Proposed Scheme. It also states that the permanent acquisition is unnecessary if minor modifications are made to the scheme.

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

At the specific area outside 325 Templeogue Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath, cycle tracks, general traffic and bus lanes. This sets the desirable footpath width of 2.0m for footpaths, and absolute minimum footpath width of 1.8m, 3.0m for general traffic lanes and 3.0 for bus lanes. At this location a 2.0m footpath width was provided on the northern side of Templeogue Road and 1.8m on the southern. The minimum width for the bus and general traffic lane were provided. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It is noted that the Proposed Scheme at this location has evolved through the positive consultation with residents in this area, reducing the impact on 325 Templeogue Road by approximately 3 m. This evolution is detailed in section 3.4.3.1 of Chapter 3 of Volume 2 of the EIAR:

Following feedback received as part of the public consultation and further traffic assessment, an additional option was developed for consideration within this section to minimise the impact on properties to the north of Templeogue Road. This additional option, which was assessed against the two options assessed at draft PRO development stage (described in section 3.3.5.2.1), is described below:

- *Option TG3: Bus priority traffic signals provided on either side of Templeogue Village, with signal controlled priority provided through the village. The scheme would tie into the Templeogue Village Initiative (approved SDCC Part VIII proposal) within Templeogue Village. Outbound bus lane curtailed at Cypress Grove Road Junction to minimise land acquisition. Equivalent vehicular queuing space provided in advance of Cypress Grove Road for general traffic compared to TG2 through amendments to the adjacent service road, thereby providing similar level of bus priority to the draft PRO but with less impacts.*

Option TG3 – Bus priority traffic signals provided on either side of Templeogue Village, with signal-controlled priority provided through the village and outbound bus lane curtailed at Cypress Grove Road junction - was identified as the preferred option as it best aligned with the objectives for the Proposed Scheme by providing physical bus priority and fully segregated cycle tracks throughout the majority of this section of the Proposed Scheme while minimising impacts on adjacent properties.

In terms of the sub-criteria under the Environment criterion, the main criterion under which Option TG3 performed better than the draft PRO was Flora and Fauna, as fewer trees would be impacted under this option. Option TG3 also had advantages over the draft PRO in terms of capital costs due to the reduced extent of land acquisition required.

iii. Impact of Construction Phase

Construction activities associated with the Proposed Scheme, including mitigation measures have been outlined in EIAR Volume 2 Chapter 5 Construction:

The National Transport Authority (NTA) (the Employer for the construction works) shall set out the Employer's Requirements in the Construction Contract including all applicable mitigation measures identified in this EIAR, as well as additional measures required pursuant to conditions attached to any decision to grant approval. Procurement of the contractor will involve the determination that the appointed contractor is competent to carry out the works, including the effective implementation of the mitigation measures. The appointed contractor will be required to plan and construct the Proposed Scheme construction works in accordance with the Employer's Requirements, and the NTA will employ an Employer's Representative team with appropriate competence to administer and monitor the Construction Contract for compliance with the Employer's Requirements.

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) of this EIAR.

Appendix A5.1 Construction Environmental Management Plan in Volume 4 of the EIAR comprises the construction mitigation measures, which are set out in the Environmental Impact Assessment Report (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.

The CEMP will need to be altered during the lifecycle of the Construction Phase to take account of monitoring results, permits, legislative changes, outcomes of third-party consultations etc. The appointed contractor will ensure that the CEMP remains up to date for the duration of the Construction Phase. The appointed contractor may propose modifications to the CEMP. However, any such modifications will not give rise to any impacts which are more significant than those already identified and assessed in the EIAR or NIS.

The potential Noise impacts, as a result of the Proposed Scheme has been assessed in the EIAR. The process of assessment and the results have been described in Chapter 9 (Noise & Vibration) in Volume 2 of the EIAR.

Section 9.4.3.2 of Chapter 9 considers construction noise and Table 9.30 provides the predicted noise levels for Road Widening, Road Construction, Road Upgrade and Utility Diversion Construction Noise Calculations at Nearest NSLs.

As summarised in Table 9.30, road widening, road upgrade and utility diversion works are within 10m to 30m of the nearest NSLs in the four geographical sections of the Proposed Scheme. A minor retaining wall (RW01) is located in Section 1d within 10 to 15m of NSLs. The predicted CNL for these works at the closest NSL façades are between 73 to 83 dB LAeq,T in the absence of any noise mitigation. Making reference to the CNLs in Table 9.30, the potential noise impacts at the closest NSLs range between negative, moderate to very significant and temporary during the daytime period and negative, moderate to very significant, and temporary during the evening and weekend periods in the absence of noise mitigation.

The calculations are based on six plant items with an average noise level of 75 dB LAeq,T at 10m operating simultaneously along a given section of road. The average plant noise level has been calculated on the basis that plant will be operating at varying distances from a NSL at any one time. Reference to Table 9.26 indicates that highest noise levels will occur when breaking, excavators and road planers are operating at the closest distance to NSLs. During specific periods when these activities are operating outside NSLs, higher noise levels may occur compared to those discussed in Table 9.30. These activities will occur, however, for intermittent periods of time at any one location over the course of a working day.

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 in Volume 2 of the EIAR (and are also summarised in Appendix A5.1 Construction Environmental Management Plan in Volume 4 of the EIAR).

Section 9.5.1.1 of the EIAR Chapter 9 states the following:

“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. The mitigation measures outlined below for the Construction Phase have also been included in the Construction and Environmental Management Plan (CEMP) in Appendix A5.1 in Volume 4 of this EIAR.

These measures will ensure 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); and*
- The best means practicable, including proper maintenance of plant and equipment, will be employed to minimise the noise produced by on site operations.*

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.*

.....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 9.38 indicates that intrusive works occurring within 75m of NSLs with a direct line of sight to work will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e., daytime or evening).”

Section 9.5.1.1.4 of Chapter 9 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. 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 9.50), other construction activities will be scheduled to not result in significant cumulative noise levels.”

In summary the NTA is satisfied that 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.

Chapter 7 Air Quality of the EIAR sets out the methodology adopted to assess the impact on air quality of the Proposed Scheme. Table 7.1 identifies the air quality receptors within the study area.

For the Construction Phase Section 7.4.2.3.3 of Chapter 7 identifies the significance of the changes in the concentration of each of the ambient receptors in the context of the TII significance criteria (TII 2011).

As shown in Table 7.27 and Figure 7.7 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of annual mean PM₁₀ concentrations, with all receptors experiencing a negligible impact.

As shown in Table 7.27 and Figure 7.8 in Volume 3 of the EIAR the Proposed Scheme will be overall neutral in terms of the annual mean PM_{2.5} concentration with all receptors experiencing a negligible impact.

In accordance with the EPA Guidelines (EPA 2022), the impacts associated with the Construction Phase traffic emissions pre-mitigation are overall neutral and long-term.

Section 7.6.1 Construction Phase notes the following: *“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.*

The air dispersion modelling assessment of Construction Phase traffic emissions has found that the Proposed Scheme will be neutral overall in the study area. There are no substantial or moderate adverse effects expected as a result of the Construction Phase of the Proposed Scheme.

Therefore, overall, it is considered that the residual effects as a result of the Proposed Scheme’s construction are Neutral and Short-term. No significant residual impacts have been identified during the Construction Phase of the Proposed Scheme, whilst meeting the scheme objectives set out in Chapter 1 (Introduction).”

iv. Access to Property

The roads and streets along the Proposed Scheme will remain open to general traffic wherever practicable during the Construction Phase. Works will be constructed ensuring disturbances to residents, businesses and road users are minimised while maintaining the flow of all modes of traffic along the route wherever practicable. However, lane closures, road closures and diversions will be necessary to facilitate construction.

Section 5.5.3.1 of Chapter 5 states: *“The Proposed Scheme will be constructed in a manner which will minimise, as much as practicable, any disturbance to residents, businesses, and road users. Road and street upgrade works will be completed in a staged manner, as described in Section 5.8.4, whereby traffic of all modes will be managed to ensure construction can continue while ensuring the safety of all road users, and personnel, and maintaining flow of all modes of traffic wherever practicable.”*

As noted in section 5.5.3.2 Parking and Access:

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on-street and off-street parking provision, and 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. 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 location of temporary land acquisition, proposed gates, and the relocation of existing gates are shown in the Fencing and Boundary Treatment Drawings (BCIDC-ARP-SPW_BW-1012_XX_00-DR-CR-9001) in Volume 3 of this EIAR.

Access will be maintained for emergency vehicles along the Proposed Scheme, throughout the Construction Phase.

v. Impact on trees within proximity of the construction area

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 by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*
- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g., Cellweb or equivalent), installed without excavation using no dig techniques.*
- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*
- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under Arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*

- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIA further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and Arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

- vi. Service connections into the property

EIA Volume 2 Chapter 19 Material Assets assesses the potential impact of construction works on major infrastructure and utilities. Section 19.5.1.1 states that the Proposed Scheme has been designed to minimise the impact on major infrastructure. This includes the avoidance of interactions with major utility infrastructure as far as possible. Where there are interfaces with existing utility infrastructure, protection in place or diversion as necessary is proposed to prevent long-term interruption to the provision of the affected services.

As set out in section 19.5.1.1 of Chapter 5 of Volume 2, 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. This will include appropriate investigation by the appointed contractor to identify the precise location of all utility infrastructure within the working areas prior to the commencement of excavation works. 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.

Consultation has been undertaken with the major utility companies regarding the design, potential interfaces and measures required to protect or divert the infrastructure which is interfacing with the Proposed Scheme design. All utility companies for which diversions are proposed will continue to be consulted with NTA oversight when designing any diversions to ensure that proposed diversions conform to the utility provider's requirements, where practicable, and acceptable to the NTA, and to ensure that service interruptions are kept to a minimum. Where diversions, or modifications, are required to utility infrastructure (as listed in section 19.4.3 of Chapter 19), 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 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 interruption is minimised in so far as is practicable.

With respect to the vent pipe on the footpath, the specific treatment of this pipe will be given consideration at the next design stage.

3.47 CPO-47 – Patrick J M Durcan and Mary Clare McCormack Durcan – 60 Terenure Road East

3.47.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 60 Terenure Road East, with the permanent width of land to be acquired between 0.8 and 2.0m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.47.1.

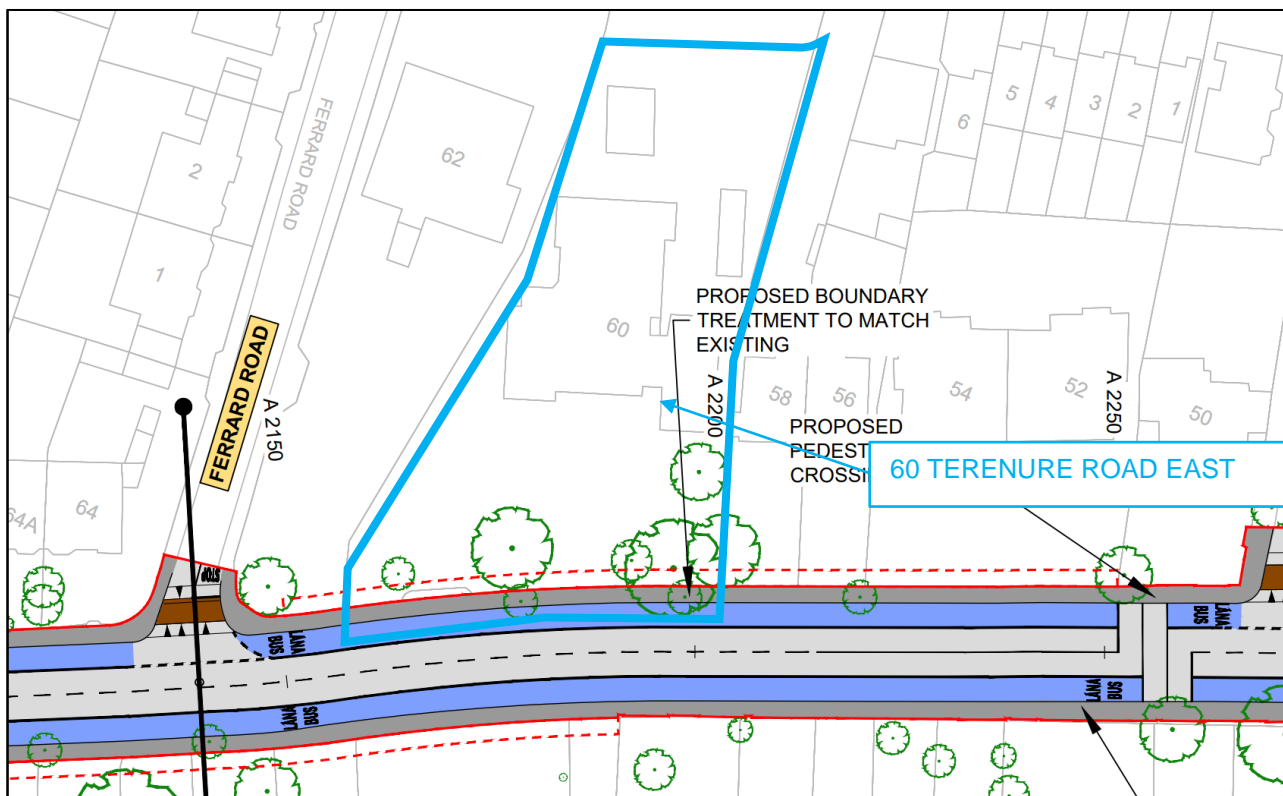


Figure 3.47.1 General Arrangement of Proposed Scheme adjacent to 60 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.47.2.



Figure 3.47.4 Proposed Land Acquisition lines adjacent to 60 Terenure Road East

The existing property frontage is shown in Figure 3.47.5.



Figure 3.47.5 Existing frontage of 60 Terenure Road East (Image source: Google)

3.47.2 Summary of the Points of Objection to the CPO by Patrick J M Durcan and Mary Clare McCormack Durcan

This submission objected to CPO for the reasons summarised in the following section.

i. Removal of Trees

The submission expressed concerns about the removal of the trees proposed as part of the Proposed Scheme. Nothing that it will have a significant impact on the visual appeal of the property.

- ii. Impact on property value
- iii. Reduced parking

The submission states that the proposed land acquisition will reduce the number of parking spaces which are currently available at 60 Terenure Road East.

- iv. Increase in noise pollution.

The submission states that the Proposed Scheme will negatively contribute towards noise levels during the construction and operation phase of the project.

- i. Area unsuitable for proposals.

3.47.3 Responses to the Points of Objection

- i. Removal of Trees

Figure 3.47.6 presents an extract from the Landscaping 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 which shows the proposed landscaping proposals, including any tree removal, along Terenure Road East.

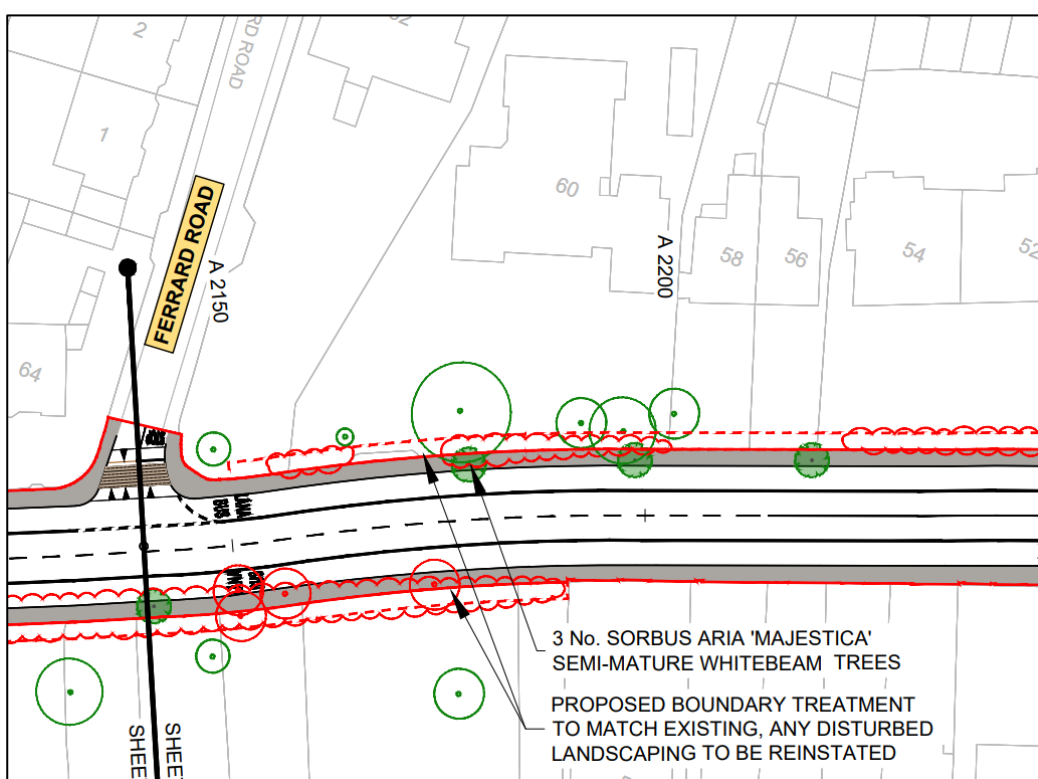


Figure 3.47.6 Landscaping General Arrangement at Terenure Road East (Sheet 07)

It can be seen that it is not proposed to remove any trees from within the grounds of 60 Terenure Road East. It will be necessary to remove the existing hedgerow immediately adjacent the wall. It is also noted that the Landscaping General Arrangement Drawings indicate that it is proposed to plant 3 no. street trees (Sorbus Aria 'Majestica' Semi-Mature Whitebeam Trees) in the vicinity of the property.

If the CPO is confirmed by An Bord Pleanála, 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.

A detailed response to the removal of trees generally along Terenure Road East is presented in Section 2.4.2.

ii. Impact on Property Value

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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: "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." and "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 on Rathfarnham 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.

iii. Reduced Parking

The permanent acquisition will result in the loss of between 0.8m and 2.0m of lands with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The proposed permanent acquisition will only affect the landscaped section directly adjacent to the property boundary and as such will not impact on the existing parking arrangements in this area. Plans for reinstatement of property frontage will be done 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.

iv. Increase in noise pollution

In relation to noise pollution, the operational impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*" Table 9.39 lists these roads and Terenure Road East is not identified, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

Section 9.4.3.2 of Chapter 9 considers construction noise and Table 9.30 provides the predicted noise levels for Road Widening, Road Construction, Road Upgrade and Utility Diversion Construction Noise Calculations at Nearest NSLs.

As summarised in Table 9.30, road widening, road upgrade and utility diversion works are within 10m to 30m of the nearest NSLs in the four geographical sections of the Proposed Scheme. A minor retaining wall (RW01) is located in Section 1d within 10 to 15m of NSLs. The predicted CNL for these works at the closest NSL façades are between 73 to 83 dB LAeq,T in the absence of any noise mitigation. Making reference to the CNLs in Table 9.30, the potential noise impacts at the closest NSLs range between negative, moderate to very significant and temporary during the daytime period and negative, moderate to very significant, and temporary during the evening and weekend periods in the absence of noise mitigation.

The calculations are based on six plant items with an average noise level of 75 dB LAeq,T at 10m operating simultaneously along a given section of road. The average plant noise level has been calculated on the basis that plant will be operating at varying distances from a NSL at any one time. Reference to Table 9.26 indicates that highest noise levels will occur when breaking, excavators and road planers are operating at the closest distance to NSLs. During specific periods when these activities are operating outside NSLs, higher noise levels may occur compared to those discussed in Table 9.30. These activities will occur, however, for intermittent periods of time at any one location over the course of a working day.

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 in Volume 2 of the EIAR (and are also summarised in Appendix A5.1 Construction Environmental Management Plan in Volume 4 of the EIAR).

Section 9.5.1.1 of the EIAR Chapter 9 states the following:

“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. The mitigation measures outlined below for the Construction Phase have also been included in the Construction and Environmental Management Plan (CEMP) in Appendix A5.1 in Volume 4 of this EIAR.

These measures will ensure 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); and*
- *The best means practicable, including proper maintenance of plant and equipment, will be employed to minimise the noise produced by on site operations.*

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.*

.....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 9.38 indicates that intrusive works occurring within 75m of NSLs with a direct line of sight to work will need specific noise control measures to reduce impacts depending on time period over which they will occur (i.e., daytime or evening).”

Section 9.5.1.1.4 of Chapter 9 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. 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 9.50), other construction activities will be scheduled to not result in significant cumulative noise levels.”

In summary the NTA is satisfied that 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.

3.48 CPO-48 – Paul Dormer – 15 Fortrose Park

3.48.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.1.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Templeogue Road it is proposed to widen the existing R137 carriageway to accommodate enhanced bus priority and pedestrian facilities along the corridor.

Between Ashfield Place and the Templeogue Tennis Club, it is proposed to provide a bus lane and a general traffic lane in each direction. It is proposed to utilise a limited amount of land-take within this section to achieve the desired cross-section. Within Templeogue Village, between Templeogue Tennis Club and the Templeville Road junction, it is proposed to manage bus priority through the use of signal-controlled priority and tie into South Dublin County Council’s Templeogue Village Initiative Scheme. To accommodate this cross section, land acquisition will be required along the Templeogue Road. Land acquisition is proposed on the northern side of Templeogue Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at 15 Fortrose Park, with a maximum width of land to be permanently acquired of up to approximately 1m and up to 6.5m acquired temporarily. The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.48.1.

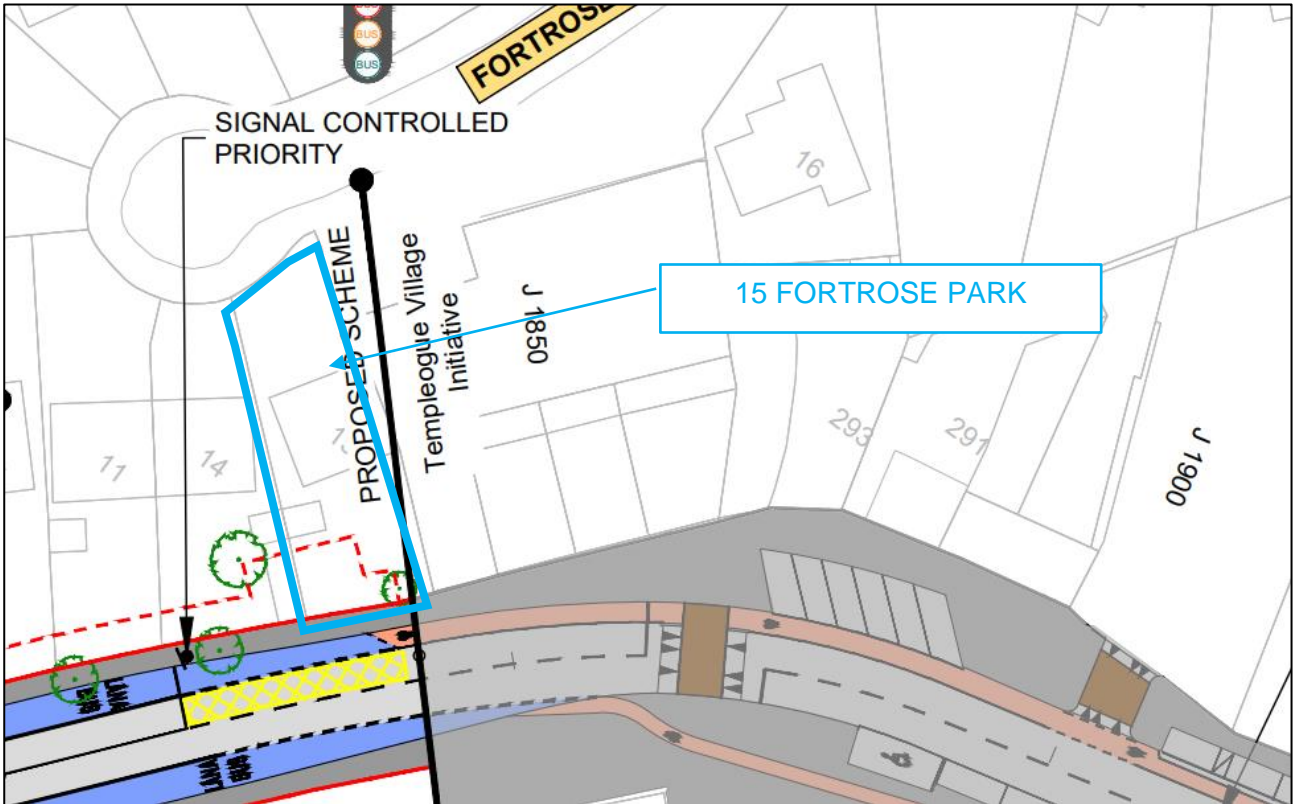


Figure 3.48.1 General Arrangement of Proposed Scheme adjacent to 15 Fortrose Park (Sheet 33)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.48.2.

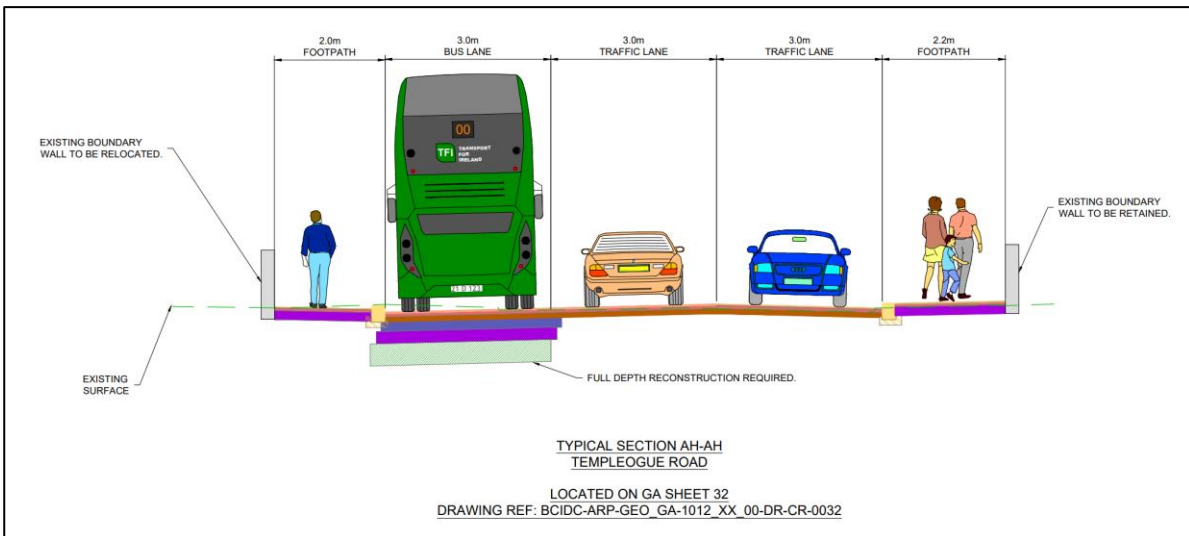


Figure 3.48.2 Typical Cross-Section adjacent to 15 Fortrose Park

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 15 Fortrose Park is shown in Figure 3.48.3.

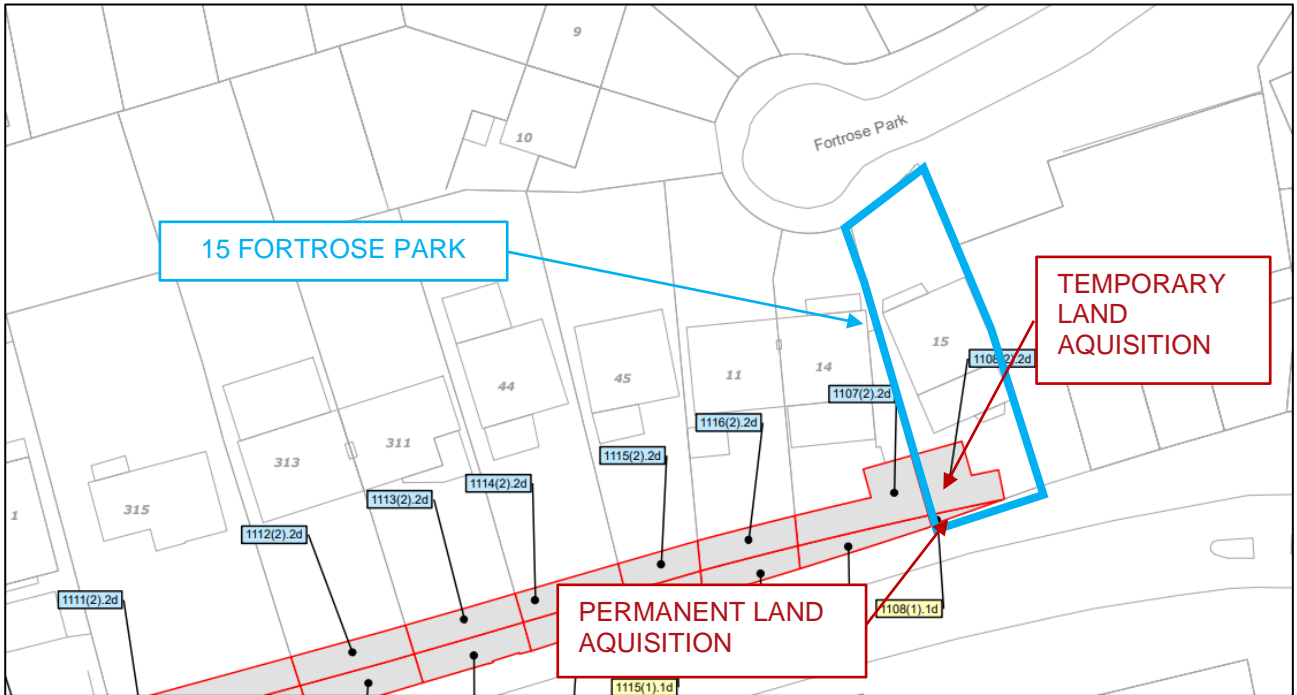


Figure 3.48.3 Extract from CPO Deposit Maps adjacent to 15 Fortrose Park



Figure 3.48.4 Proposed Land Acquisition lines adjacent to 15 Fortrose Park

The existing back of property is shown in Figure 3.48.5.



Figure 3.48.5 Existing back view of 15 Fortrose Park from Templeogue Road (Image source: Google)

3.48.2 Summary of the Points of Objection to the CPO by Paul Dormer

This submission objected to CPO for the reasons summarised in the following section.

i. Combining two routes into one scheme

The submission raises a concern about the NTA combining two of the previously separate routes into one scheme when the NTA made its application to the Board for approval under section 51 of the Roads Act. The submission notes that this made it difficult to review and comment on the scheme particulars in the application given the familiarity of the proposals as individual schemes (as presented at the public consultations).

ii. Cumulative impacts of all CBC schemes

The submission emphasizes that the lodging of separate planning applications for each BusConnects corridor hinders a comprehensive assessment of potential adverse interactions between these corridors.

iii. Consultation process

The submission states that there have been significant alterations to the Proposed Scheme compared to the original scheme; however, there was no public consultation in advance of the application.

iv. Deposit Maps unsigned

The submission notes that the published deposit maps are unsigned and unsealed. The submission also notes that the hard copies of the deposit maps available for inspection in An Bord Pleanála were not furnished in the published book form, but a bundle of folder plans secured with rubber bands. The submission notes that there is no certainty that the deposit maps lodged are the same as the published drawings.

v. Discrepancies in mapping

The submission states the design drawings are based on out-of-date mapping noting that a home office at the rear of the garden of the premises is not shown despite being built 20 years ago. It also notes that the ESB Asset Alteration drawings have been overprinted with different properties overlaying the properties on Fortrose Park and the Templeogue Road with labels for roads being displaced into incorrect positions.

vi. Compliance with the Design Manual for Urban Roads and Streets

The submission states that the design for the Proposed Scheme does not align with the principles of good planning and design embodied in DMURS. The submission notes that BusConnects is fundamentally flawed resulting in corridors through residential areas, widening roads and destroying the quiet enjoyment of the residents.

It also stated that the NTA has devised a Guidance Booklet for the design of the schemes which seek to modify the demands of DMURS. This is in reference to the BusConnects Preliminary Design Guidance Booklet.

vii. Bus Stops

The submission refers to paper by Alan Howes Associates 'Bus Stop Spacing' and states that achieving a balance in bus stop spacing can reduce bus journey times can be reduced. The submission notes that a walk distance of 700m is considered to be optimal. It also adds that the BusConnects proposals appear to disregard the principles of the studies and notes that there is an example in parts of the Templeville/Terenure area where passengers would have to walk 2km to access any bus.

viii. Need for the scheme

The submission states that the functionality of the Proposed Scheme is limited to the inbound peak hours from 7 AM to 10AM five days a week. Noting that the project provides poor economic value. Adding that the project is an expensive short-term solution to a developing demand due to the current and future intensification of population increase in the South Dublin Area.

ix. Traffic congestion and impacts on air quality

The submission states that the proposals will result increased traffic congestion and gridlock of general traffic on Rathfarnham Road, Terenure Cross, Rathgar, Rathmines, Castlewood Avenue and Ranelagh. Adding that such proposals will result in severe deterioration of air quality for residents in the vicinity.

x. Impact on heritage

The submission states that the Proposed Scheme ignores the fabric and heritage of the areas along its route.

xi. Implementation of other less intrusive measures first

The submission states that introduction of a cash less payment system will provide significant benefits without the need for the Proposed Scheme.

xii. No planned increase in bus fleet

The submission notes that the current bus fleet is at capacity and there are no plans to increase the bus fleet suggesting that capacity can therefore not be increased.

xiii. Changes to work patterns as a result of the COVID-19 pandemic.

The submission raises a concern that due to the changes to work/travel patterns as a result of the COVID-19 pandemic, there is no need for the scheme as there is less demand for travel.

xiv. Unclear what works are proposed in property

The submission notes that the 15 Fortrose Park is approximately 800mm above the level of Templeogue Road and that the rear boundary wall is a retaining wall. It notes that no construction details are given for the works necessary for the retaining wall. The submission suggests that although not noted in the planning documentation, it will be necessary to demolish the shed in the rear garden area.

3.48.3 Responses to the Points of Objection

i. Combining two routes into one scheme

A detailed response to this item is presented in Section 2.1.1

ii. Cumulative impacts of all CBC schemes

A detailed response to this item is presented in Section 2.1.1

iii. Consultation Process

A detailed response to this item is presented in Section 2.1.1

iv. Deposit Maps are unsigned

The CPO Deposit Maps presented on the project website are unsigned/unsealed versions of the final plans. The primary reason for presentation of these maps is that a scanned copy of the sealed drawings would not provide sufficient quality for the purposes of consultation. It is however noted that the final page of the CPO schedule on the project website does contain the seal and signature which was completed at the same time as the signing/sealing of the Deposit Maps on the 18th April 2023. For avoidance of doubt, the Deposit Maps presented on the project website are the final Deposit Maps which were sealed on 18th April 2023.

It is further noted that 2 signed/sealed copies of the bound CPO Deposit Maps and CPO Schedule were provided to An Bord Pleanála on 21st April 2023 and were made available for inspection at An Bord Pleanála offices throughout the consultation period. A further copy of these documents was made available for inspection at the NTA offices throughout the consultation period.

v. Discrepancies in mapping

The submission noted that the Deposit Maps, which are included in the Compulsory Purchase Order section do not include an outline of the home office located at the rear of the back garden.

The Proposed Scheme plan is presented in the General Arrangement drawings on Ordnance Survey (OS) mapping. The OS mapping does not show the home office structure located in the rear garden of the 15 Fortrose Park, but we can confirm that the topographical survey carried out for the design work does identify the presence and location of this structure and as such the design has taken full cognisance of it and the potential impacts (see response below to item xiv. Unclear what works are proposed in property).

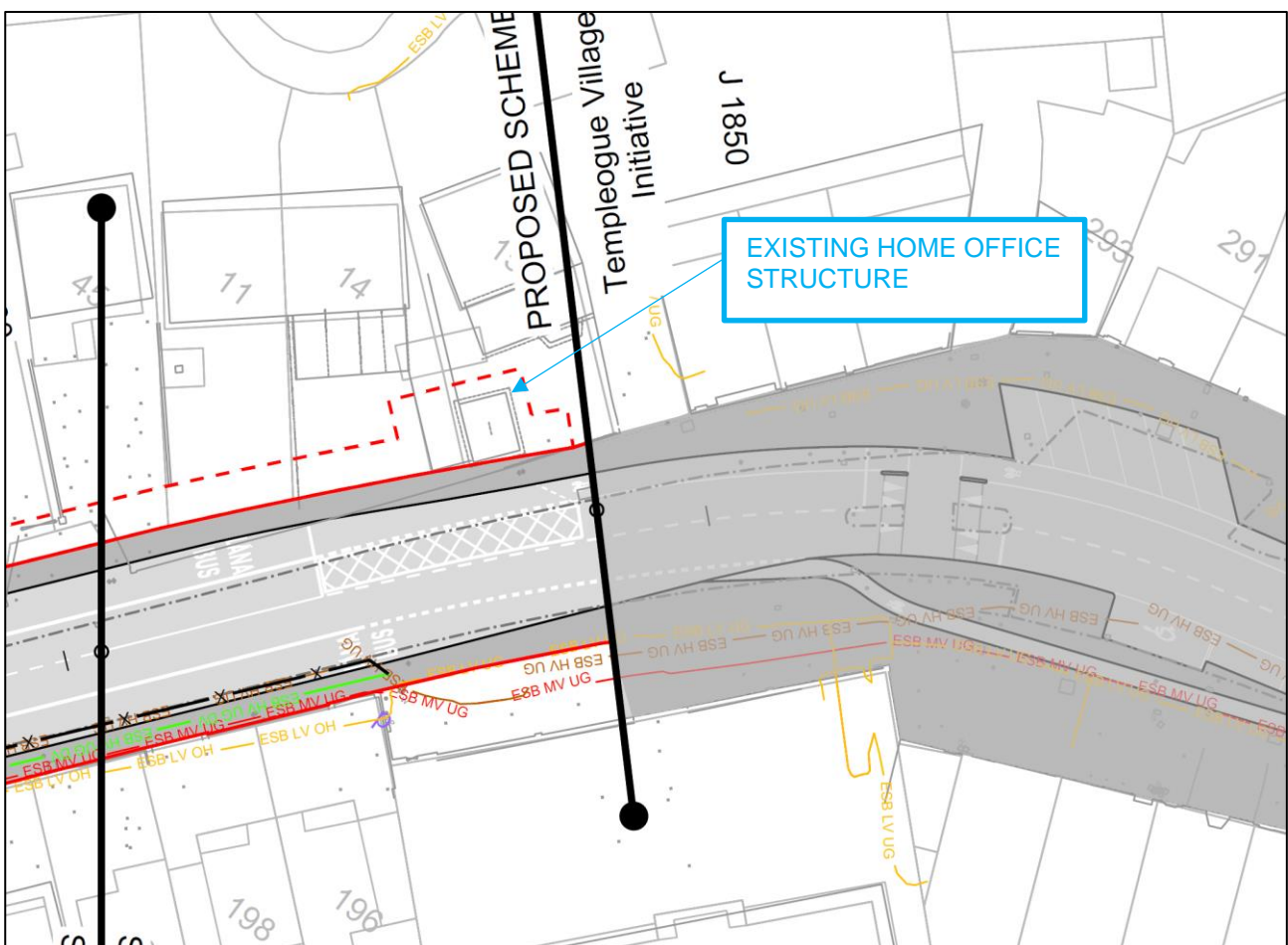


Figure 3.48.6 Extract from Corrected ESB Asset Alteration drawings (Sheet 33)

The submission also noted that the ESB Asset Alteration drawings contained in Volume 3 of the EIAR were not clear and with property outlines overlapping each other. It is acknowledged that during the final printing of the ESB Asset Alteration drawing set sheets 28 to 37 got corrupted. While it is acknowledged that the presentation of these drawings was affected in the EIAR due to the corrupted printouts, very importantly, the specifics of the design was not in any way affected, and the assessment of these proposed works remain as presented and set out in the EIAR.

The various utility drawings presented in Volume 3 of the EIAR are presented on topographical survey and show the home office structure located in the rear garden of the 15 Fortrose Park. An extract from the Corrected ESB Asset Alteration drawings is presented above. For completeness and clarity, we have included sheets 28 to 37 of the ESB Asset Alteration drawings (which were contained in Volume 3 of the EIAR) in Appendix A of this document where the presentation issue has now been corrected.

Section 19.4.3.1.2 of the EIAR describes the electricity works required as part of the Proposed Scheme. Table 19.6 presents a summary of all potential major electricity infrastructure diversions. The assessment of the proposed works summarises:

While electricity interruptions, if required, will generally only occur for a set number of hours per day (no more than eight hours where reasonably practicable), the exact number of interruption days for particular customers for each diversion cannot be ascertained at this stage, so a worst-case scenario of up to a week has been assessed. Using the criteria as outlined in Section 19.2.4 and Table 19.1, where diversion of an electricity line is required which will result in the planned interruption of electricity provision, the worst-case potential impact will be Negative, Moderate and Temporary

vi. Compliance with the Design Manual for Urban Roads and Streets

Section 1.2 of the Design Manual for Urban Roads and Streets outlines the objectives and principles of national and regional policies that form the foundation for the development of the manual.

National planning and transport strategy seeks to achieve a hierarchy of towns, linked by efficient transport networks, underpinned by economic activity and investment. It also aims to minimise overall travel demand, reduce carbon emissions and reliance on fossil fuels. Central to this is the alignment of spatial planning and transport policy to contain suburban sprawl, linking employment to transport and encouraging modal shift to more sustainable modes of travel.

To support these objectives, street layouts in cities, towns and villages will be interconnected to encourage walking and cycling and offer easy access to public transport. Compact, denser, more interconnected layouts, particularly where served by good quality bus or rail services, will help to consolidate cities, towns and villages making them viable for reliable public transport.

The design of the Proposed Scheme aligns with the governing principles of DMURS, as outlined in section 1.2 of DMURS and in the extracted text above. 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. A central component of DMURS is 'A Balanced Approach' which seeks to guide a more place-based/integrated approach to road and street design. The BusConnects proposals have respected this concept throughout the scheme design and this approach is embedded in the aims and objectives of the Proposed Scheme as set out in Section 1.2 of Chapter 1 of the EIAR:

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.*

In response to the reference made in the submission to the extract from DMURS - "...Streets should not just be transport corridors, but rather should be places in which people want to live and spend time..."

Section 17.1 of EIAR Chapter 17 outlines the potential landscape (townscape) and visual impacts associated with the Construction and Operational Phases of the Proposed Scheme.

During the Construction Phase, the potential landscape (townscape) and visual impacts associated with the development of the Proposed Scheme have been assessed. This included streetscape disturbance, impacts on property boundaries, removal of trees and vegetation, traffic issues and the general visual intrusion of construction activities due to utility diversions, road resurfacing and road realignments.

During the Operational Phase, 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.

As noted in section 17.4.4.1.1 of Chapter 17:

The sensitivity of this section is low / high. The Operational Phase of the Proposed Scheme involves changes to the existing layout of roads and junctions. Section of the route will have experienced widening of the road corridor, and this will result in permanent land-take from a number of residential properties, including loss of private outdoor area, reinstatement of boundaries at a setback alignment and permanent loss of garden trees and other vegetation removed during the Construction Phase. However, there will be substantial tree planting throughout this section, to medians, roadside open spaces and streets which will more than compensate for the impact from removed trees. There will be a notable improvement at Templeogue Arch where the setting of this historic landmark public access will be provided, and an appropriate public realm scheme will be provided. There will be improvements to open space at Bushy Park and Rathdown Drive with provision of upgraded pedestrian and cycle access. The Operational Phase will not alter the overall townscape character along this section of the Proposed Scheme but there will be an overall improvement to streetscape amenity which will become more pronounced as proposed planting matures. The magnitude of change in the baseline environment is medium / high.

The townscape / streetscape impact of the Operational Phase is assessed to be **Positive, Moderate / Significant** and **Short-Term becoming Positive, Significant and Long-Term**.

In response to the claim made in reference to the BusConnects Preliminary Design Guidance Booklet.

The design of the Proposed Scheme was developed with reference to the Preliminary Design Guidance Booklet for BusConnects Core Bus Corridors (PDGB) (NTA 2021) as presented in Appendix A4.1 in Volume 4 of the 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, which include the following:

- The Design Manual for Urban Roads and Streets (DMURS) (Government of Ireland 2013);
- The National Cycle Manual (NCM) (NTA 2011);
- TII National Road Design Standards;
- The Traffic Signs Manual (TSM) (DoT 2019);
- Guidance on the use of Tactile Paving (UK DfT 2007);
- Building for Everyone: A Universal Design Approach (NDA 2020), and
- Greater Dublin Strategic Drainage Study (GDSDS) (Irish Water 2005).

As noted above, DMURS is a central document that informed the content of the PDGB.

vii. Bus Stops

As noted in Section 4.6.5.5 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 position and number of bus stops have been evaluated as part of a bus stop assessment.

The 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 bus interchange stops;
- Where ideally there is space for a bus shelter;
- Location in pairs, 'Tail to Tail' opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings;
- Away from sites likely to be obstructed; and
- Adequate footpath 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 of route, dropping 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.

The Bus Stop Review Methodology which is appended to Bus Stop Review Report included in Appendix H of the Preliminary Design Report provided as Supplementary Information elaborates further on the methodology:

The Core Bus Network Report (2015) noted that the distances between bus stops influences the efficiency of the bus network. In general, the lower the distances between stops along a corridor, the higher the delay that is incurred for buses. This delay is caused through acceleration and deceleration and delays associated with pulling in and out of bus stops with some estimates suggesting that stopping at bus stops makes up in excess of 20% of the journey times along the QBC corridors. International literature on bus stop spacing recommends a distance of 300 to 500m (NTA Report on Core Bus Network Infrastructure Network, February 2015) between stops in suburban areas is optimum, whereas in Dublin many routes have bus stops located at far lower spacing. The Core Bus Network Report concluded that increasing spacing between bus stops was part of the solution to reduce delays along the corridors.

As part of the design of the Proposed Scheme a detailed review of bus stop locations was undertaken in line with the above methodology. 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.

In response to the claim made in the submission stating that some areas in Templeville/Terenure will require potential passengers to walk 2km to access any bus routes, the BusConnects Revised Network Map, which is available for viewing on the BusConnects website (<https://busconnects.ie/wp-content/uploads/2021/01/big-picture-map-170920-oe-web.pdf>), presents the proposed bus services in the Greater Dublin Area. Within the area referenced it can be seen that Templeville Road will be served directly by spine route F1 and indirectly along Wellington Road by routes F2, 81 and 82 and along Templeogue Road by routes spine routes A1 and A3. An extract from the Network Map is highlighting the area in question is presented in the below Figure 3.48.7 below. While the submission does not note an exact location it is clear from the below that residents in this area will be within a short distance of a number of bus routes.

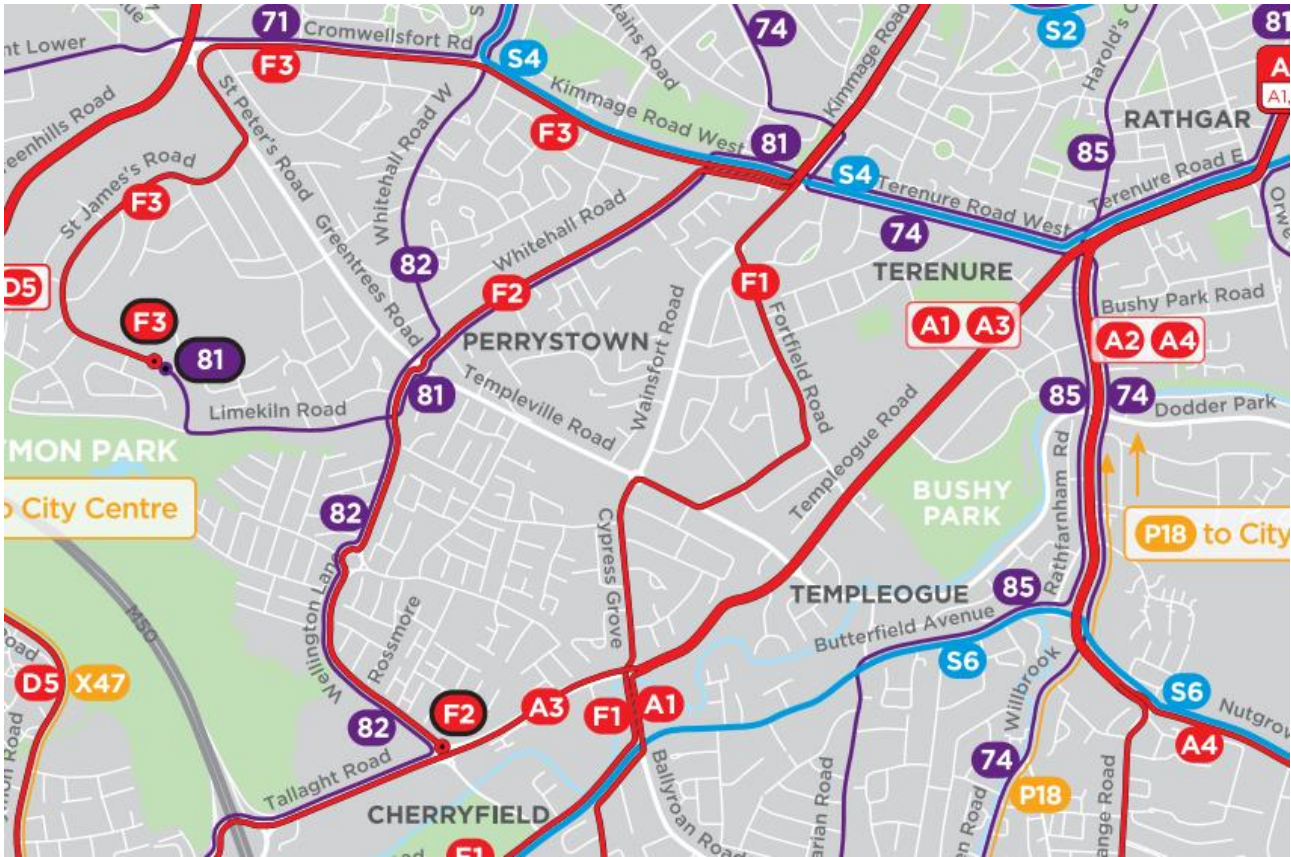


Figure 3.48.7 Extracts from the Dublin Area Bus Network Redesign Revised Proposal (2020)

viii. Need for the scheme

The submission states that the functionality of the Proposed Scheme is limited to the inbound peak hours from 7 AM to 10AM.

However, the scheme benefits are realised through each peak period as demonstrated in the assessment presented in the EIAR and summarised below.

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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.

In meeting its objectives, the Proposed Scheme will deliver strong positive impacts in terms of promoting active travel and sustainable transport. It is noted that the modelled forecasts for the 2028 opening year indicate:

- A significant decrease in people travelling to/from the city by car in each peak period with decreases of 30% and 39% in the AM and PM peak periods respectively;
- A significant increase in people travelling by public transport in each peak period with increases of 123% and 145% in the AM and PM peak periods respectively;
- A significant increase in people walking/cycling in each peak period with increases of 79% and 91% in the AM and PM peak periods respectively;

This is summarised in in Figure 3.48.8 and Figure 3.48.9 (reproduced from diagrams 6.6 and 6.7 in Chapter 6).

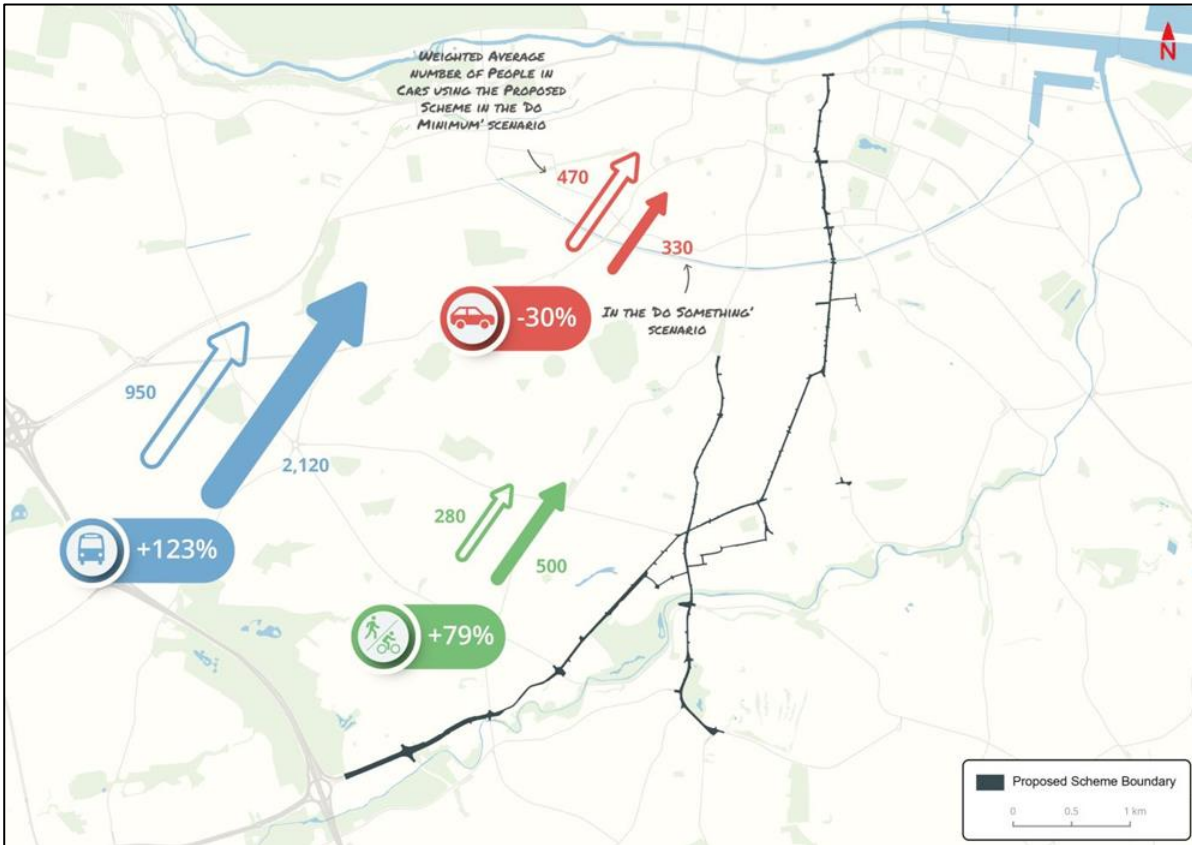


Figure 3.48.8 People Movement by Mode travelling along the Proposed Scheme during 2028 AM Peak Hour (Diagram 6.6 in EIAR Chapter 6)

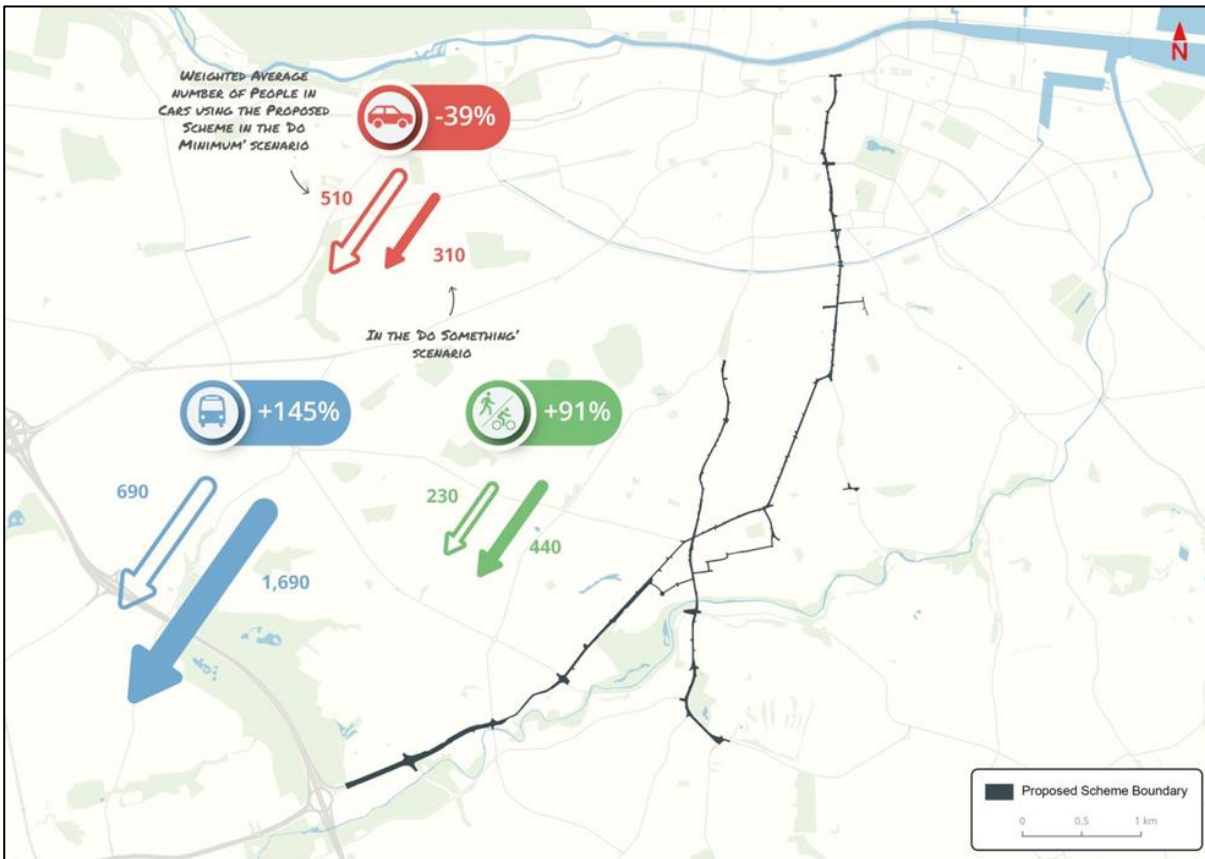


Figure 3.48.9 People Movement by Mode travelling along the Proposed Scheme during 2028 PM Peak Hour (Diagram 6.7 in EIAR Chapter 6)

As noted in section 6.4.6.1.8.1:

The Proposed Scheme will facilitate a step change in the level of segregated cycling provision in comparison with existing conditions along the entire length of the corridor. The transport modelling is conservative in terms of the predicted cycling mode share. The Proposed Scheme has been designed to cater for much higher levels of cycling uptake than modelled outputs, to cater for long-term trends in travel behaviours as people make sustainable travel lifestyle choices, which would otherwise not be achievable in the absence of the Proposed Scheme.

Mode Split

The Proposed Scheme will facilitate a significant modal shift towards sustainable modes. This is evidenced in table 6.42 and 6.43 in Chapter 6 of Volume 2 of the EIAR for the AM and PM Peak hours respectively.

Table 6.42: 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	470	28%	330	11%	-140	-30%
		Public Transport	950	56%	2,120	72%	1,170	123%
		Walking	170	10%	140	5%	-30	-18%
		Cycling	110	6%	360	12%	250	227%
		Combined Walking/Cycling	280	16%	500	17%	220	79%
		Sustainable Modes Total	1,230	72%	2,620	89%	1,390	113%
		Total (All modes)	1,700	100%	2,950	100%	1,250	74%

Figure 3.48.10 Extract from EIAR Chapter 6 (Table 6.42)

Table 6.43: 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	510	36%	310	13%	-200	-39%
		Public Transport	690	48%	1,690	69%	1,000	145%
		Walking	150	10%	130	5%	-20	-13%
		Cycling	80	6%	310	13%	230	288%
		Combined Walking/Cycling	230	16%	440	18%	210	91%
		Sustainable Modes Total	920	64%	2,130	87%	1,210	132%
		Total (All modes)	1,430	64%	2,440	87%	1,010	71%

Figure 3.48.11 Extract from EIAR Chapter 6 (Table 6.43)

In the AM peak, the results indicate a 74% increase in people moved as a result of the Proposed Scheme and 113% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

In the PM peak, the results indicate a 71% increase in people moved as a result of the Proposed Scheme and 132% increase in people moved by sustainable modes (Public Transport, Walk, Cycle).

It is clear from the above that the Proposed Scheme will deliver significant benefits in both peak periods.

Further detail on the benefits of the Proposed Scheme is presented in 2.1.1.

- ix. Traffic congestion and impacts on air quality

A detailed response to this item is presented in Sections 2.2.2, 2.3.2, 2.4.2 and 2.5.2.

x. Impact on heritage

The submission notes concern around the general impact on heritage along the route.

Chapter 16 of the EIAR has considered the potential architectural heritage impacts associated with the Construction and Operational Phases of the Proposed Scheme. The summary of predicted construction phase impacts following the implementation of mitigation and monitoring measures is presented in Table 2 16.17 of Chapter 16. This identifies impacts on a variety of features along the route. The impacts range from Direct Negative, Moderate, Temporary (coal holes at 44 and 45 Richmond Street) to Direct Positive, Very Significant, Long Term (freestanding arch Templeogue Road).

Further details on the impact assessment can be found in EIAR Chapter 16.

xi. Implementation of other less intrusive measures first

A detailed response to this item is presented in 2.1.1.

xii. No planned increase in bus fleet

The Proposed Scheme will facilitate opportunities to change bus network capacity operating along the corridor due to the extensive priority provided. This will allow increases in service provision as demand increases.

As noted in 6.4.6.1.14 Increased Bus Frequency – Resilience Sensitivity Analysis of Chapter 6 states the following:

For the purposes of this EIAR and the transport modelling undertaken in support of the EIAR, no increase in bus service frequency beyond that planned under the current Bus Connects Network redesign proposals was assessed. The bus frequencies used in the modelling are based on the proposed service rollout as part of the BusConnects Network Redesign and are the same in both the Do Minimum and Do Something scenarios. This rollout is currently underway. The rationale for undertaking this approach was that the planning consent being sought and which this EIAR supports is solely for the infrastructural improvements associated with providing bus priority and other sustainable modes measures along the Proposed Scheme.

This analysis, however, is conservative as the bus priority infrastructure improvements and indeed the level of protection it will provide to bus journey time consistency and reliability will provide a significant level of resilience for bus services that will use the Proposed Scheme from implementation into the future. The resilience provided by the Proposed Scheme will allow the service pattern and frequency of bus services to be increased into the future to accommodate additional demand without having a significant negative impact on bus journey time reliability or the operation of cycle and pedestrian facilities.

xiii. Changes to work patterns as a result of the COVID-19 pandemic.

A detailed response to this item is presented in Section 2.1.1.

xiv. Unclear what works are proposed in property.

In order to achieve the desired cross section for the Proposed Scheme in this area, permanent and temporary land acquisition is proposed at 15 Fortrose Park, with a maximum width of land to be permanently acquired of up to approximately 1m and up to 6.5m acquired temporarily.

Based on the topographical survey undertaken to inform to Proposed Scheme design, it is understood that at its closest point, the existing garden room is approximately 1.2m from the roadside face of the existing boundary wall. There is therefore adequate room to relocate the existing wall without interfering with the footprint of the existing garden room.

It is acknowledged that the existing boundary wall is a retaining wall with the rear garden c. 800mm above the level of Templeogue Road. While the exact form of the current retaining structure and interaction with the foundations of the garden room are not yet known, it is likely that the existing structure will be required to be underpinned to facilitate the works necessary for the reconstruction of the retaining wall. To facilitate this, a temporary acquisition of up to 6.5m has been allowed to incorporate the full extent of the garden room and any associated mitigation works.

It is noted that if the CPO is confirmed by An Bord Pleanála, reinstatement of property including existing structures, 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 submission suggests that the stated construction period of 7 months is not sufficient. As stated in section 5,4 of Chapter 5 of the EIAR, the programme presented is indicative but is considered to be adequate to cover the works required on this section. .

3.49 CPO- 49 – Peter Lynch – 55 Rathfarnham Road

3.49.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road it is proposed to widen the existing R114 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road between the River Dodder and Rathdown Park.

The existing junctions along this portion of the Rathfarnham Road (R114) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 1.2m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.49.1.

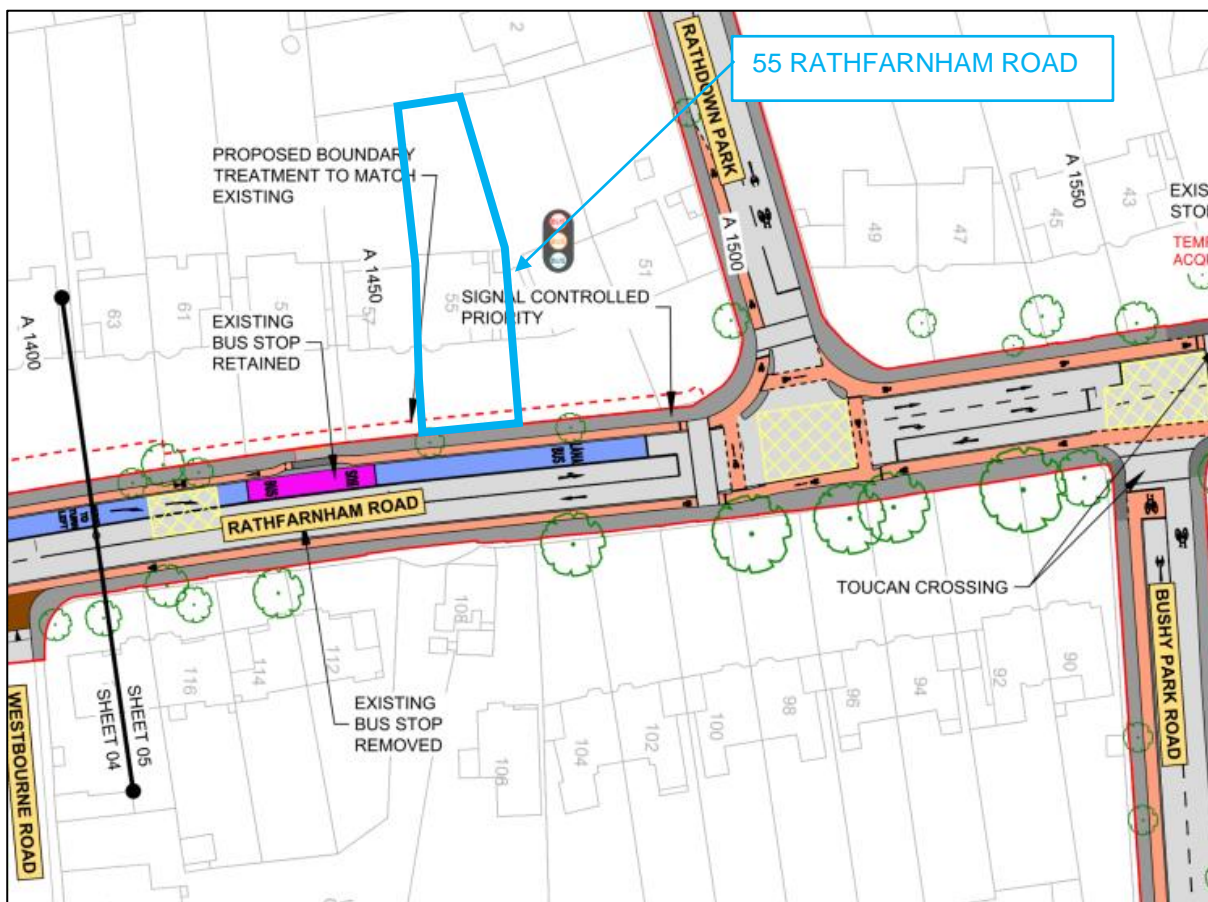


Figure 3.49.1 General Arrangement of Proposed Scheme adjacent to 55 Rathfarnham Road (Sheet 05)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.49.2.

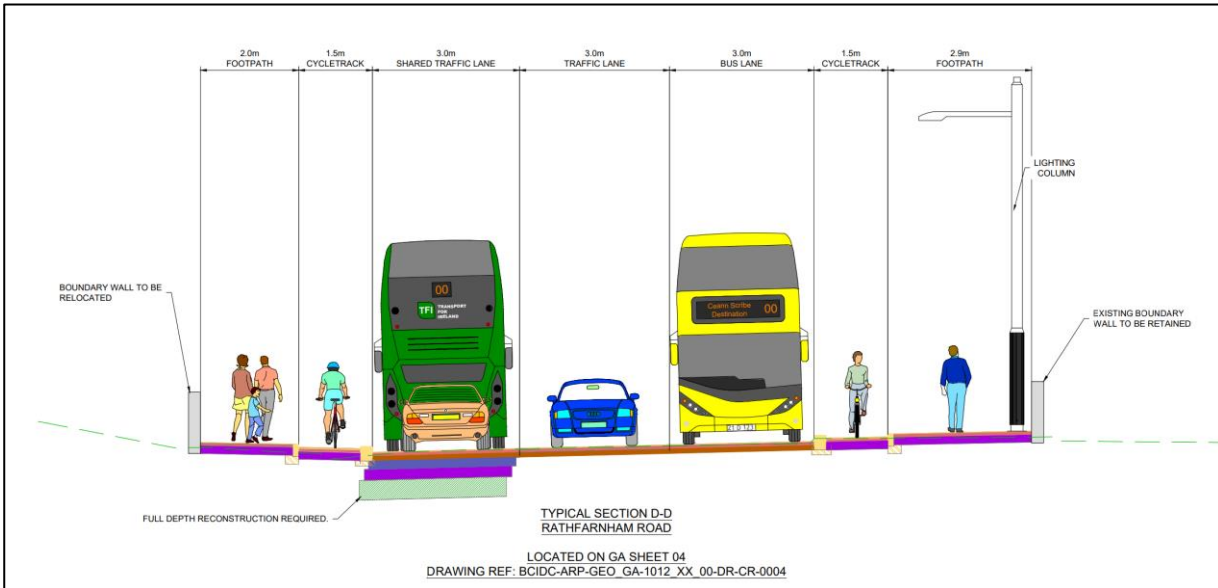


Figure 3.49.2 Typical Cross-Section adjacent to 55 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 55 Rathfarnham Road is shown in Figure 3.49.3.

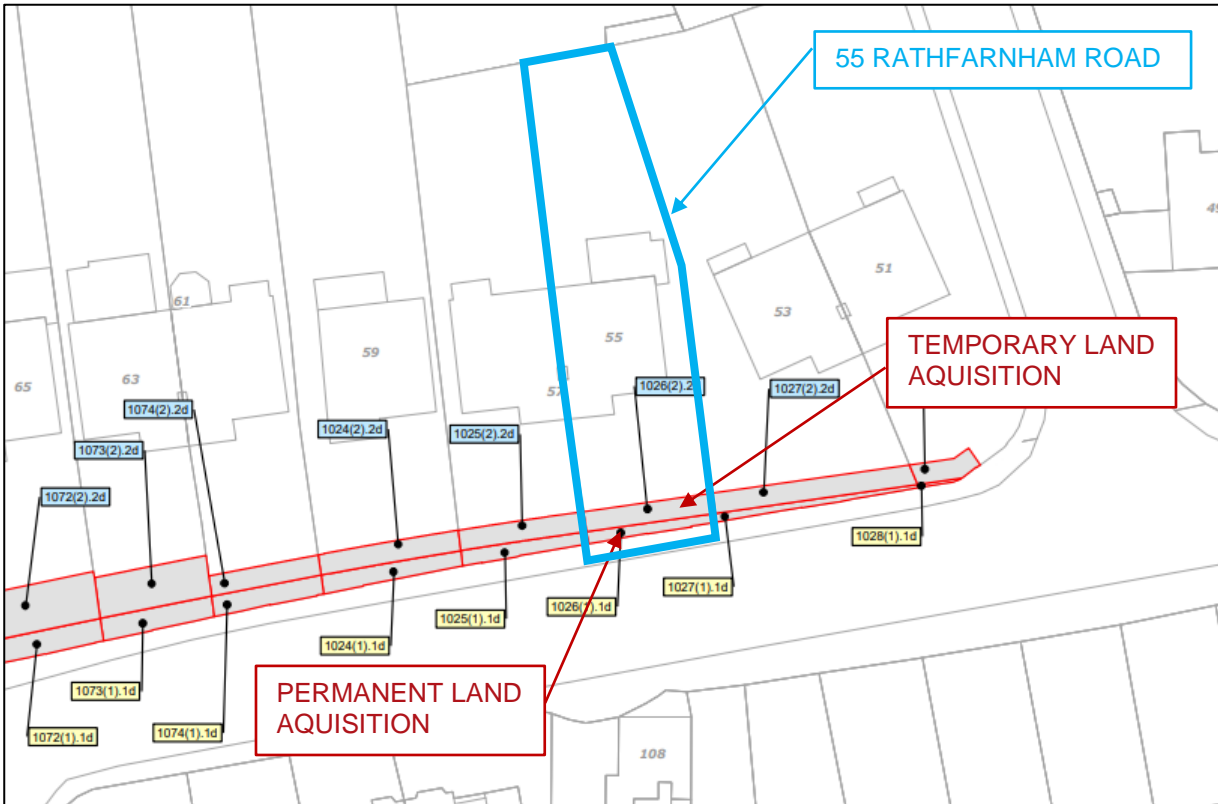


Figure 3.49.3 Extract from CPO Deposit Maps adjacent to 55 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.49.4.

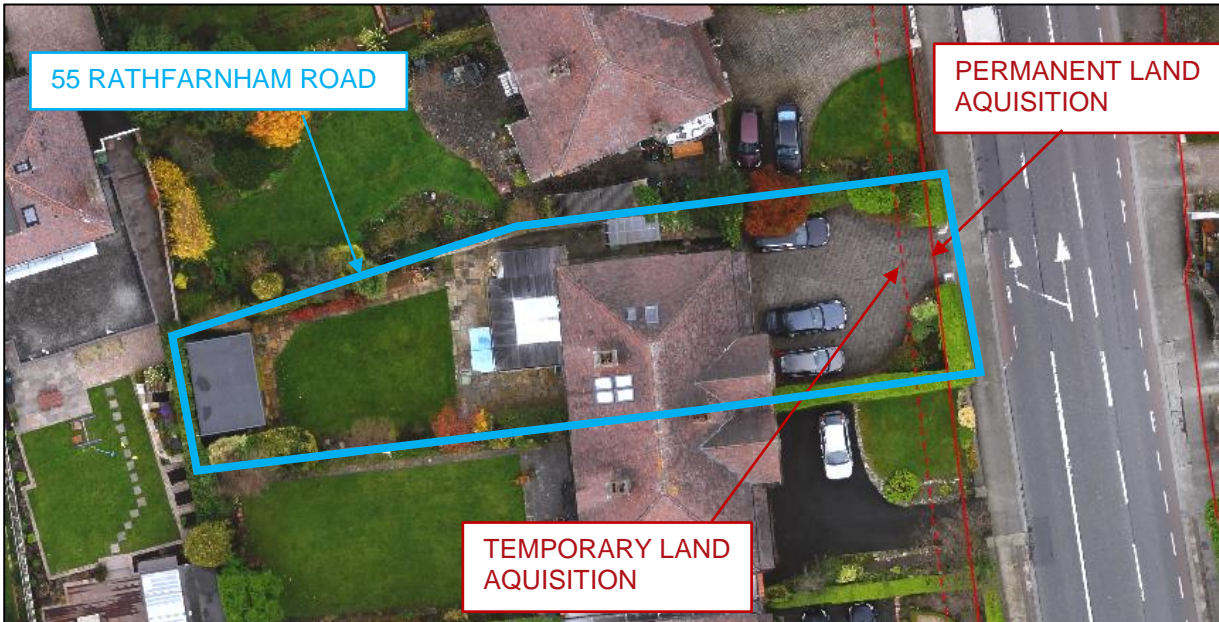


Figure 3.49.4 Proposed Land Acquisition lines adjacent to 55 Rathfarnham Road

The existing property frontage is shown in Figure 3.49.5.



Figure 3.49.5 Existing frontage of 55 Rathfarnham Road (Image source: Google)

3.49.2 Summary of the Points of Objection to the CPO by Peter Lynch

This submission objected to CPO for the reasons summarised in the following section.

- i. Necessity of land acquisition and consideration of alternatives

The submission noted that the proposed CPO is unnecessary, disproportionate, and unjustified in the context of reasonable criteria. It also notes that the segregated cycle track lacks rationale, giving an example of the proposed shared cycle and bus facilities south of the River Dodder.

- ii. Clarity around land acquisition

The submission states that there is insufficient information provided from the NTA in respect to the proposed land acquisition.

iii. Combined impact of BusConnects Schemes

The submission suggests that the impact assessment for the Proposed Scheme was complete in isolation and did not consider the knock-on effects from other BusConnects Schemes.

iv. Removal of Trees

The submission stated that the works associated with the Proposed Scheme, between the Dodder View Road and Rathdown Park will remove a significant number of trees.

v. Driveway Gradients

The submission states that the land acquisition associated with the Proposed Scheme will be a direct breach of Part M of the Building Regulations due to the resulting changes to the gradients on the approach to the residential houses.

vi. Congestion from bus priority on Rathfarnham Road

The submission noted that the bus priority measures at Dodder Park Road and Rathdown Park are only 260m apart and are likely to cause significant traffic congestion. It also noted that the need for bus priority measures is not clear. The submission referenced the RW Nowlan & Associates Report which recommends a longer green time at the Rathdown Park junction instead of the bus priority, stating that it will benefit buses while alleviating congestion.

vii. Contravention of the development plan zoning objective

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

3.49.3 Responses to the Points of Objection

i. Necessity of Land Acquisition and Consideration of Alternatives

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the Proposed Scheme. It also outlines the different stages that were undertaken during the development of the Proposed Scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

The Feasibility and Options Reports used a two-stage assessment process to determine the Emerging Preferred Route.

- Stage 1 – an initial high-level route options assessment, or ‘sifting’ process, which appraised routes in terms of ability to achieve scheme objectives and whether they could be practically delivered. The assessment included consideration of the potential high level environmental constraints as well as other indicators such as land take (particularly the impact on residential front gardens); and
- Stage 2 - Routes which passed the Stage 1 assessment were taken forward to a more detailed qualitative and quantitative assessment. All route options that progressed to this stage were compared against one another using a detailed Multi-Criteria Analysis in accordance with the Department of Transport Document ‘Common Appraisal Framework for Transport Projects and Programmes’.

Following completion of Stage 1 initial appraisal, the remaining reasonable alternative options were progressed to Stage 2 of the assessment process. This process involved a more detailed qualitative and quantitative assessment using criteria established to compare the route options.

There were seven (CB1 to CB7) viable route options for Section 2 (Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road) were taken forward for assessment and further refinement, these are detailed in section 3.3.2.2.2 of the Chapter 3 of the EIAR.

Within the aforementioned route options, there were two constrained locations which required specific consideration. These constrained locations were brought through an initial assessment to determine the optimum layout for these areas to be included in the principal route options listed above.

A multi-criteria assessment (MCA) was carried out within each of these two sub-sections, as detailed in section 3.3.2.2.1 of Chapter 3.

Following the MCA, Stage 2- Route Options Assessment concluded that sub-option TVR3 was the preferred option for the sub-section along Rathfarnham Road and Terenure Road East to Rathgar Village, stating that:

Sub-option TVR3: *This route sub-option would include the provision of segregated bus facilities along Rathfarnham Road and Terenure Road East in both directions with the exception of a 100m section of Terenure Road East at Terenure Cross where an inbound bus lane would not be provided. Segregated cycle facilities would be provided along the CBC route on Rathfarnham Road and Terenure Road East (with the exception of a 270m section from Terenure Cross to Ferrard Road and a 20m section east of Rathgar Village);*

The assessment sub-criteria which were differentiators between scheme sub-options included Capital Cost, Transport Quality and Reliability, Residential Population and Employment Catchments, Cycle Network Integration, Traffic Network Integration, Key Trip Attractors, Road Safety, Architectural Heritage, Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Sub-option TVR3 was identified as having significant benefits over other sub-options in relation to Cycle Network Integration and Traffic Network Integration, and some benefits over other sub-options with respect to Flora and Fauna, Landscape and Visual, Air Quality, Noise and Vibration and Land Use Character. Following an MCA, sub-option TVR3 was identified as the preferred option for this sub-section and was brought forward for assessment as part of the principal route options.

As described in the above paragraphs and in EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Section 4.5.2.1 of the EIAR describes the general overview of the Proposed Scheme at Section 2: *Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road*. At the section adjacent to 55 Rathfarnham Road, between Dodder Park Road and Rathdown Park, it is proposed *to provide bus priority through a combination of signal-controlled priority and partial bus lanes, with 1.5m wide cycle tracks provided. To accommodate the new configuration within this section it is proposed to utilise land-take from adjacent properties on the western side of the road.*

Further detail on the optioneering carried out in this area is presented in Section 2.3.2.

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 journey times and reliability improvements which the Proposed Scheme provides. This in turn will support the potential to increase the bus network capacity of services operating along the corridor and thereby further increasing the attractiveness of public transport. 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 and will therefore cater for higher levels of future population and employment growth.

At the specific area outside 55 Rathfarnham Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the absolute minimum width of 1.8m for footpaths and desirable width of 2m for cycle tracks. At this location a 1.8m footpath has been provided. However, as noted in table 4.3 of Chapter 4 of the EIAR, a reduced width cycle track of 1.5m is provided through this area in order to minimise impacts on adjacent properties while also meeting the scheme objectives. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives.

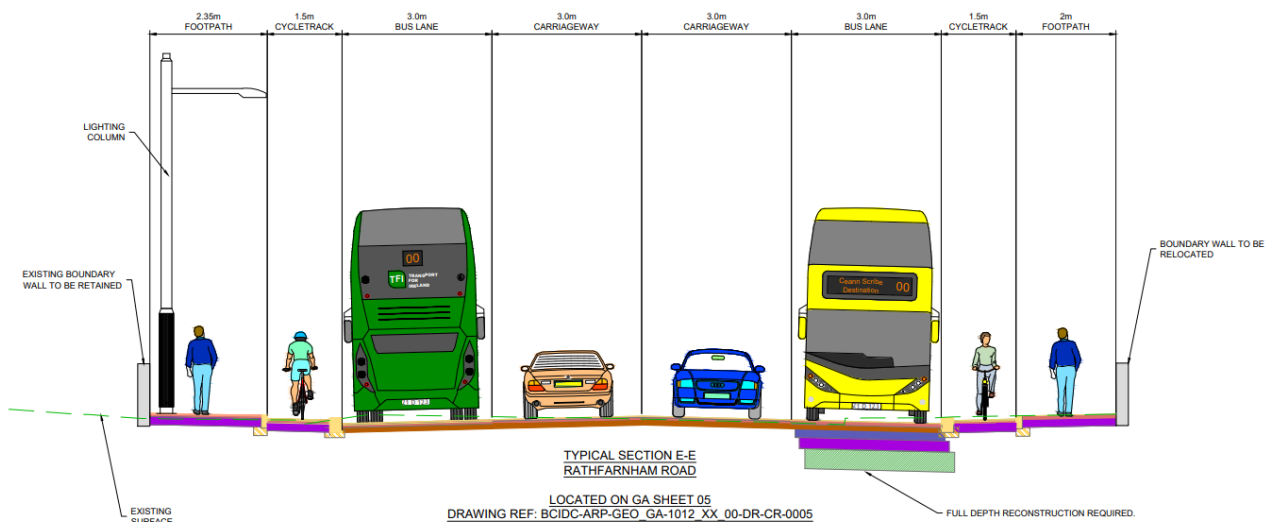


Figure 3.49.6 Typical Cross-section of Proposed Scheme between Bushy Park Road and Terenure Cross

ii. Clarity around land acquisition

Both permanent and temporary land acquisition is required at this property, the extents of which are outlined in the Deposit Maps replicated in Figure 3.49.3 above. In terms of permanent acquisition, up to 1.2m will be required to achieve the optimum road cross-section, as described in Section 4.5.1.1 of EIAR Volume 2 Chapter 3 Proposed Scheme Description and General Arrangement Drawings.

An additional 2.0m temporary acquisition is required for the duration of the works to facilitate reconstruction of the boundary treatment.

Any land temporary 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 is noted the entire area identified for temporary acquisition will not be required for the duration of the works. It is acknowledged that during the construction of the works there will be inconveniences for all users, but this will be managed to minimise impacts for all affected parties. The duration of the works will vary from property to property, but access and egress will be always maintained. Prior to undertaking any accommodation works within private property the appointed contractor will engage in consultation with landowners, during consultation the landowner will have an opportunity to raise any concerns and outline any requirements associated with the land in question.

In relation to boundary treatments and planting, section 4.6.13.5.2 Chapter 4 states:

Impacted property boundaries will be reinstated following construction. In some instances, boundaries will be rebuilt along their original alignments. In other cases, boundaries will be re-built on a new setback alignment. In general, property boundaries will be reinstated on a 'like for like' basis, including any walls, piers, fences, railings, gates, driveway finishes and private landscaping. Private grounds that are utilised in part for construction access will be reinstated following completion of the works to match the existing landscaping of the property. Where private grounds are reduced by permanent land take required for the scheme, the remaining grounds will be reinstated to match the landscape and character of the existing grounds in consultation with the property owner.

iii. Combined impact of BusConnects Schemes

A detailed response to this item is presented in Section 2.1.1.

iv. Removal of Trees

Section 1.1 of Appendix A17.1 Arboricultural Impact Assessment of Volume 4 of the EIAR states:

The objective of the impact assessment was to identify the areas that contained trees, groups of trees or hedgerows, and to ensure where practicable that these areas would be retained and to identify the trees that are to be removed to facilitate the Proposed Scheme. The survey was undertaken between the 10th and 13th August 2020.

The survey commenced at the junction of Grange Road and Nutgrove Avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold's Cross Road section and the of the Proposed Scheme. The below impact assessment report is based on the British standard BS 5837:2012 Trees in relation to design, demolition and construction recommendations. This standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. This impact assessment report is accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the Proposed Scheme to identify trees that may be impacted on by the proposed development based on the proposed design.

Section 6 of Appendix A17.1 states: This impact assessment sets out the likely principal direct and indirect impacts of the Proposed Scheme on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate.

Landscaping 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 show the proposed landscaping along the Proposed Scheme. As can be seen in Figure 3.49.7, there are 7 No. Prunus Avium 'PLENA' Semi-Mature wild Cherry Trees proposed along the section of Rathfarnham Road between Nos 51-71.

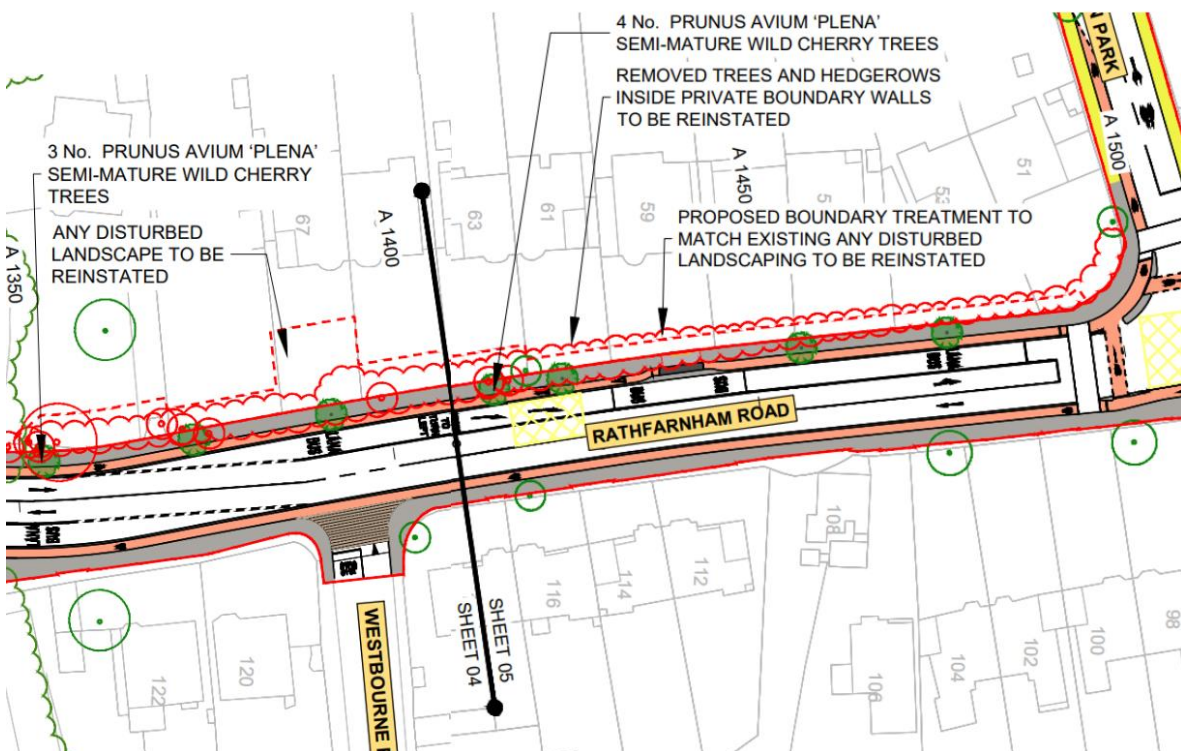


Figure 3.49.7 Extract from Landscaping General Arrangement Drawings (Combined Sheet 4 and 5)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

A detailed response to the removal of trees generally is presented in Section 2.1.1.

v. Driveway Gradients

As set out in Section 4.5 of the Preliminary Design Report in the Supplementary Information, a detailed 3d road alignment model has been prepared to inform the design of the Proposed Scheme:

As part of preliminary design, the 3D road alignment design has been developed on the principles of the Preferred Route Option. The proposed alignment has also taken into consideration public consultation, traffic impact and environmental impact assessments, in addition to a peer review exercise in collaboration with the other Engineering Designers (EDs) for the Proposed Scheme.

The 3D highway design, including the horizontal and vertical alignments, 3D modelling corridors and the associated highways related design features required for all roads included in this preliminary design, has been developed using Civil 3D software. In collaboration with the other EDs for the other CBC schemes, the 3D models have been produced in accordance with the BusConnects BEP.

As part of the alignment design process, the horizontal and vertical design has been optimised to minimise impact to the existing road network and adjoining properties where feasible. Horizontal and vertical alignments have been developed to define the road centrelines for the proposed route layout while also taking cognisance of the existing road network.

In terms of the horizontal alignments, due consideration has been given to aligning the centrelines as close to existing as practicable. However, the overriding determining factor for locating the horizontal alignment is to ensure it is positioned in the centre of the proposed carriageway.

This is ideally along a central lane marking on the carriageway, in order to minimise rideability issues for vehicles crossing the crown line.

In the case of developing the vertical alignment along the route, a refinement process has been undertaken to minimise any impact to existing road network and develop the proposed carriageway levels as close to existing as practicable. In most circumstances however, due to a change in cross-section, due consideration is given to the resulting level difference at the outer extents of the carriageway, particularly through urban areas where a difference in existing and proposed footpath levels will require additional temporary land-take to facilitate tie-in.

Notwithstanding the above, it is important to note that the design of the Proposed Scheme has been carried out so as to minimise impacts on adjacent properties and at this location is such that it will not result in any increase to the maximum driveway gradients at this property. This has been achieved through a combination of the following design measures aimed at minimising the impact on adjacent properties:

- Raising the centreline level of the road by c. 0.15m at this location (as presented in the Mainline Plan and Profile drawings provided the Volume 3 of the EIAR);
- Providing footpath cross-fall gradient above that which is typically provided for new built schemes, however not exceeding the existing gradient.

In relation to table 1 – *Summary of Design Review of Access Gradients*, included in the appended report by NRB Consulting Engineer which includes a summary of increased driveway gradients between Nos 55-71 Rathfarnham Road. A detailed response to each CPO submission received in relation to driveway gradients, where the NRB assessment concluded that the driveway gradient is either *steeper or significantly steeper*, has been prepared. The response to this submission can be found in the response to points of objection of CPO-01, CPO-19, CPO-25, CPO-30 and CPO-36.

It is noted that the NRB assessment indicated that the gradients in the driveway to 55 Rathfarnham Road would be improved as a result of the Proposed Scheme, but this is not the case – existing gradients within the property will be retained as per the existing situation.

In summary, the Proposed Scheme design has fully considered the engineering requirements along Rathfarnham Road to both minimise the impact of the Proposed Scheme on adjacent properties and facilitate the no increase to the gradients within these properties.

- vi. Congestion from bus priority on Rathfarnham Road

As set out in Section 4.1 of Appendix 4.1 of the EIAR:

Signal control bus 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. This typically arises where the bus lane cannot continue due to obstructions on the roadway. An example might be where a road has pinch-points where it narrows due to existing buildings or structures that cannot be demolished to widen the road to make space for a bus lane. It works through the use of traffic signal controls (typically at junctions) where the bus lane and general traffic lane must merge ahead and share the road space for a short distance until the bus lane recommences downstream. The general traffic will be stopped at the signal to allow the bus pass through the narrow section first and when the bus has passed the general traffic will then be allowed through the lights.

In terms of Rathfarnham Road, signal control bus priority is utilised to achieve the BusConnects objective of improving bus speeds, reliability, and punctuality.

Section 4.4.1.2.3 of the Preferred Route Option Report, which is part of the supplementary information, evaluated various choices for the BusConnects route between Grange Road and Terenure Cross. *Numerous submissions received as part of the public consultation raised concerns about the impact of land acquisition along this section of the route. In addition, upon review of the EPR Option proposals with the benefit of topographical survey, it was evident that portions of the EPR Option proposals, namely the Brookvale Downs parallel cycle route as well as the impact on steep driveways on Rathfarnham Road, required further consideration.* For these reasons, alternative options have been considered in this area. Consequently, alternative options were explored for this area. In this evaluation, 9 options (RF1-9) were considered.

Section 4.4.1.2.5 of the report summarises the assessment process and concludes that Option RF5 offers more advantages compared to the other options.

Option RF5: An inbound bus lane, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road south of the River Dodder. A combination of bus lanes and signal-controlled priority, with two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between the River Dodder and Bushy Park Road. The inbound cycle track would be curtailed for a short section (c.270m) from the Texaco station to c. 100m in advance of the junction with Dodder Park Road. For this short section, cyclists would use the bus lane. Two bus lanes, two general traffic lanes and two 1.5m wide cycle tracks provided on Rathfarnham Road between Bushy Park Road and Terenure Cross.

RW Nowlan & Associates Report, which was appended to the submission states in Section 4.1 states that the proximity of the signal control bus priority at the Dodder View Road junction and Rathdown Park Junction may lead to congestion along Rathfarnham Road. While the issue of traffic congestion was already addressed earlier in this response, for additional context, Section 2.3.2 demonstrates an overall reduction in combined traffic flow on Rathfarnham Road in the 2028 Opening Year scenario of the Proposed Scheme

In reference to the recommendation presented in section 4.2 of the submission, which suggests that a more suitable alternative to the signal control bus priority for inbound buses at Rathdown Park is the implementation of longer green traffic light cycles, it is emphasised that this change could offer benefits for buses and effectively alleviate congestion.

The proposed road configuration for the section of Rathfarnham Road between Rathdown Park and Bushy Park Road maintains the northbound traffic lane and a right-turn filter lane into Bushy Park Road. Without the inclusion of bus priority at the entrance to Rathdown Park, a scenario could emerge in which buses and general traffic both converge in an uncontrolled manner into the straight-ahead traffic lane, exacerbating congestion and safety concerns. Therefore, a bus priority signal measures is essential at this location to effectively regulate the traffic flow into the straight-ahead lane, while also ensuring priority for buses is maintained.

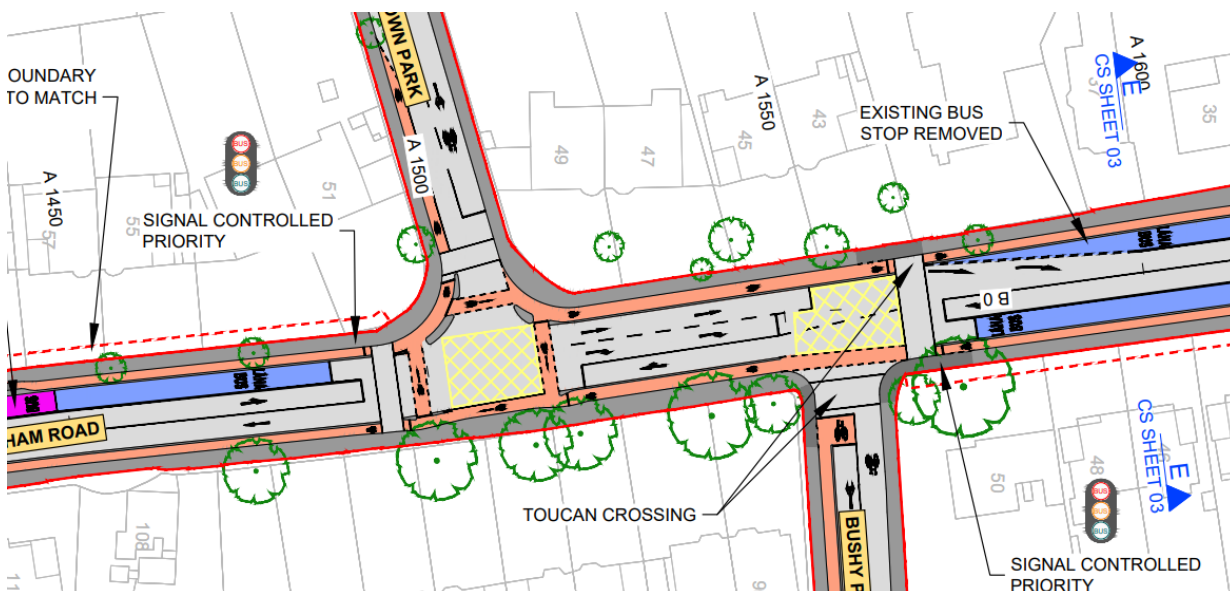


Figure 3.49.8 General Arrangement at Rathfarnham Road

- vii. Contravention of the development plan zoning objective

The submission noted that the houses and front gardens on Rathfarnham Road are designated as Z2 – Residential Neighbourhoods (Conservation Areas), and therefore the proposed road widening of the road space along the fronts of the houses is a material contravention of the Dublin City Development Plan.

Section 16.3.1.5 of EIAR Volume 2 Chapter 16 Architectural Heritage describes Conservation Areas in the context of the Dublin City Development Plan 2022-2028 (DCC (2022)).

Conservation Areas are areas which, while not to be confused with ACAs, do afford some protection to the architectural heritage under the Dublin City Development Plan 2022-2028 (DCC 2022), specifically under PolicyBHA9:

'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. Development within or affecting a Conservation Area must contribute positively to its character and distinctiveness and take opportunities to protect and enhance the character and appearance of the area and its setting, wherever possible. Enhancement opportunities may include:

- 1. Replacement or improvement of any building, feature or element which detracts from the character of the area or its setting.*
- 2. Re-instatement of missing architectural detail or important features.*
- 3. Improvement of open spaces and the wider public realm and reinstatement of historic routes and characteristic plot patterns.*
- 4. Contemporary architecture of exceptional design quality, which is in harmony with the Conservation Area.*
- 5. Retention of buildings and features that contribute to the overall character and integrity of the Conservation Area.*
- 6. Changes of use will be acceptable where in compliance with the zoning objectives and where they make a positive contribution to the character, function and appearance of the Conservation Area and its setting. The Council will consider the contribution of existing uses to the special interest of an area when assessing change of use applications and will promote compatible uses which ensure future long-term viability'.*

Policy BHA10 states: 'There is a presumption against the demolition or substantial loss of a structure that positively contributes to the character of a Conservation Area, except in exceptional circumstances where such loss would also contribute to a significant public benefit'.

A review of the Dublin City Development Plan 2016 to 2022 (DCC 2016a) indicates that the Proposed Scheme traverses through four CAs. These areas contain structures of Local to National importance and of Low to High Sensitivity. They are described briefly in Table: 16.8 and Section 16.3.1.5.1 to Section 16.3.1.5.4. Further information on each CA is provided in Appendix A16.2 Inventory of Architectural Heritage Sites in Volume 4 of this EIAR. There are no equivalent Conservation Areas in the South Dublin or in Dún Laoghaire-Rathdown.

The status of the buildings in this area is acknowledged and assessed in the EIAR.

The proposed land takes on the west side of the Rathfarnham Road will directly impact the boundary treatments to 51 to 71 Rathfarnham Road (CBC1012BTH039, CBC1012BTH040) which are of low sensitivity. These largely consist of cement rendered walls and piers with concrete capping's. Although some interventions have occurred in the past such as the widening of gateways, the boundary treatments are largely intact and consistent and contribute to the character of the houses and the streetscape in general. The removal of these boundaries would have a negative impact. The pre-mitigation Construction Phase impact will be Direct, Negative, Slight Temporary. The proposed mitigation is the recording of the existing boundaries in position prior to the works, labelling the affected masonry, brickwork, railings, gates, gate posts, capping stones prior to their careful removal to safe storage, and their reinstatement on new lines, which reinstate the existing details, and the relationships between the entrances and the historic buildings. 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 affected gates, railings, piers, bricks and 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 to Low. The predicted residual impact is Direct, Negative, Not Significant, Temporary.

3.50 CPO-50 – Peter McAuley– 141 Rathfarnham Road

3.50.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 0.3m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.50.1.

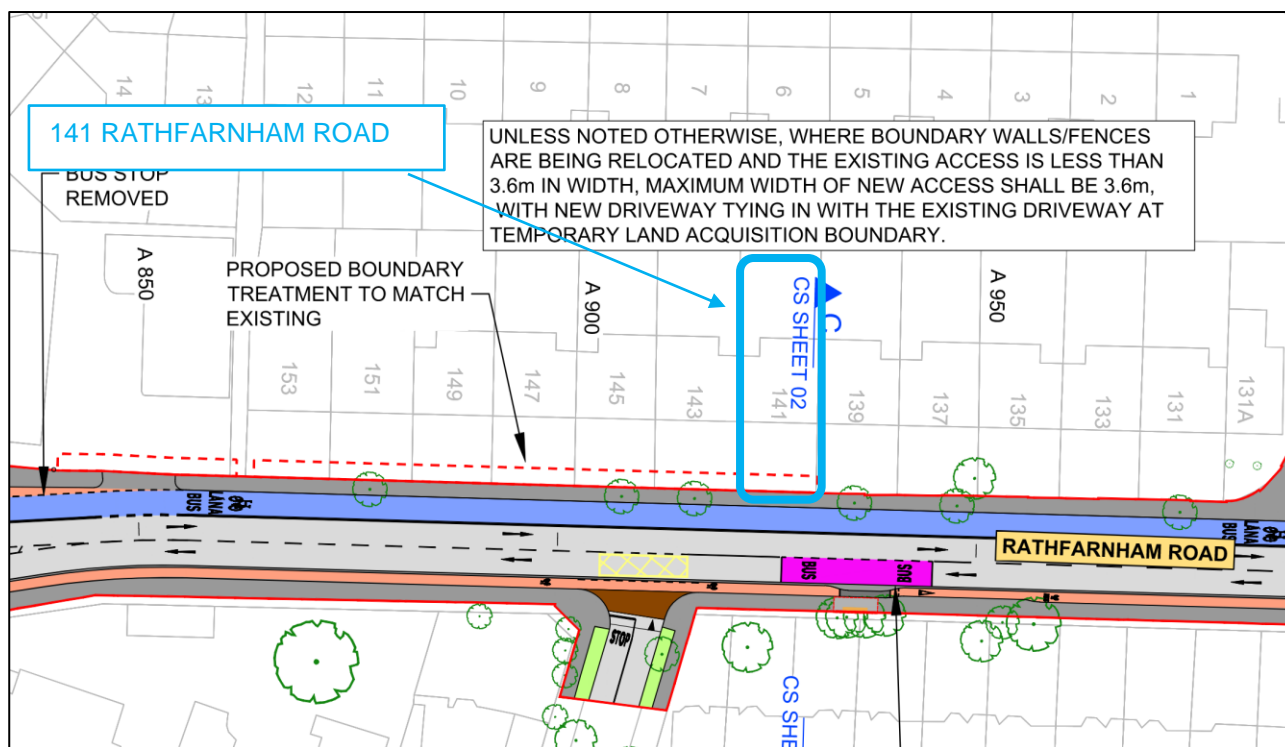


Figure 3.50.1 General Arrangement of Proposed Scheme adjacent to 141 Rathfarnham Road (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.50.2.

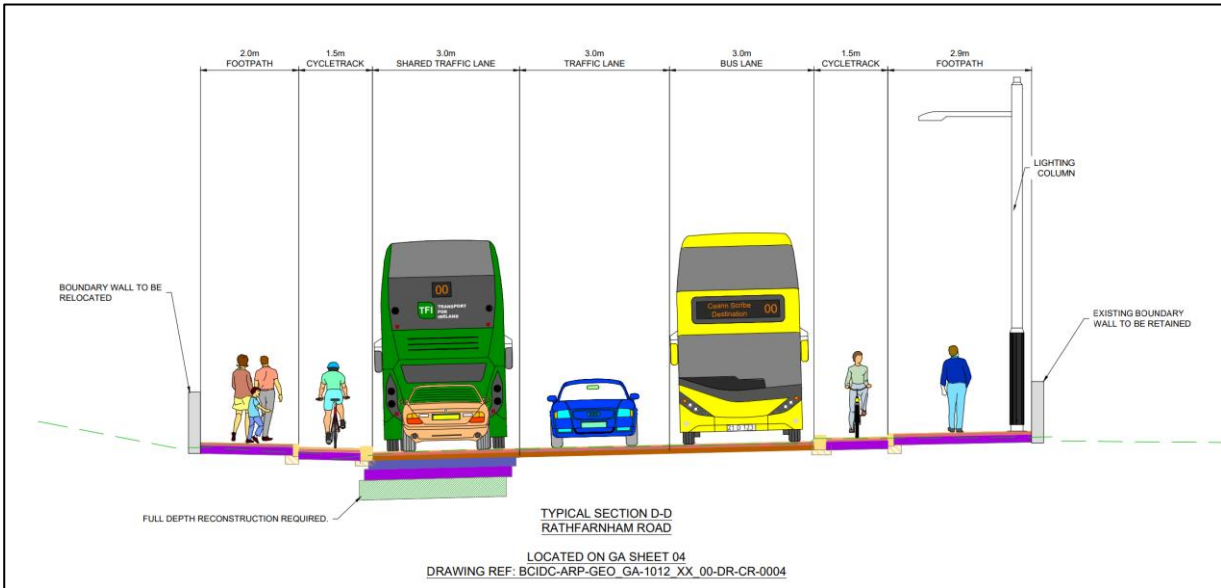


Figure 3.50.2 Typical Cross-Section adjacent to 141 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 141 Rathfarnham Road is shown in Figure 3.50.3.

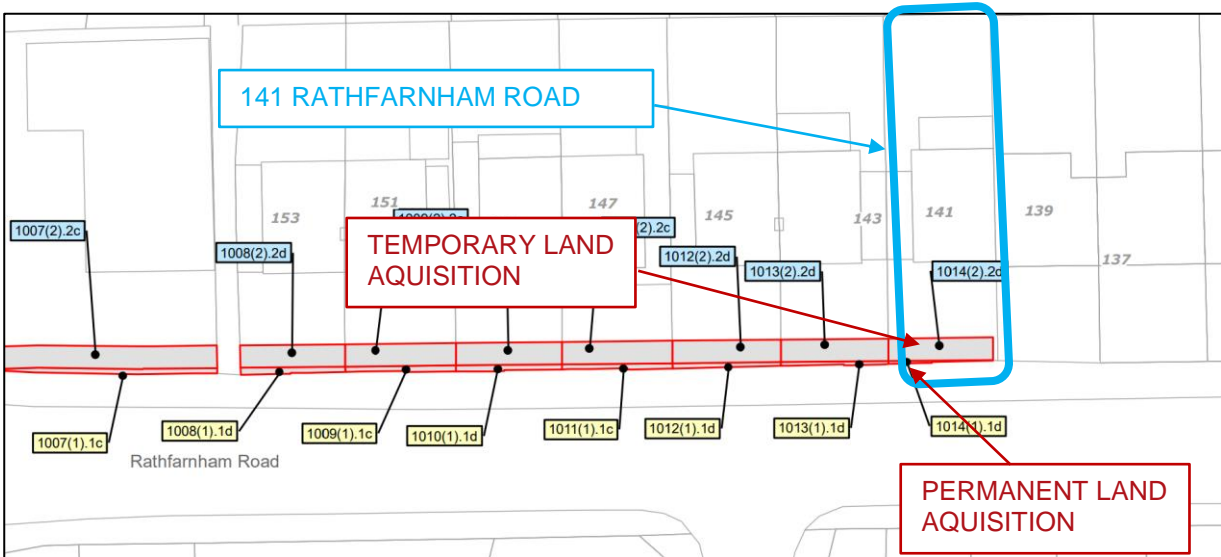


Figure 3.50.3 Extract from CPO Deposit Maps adjacent to 141 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.50.4.

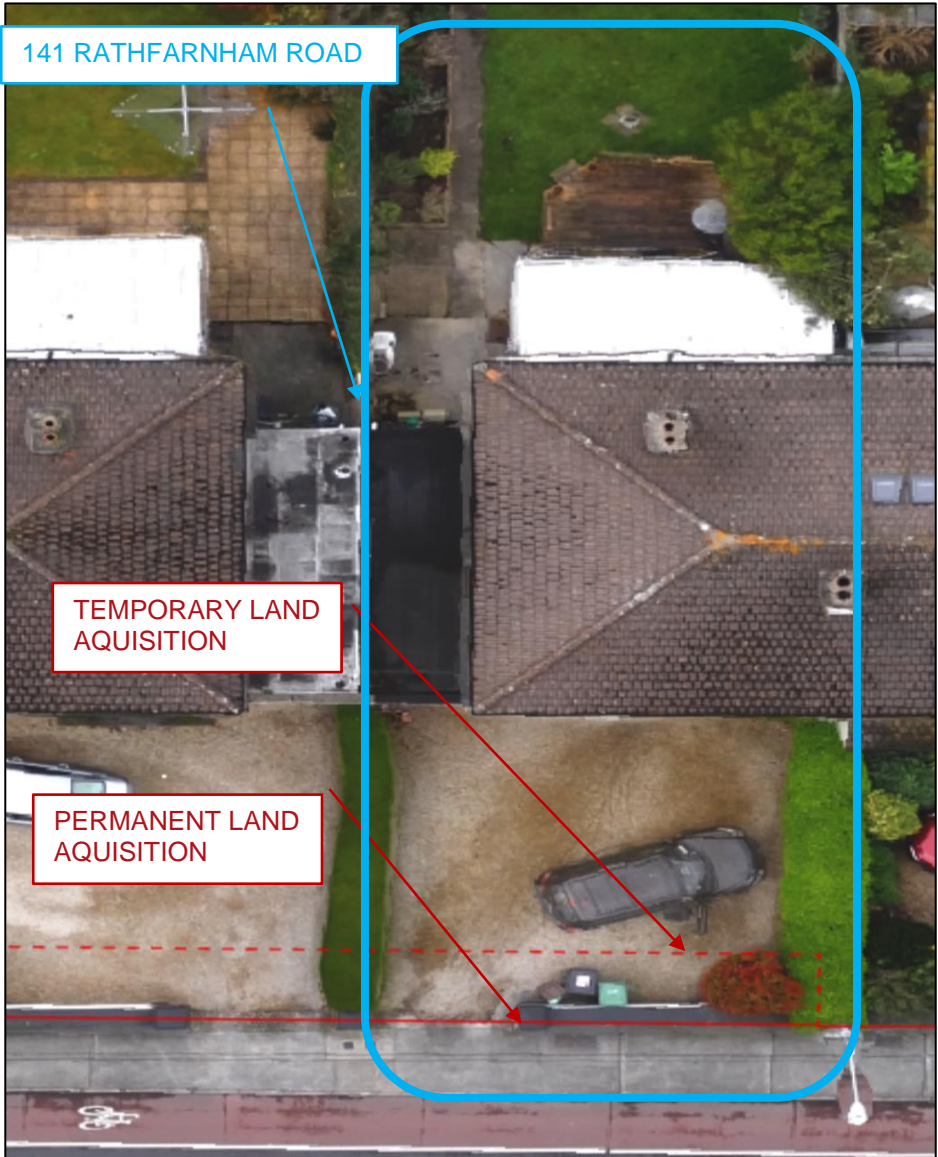


Figure 3.50.4 Proposed Land Acquisition lines adjacent to 141 Rathfarnham Road
The existing property frontage is shown in Figure 3.50.5.



Figure 3.50.5 Existing frontage of 141 Rathfarnham Road (Image source: Google)

3.50.2 Summary of the Points of Objection to the CPO by Peter McAuley

This submission objected to CPO for the reasons summarised in the following section.

i. Land Acquisition

The submission states that as part of the land acquisition they will require the reinstatement of driveway pillar, wall, trees, and shrubs. It also stated that they will require compensation for the inconvenience caused and property devaluation.

3.50.3 Responses to the Points of Objection

i. Land Acquisition

Reinstatement of property frontage including boundary walls, gates, railings and landscaping will be on a like-for-like basis, meaning that the current boundary treatment will be reinstated as it currently is. 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.

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.

3.51 CPO-51 – Reflective Measurement Systems Ltd– 59A Terenure Road East

3.51.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the laneway adjacent 59A Terenure Road East, with a maximum width of land to be permanently acquired of approximately 1.4m and a maximum width of temporary acquisition of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown Figure 3.51.1.

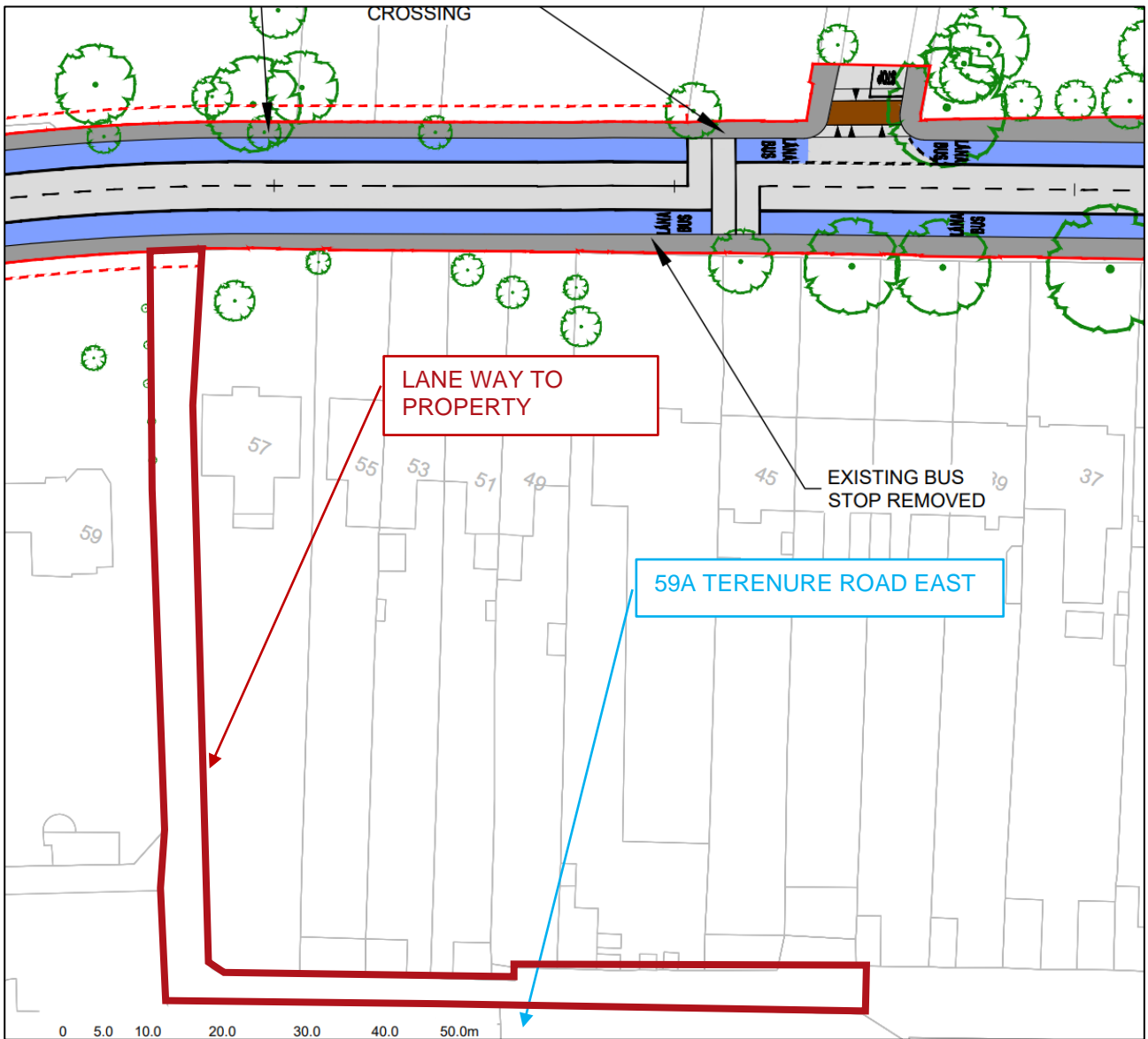


Figure 3.51.1 General Arrangement of Proposed Scheme at laneway of 59A Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.51.2.

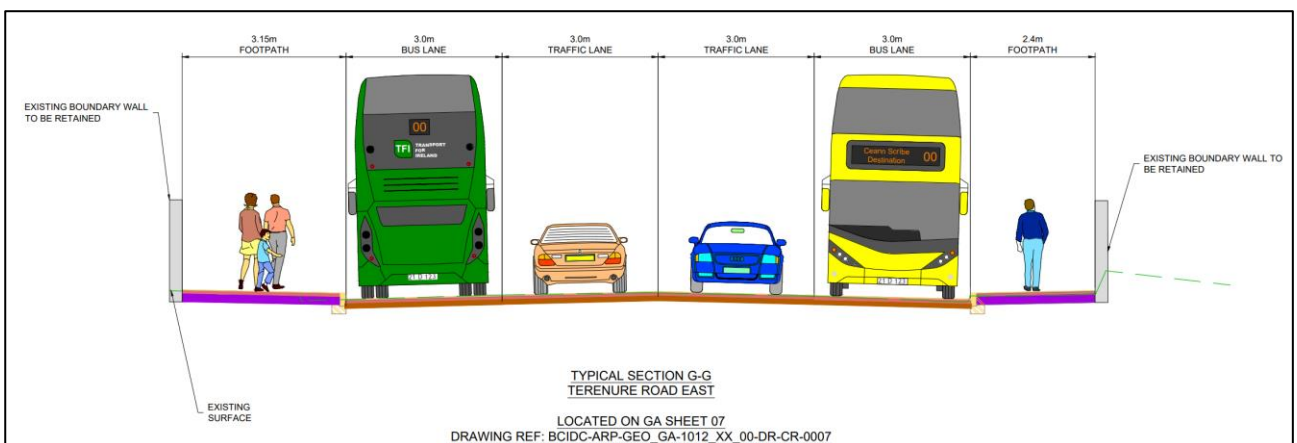


Figure 3.51.2 Typical Cross-Section at laneway of 59A Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at the laneway adjacent 59A Terenure Road East is shown in Figure 3.51.3.

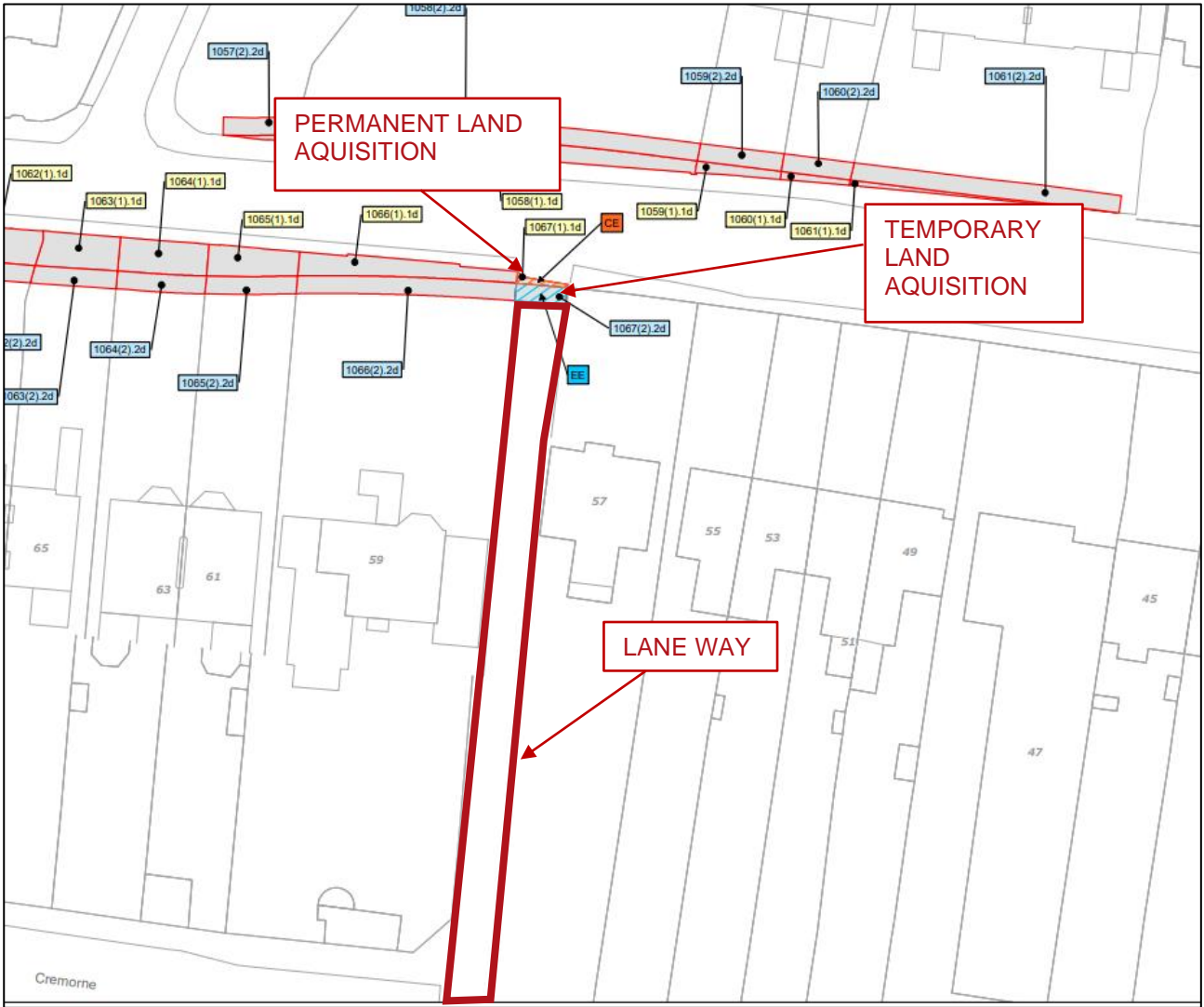


Figure 3.51.3 Extract from CPO Deposit Maps at laneway of 59A Terenure Road East



Figure 3.51.4 Proposed Land Acquisition lines at laneway of 59A Terenure Road East

The existing laneway frontage is shown in Figure 3.51.5.



Figure 3.51.5 Existing frontage at laneway of 59A Terenure Road East (Image source: Google)

3.51.2 Summary of the Points of Objection to the CPO by Reflective Measurement Systems Ltd

This submission objected to CPO for the reasons summarised in the following section.

i. Access

The submission states that they require continuous access through the lane to access their business.

ii. Removal of trees

The submission raised concerns about the implications on wildlife from the proposed tree removal on Terenure Road East.

iii. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

iv. Increase in air and noise pollution

The submission is concerned that the proposed CPO on Terenure Road East will bring the road closer to residential properties, in combination with removal of trees it will contribute towards an increase in noise and air pollution.

v. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

3.51.3 Responses to the Points of Objection

i. Access

During construction, the roads and streets along the Proposed Scheme will remain open to general traffic wherever practicable. Works will be constructed ensuring disturbances to residents, businesses and road users are minimised while maintaining the flow of all modes of traffic along the route wherever practicable. However, lane closures, road closures and diversions will be necessary to facilitate construction.

Section 5.5.3.1 of Chapter 5 states: *“The Proposed Scheme will be constructed in a manner which will minimise, as much as practicable, any disturbance to residents, businesses, and road users. Road and street upgrade works will be completed in a staged manner, as described in Section 5.8.4, whereby traffic of all modes will be managed to ensure construction can continue while ensuring the safety of all road users, and personnel, and maintaining flow of all modes of traffic wherever practicable.”*

As noted in section 5.5.3.2 Parking and Access:

When roads and streets are being upgraded, there will be some temporary disruption / alterations to on street and off-street parking provision, and 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. 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 location of temporary land acquisition, proposed gates, and the relocation of existing gates are shown in the Fencing and Boundary Treatment Drawings (BCIDC-ARP-SPW_BW-1012_XX_00-DR-CR-9001) in Volume 3 of this EIAR.

Access will be maintained for emergency vehicles along the Proposed Scheme, throughout the Construction Phase.

It is noted that upon completion of the Proposed Scheme, access via the laneway will be retained as per the existing situation.

ii. Removal of trees on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

In relation to the impact of the Proposed Scheme on habitat loss and loss of breeding / resting site has been assessed and are reported in Chapter 12 Biodiversity of Volume 2 of EIAR. Section 12.4.3.5.1.1 states that *“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”.*

iii. Impact on Heritage Properties on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

iv. Increase in Air and Noise Pollution

EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Section 7.5.3 of Chapter 7 states that the Proposed Scheme will have a generally neutral impact on air quality. Noting that *vehicle emissions technology will improve, and the Irish vehicle fleet will continue to evolve to the extent that vehicle emissions impacts associated with the Proposed Scheme are anticipated to be short-term. City wide traffic management measures and proactive encouragement of low emissions vehicle uptake would accelerate these improvements.*

Assessment Topic	Potential Impact (Pre-Mitigation and Monitoring)	Predicted Impact (Post Mitigation and Monitoring)
Road traffic impacts on local human receptors	Neutral, Long-term	Neutral, Long-term
Road traffic impacts on local ecological receptors	Positive, Slight, Long-term	Positive, Slight, Long-term
Regional air quality	Neutral, Long-term	Neutral, Long-term

Figure 3.51.6 Summary of Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme's operation are **neutral and long-term**.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Terenure Road East. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

The impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 Proposed Scheme, a **Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium** impact is calculated (Reference to Table 9.17). This is as a result of reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths. The largest increases in traffic noise level are 1 dB along the Proposed Scheme*”.

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 traffic noise level above a daytime noise level of 55 dB LAeq, 16hr an increase in noise level greater than 3 dB.*”. Table 9.39 lists these roads and Terenure Road East is not identified, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

- v. Existing Signal-controlled Priority Sufficient

A detailed response to this item is presented in Section 2.4.2.

3.52 CPO-52 – Ria Duignan – 47 Lissenfield

3.52.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.4.1 of Chapter 4 of Volume 2 of the EIAR. Proposed Scheme Description between Castlewood Avenue and Grove Road, a general traffic lane and a cycle track in each direction are proposed, with the provision of a Bus Gate between Richmond Hill and Lissenfield which will restrict general traffic movements during the hours of operation of the Bus Gate (06:00 – 20:00 - 7 days a week). This proposal also allows for some increase to footpath widths through Rathmines and the provision of 2m wide cycle tracks in each direction through the village. It is proposed to reverse the existing one-way traffic regime on Williams Park to facilitate traffic to turn off of the Proposed Scheme main corridor at Military Road in advance of the Bus Gate and return via Williams Park. It is proposed to provide a mini roundabout outside of St Mary's College to facilitate school drop off.

In order to achieve the desired design for the Proposed Scheme, temporary land acquisition is proposed at this property, with a maximum width of land to be temporary acquired of approximately 4.9m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.52.1.

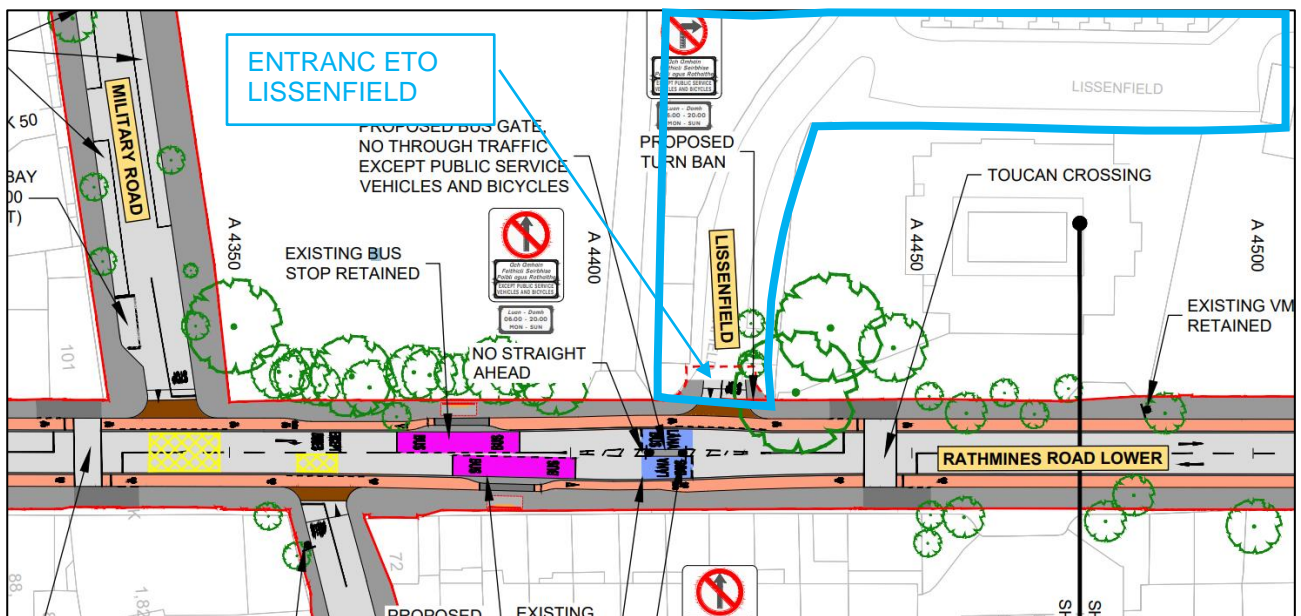


Figure 3.52.1 General Arrangement of Proposed Scheme adjacent to 47 Lissenfield (Sheet 13)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.52.2.

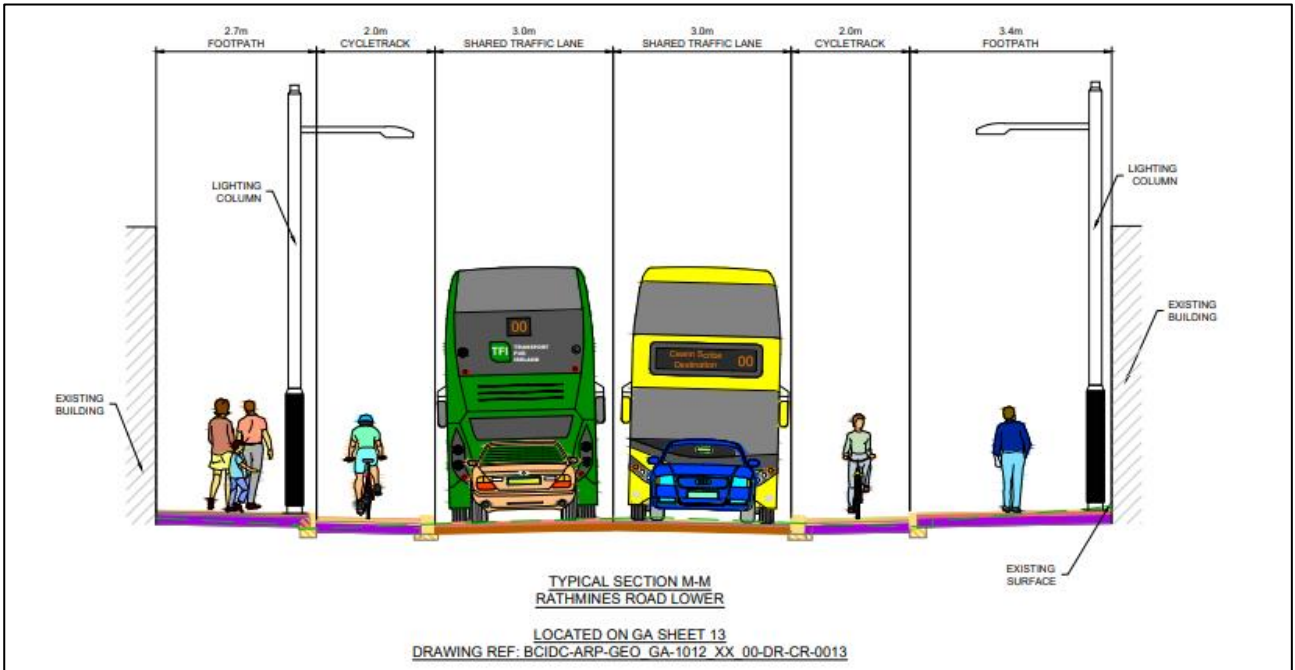


Figure 3.52.2 Typical Cross-Section adjacent to 47 Lissenfield

The relevant extract from the CPO Deposit Maps showing the proposed temporary land acquisition areas at 47 Lissenfield is shown in Figure 3.52.3.

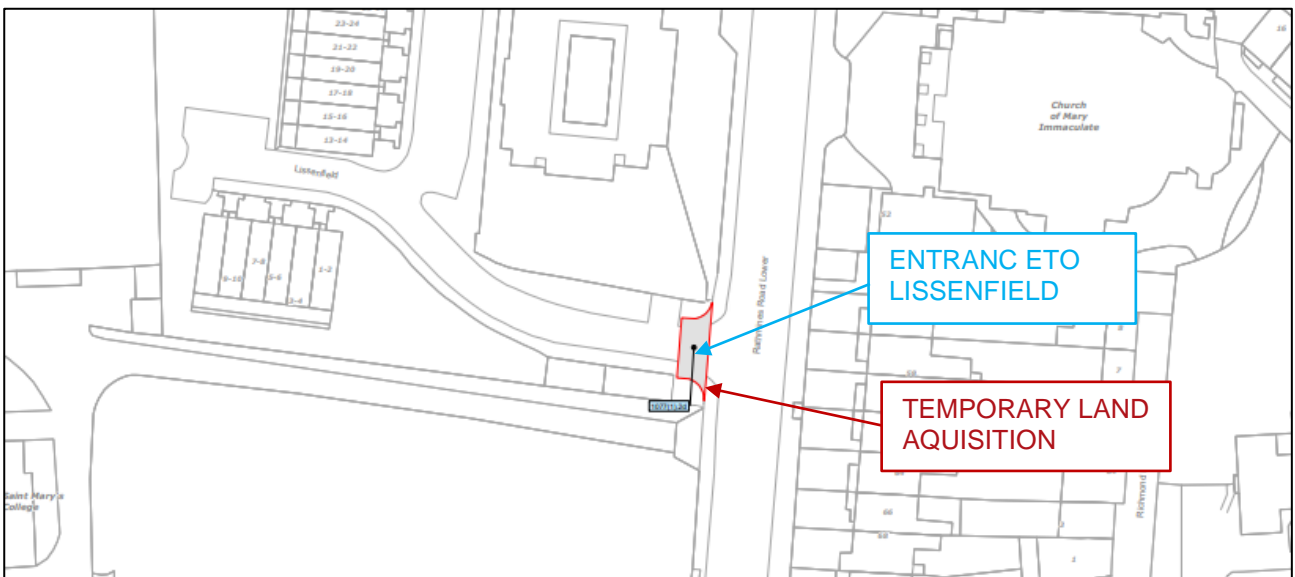


Figure 3.52.3 Extract from CPO Deposit Maps adjacent to 47 Lissenfield

The proposed temporary land acquisition lines overlain on aerial photography are shown in Figure 3.52.4.

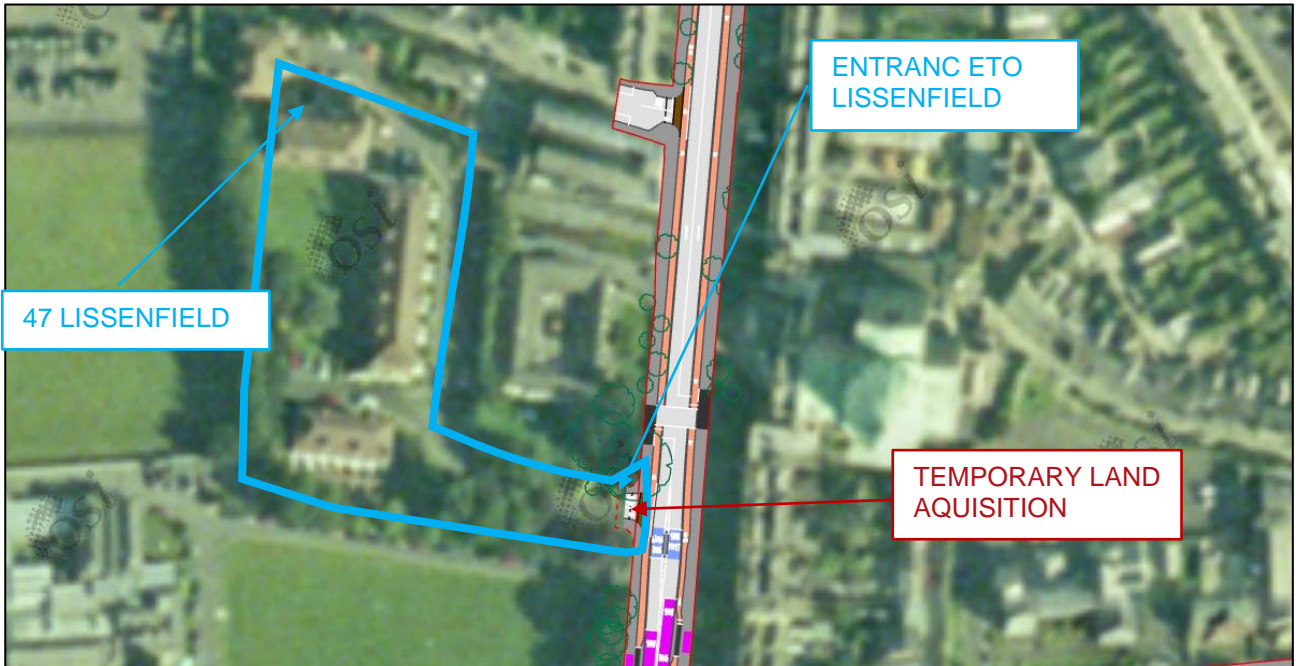


Figure 3.52.4 Proposed Land Acquisition lines adjacent to 47 Lissenfield (at entrance to Lissenfield)
 The existing property frontage is shown in Figure 3.52.5.



Figure 3.52.5 Existing entrance to Lissenfield (Image source: Google)

3.52.2 Summary of the Points of Objection to the CPO by Ria Duignan

This submission objected to CPO for the reasons summarised in the following section.

- i. Impact of proposed bus gate on access routes

The submission notes concern around the impact of the proposed bus gate on access routes to and from Lissenfield

- ii. Turning Ban at Lissenfield

The submission raised a concern regarding the proposed Bus Gate along Rathmines Road which prohibits a right turn from Lissenfield onto Rathmines Road Lower between the hours of 06:00 – 20:00.

- iii. Reduced hours of operation of bus gate

The submission suggests that the hours of operation of the bus gate and associated turn ban from Lissenfield should be limited such that it does not operate between 10:00 and 14:00 Monday to Friday.

3.52.3 Responses to the Points of Objection

- i. Impact of proposed bus gate on access routes

A detailed response to this item is presented in Section 2.5.2.

- ii. Turning Ban at Lissenfield

The submission raises concern regarding the need for the right turn ban. Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets out turning bans and other traffic management measures which will be implemented on the route to direct traffic away from either the Proposed Scheme corridor (to maximise bus journey time reliability) or to limit use of side streets as a short-cut route by through traffic. An extract from this table is presented in .

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Rathmines Road Lower/Williams Park Junction	No Left turn allowed from Rathmines Road Lower onto Williams Park	Bus gate being proposed for Rathmines Village	No traffic allowed to turn left from Williams Park onto Rathmines Road Lower.
Richmond Hill/Rathmines Road Junction	No Right turns from Richmond Hill onto Rathmines Road (06:00-20:00)	Bus gate being proposed for Rathmines Village	Northbound traffic redirected to alternative routes.
Lissenfield/Rathmines Road Junction	No Right turns from Lissenfield onto Rathmines Road (06:00-20:00)	Bus gate being proposed for Rathmines Village	Southbound traffic redirected to alternative routes.
Rathmines Road south of Lissenfield	No Straight ahead for general traffic	Bus gate being proposed for Rathmines Village	Prevent general traffic from going through Rathmines. Traffic must travel elsewhere.
Rathmines Road/Grove Road Junction	No Straight ahead onto South Richmond Street	One-way outbound regime proposed on South Richmond Street	Northbound traffic redirected to alternative routes.

Figure 3.52.6 Extract from Table 4.25 of the Preliminary Design Report

As seen in the Figure 3.52.6 above, the No Right turns from Lissenfield onto Rathmines Road is necessary in order to facilitate the proposed bus gate.

- iii. Reduced hours of operation of bus gate

A detailed response to this item is presented in Section 2.5.2.

3.53 CPO-53 – Rose and Michael O'Neill– 3 Village Green, Rathfarnham Road

3.53.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, temporary land acquisition is proposed at the entrance to Village Green, with a maximum width of land to be temporarily acquired of approximately 1.0m to facilitate the construction of the Proposed Scheme.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.53.1.

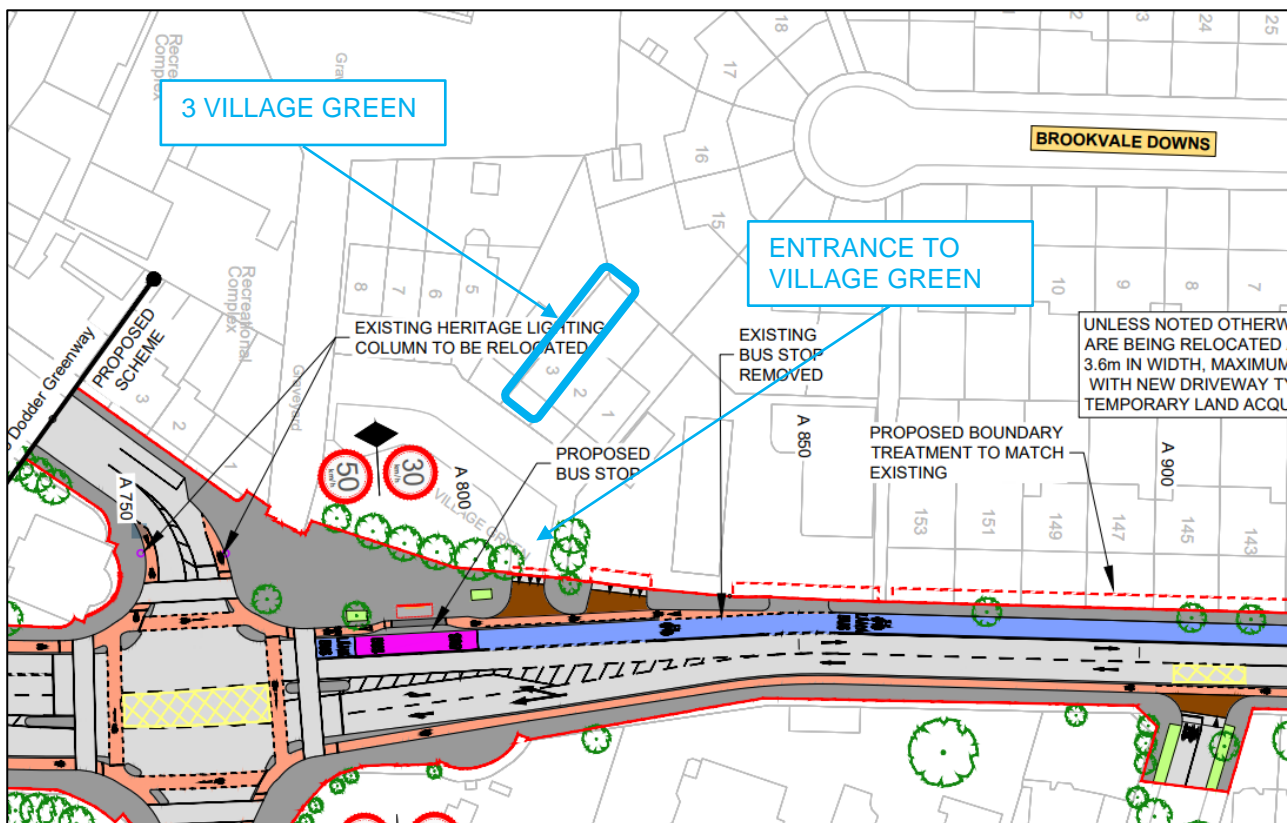


Figure 3.53.1 General Arrangement of Proposed Scheme adjacent to 3 Village Green (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.53.2.

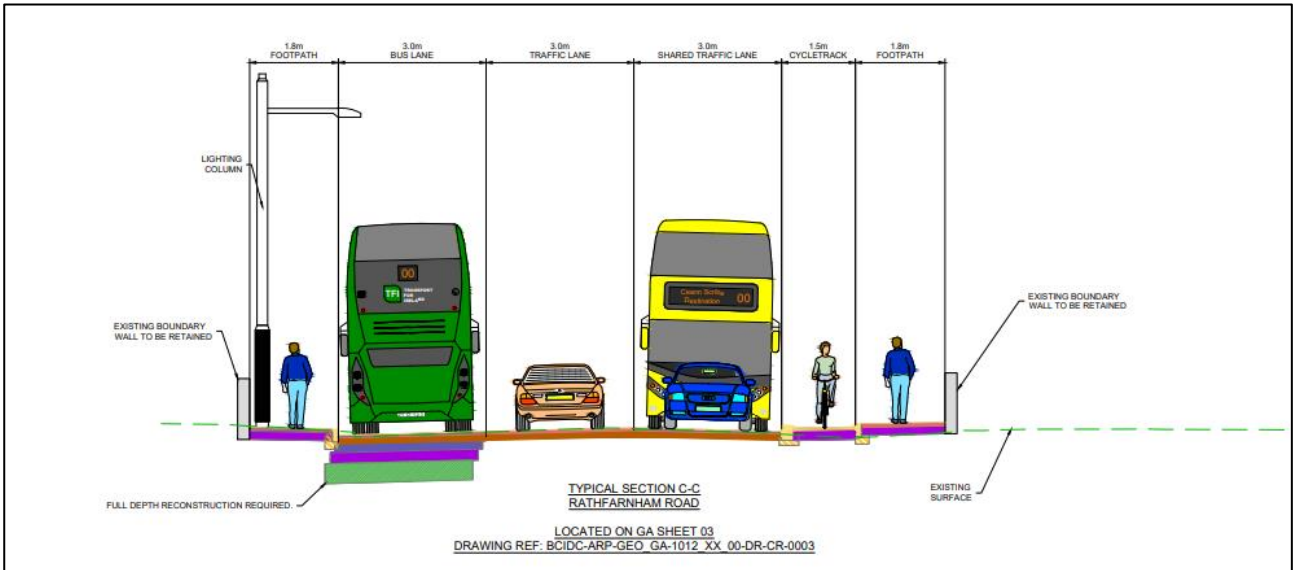


Figure 3.53.2 Typical Cross-Section adjacent to Village Green

The relevant extract from the CPO Deposit Maps showing the proposed temporary land acquisition areas at 3 Village Green is shown in Figure 3.53.3.

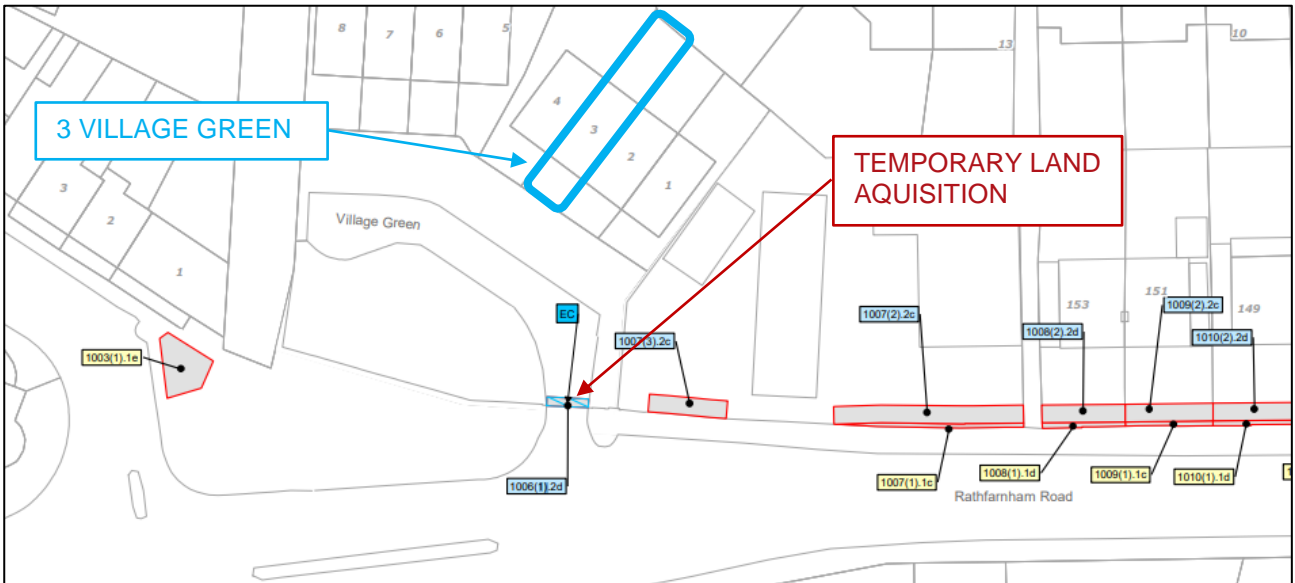


Figure 3.53.3 Extract from CPO Deposit Maps adjacent to 3 Village Green

The proposed temporary land acquisition lines overlain on aerial photography are shown in Figure 3.53.4.



Figure 3.53.4 Proposed Land Acquisition lines adjacent to 3 Village Green

The existing property frontage is shown in Figure 3.53.5.



Figure 3.53.5 Existing frontage of 3 Village Green (Image source: Google)

3.53.2 Summary of the Points of Objection to the CPO by Rose and Michael O'Neill

This submission objected to CPO for the reasons summarised in the following section.

- i. Increase in noise pollution and removal of trees

The submission expressed concerns relating to increase in noise pollution as a result of the Proposed Scheme. It also requests that additional trees are planed between the property and the Proposed Scheme.

3.53.3 Responses to the Points of Objection

- i. Increase in noise pollution and removal of trees.

At the location adjacent to Village Green, as can be seen in the Landscape General Arrangement Drawings included in EIAR, Volume 4, and depicted in

Figure 3.53.6, it is proposed to provide 1 No. Ginkgo Biloba Semi-Mature Maidenhair Tree. There are also no trees proposed to be removed in the immediate vicinity of Village Green.

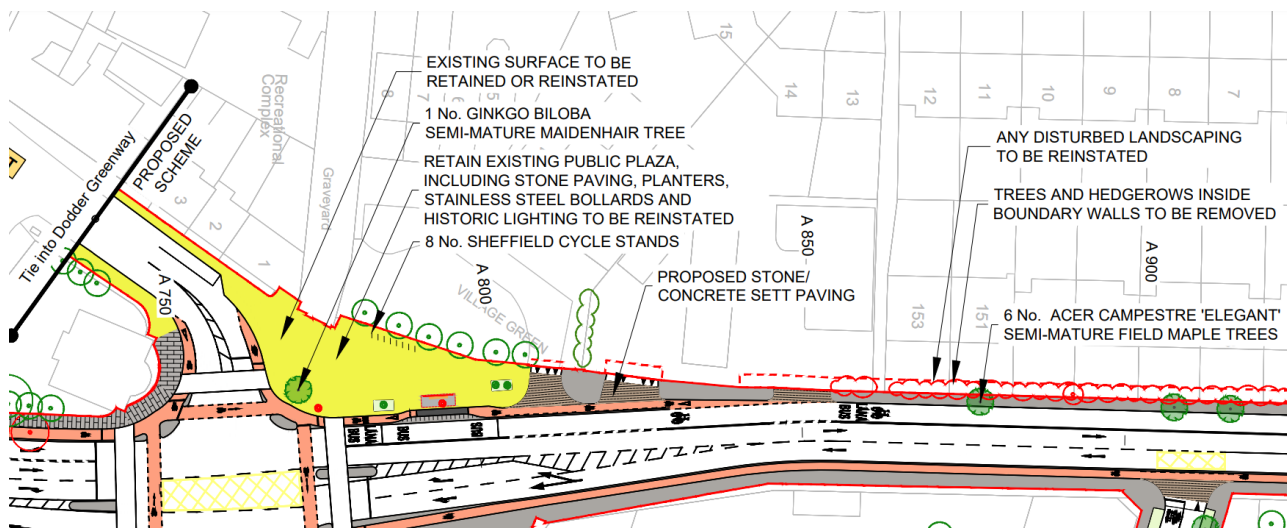


Figure 3.53.6 General arrangement drawing at entrance to Village Green

The Proposed Scheme proposes to narrow the section of Rathfarnham Road directly outside Village Green, so the nearest traffic lane (Bus Lane) will be positioned slightly further from the property than in the existing scenario.

In relation to noise levels the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme.

Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 Proposed Scheme, a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact is calculated (Reference to Table 9.17). This is as a result of reduction in overall traffic volumes through the incorporation of bus priority signals and junctions, restricted turning movements for private vehicles and the incorporation of dedicated bus lanes, cycle lanes and footpaths. The largest increases in traffic noise level are 1 dB along the Proposed Scheme.*” 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*” Table 9.39 lists these roads and Rathfarnham Road is not identified, indicating that there are no potential significant noise impacts envisaged along Rathfarnham Road.

A detailed response to the proposals for tree planting along the Proposed Scheme is presented in Section 2.1.1.

3.54 CPO-54 – Sean Silke – 67 Terenure Road East

3.54.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph's Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.8m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.54.1.

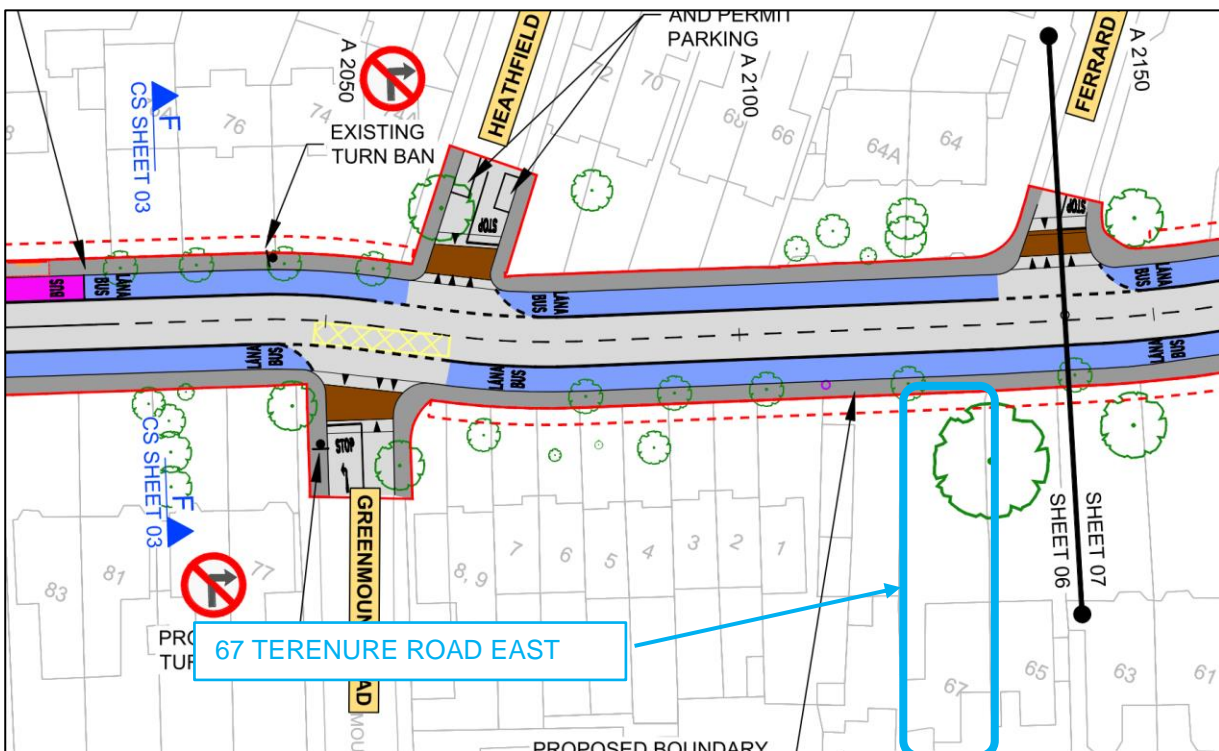


Figure 3.54.1 General Arrangement of Proposed Scheme adjacent to 67 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.54.2.

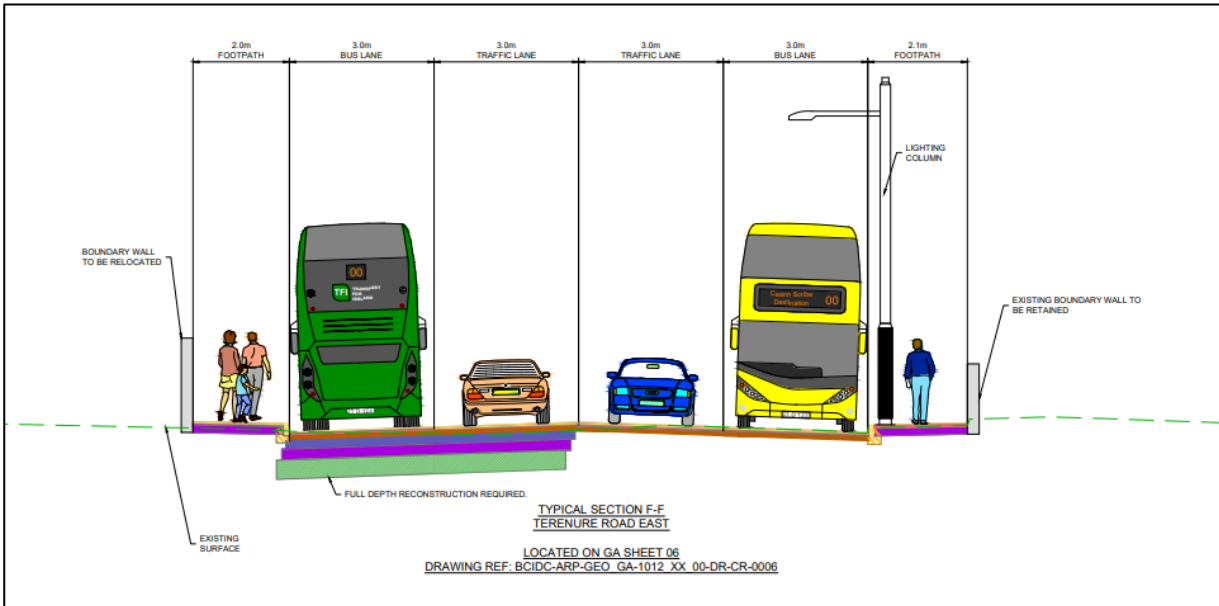


Figure 3.54.2 Typical Cross-Section adjacent to 67 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas 67 Terenure Road East is shown in Figure 3.54.3.

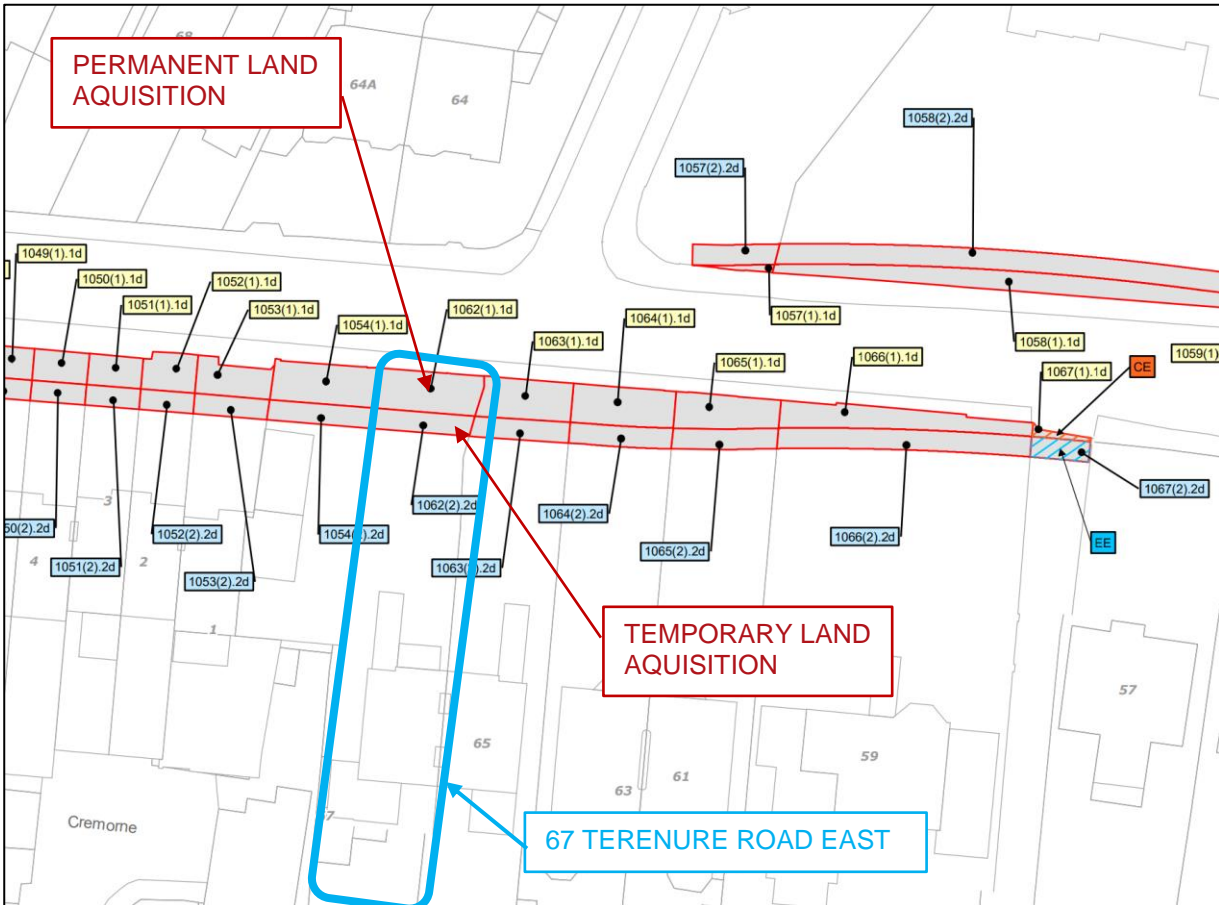


Figure 3.54.3 Extract from CPO Deposit Maps adjacent to 67 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.54.4.



Figure 3.54.4 Proposed Land Acquisition lines adjacent to 67 Terenure Road East
The existing property frontage is shown in Figure 3.54.5.



Figure 3.54.5 Existing frontage of 67 Terenure Road East (Image source: Google)

3.54.2 Summary of the Points of Objection to the CPO by Sean Silke

- i. Traffic data out of date due to Covid

The submission notes that the basis of the traffic assessment is out of date due to changes in travel patterns as a result of Covid.

- ii. Section 51 and CPO Application should not be made concurrently

The submission notes concern over the appropriateness of the NTA making (i) an Application for Confirmation of the CPO and (ii) an Application for Approval of the Proposed Scheme under Section 51 of the Roads Act 1993 (as amended) and the Board making its decisions at the same time.

- iii. NTA has not demonstrated need for the scheme and the CPO

The submission notes that the NTA has not established that there is a need for the Scheme or that the lands to be acquired are required. The submission also notes that no alternative solutions have been considered.

- iv. Existing signal-controlled priority sufficient

The submission notes that there is an existing bus priority signal in operation along Terenure Road East that combined with reduced traffic volumes in future, will continue to operate in a satisfactory manner. It is submitted that retaining the existing situation would negate the need for land acquisition from any properties along Terenure Road East.

- v. Inadequate Consultation

The submission notes that the consultation process was inadequate. Due to COVID-19 restrictions and limited social gatherings, residents and local communities were unable to convene to discuss the Proposed Scheme's implications. Furthermore, not all community members are proficient with technology, which hindered their access to information and participation in virtual consultations. It noted that the planning documents were presented in a manner that is inaccessible to everyone. The submission asserts that the consultation process did not align with the principles of the Aarhus Convention, failing to encourage comprehensive public participation in scheme-related decision-making.

The submission continues to state that the NTA has not consulted with expert groups, such as Dublin City Council and South Dublin County Council nor have the consulted with bus drivers. It continued to note that the NTA has had the benefit of direct access to An Bord Pleanála for pre Planning meetings and consultations. While the public were afforded an eight-week period to access, interpret, and respond to the proposals.

vi. Cost Benefit Analysis is Required

The submission noted that a cost / benefit analysis is required to understand whether the proposals are 'good value for money'.

vii. Implementation of other BusConnects measures first

The submission suggests that less intrusive measures that form part of the BusConnects programme should be implemented first (e.g., cashless fares). It is also suggested that the benefits delivered by the infrastructure and other measures of the programme are separated to identify the benefits as a result of the infrastructure alone.

viii. Metro is more suitable for this corridor

The submission notes concern that a metro option has not been considered by the NTA for the Rathfarnham corridor.

ix. Impact on Heritage Properties on Terenure Road East

The submission raise concern over the impact of the proposed widening of Terenure Road East on properties with heritage value.

x. Congestion at Terenure Cross due to proposed changes

The submission states that the introduction of right turn from Rathfarnham Road towards Terenure Road East will create issues with the operation of the junction resulting in congestion.

xi. Impact on Businesses due to loss of parking/loading

The submission states that businesses in Rathgar and Terenure will lose access to their customers due to the removal of parking and loading facilities in these areas.

xii. Bus Gate Hours of Operation

The submission suggests that consideration should be given to reducing the hours of operation of the bus gates on the Proposed Scheme.

xiii. Proposed Cycle Facilities are Insufficient

The submission noted that the proposals do not provide continuous cycle lanes and, expressed concerns about facilities provided on alternative routes. The submission also raised concerns about cycle tracks being blocked by vehicles e.g., delivery vehicles.

xiv. Traffic Impact as a result of Traffic Management Measures

The submission raises a number of concerns about the impact of proposed traffic management measures (namely bus gates and proposed one-way on Rathgar Road) on the surrounding road network. Specific concerns included:

- Traffic rerouting from current corridor to residential streets and impact on these streets
- Traffic rerouting to other routes and resulting congestion (e.g. through Harold's Cross and Ranelagh)
- New access routes to/from the city following implementation of traffic management measures

The submission suggest that the effect of rerouting traffic has not been considered in the modelling undertaken.

xv. Cumulative Impact of Scheme with Adjacent BusConnects Schemes

The submission noted traffic modelling should include immediately adjacent BusConnects routes and should be presented in the planning application. Noting that the proposed diversions, restrictions and amendments to traffic routes will have a knock-on effect on immediate BusConnects routes.

xvi. Contravention of Article 1 of the First Protocol to the European Convention on Human Rights

The submission states that in the past CPO's have been approved and subsequently abandoned due to lack of funding, or a Notice to Treat has been served, but no works have commenced for over 10 years after the notice. The submission continues to state once the CPO is confirmed, and a Notice of Treat and Noticed to Enter is served there is no obligation on the acquiring Authority to commence or complete the works within any timeframe. The submission suggests that this contravenes Article 1 of the First Protocol to the European Convention on Human Rights. The submission concludes with *"The board has a duty and an obligation to ensure that its decision meet the requirements of both European and domestic legislation and that the landowners effected by the compulsory expropriation do not suffer an excessive burden under Article 1 of the First Protocol to the Convention on Human Right"*.

xvii. No Funding Approved for the Scheme

The submission asserts that funding has not yet been approved for the detailed design, the land acquisition or the construction of the scheme.

xviii. Common Good

The submission states that the confirming Authority must prove that the acquisition of the property is clearly justified by the common good. Stating that the NTA has not demonstrated that this is the case.

xix. Consideration of Alternatives

The submission states that alternative routes have not been adequately assessed and reasons for their rejection have not been provided. The submission continues to state that the assessment carried out has not established that this route is the most effective route for delivery of the Proposed Scheme, and that the assessment does not establish that there is an urgent need for the scheme.

xx. Compliance with Development Plans

The submission states that the Proposed Scheme does not comply with the Development Plans of the Local Authorities.

xxi. General Scheme of the Planning and Development (Land Value Sharing and Urban Development Zone) Bill 2022

The submission alleges that, according to the "Land Value Sharing and Urban Development Zones Bill 2022", the rules for compensation, the process of assessment, and the title transfer procedures would all be governed by this new bill. the submission sets out that these new provisions are different from what was mentioned in the served notice, including how compensation is determined when an agreement cannot be reached. It further asserts that the Board should not confirm any CPO until property owners have been properly informed about the legislation and procedures that will be used to settle their claims.

3.54.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-14 and CPO-20. Please refer to Section 3.20.3 above for a response to items i to xv and to Section 3.14.3 for a response to item xvi to xxi.

3.55 CPO- 55 – Stonepark Investments Ltd. – Earl's Court, 80 Terenure Road East

3.55.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions.

To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on Terenure Road East.

To accommodate this cross section, land acquisition is proposed on the northern and southern side of the Terenure Road East between Saint Joseph's Church and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 80 Terenure Road East, with a maximum width of land to be permanently acquired of up to 3.7m, and temporarily acquired of up to approximately 2m at the boundary wall.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.55.1.

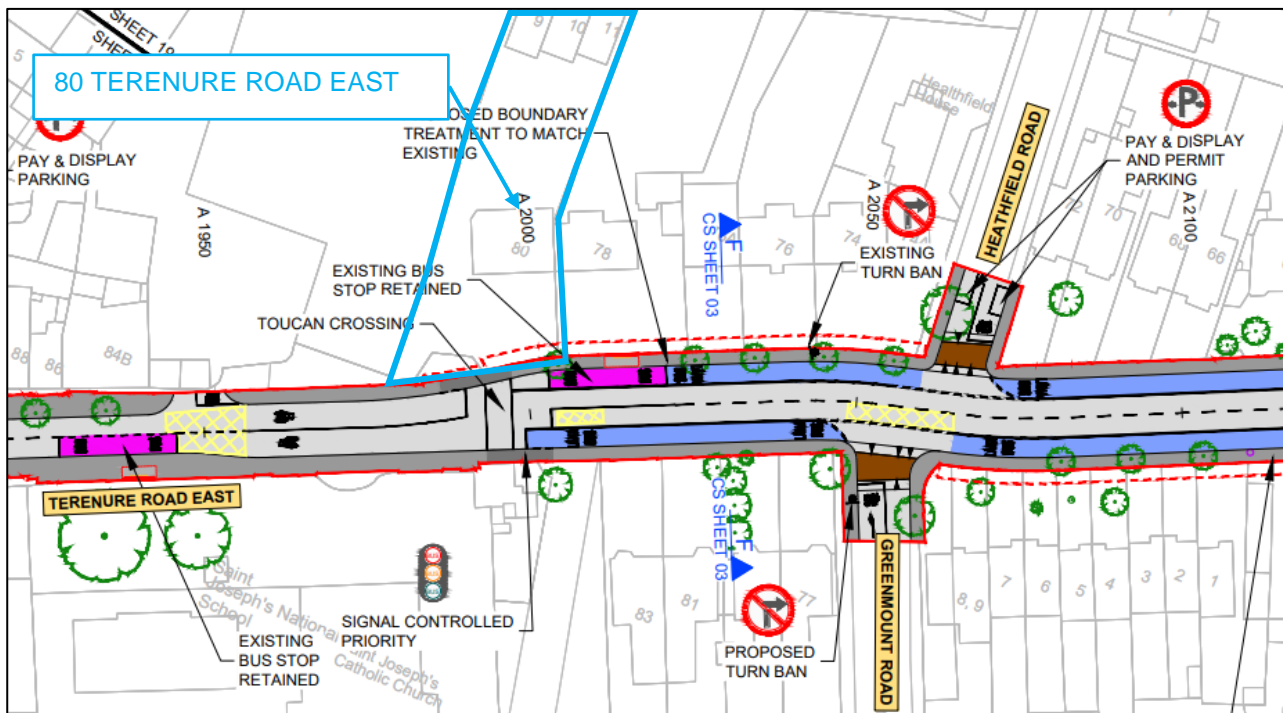


Figure 3.55.1 General Arrangement of Proposed Scheme adjacent to 80 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.55.2

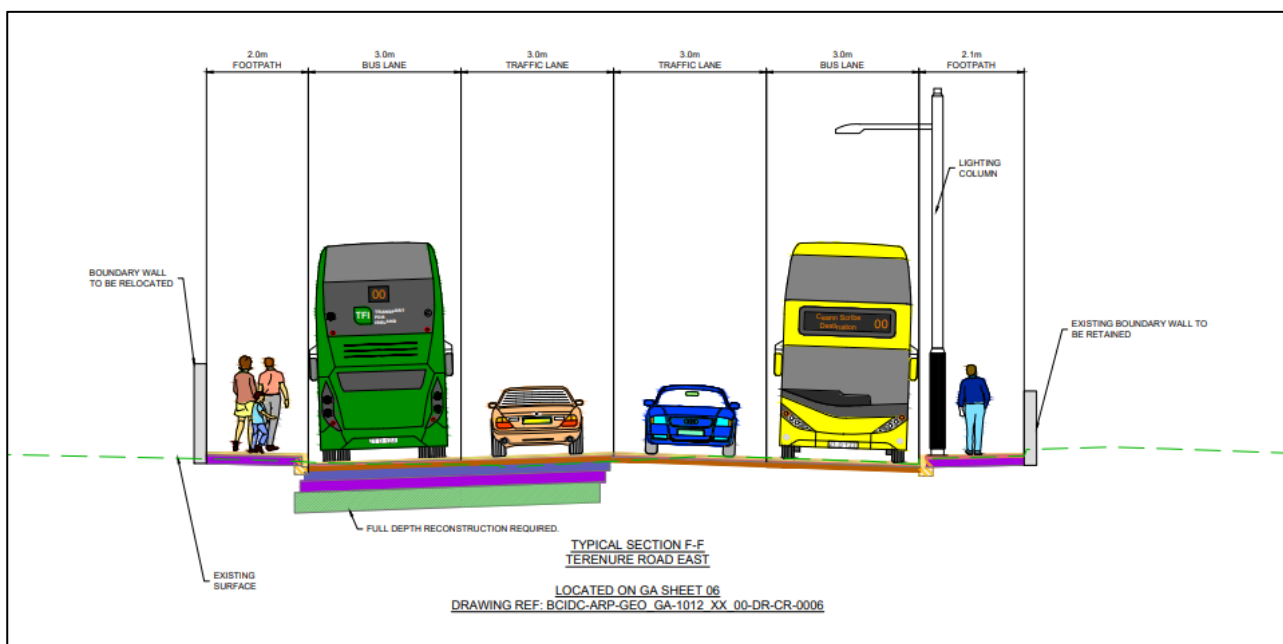


Figure 3.55.2 Typical Cross-Section adjacent to 80 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 62 Terenure Road East is shown in Figure 3.55.3.

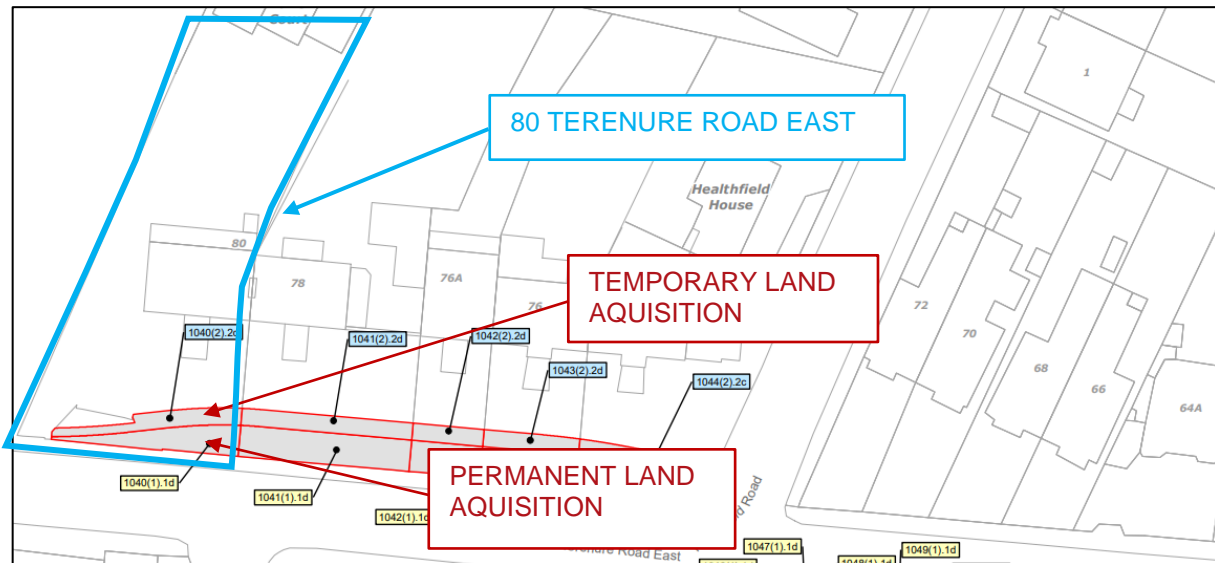


Figure 3.55.3 Extract from CPO Deposit Maps adjacent to 80 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.55.4.

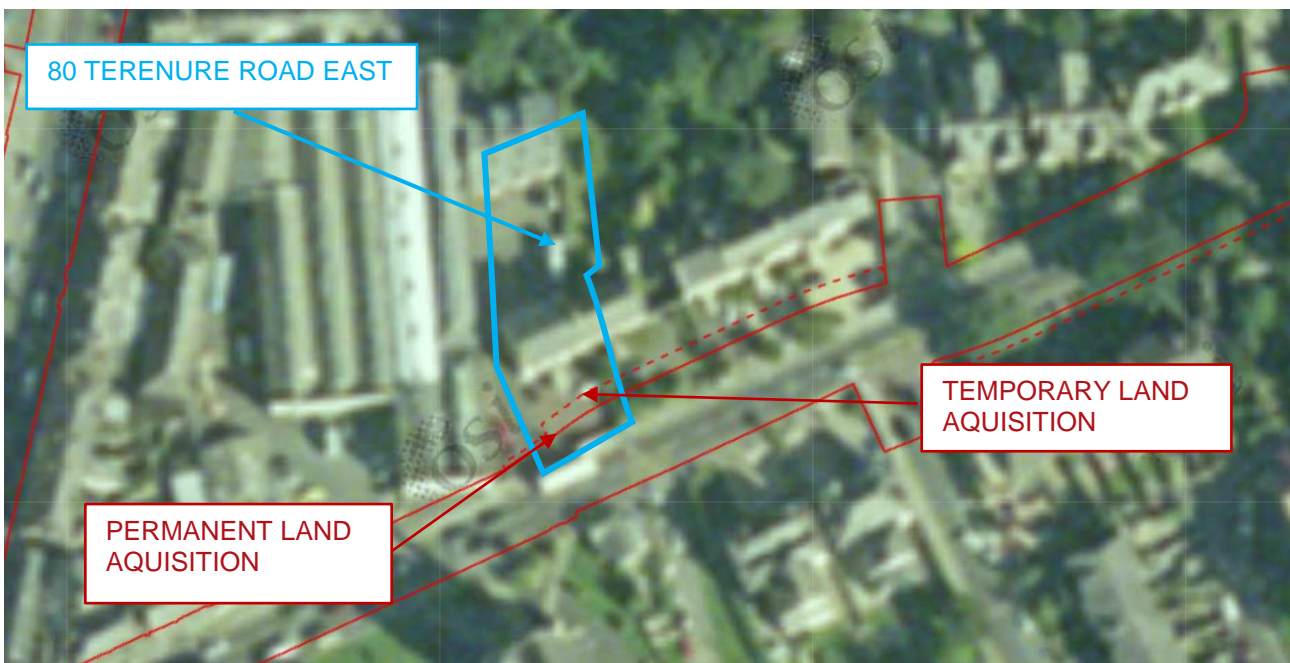


Figure 3.55.4 Proposed Land Acquisition lines adjacent to 80 Terenure Road East

The existing property frontage is shown in Figure 3.55.5.



Figure 3.55.5 Existing frontage of 80 Terenure Road East (Image source: Google)

3.55.2 Summary of the Points of Objection to the CPO by Stonepark investments Limited

This submission objected to CPO for the reasons summarised in the following section.

i. Visibility Splays

The submission states that the current location of the inbound bus stop reduces visibility for vehicles leaving Earls Court when a bus is at the stop. It suggests moving the bus stop to a more suitable location that aligns with the National Roads Authority (NRA) Design Manual for Roads, ensuring proper sightlines are maintained.

The submission also notes that drivers intending to make a right turn from the property will face reduced visibility of oncoming traffic from Terenure Village. This is attributed to the proposed land acquisition, which will prevent drivers from pulling up as close to the road as they currently can.

ii. Proposed toucan crossing

The submission expressed a concern relating to the proposed toucan crossing at outside Earl Court, stating that it will negatively impact access and egress from the property. The reasons given in the submission are a) It will not be possible for residents to see the traffic signal heads while existing the property b) Absence of yellow box will make it difficult to exit.

iii. Reduced parking

The submission states that the proposed land acquisition at Earl Court will reduce the already limited car parking spaces. The submission also noted that the land acquisition will impact the value of the property.

3.55.3 Responses to the Points of Objection

i. Visibility Splays

Section 4.8.1 of the Preliminary Design Report included in the Supplementary Information submitted as part of the planning documents outlined the visibility assessment undertaken at minor and major junctions, as well as individual properties and single dwellings:

An assessment of visibility at major and minor junctions has been completed along the route. In accordance with DMURS, the SSD parameters for relevant design speeds has been adopted as the Y-Distance visibility to be achieved while an X-Distance of 2.4m (reduced to 2.0m as a relaxation) has been implemented.

An assessment of the junction visibility at accesses serving individual properties and single dwellings has been undertaken, ensuring that the existing visibility splay "X" and "Y" are maintained or improved.

SSD STANDARDS			
Design Speed (km/h)	SSD Standard (metres)	Design Speed (km/h)	SSD Standard (metres)
10	7	10	8
20	14	20	15
30	23	30	24
40	33	40	36
50	45	50	49
60	59	60	65
Forward Visibility		Forward Visibility on Bus Routes	

Figure 3.55.6 Reduced SSD standard for application within cities towns and villages. Reduced forward visibility increases driver caution and reduces vehicle speeds (Table 4.2 from DMURS)

Visibility splays along the Proposed Scheme were assessed in accordance with the Design Manual for Urban Roads and Streets (DMURS) which is the overarching design guidance for urban roads in Ireland. The visibility at Earl Court complies with the Stopping Sight Distance (SSD) requirements specified for a 30km/h urban road in DMURS.

If the CPO is confirmed by An Bord Pleanála, 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.

ii. Proposed Toucan Crossing

Regarding the concern raised about drivers leaving Earl Court having difficulty seeing the traffic signal head, the Junction System Design drawings in EIAR Volume 3 Chapter 4 include a proposed secondary signal head on the southern side of the crossing. The secondary signal head is angled to face oncoming traffic from Terenure Village and will be visible to drivers exiting from Earl Court.

It is noted that there is currently no yellow box provided at the entrance to Earl Court. While a toucan crossing is located nearby, it is not considered necessary to include a yellow box at this location. However, should an issue with access be identified in future, a yellow box may be considered appropriate and could be installed by the local authority. It is noted that the Proposed Scheme would not preclude this being introduced.

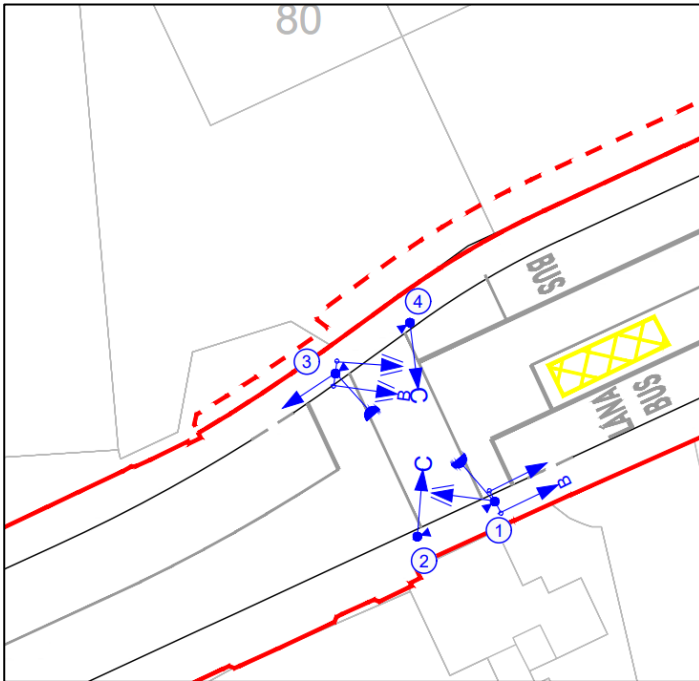


Figure 3.55.7 Traffic signal arrangement extracted from Junction System Design

iii. Reduced Parking

The permanent acquisition will result in the maximum loss of 3.7m of lands on the eastern end of the property, which narrows to 0.3m on the western end. An additional 2.0m will be temporarily required at the boundary wall and 1.0m at the driveway to allow for the construction of boundary treatment works and tying into the existing garden/driveway. It is acknowledged that the proposed land acquisition may lead to the loss of one parking space in the front area of the property. However, it is emphasised that the proposed changes will not significantly impact the residents' ability to park generally at the property.



Figure 3.55.8 Proposed Permanent and Temporary land acquisition at Earl Court

In relation to the impact on property value 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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: *"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."* and *"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 on Rathfarnham 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.

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.

3.56 CPO-56 – The Estate Ann Bernadette Smith – 69 Terenure Road East

3.56.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph's Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.8m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.56.1.

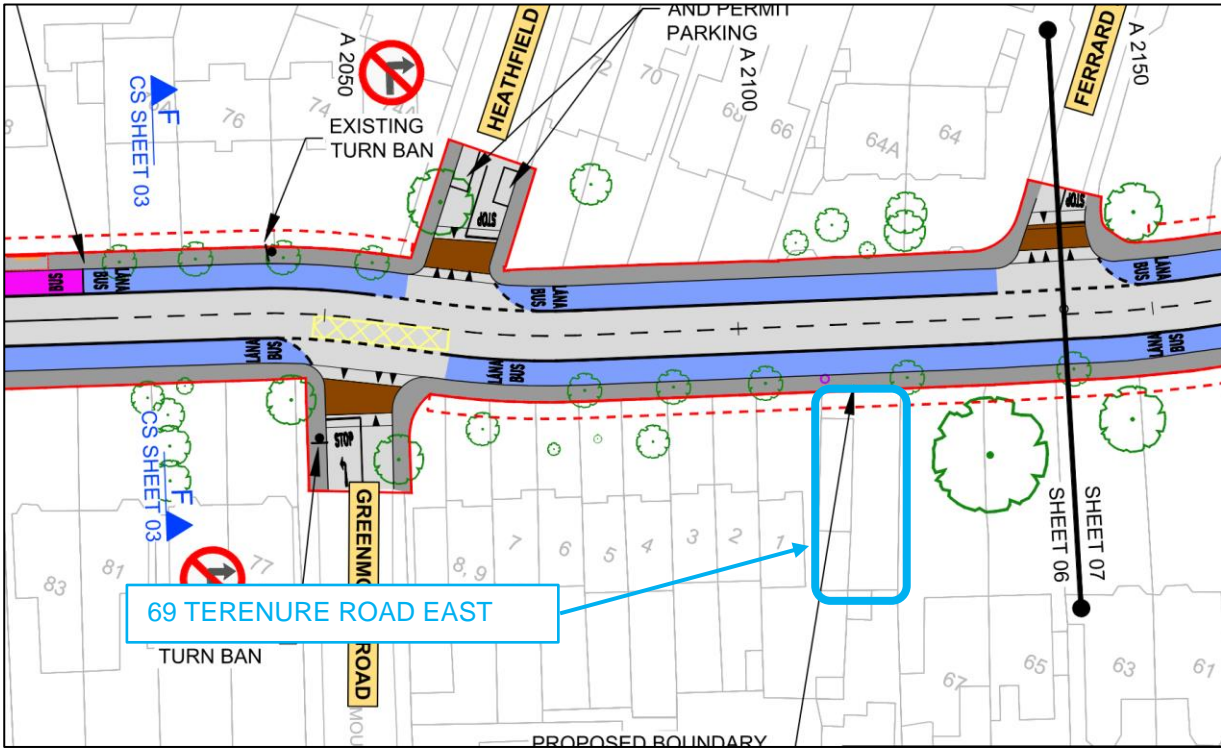


Figure 3.56.1 General Arrangement of Proposed Scheme adjacent to 69 Terenure Road East (Sheet 06)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.56.2.

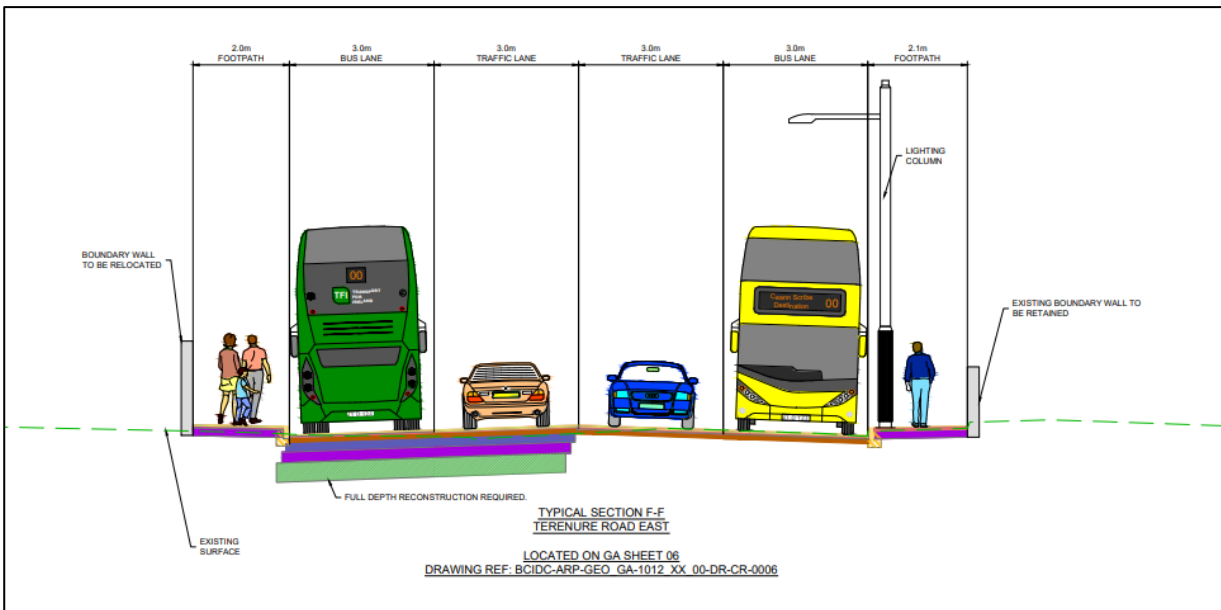


Figure 3.56.2 Typical Cross-Section adjacent to 69 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas 69 Terenure Road East is shown in Figure 3.56.3.

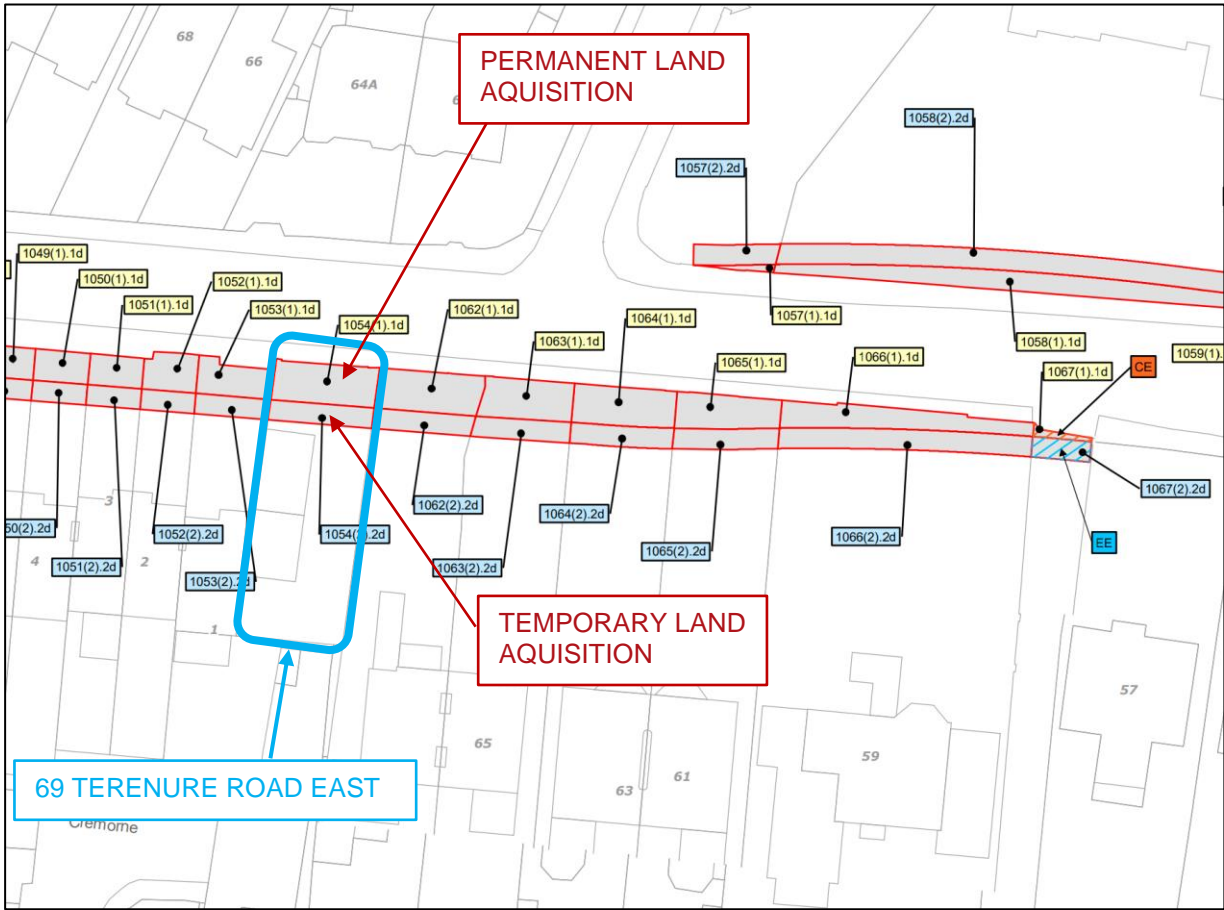


Figure 3.56.3 Extract from CPO Deposit Maps adjacent to 69 Terenure Road East

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.56.4.

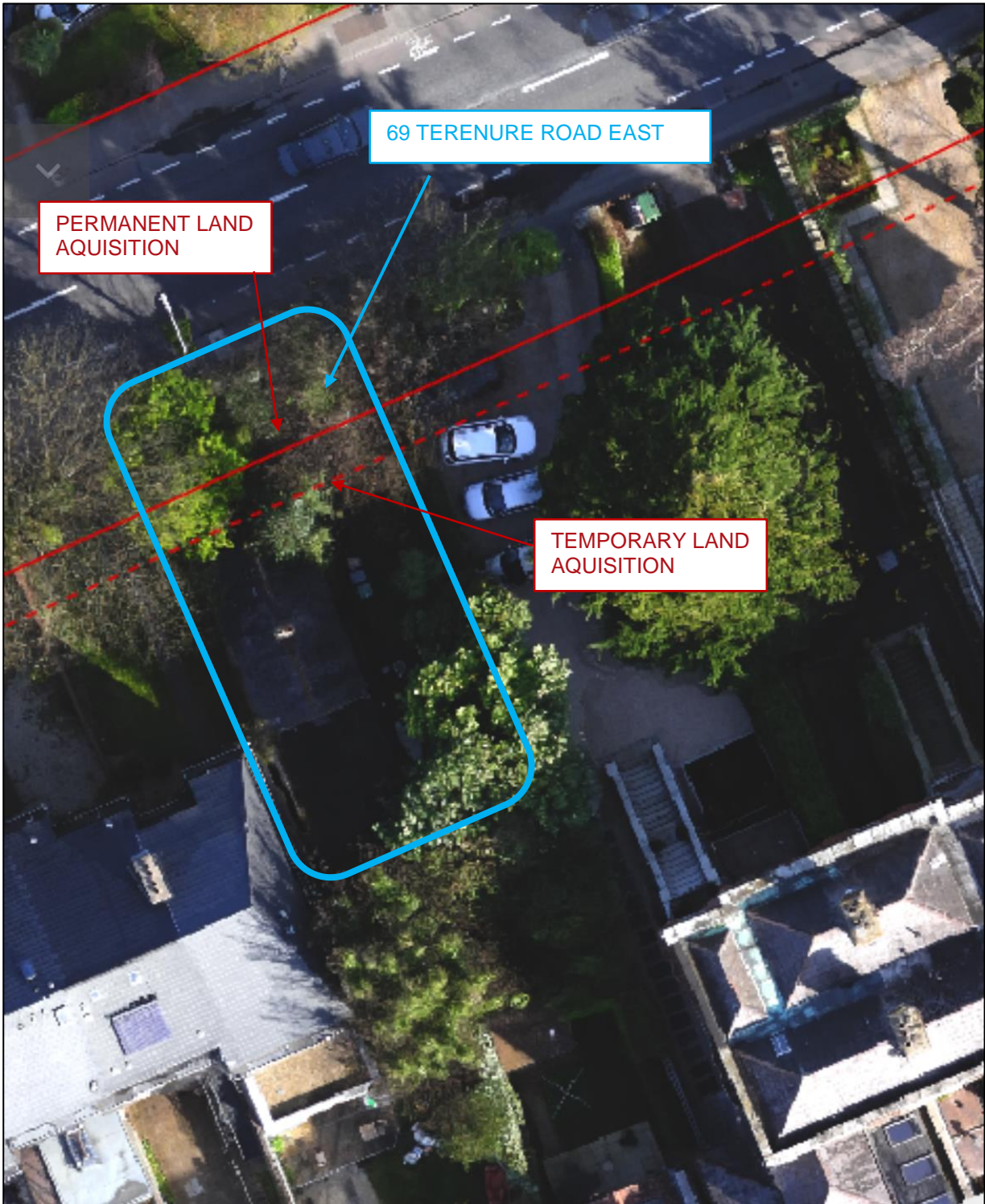


Figure 3.56.4 Proposed Land Acquisition lines adjacent to 69 Terenure Road East
The existing property frontage is shown in Figure 3.56.5.



Figure 3.56.5 Existing frontage of 69 Terenure Road East (Image source: Google)

3.56.2 Summary of the Points of Objection to the CPO by The Estate Ann Bernadette Smith

This submission objected to CPO for the reasons summarised in the following section.

- i. Section 51 and CPO Application should not be made concurrently
- ii. Contravention of Article 1 of the First Protocol to the Convention on Human Rights

The submission states that in the past CPO's have been approved and subsequently abandoned due to lack of funding, or a Notice to Treat has been served, but no works have commenced for over 10 years after the notice. The submission continues to state once the CPO is confirmed, and a Notice of Treat and Noticed to Enter is served there is no obligation on the acquiring Authority to commence or complete the works within any timeframe. The submission suggests that this contravenes Article 1 of the First Protocol to the Convention on Human Rights. The submission concludes with *"The board has a duty and an obligation to ensure that its decision meet the requirements of both European and domestic legislation and that the landowners effected by the compulsory expropriation do not suffer an excessive burden under Article 1 of the First Protocol to the Convention on Human Right"*.

- iii. No Funding Approved for the Scheme

The submission asserts that funding has not yet been approved for the detailed design, the land acquisition or the construction of the scheme.

- iv. Common Good

The submission states that the confirming Authority must prove that the acquisition of the property is clearly justified by the common good. Stating that the NTA has not demonstrated that this is the case.

- v. Consideration of Alternatives

The submission states that alternative routes have not been adequately assessed and reasons for their rejection have not been provided. The submission continues to state that the assessment carried out has not established that this route is the most effective route for delivery of the Proposed Scheme, and that the assessment does not establish that there is an urgent need for the scheme.

vi. Compliance with Development Plans

The submission states that the Proposed Scheme does not comply with the Development Plans of the Local Authorities.

vii. Impact of CPO on a protected structure

The submission asserts that the assessment has not adequately taken into account the potential ramifications of the Proposed Scheme on the O'Donnell Family home. It further notes that this residence is designated as a protected structure, which encompasses a tree safeguarded by the prevailing Development Plan Provisions

viii. General Scheme of the Planning and Development (Land Value Sharing and Urban Development Zone) Bill 2022

The submission alleges that, according to the "Land Value Sharing and Urban Development Zones Bill 2022", the rules for compensation, the process of assessment, and the title transfer procedures would all be governed by this new bill. The submission sets out that these new provisions are different from what was mentioned in the served notice, including how compensation is determined when an agreement cannot be reached. It further asserts that the Board should not confirm any CPO until property owners have been properly informed about the legislation and procedures that will be used to settle their claims.

3.56.3 Responses to the Points of Objection

This Objection raises the same concerns as CPO-14. Please refer to Section 3.14.3

3.57 CPO- 57 – Thomas MacAleavey – 53 Terenure Road East

3.57.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road. In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the laneway west of 53 Terenure Road East, with a maximum width of land to be permanently acquired of approximately 1.4m and a maximum width of temporary acquisition of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.57.1.

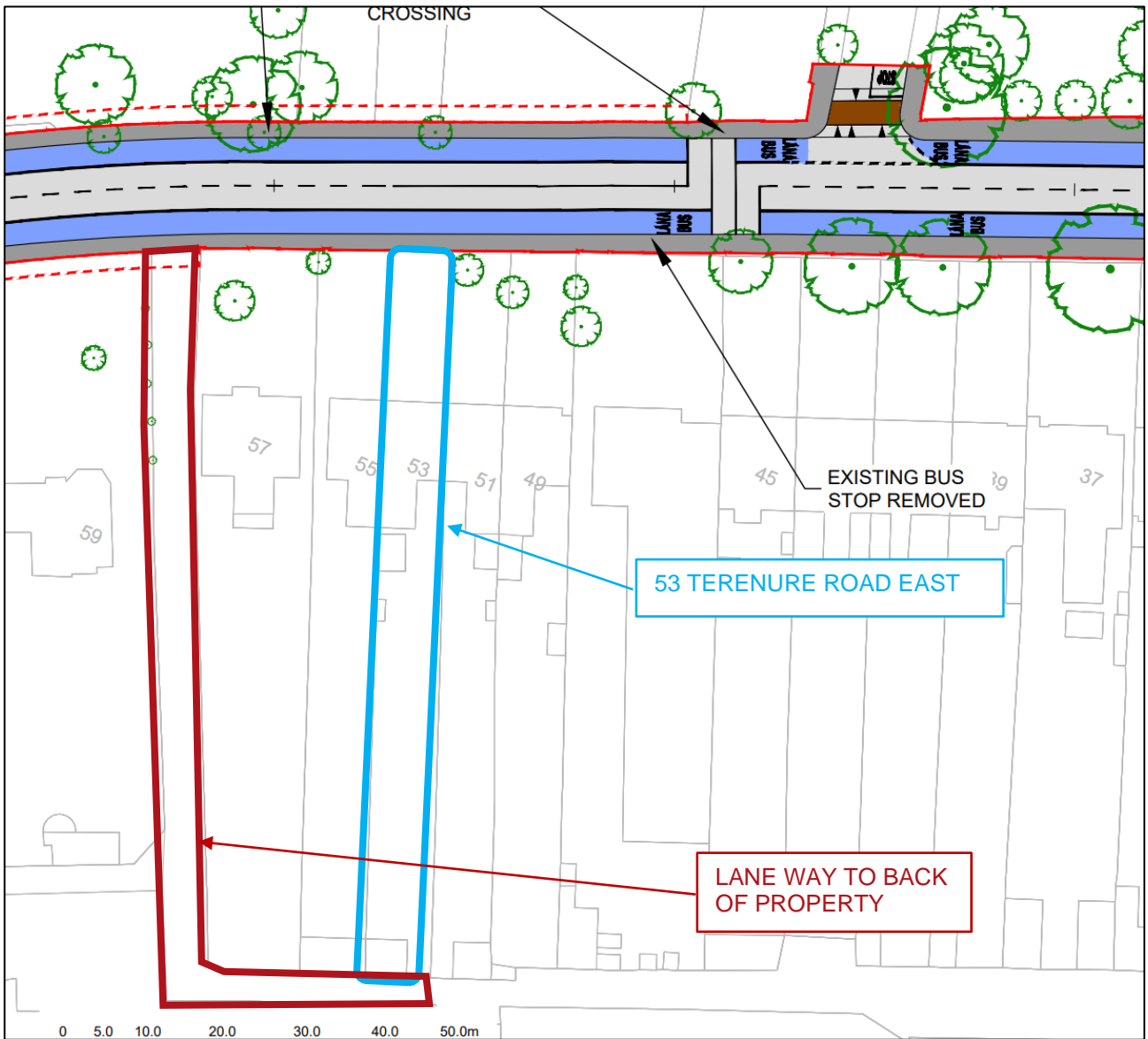


Figure 3.57.1 General Arrangement of Proposed Scheme at laneway adjacent to 53 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.57.2.

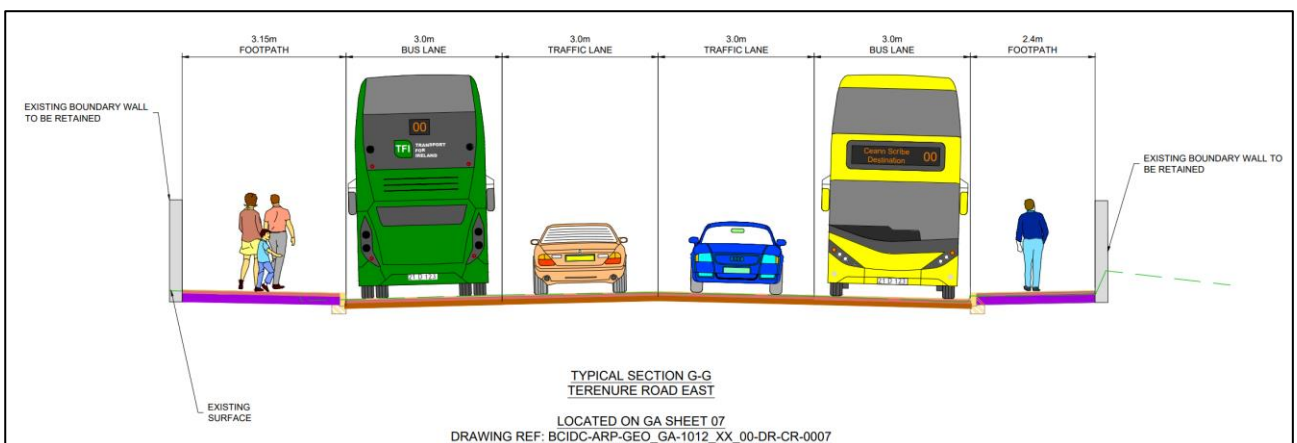


Figure 3.57.2 Typical Cross-Section at laneway adjacent to 53 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at the laneway west of 53 Terenure Road East is shown in Figure 3.57.3.

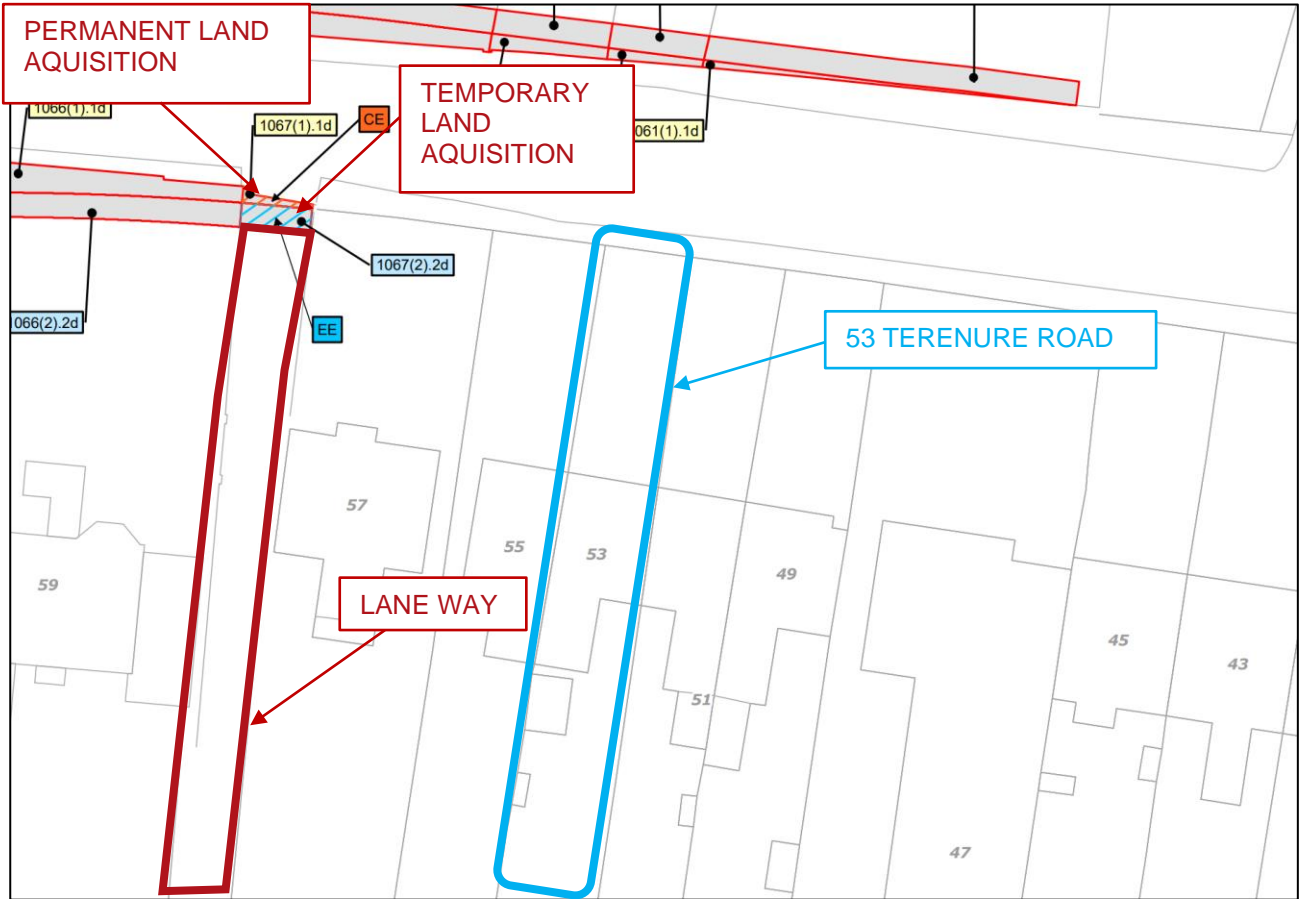


Figure 3.57.3 Extract from CPO Deposit Maps at laneway adjacent to 53 Terenure Road East



Figure 3.57.4 Proposed Land Acquisition lines at laneway adjacent to 53 Terenure Road East

The existing laneway frontage is shown in Figure 3.57.5.



Figure 3.57.5 Existing frontage at laneway and 53 Terenure Road East (Image source: Google)

3.57.2 Summary of the Points of Objection to the CPO by Thomas MacAleavey

This submission objected to CPO for the reasons summarised in the following section.

- i. Impact on protected structures on Terenure Road East

The submission expresses concern about the impact of the Proposed Scheme on protected structures on Terenure Road East.

- ii. Existing signal-controlled priority sufficient on Terenure Road East

The submission notes that the current signal-controlled bus priority system on Terenure Road East is running smoothly, it also notes that any enhancements made in the bus efficiency on Terenure Road East will be offset by the bottlenecks in Terenure and Rathgar Village.

- iii. Implications from tree removal on Terenure Road East

The submission states that the proposed removal of trees on Terenure Road East will have negative implications on the visual appeal, noise pollution and wildlife habitat.

3.57.3 Responses to the Points of Objection

- i. Impact on Protected Structures on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

- ii. Existing signal-controlled priority sufficient on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

- iii. Implications of Tree Removal on Terenure Road East

A detailed response to this item is presented in Section 2.4.2

3.58 CPO-58 – Thomas Sexton– 9 Rathfarnham Wood

3.58.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor. To accommodate this cross section, land acquisition will be required along Grange Road. Land acquisition is proposed on the northeastern side of the Grange Road.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of large segregation islands proposed where practical.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of up to approximately 1.8m and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.58.1.



Figure 3.58.1 General Arrangement of Proposed Scheme adjacent to 9 Rathfarnham Wood (Sheet 01)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.58.2.

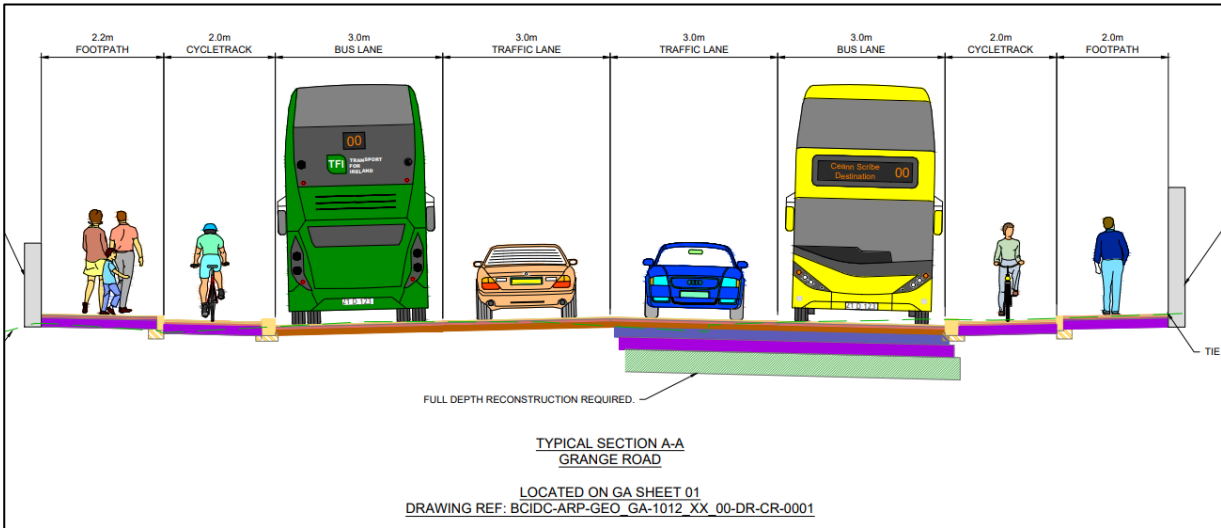


Figure 3.58.2 Typical Cross-Section adjacent to 9 Rathfarnham Wood

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 9 Rathfarnham Wood is shown in Figure 3.58.3.

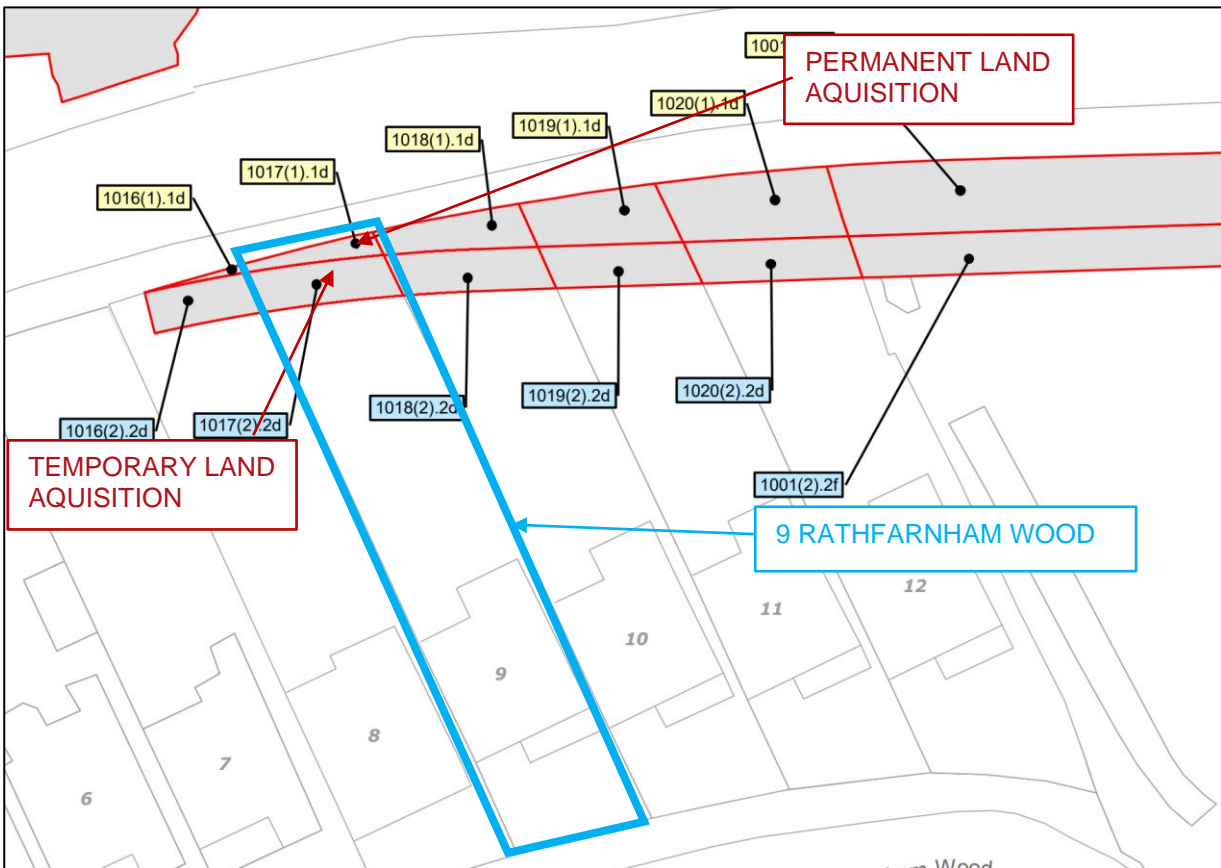


Figure 3.58.3 Extract from CPO Deposit Maps adjacent to 9 Rathfarnham Wood

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.58.4.

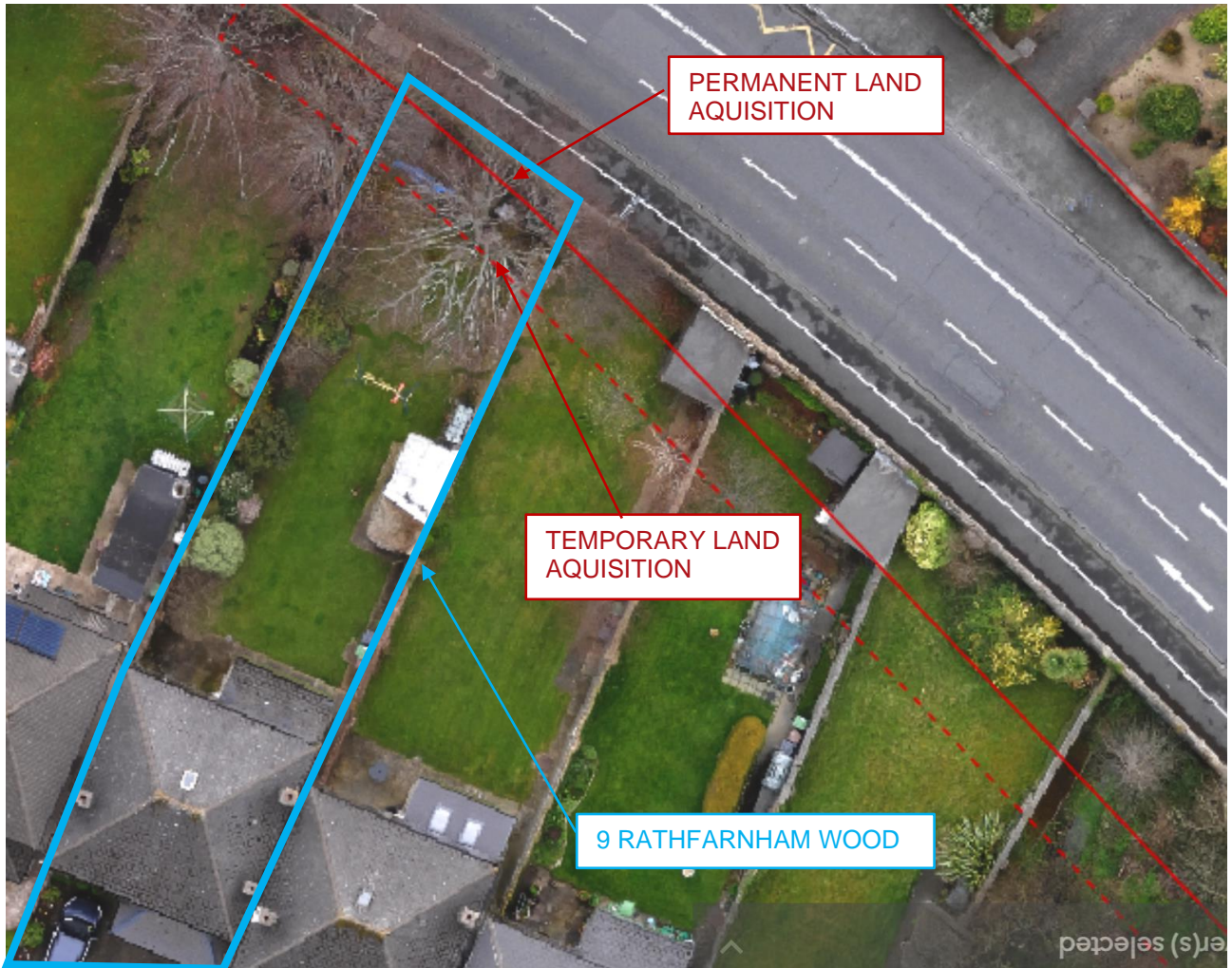


Figure 3.58.4 Proposed Land Acquisition lines adjacent to 9 Rathfarnham Wood
 The existing property rear boundary is shown in Figure 3.58.5.

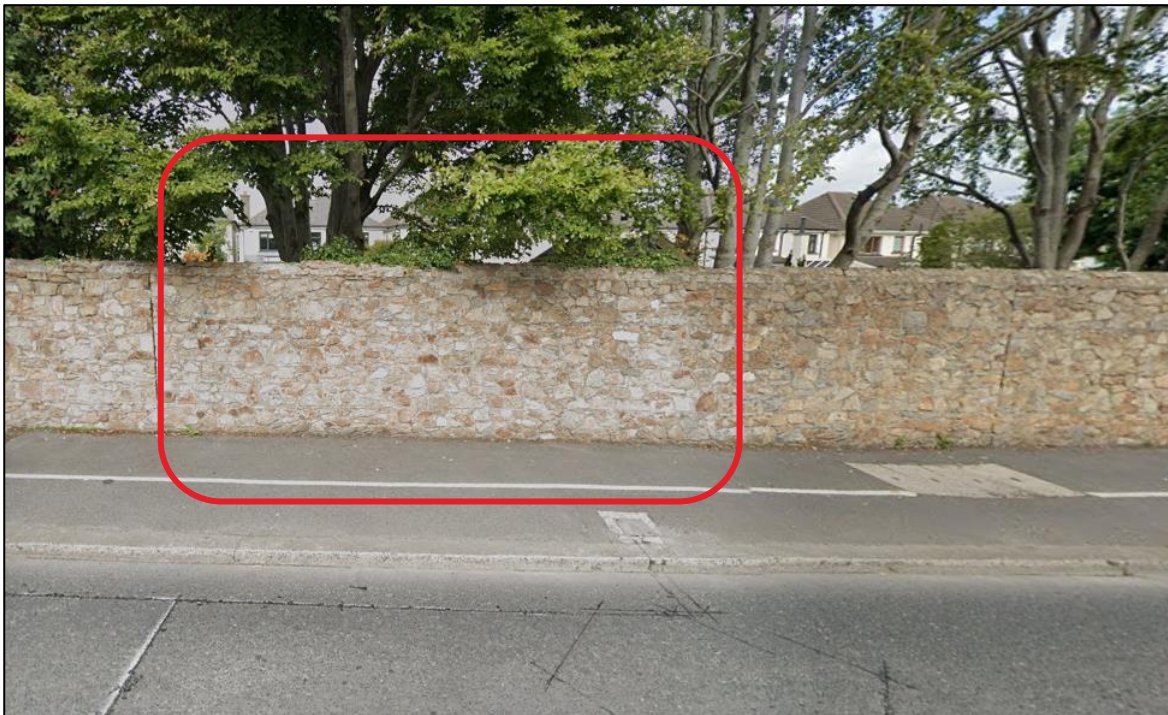


Figure 3.58.5 Existing property rear boundary of 9 Rathfarnham Wood (Image source: Google)

3.58.2 Summary of the Points of Objection to the CPO by Thomas Sexton

i. Necessity of road widening

The submission states that road widening adjacent to 9 Rathfarnham Wood are unnecessary, adding that the environmental impact involved relocating the granite wall are unnecessary. It also states that the land acquisition could be avoided by deviating from the standard footpath and cycle track widths.

ii. Removal of tree

The submission expressed concerns regarding the removal of a tree from the back garden of 9 Rathfarnham Wood, it also noted that the removal of the Beech tree will likely negatively impact the surrounding trees.

iii. No consideration of Glin River

The submission notes that Environmental, Impact Assessment Report, Natura Impact Statement and other scheme documents are deficient as they do not consider Glin River or Whitechurch Stream. It also appends a response from Inland Fisheries to the planning application for a nearby housing development which sets out the importance of the Glin River to the area.

iv. Consideration of alternative options

The submission contends that the acquisition of land from Rathfarnham Castle Park and other private properties to install an outbound lane from Butterfield Avenue/Grange Road junction to the Grange Road/Nutgrove Avenue junction is not justifiable given the significant impact on biodiversity within the park, particularly when there is no realistic opportunity to install bus lanes on either Nutgrove Avenue or Grange Road beyond the Nutgrove Avenue/Grange Road junction given the existing physical constraints. The submission goes on to suggest using bus priority as an alternative to reduce landtake need.

v. Climate Impact from Tree Removal

The submission notes that a significant number of trees will be removed from Rathfarnham Castle Park and private property along Rathfarnham Road under the scheme proposals.

vi. Biodiversity Impact

The submission notes that scheme proposals will adversely impact on a vast variety of wildlife within Rathfarnham Castle Park which includes bats, mining bees, frogs, otter, squirrels, foxes, crows, mallards, tufted duck, moorhens, heron, black headed gulls, kingfisher, mandarin ducks and many other wild birds, many of which have protected status.

vii. Landscape and Visual

The submission notes that removal of trees from Rathfarnham Castle Park would be detrimental to the area in terms of visual and amenity use. It also notes the impact on the Woodland playground.

viii. Noise, Vibration and Air Quality

The submission contends that the construction activities will have a significant adverse impact on the wildlife and woodland playground within the park.

3.58.3 Responses to the Points of Objection

Items iii – viii raises the same concerns as CPO-08. Please refer to Section 3.8.3 for responses to these items. See below for response to item i and ii

i. Necessity of road widening

EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report provides an overview of the various route alternatives that were evaluated during the process of establishing the proposed scheme. It also outlines the different stages that were undertaken during the development of the proposed scheme. As described in the above documents the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained.

For the section between adjacent to 9 Rathfarnham Road, three options (SA1 to SA3) have been developed during the development of the Emerging Preferred Route (EPR). The assessment process of three options is described in section 5.4 of the Rathfarnham to City Centre Core Bus Corridor Feasibility Study and Options Assessment (FSOA), included in appendix I2 of the supplementary documents submitted alongside the planning application.

Following the review of the EPR and submissions received as part of the public consultation within the section between Nutgrove Avenue to Willbrook Road, it was decided that alternative options could be feasible within this section of the Proposed Scheme. For this reason, two alternative options (RC1 and RC2) have been developed. The alternative options are described in detail in section 4.4.1.1 of the Preferred Route Option Report included in the supplementary documents submitted alongside the planning application.

A detailed response to the optioneering process complete for Grange Road and Rathfarnham Road is provided in Section 2.3.2 of this report.

Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the desirable width of 2.0m for footpaths and desirable width of 2m for cycle tracks. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

Providing the optimum cross-section described in the above paragraphs achieves the project objectives of enhancing the potential for cycling and walking by providing safe infrastructure. EIAR Volume 2 Chapter 6 Traffic & Transport, section 6.4.6.1 outlines the qualitative assessment process that was undertaken to assess the quality of the cycling and pedestrian infrastructure of the Proposed Scheme in context of changes in physical provision between the Do Minimum and So Something Scenarios.

Pedestrian Infrastructure

Table 6.27 in section 6.4.6.1.3.1 of Chapter 6 demonstrates that the scheme will have a long-term positive impact on the quality of the pedestrian infrastructure between the R821 Nutgrove Avenue and R137 Terenure Road North.

Junctions	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity	Significance of Effect
R821 Nutgrove Avenue / R821 Grange Road / R822 Grange Road signalised junction	A000	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / R821 Grange Road / R115 Willbrook Road signalised junction	A350	D	A	Medium	Medium	Positive Significant
R115 Rathfarnham Road / L8451 St Mary's Avenue priority junction	A375	D	A	Medium	High	Positive Very Significant
R114 Rathfarnham Road / R115 Rathfarnham Road / R114 Butterfield Avenue signalised junction	A475	E	A	High	Medium	Positive Very Significant
R114 Rathfarnham Road / L4014 Main Street / L8103 Castleside Drive signalised junction	A750	D	A	Medium	Medium	Positive Significant
R114 Rathfarnham Road / L8122 Crannagh Road priority junction	A900	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / L8068 Brookvale Road priority junction	A1000	D	B	Medium	Low	Positive Moderate

R114 Rathfarnham Road / L8384 Rathfarnham Park priority junction	A1150	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / R112 Dodder Park Road / R112 Dodder View Road signalised junction	A1250	C	A	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Westbourne Road priority junction	A1400	D	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Rathdown Park signalised junction	A1500	E	B	Medium	Low	Positive Moderate
R114 Rathfarnham Road / Bushy Park Road signalised junction	A1550	C	B	Low	Medium	Positive Moderate
R114 Rathfarnham Road / Fergus Road priority junction	A1650	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Cormac Terrace priority junction	A1700	D	B	Medium	High	Positive Very Significant
R114 Rathfarnham Road / Beechlawn Way priority junction	A1750	D	B	Medium	High	Positive Very Significant
R137 Terenure Road North / R114 Terenure Road East / R114 Rathfarnham Road / R137 Terenure Place priority junction	H000	D	A	Medium	High	Positive Very Significant
Orwell Road / Zion Road signalised junction (along alternative quiet route for cyclists)	B900	E	A	High	High	Positive Profound
Section Summary		D	A	Medium	Medium	Positive Significant

Figure 3.58.6 Section 2 -Significance of Effects for Pedestrian Impact during Operational Phase (Table 6.27 of EIAR Chapter 6)

The LoS during the Do Minimum scenario ranges between C and E, with three of the 17 impacted junctions along this section given a low E rating. The LoS will improve to an A / B rating at all impacted junctions in the Do Something scenario. This is as a result 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 footway 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 **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.*

Cycling Infrastructure

Table 6.28, in section 6.4.6.1.3.2 of Chapter 6 outlines the qualitative assessment along section 2 of the Proposed Scheme in relation to cycling impact during the operation phase.

Location	Chainage	Do Minimum LoS	Do Something LoS	Impact	Sensitivity of Environment	Significance of Effect
R821 Nutgrove Road to Butterfield Avenue	A000 – A475	C	A	Medium	High	Positive Very Significant

R114 Butterfield Avenue to Main Street	A475 - A750	C	A	Medium	Medium	Positive Significant
R112 Dodder View Road to Rathdown Park	A1250 - A1500	C	B	Low	Medium	Positive Moderate
Rathdown Park to R137 Terenure Road North	A1500 - H000	C	B	Low	High	Positive Moderate
Alternative Quiet Route: Bushy Park Road to Orwell Road	A1550 - A2500	D	C	Low	Low	Positive Slight
Alternative Route: Orwell Road to R114 Terenure Road East	A2500	D	A	High	High	Positive Profound
Section Summary		C	B	Low	High	Positive Moderate

Figure 3.58.7 Section 2 - Cycling Impact during Operational Phase (Table 6.28 of EIAR Chapter 6)

As set out in 6.4.6.1.3.2:

Table 6.28 demonstrates demonstrate that the scheme will have a **Positive, Moderate and Long-term effect** on the cycling environment between the R821 Nutgrove Avenue and R137 Terenure Road North.

The LoS rating during the Do Minimum scenario ranges between C and D, with two of the six impacted routes along this section being given a low D rating. These ratings have been determined using the previously referenced assessment criteria set out in Table 6.20. The LoS in the Do Something scenario is C for one route, B for two route and A for three routes. This is as a result of improved segregation for cyclists and junction treatment in the form of cycle lanes traversing priority junctions and continuing through signalised junctions with protected treatment as part of the Proposed Scheme.

Further details on the significant benefits of the Proposed Scheme are presented in Section 2.1.1.

ii. Removal of Tree

EIAR Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is one tree proposed to be removed at No. 9 Rathfarnham Wood. This tree has been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- An 16m tall mature Beech displaying overall good condition, of Category B2 and with 20+ estimated remaining years;

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the eastern section of Rathfarnham Road between entrance to Rathfarnham Wood residential estate and Willbrook Road it is proposed to plant 13 No. Acer Campestre 'Elsrijk' Semi-Mature Field Maple Trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17. As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

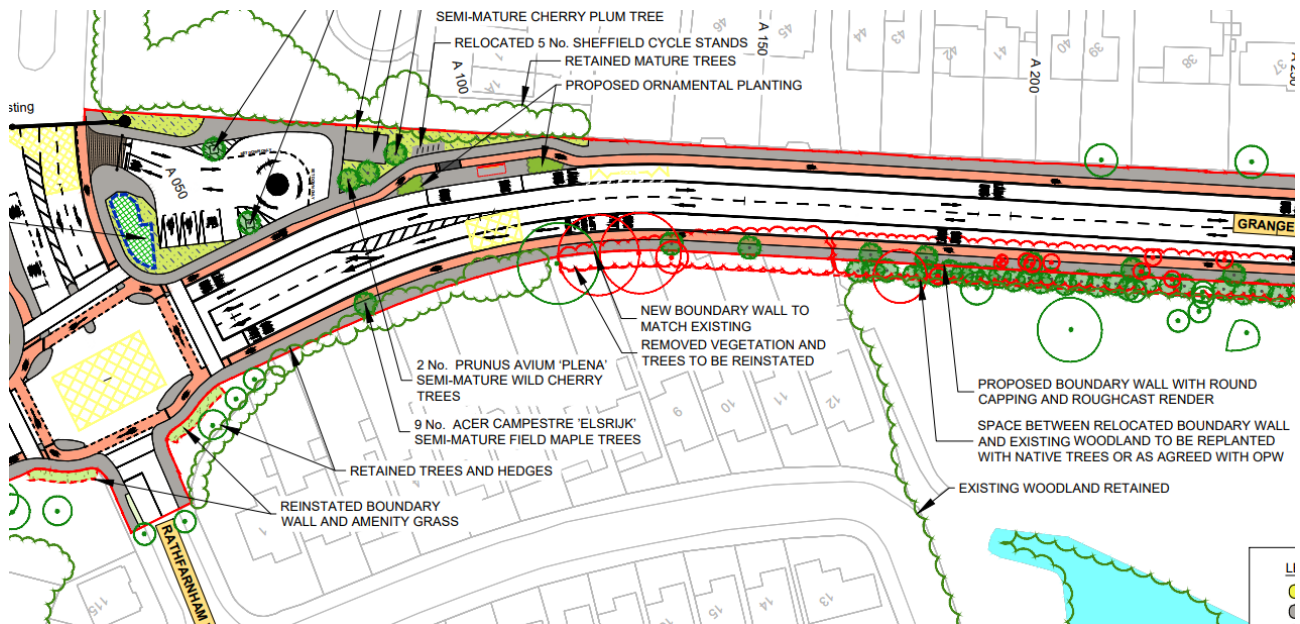


Figure 3.58.8 Extract from Landscaping General Arrangement Drawings (Sheet 1)

Table 4 of Appendix A17.1 notes that there will be 935 trees retained as part of the Proposed Scheme with a total of 169 trees identified for removal. Table 14.1 of the Preliminary Design Report in the Supplementary Information notes that there will be 400 new trees planted, resulting in an overall net increase of 24% in individual trees as a result of the Proposed Scheme.

In relation to the concern raised relating to impact on trees within proximity of the tree proposed for removal. A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities.

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 by a professional qualified arborist. For details of trees to be retained refer to Tree Protection Plans (BCIDC-ARP-ENV_LA1012_XX_00-DR-ES-0001 in the Arboricultural Impact Assessment).

These methods are further elaborated upon in Section 6.3 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR.

Given the constraints of the site, incursions into the RPA may be unavoidable therefore the mitigation measures as set out in the method statement are to be adhered to. The Arboricultural Method Statement included as Appendix B sets out the methodology for specific activities near retained trees. The following general principles as outlined below have been applied:

- *The extent of resurfacing has not been fully determined at this stage. Where resurfacing of existing hard surfacing is required, this will be applied over the existing wearing course or on the existing intact subbase following the careful removal of the wearing course.*
- *New surfacing on existing unsurfaced ground within a significant proportion of an RPA will be achieved using a three-dimensional cellular confinement system (e.g. Cellweb or equivalent), installed without excavation using no dig techniques.*
- *Where existing verges or footways are to be widened out into the existing carriageway, kerb stones and haunching will be carefully removed by hand to protect adjacent tree roots. The Proposed Scheme will likely result in improved growing conditions for trees where carriageway is replaced by less heavily engineered footway or verge.*

- *Where the existing road carriageway is to be widened requiring a section of cut into a tree RPA or where new drainage cannot feasibly be adjusted to fully avoid the RPA, tree retention will be feasible where trees are considered on balance to be of an age, condition and species which will tolerate the degree of disturbance required (generally not more than a maximum of 20% of the overall RPA) and that this is preferable to the loss of the tree. The area of excavation nearest the tree will be carried out by hand and roots will be carefully assessed by an arboriculturist and pruned as required. New kerb stones and any haunching will be the narrowest profile feasible and alternative methodologies such as reinforced bridged/lintel sections of kerb can be applied, should significant roots need to be retained and worked around.*
- *Where a new boundary wall is to be constructed within an RPA, alternative footings utilising low diameter pads or piles will be carefully located to avoid tree roots (via hand dug trial holes) and will support floating beams set at or above ground level, unless trial holes (under arboricultural supervision) determine that limited careful excavation is viable to allow beams to be set into the ground.*
- *The position of new lamp columns, signs and bus shelter footings can be locally adjusted to avoid significant roots and tree canopies and the lowest diameter footings feasible will be employed (such as screw piles or equivalent). Footings will be hand dug within RPAs.*
- *All new or diverted utilities will avoid the RPA of retained trees where practicable. Where this is not practicable, they will be installed using trenchless methods or via careful excavation in accordance with BS5837: 2012 and guidance from the National Joint Utilities Group (NJUG) Volume 4. Utilities to be removed will be cut off and left in situ where feasible to minimise disturbance or will be removed via careful excavation.*

Section 6.5 of the Arboricultural Impact Assessment Report presented in Appendix 17.1 of the EIAR further states methods for protection of retained trees:

Retained trees are vulnerable to damage from construction activities which can include physical damage to stems and branches following impacts with plant, root severance following trenching, root death or dysfunction following damage to soil structure (caused by the movement of people or machinery on unsurfaced ground) or via the spillage of materials toxic to tree health. The default position is that the RPA and canopy spread of trees to be retained will form an effective Construction Exclusion Zone, secured with robust fencing where no access will be permitted. Where access is necessary within this area, special measures such as the use of ground protection (or retention of existing hard surfacing) and arboricultural supervision are generally required. In some cases, existing boundary walls and fences can be employed as a tree protection barrier where they are robust and sufficient to prevent access or damage.

3.59 CPO-59 – Tom Kelly– 2 The Townhouses, Terenure Road East

3.59.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description. On Terenure Road East, between the Terenure Road North junction and St. Joseph's Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction. Bus priority will be provided through this section by signal-controlled priority. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village. Between St. Joseph's Church and the Rathgar Avenue junction it is intended to provide a bus lane and general traffic lane in both directions. To accommodate the proposed cross section, it is proposed to acquire land from adjacent properties on both northern and southern sides of Terenure Road East between Saint Joseph's Church and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 3.8m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.59.1.

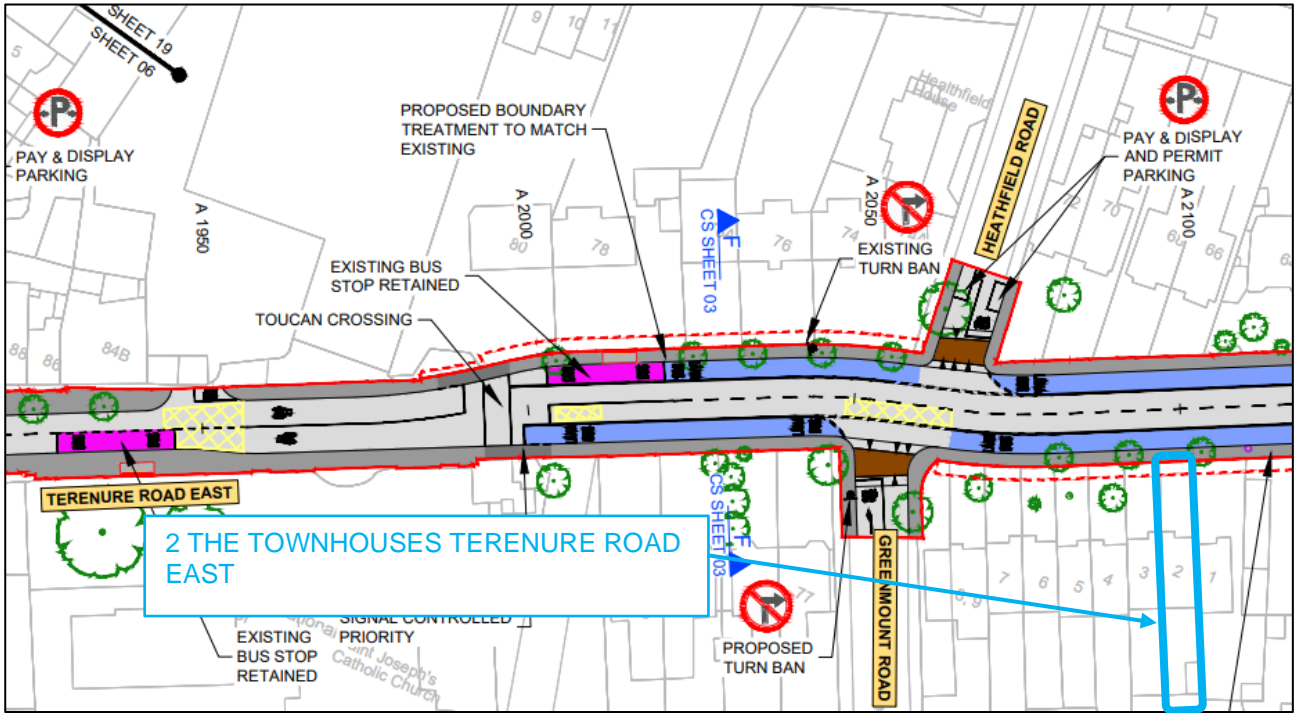


Figure 3.59.1 General Arrangement of Proposed Scheme adjacent to 2 The Townhouses Terenure Road East (Sheet 06)
 The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.59.2.

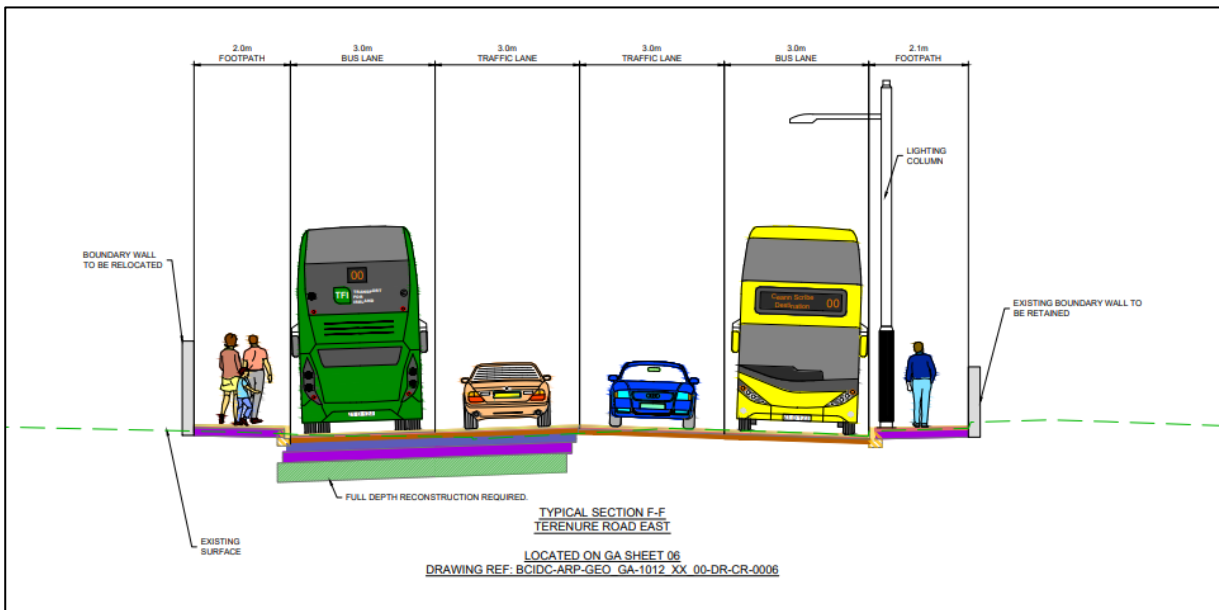


Figure 3.59.2 Typical Cross-Section adjacent to 2 The Townhouses Terenure Road East
 The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 4 The Townhouses Terenure Road East is shown in Figure 3.59.3.

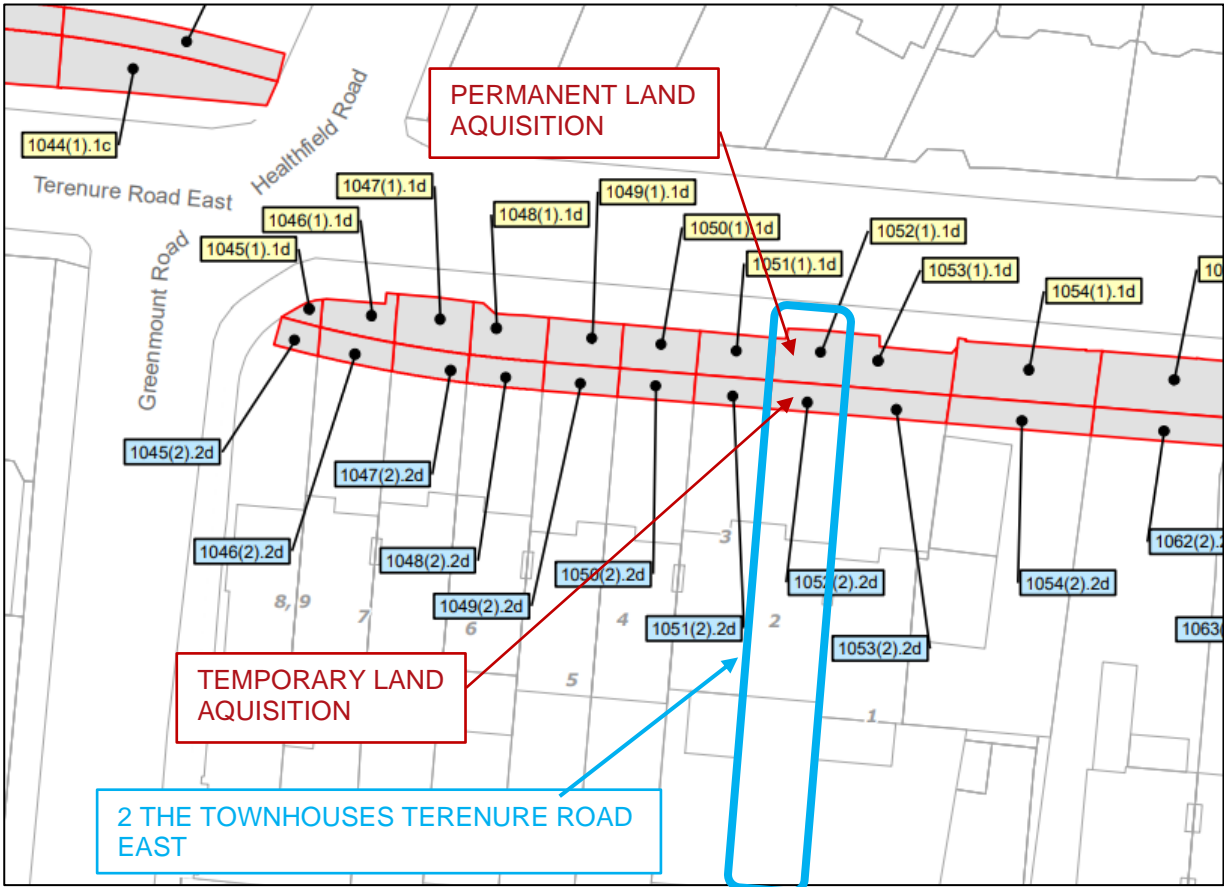


Figure 3.59.3 Extract from CPO Deposit Maps adjacent to 2 The Townhouses Terenure Road East
 The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.59.4.

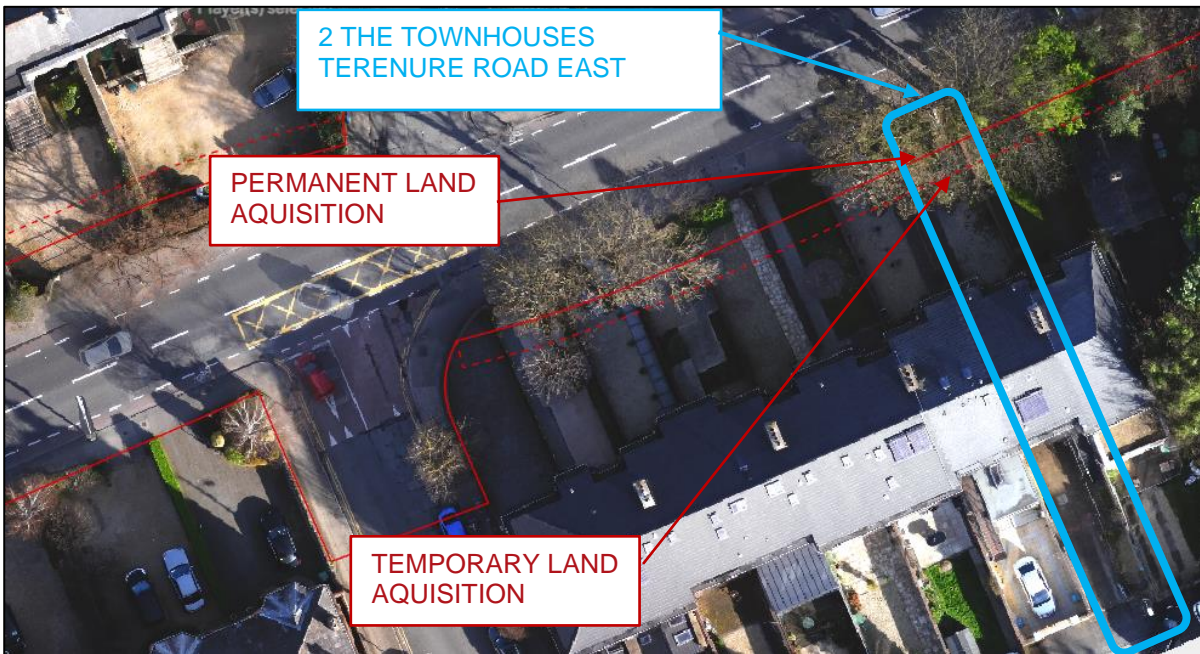


Figure 3.59.4 Proposed Land Acquisition lines adjacent to 2 The Townhouses Terenure Road East
 The existing property frontage is shown in Figure 3.59.4.



Figure 3.59.5 Existing frontage of 2 The Townhouses Terenure Road East (Image source: Google)

3.59.2 Summary of the Points of Objection to the CPO by Tom Kelly

This submission objected to CPO for the reasons summarised in the following section.

- i. Inadequate consultation

The submission states that the consultation conducted by the NTA has not been satisfactory, falling short of standards.

- ii. Section 51 and CPO Application should not be made concurrently
- iii. Changes to work patterns due to the COVID-19 pandemic

The submission states that the Covid-19 pandemic has brought a change in traffic patterns and that the scheme should be altered to take account of this development.

- iv. Implementation of other BusConnects measures first

The submission states that less intrusive measures, such as cash less payment systems, park and ride facilities and or-organising bus stops, should be implemented prior to undertaking the infrastructure works. Stating that, once implemented, their benefits should be assessed.

- v. Metro is more appropriate for this corridor

The submission notes that the benefits of the Proposed Scheme are marginal and that with increasing population, a metro or expansion of the light rail system will be required in the long term.

- vi. Existing bus priority signal on Terenure Road East is adequate

The submission notes that there is an existing bus priority signal in operation on Terenure Road East that operates satisfactorily and as such it is not necessary to widen the road.

- vii. Traffic impact of the Proposed Scheme at Terenure Cross

The submission notes concern around the operation of the Terenure Cross junction with the Proposed Scheme in place.

- viii. Impact on protected structures

The submission expresses concern about the impact of the Proposed Scheme on protected structures on Terenure Road East.

ix. Removal of Parking in Terenure Village

The submission notes that the Proposed Scheme will remove parking in Terenure Village which will have a profound impact on businesses in the village.

x. Removal of Trees and increased noise

The submission notes that the Proposed Scheme will result in the removal of 2 trees from the front garden of the property and that this would increase noise. It was noted in the submission that the road would be 20m closer to the house than currently is the case.

3.59.3 Responses to the Points of Objection

i. Inadequate consultation

A detailed response to this item is presented in Section 2.1.1.

ii. Section 51 and CPO Application should not be made concurrently

It was entirely appropriate and proper for the NTA to make (i) an application to the Board for confirmation of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 (the “CPO”) and (ii) an application to the Board for approval of the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme (the “Proposed Scheme”) under section 51 of the Roads Act 1993 (as amended) (the “Roads Act”).

As the Board will be aware, section 51(7)(b) of the Roads Act provides as follows:

“(7) (b) Where an application for approval under this section [being section 51 of the Roads Act 1993 (as amended) which is what has occurred here in relation to the Proposed Scheme] relates to a proposed road development, and

- i. *a scheme submitted to the Minister [now An Bord Pleanála] for approval under section 49, or*
- ii. *an application submitted to the Minister [now An Bord Pleanála] for a bridge order under the Act of 1946, or*
- iii. *a compulsory purchase order submitted to the Minister [now An Bord Pleanála] for confirmation [which is what has occurred here with this CPO],*

*relate wholly or partly to the same proposed road development, the Minister [now An Bord Pleanála] **shall** make a decision on such approval and on the approval of such scheme or the making of such bridge order or the confirmation of such compulsory purchase order **at the same time.**” (emphasis added)*

As the NTA’s application for approval of the Proposed Scheme under section 51 of the Roads Act and the CPO submitted to the Board for confirmation “*relate wholly or partly to the same proposed road development*”, the Board is therefore statutorily required to make its decisions at the same time. Therefore, it is not open to the Board to accede to the request made on behalf of the objector to first make a decision in relation to the application for approval of the Proposed Scheme under section 51.

Further, there are very many practical reasons including in relation to the efficient use of the decision maker’s resources as to why it is entirely appropriate to deal with the section 51 application and the related application for confirmation of the CPO together. Indeed, this is also in ease of those who may wish to make an objection and/or submission both in writing and/or at any oral hearing that may be held in relation to the section 51 application and the application for confirmation of the CPO.

iii. Changes to work patterns due to the COVID-19 pandemic

A detailed response to this item is presented in Section 2.1.1.

iv. Implementation of other BusConnects measures first.

A detailed response to this item is presented in Section 2.1.1.

- v. Metro is more appropriate for this corridor

A detailed response to this item is presented in Section 2.1.1.

- vi. Existing bus priority signal on Terenure Road East is adequate.

A detailed response to this item is presented in Section 2.4.2.

- vii. Traffic impact of the Proposed Scheme at Terenure Cross

The submission raised a concern with the proposed layout at the Terenure Cross junction, in particular the introduction of a right turn for buses from Rathfarnham Road to Terenure Road East noting that this would create congestion at the junction.

Section 4.16 of the Preliminary Design Report provided in the Supplementary Information sets traffic management measures which will be implemented on the route to facilitate the Proposed Scheme. An extract from this table is presented in Figure 3.59.6 below.

Location	TM measure implemented	Reason for Mitigation	Impact of Mitigation
Rathfarnham Road/Castleside Drive/Main Street Junction	Bus Priority Signals at Rathfarnham Road/Castleside Drive/Main Street Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Dodder Park Road Junction	Bus Priority Signals at Rathfarnham Road/Dodder Park Road Junction	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Rathfarnham Road/Rathdown Park Junction	Inbound Bus Priority Signal at Rathfarnham Road/Rathdown Park	To allow for bus priority on Rathfarnham Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.
Terenure Road East/Terenure Road West Junction	Right turn for buses from Rathfarnham Road to Terenure Road East introduced through bus priority signal	To allow for bus movements in this direction as per the A spine in the New Dublin Area Bus Network	Buses allowed to turn right from Rathfarnham Road onto Terenure Road East.
Terenure Road East/Greenmount Road Junction	No Right turn allowed from Greenmount Road onto Terenure Road East	To mitigate against inbound traffic bypassing right turn ban at Terenure Cross	No right turn from Greenmount Road onto Terenure Road East for general traffic.
Rathgar Road/Highfield Road Junction	Inbound Bus Priority Signal	To allow for bus priority on Rathgar Road	Improved reliability for bus journey times along the corridor, and improved flexibility in junction stage and operation.

Figure 3.59.6 Extract from Table 4.25 of the Preliminary Design Report

As can be seen in the Junction System Design drawings included in Volume 3 of the EIAR, it is proposed that buses turning right from Rathfarnham Road would do so in its own stage to remove any potential safety issues. An extract from the staging diagrams is presented below with the relevant stage highlighted.

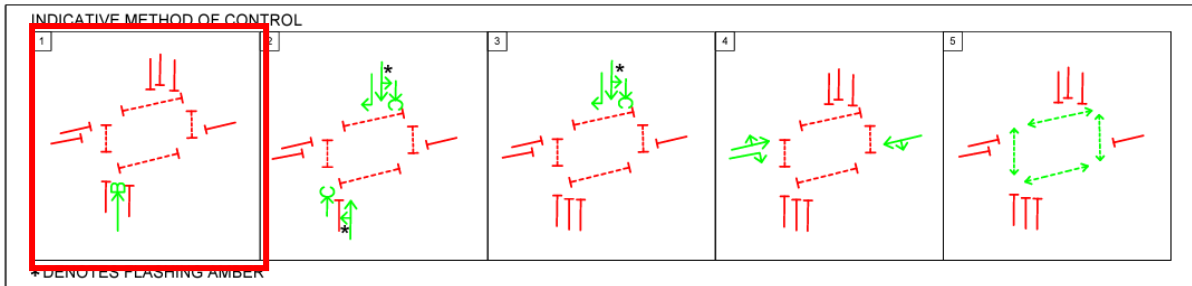


Figure 3.59.7 Extract from Junction System Design Drawings (Sheet 8)

The Junction Design Report in Appendix A6.3 of the EIA Volume 4 Part 2 of 4 presents a LinSig analysis for all major junctions along the Proposed Scheme with the assessment for Terenure Cross presented on page 34. This illustrates that the junction would be operating at capacity in both the morning and evening peaks. While the junction may be congested during the peak periods, it will be safer for pedestrians and cyclists through the introduction of shorter, more direct pedestrian crossings as well as upgrading crossings to toucan crossings. The proposed arrangement will also ensure that buses have priority through the junction.

viii. Impact on protected structures on Terenure Road East

A detailed response to this item is presented in Section 2.4.2.

ix. Removal of Parking in Terenure Village

A detailed response to this item is presented in Section 2.4.2.

x. Removal of Trees and increased noise

It is noted that this submission claims that the road would be 20m closer to their house. As noted in the introduction to this response, the Proposed Scheme will result in c. 3.8m of land to be permanently acquired to construct the outbound bus lane and footpath on the southern side of Terenure Road East. The proposals will result traffic shifting c. 3.8m towards the property.

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. If the CPO is confirmed by An Bord Pleanála, 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 EIA or conditions/modifications from An Bord Pleanála in relation to the Proposed Scheme application.

In relation to increase in noise levels, section 9.4.4.1 of EIA Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.”* Table 9.39 lists these roads and Terenure Road East is not included, indicating that there are no potential significant noise impacts envisaged along Terenure Road East.

EIA Volume 4 Part 2 Chapter 17 Appendix A17 provides the Arboricultural Impact Assessment Report (AIAR), which includes detailed drawings showing all trees that are to be removed. It can be seen from these drawings that there is Two trees proposed to be removed at No. 2 The Townhouses, Terenure Road East. These trees have been surveyed and assessed as part of the AIAR, and has been categorised as follows:

- An 24m tall mature Sycamore displaying overall good condition, of Category B2 and with 20+ estimated remaining years;
- An 24m tall mature Sycamore displaying overall good condition, of Category B2 and with 20+ estimated remaining years.

Tree loss will be mitigated with a robust and high-quality scheme of new tree planting as detailed in the Landscape General Arrangement drawings included in EIAR Volume 3 Chapter 4. Along the section of Terenure Road East between Greenmount Road and Ferrard Road, it is proposed to plant 5 No. Pyrus Calleryana 'Chanticleer' semi-mature Callery pear trees. Along the Proposed Scheme there will be substantial replanting of trees as detailed in section 17.4.4.2.9 of Chapter 17. As states in section 12.5.1.2.1 of Chapter 12, 400 trees will be planted throughout the scheme resulting in a net increase of 231 trees along the Proposed Scheme.

As shown on the Landscape General Arrangement drawings in Volume 3 of the EIAR, it is noted that approximately 19 street trees are proposed along Terenure Road East between the Rathfarnham Road/Terenure Place/Terenure Road North junction and the Rathgar Road/Orwell Road junction, with the proposed removal of approximately 18 street trees, resulting in a net gain of approximately 1 tree along this section of the Proposed Scheme. Approximately 107 trees are being retained along this section.

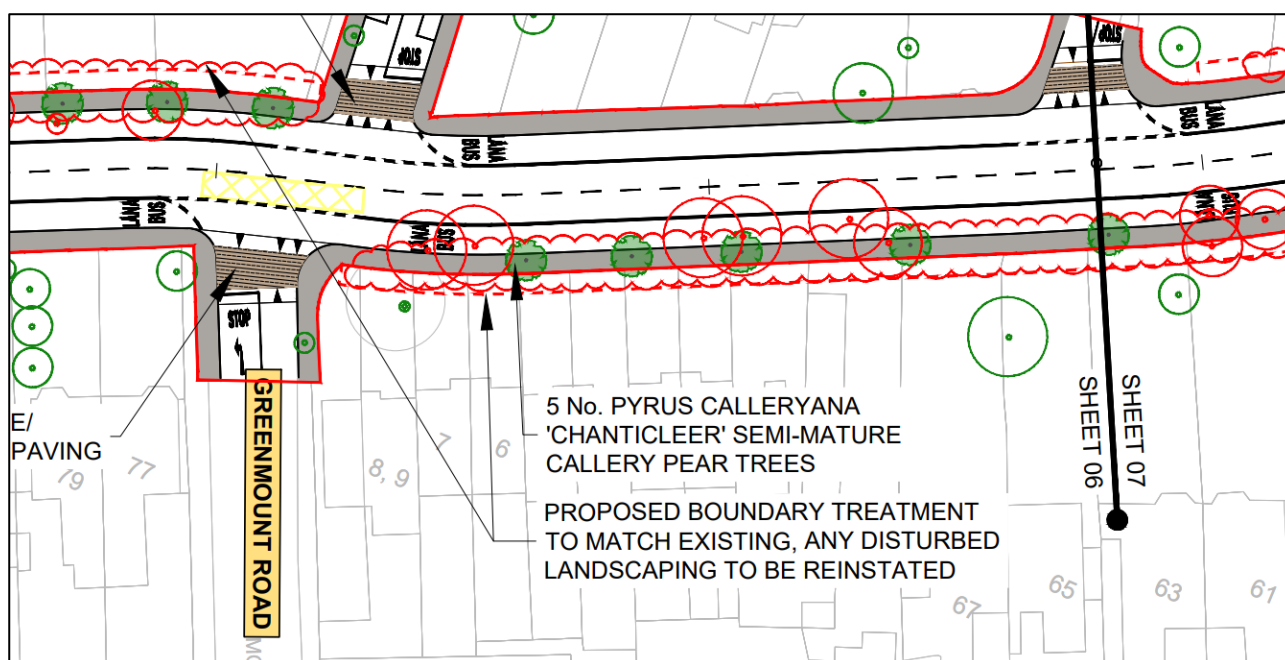


Figure 3.59.8 Landscape General Arrangement Drawings at Terenure Road East

Further details on tree loss and noise impacts along Terenure Road East are presented in Section 2.4.2.

3.60 CPO-60 – Vera Bannigan – 1A Main Street, Rathfarnham

3.60.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 6.3m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.60.1.

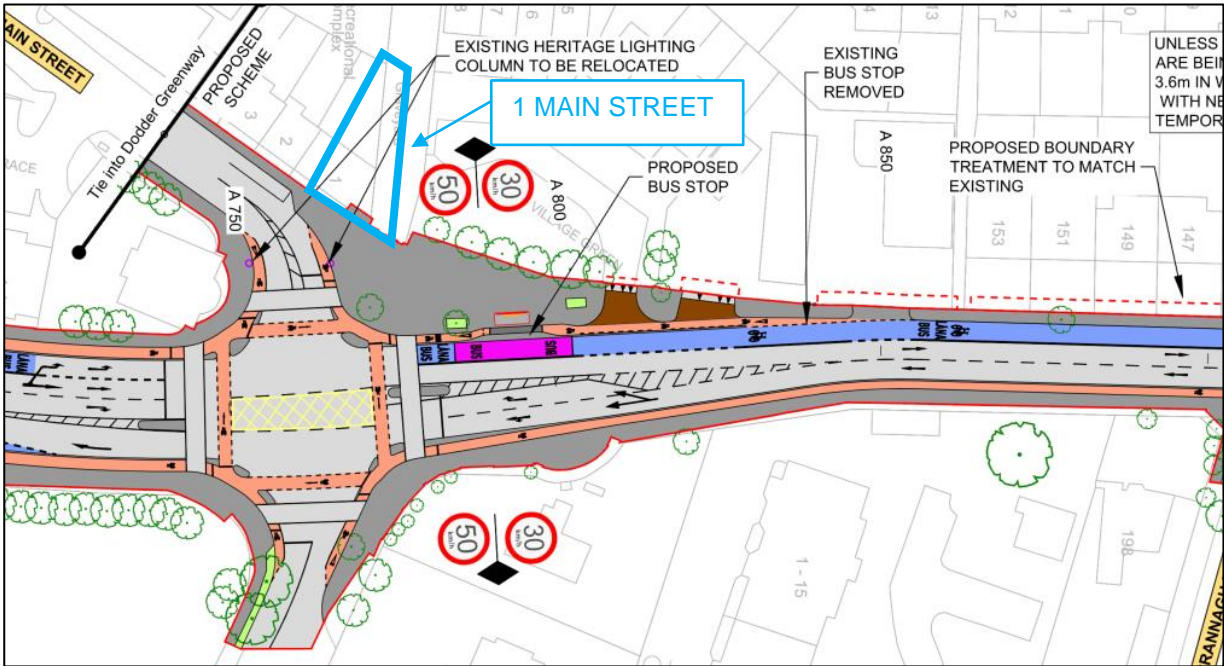


Figure 3.60.1 General Arrangement of Proposed Scheme adjacent to 1 Main Street (Sheet 03)

The relevant extract from the typical cross-section in the EIA, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.60.2.

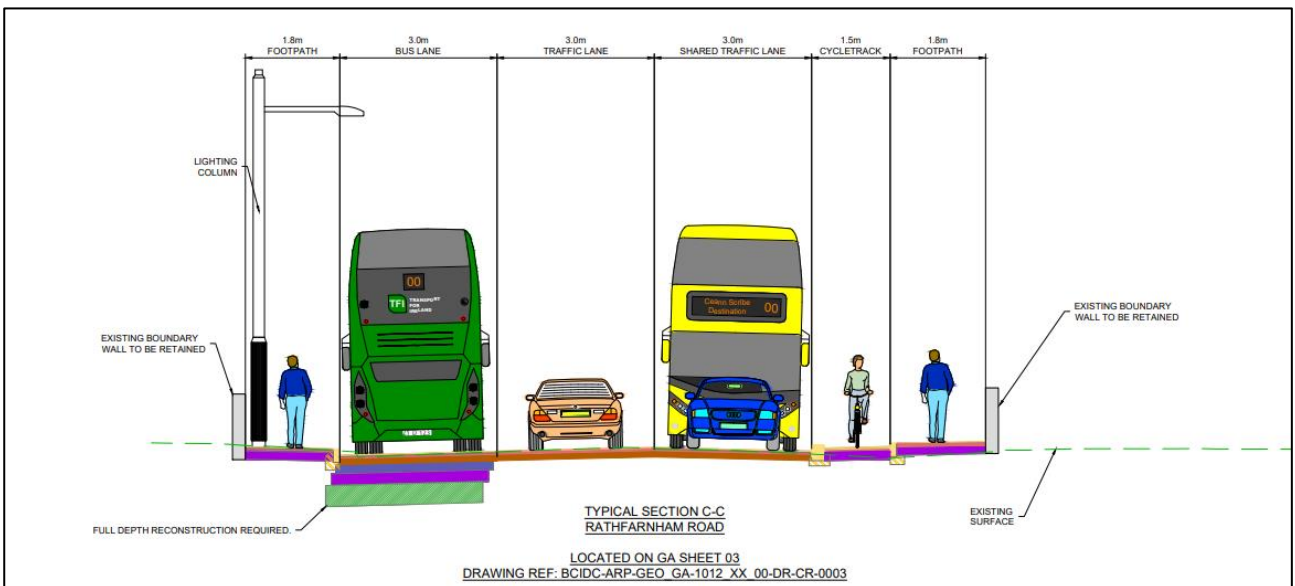


Figure 3.60.2 Typical Cross-Section adjacent to 1 Main Street

The relevant extract from the CPO Deposit Maps showing the proposed permanent land acquisition areas at 1 Main Street is shown in Figure 3.60.3.

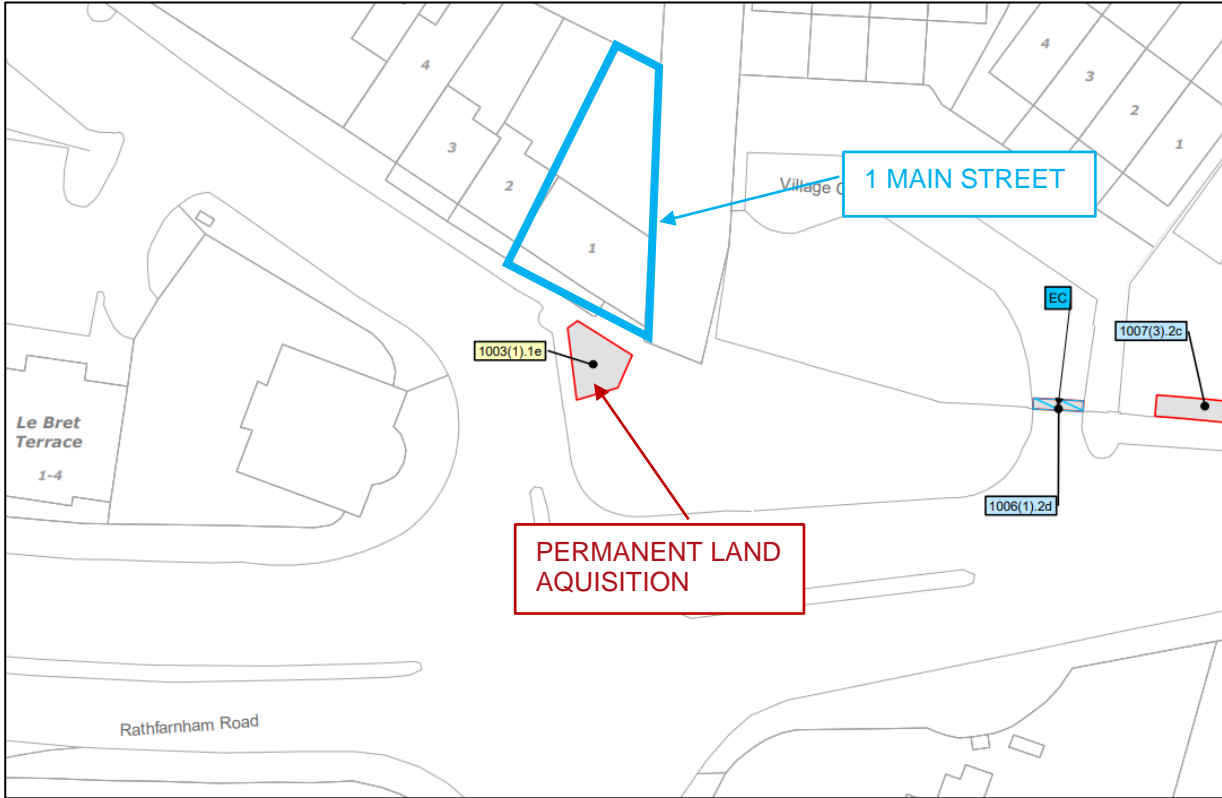


Figure 3.60.3 Extract from CPO Deposit Maps adjacent to 1 Main Street

The proposed permanent land acquisition lines overlain on aerial photography are shown in Figure 3.60.4.



Figure 3.60.4 Proposed Land Acquisition lines adjacent to 1 Main Street
The existing property frontage is shown in Figure 3.60.5.



Figure 3.60.5 Existing frontage of 1 Main Street (Image source: Google)

3.60.2 Summary of the Points of Objection to the CPO by Vera Bannigan

This submission objected to CPO for the reasons summarised in the following section.

i. Land acquisition

The submission noted that Trevor Baker is incorrectly identified as owner of 1A Main Street, Rathfarnham, in the CPO Schedule, Schedule part 1003(1).1e. It continues to note that Mrs Vera Bannigan is the actual owner and should have received a notice letter.

ii. Impact on Access and Business

The submission states that the Proposed Works outside 1A Main Street, Rathfarnham will impede the occupier's ability to conduct business, specifically noting removal of vehicular access into the property.

3.60.3 Responses to the Points of Objection

i. Land Acquisition

In preparing the schedule to the CPO a comprehensive property referencing exercise has been undertaken by the NTA. At the time of making the CPO on 18 April 2023 South Dublin County Council have been identified as the owners of plot no. 1003(1).1e. Trevor Baker and MOTO4U were included in the occupiers column in relation to plot no. 1003(1).1e as they utilise the area for the purposes of displaying stock for sale from unit 1A Rathfarnham Main St. They were not included in the owners/reputed owners column or the lessees/reputed lessees column. Our research does not indicate that Mrs. Vera Bannigan has any legal interest in this plot. However, we note correspondence received from Ms Vivienne Bannigan, on behalf of Mrs. Vera Bannigan, outlining a claim to a right of way over this land.

Ultimately, in the event that the CPO is confirmed by the Board, and the NTA exercise its powers of acquisition pursuant to such a confirmed CPO, Notices to Treat will be served on all those included in the confirmed CPO and it will then be for such persons, and/or any others that may not be on the Schedules, to make a claim for compensation and establish that they have a compensable interest in the land in question.

It is noted however, as outlined in response to item ii that the Proposed Scheme will not affect existing access arrangements to the property

ii. Impact on Access and Business

1A Rathfarnham Main Street has an access gate to what is currently used as the MOTO4U business. There is a dropped kerb in proximity to the intersection of Main Street and Rathfarnham Road. A removable bollard is situated at the centre of this dropped kerb (See Figure 3.60.6). This route is used for maintenance vehicles accessing the adjacent cemetery (Church of Saints Peter and Paul).

As outlined on sheet 3 of 37 of EIAR Chapter 4 Landscaping General Arrangement it is proposed to *retain existing public plaza, including stone paving, planters, stainless steel bollards*. In addition, the existing dropped kerb arrangement will be reinstated in the same location, including the removable bollard. In summary, vehicular access arrangement into the plaza will be reinstated as per the existing condition as part of the Proposed Scheme.

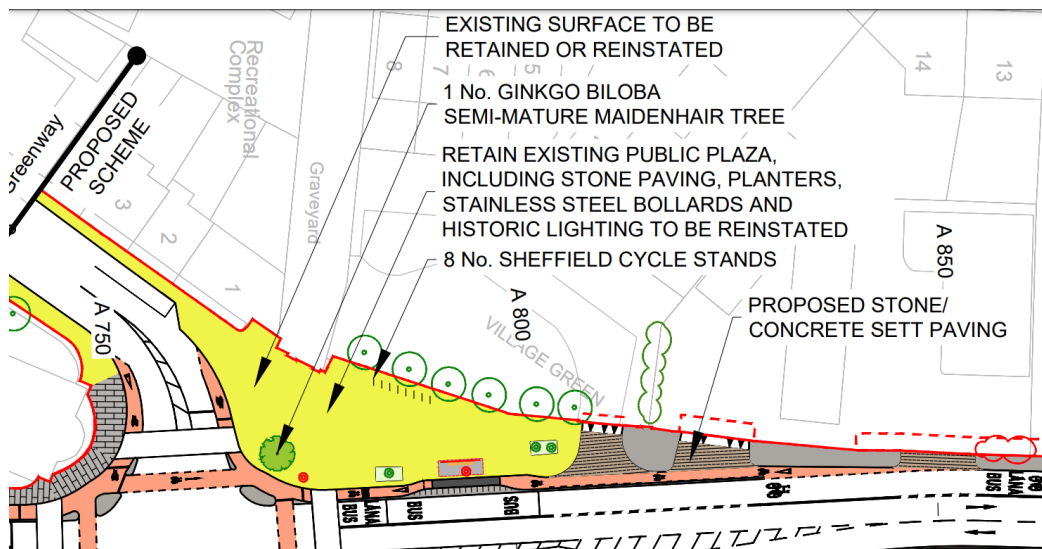


Figure 3.60.6 Landscaping General Arrangement, sheet 3 of 37

3.61 CPO-61– Vivienne and Joan Ryan– 145 Rathfarnham Road

3.61.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at this property, with a maximum width of land to be permanently acquired of approximately 0.4m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.61.1.

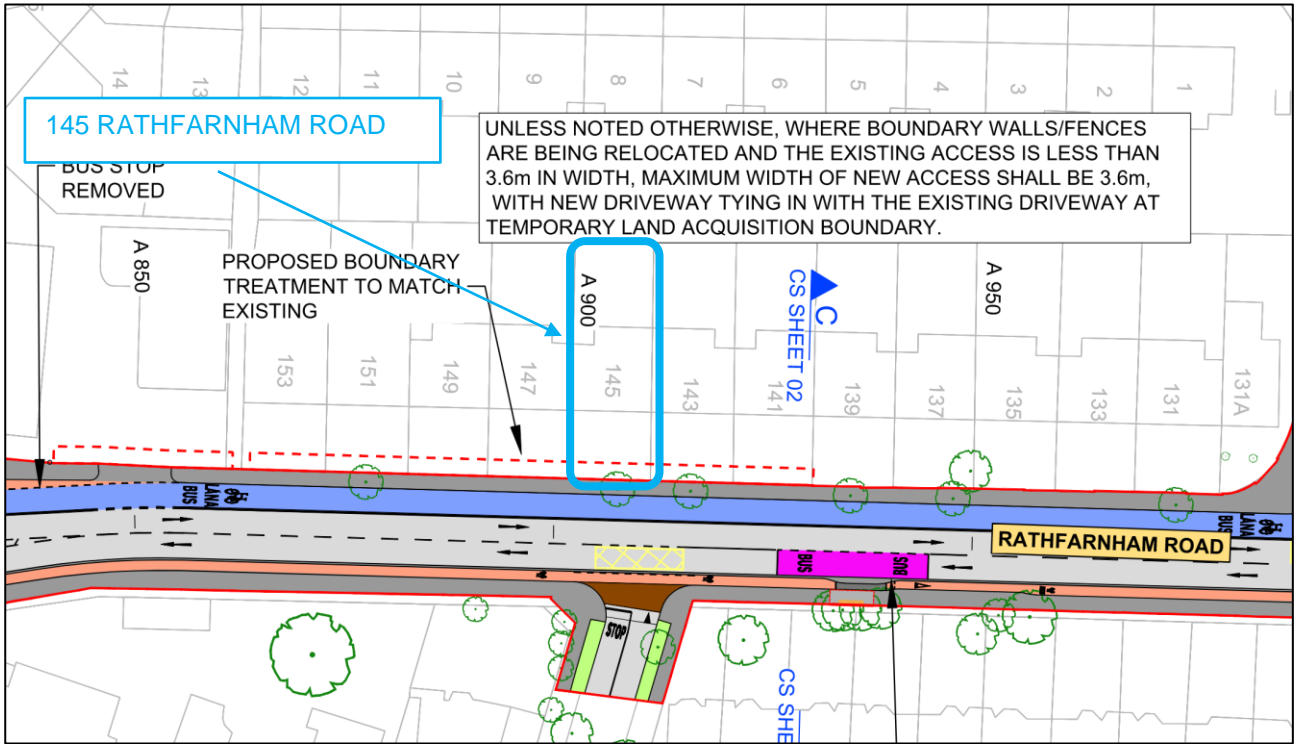


Figure 3.61.1 General Arrangement of Proposed Scheme adjacent to 145 Rathfarnham Road (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.61.2.

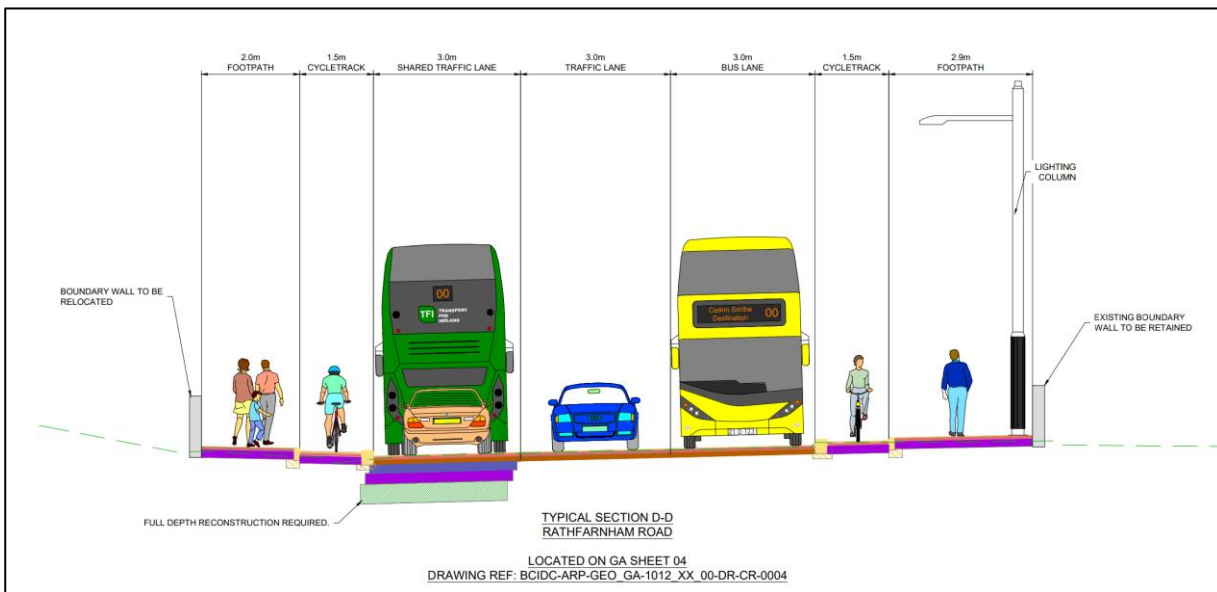


Figure 3.61.2 Typical Cross-Section adjacent to 145 Rathfarnham Road

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 145 Rathfarnham Road is shown in Figure 3.61.3.

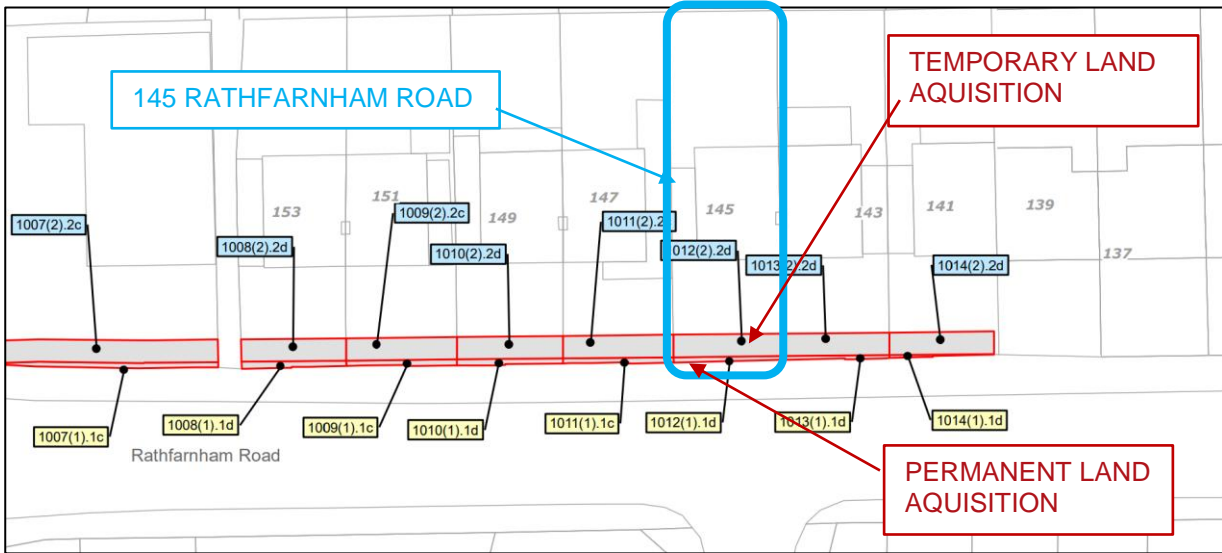


Figure 3.61.3 Extract from CPO Deposit Maps adjacent to 145 Rathfarnham Road

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.61.4.



Figure 3.61.4 Proposed Land Acquisition lines adjacent to 145 Rathfarnham Road
The existing property frontage is shown in Figure 3.61.5.



Figure 3.61.5 Existing frontage of 145 Rathfarnham Road (Image source: Google)

3.61.2 Summary of the Points of Objection to the CPO by Vivienne and Joan Ryan

This submission objected to CPO for the reasons summarised in the following section.

- i. Concerns regarding public interest justification and property rights in proposed land acquisition

The submission states that the confirming Authority must prove that the acquisition of the property is clearly justified by the public interest, as defined by Article 1 of Schedule 2 of the European Convention on Human Rights Act 2003. It continues to state that the NTA has not demonstrated that this is the case.

The submission also states that the proposed land acquisition at nos. 141 and 153 disproportionately interferes with the resident's property rights. It also states that there was no communication to residents residing along Rathfarnham Road who are affected by the CPO. Specifically, it notes that these residents have not been provided with a detailed explanation regarding why their individual properties are impacted by the CPO. The submission draws attention to the fact that only seven properties situated between Main Street and the Dodder River are subject to land acquisition.

- ii. Changes to work patterns due to the COVID-19 pandemic

The submission states that the project is based on outdated, pre COVID-19 pandemic traffic volumes and census. Stating that the traffic volumes are now much lower with the advent of hybrid working, resulting in a significant decrease in traffic volumes. Noting that, consequently, the business case for the project is no longer justifiable.

- iii. Property value

The submission states that the Proposed Scheme will have a negative impact on property value.

- iv. Increase in air and noise pollution.

The submission states that the proposed land acquisition will result in a reduced distance between traffic lanes and homes, in combination with increased frequency of buses this will result in increased air and noise pollution and vibration. The submission also states that the increase in greenhouse gas emissions by the proposals would exacerbate climate change.

- v. Impact on Rathfarnham Castle

The submission expresses concern regarding the proposed land acquisition of Rathfarnham Castle.

- vi. Permanent loss of driveway space and future development of front garden

The submission states that the Proposed Scheme will limit the parking capacity within the driveway and inhibit the future development of an accessible wheelchair ramp.

The submission also stated that the reduction in driveway will hinder the ability to turn the car in the driveway and instead force the occupants to reverse onto the road, a manoeuvre which would be deemed illegal.

- vii. Impact on community in Rathfarnham

The submission states that the Proposed Scheme will negatively impact the community life along Rathfarnham Road.

3.61.3 Responses to the Points of Objection

- i. Concerns Regarding Public Interest Justification and Property Rights in Proposed Land Acquisition

Article 1 of the First Protocol to the European Convention on Human Rights states that:

Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

There has been no contravention of Article 1 of the First Protocol which itself qualifies the right to peaceful enjoyment of possessions by reference to the concept of public or general interest. This is also in keeping with Article 40.3.2 of the Constitution which recognises that the exercise of property rights ought to be regulated by the principles of social justice and that the State may delimit the exercise of property rights with a view to reconciling their exercise with the exigencies of the common good.

The Proposed Scheme is being pursued cognisant 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 including that the impact on an individual's right to private property occasioned by a compulsory acquisition must be justified or necessitated by the exigencies of the common good, and that the impairment of an individual's rights must not exceed that which is necessary to attain the legitimate object sought to be pursued i.e. it must be proportionate to the ends sought to be achieved.

In this regard, all of the lands included in the Templeogue/Rathfarnham to City Centre Core Bus Corridor Compulsory Purchase Order 2023 are necessary and required for the construction and/or operation of the Proposed Scheme (being for the provision of public transport infrastructure) and to meet the objectives of the Proposed Scheme which are as detailed in section 1.2 of Chapter 1 of the EIAR as follows:-

- *“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.”*

It is therefore clear that the Proposed Scheme is in accordance with the concept of public or general interest and is according with the exigencies of the common good.

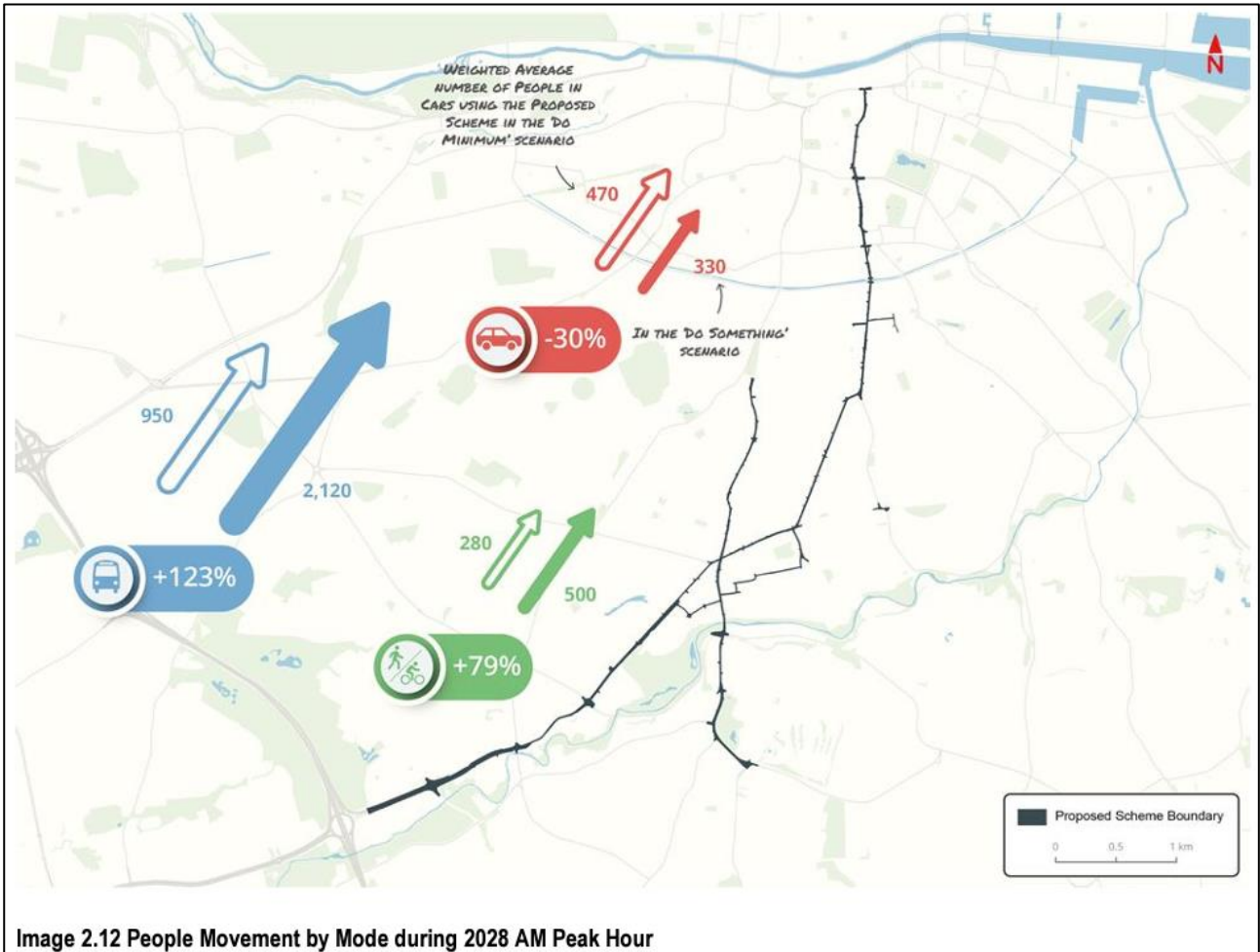
The Proposed Scheme is clearly being pursued for the common good and that is detailed throughout the EIAR and in particular in Chapter 2 Need for the Proposed Scheme. Section 2.1 of Chapter 2 of the EIAR, sets out that the Proposed Scheme aims to meet growth demand by:

“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 optimization 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 (bus, walking and cycling), which in turn provides significant efficiencies and benefits to users of the transport network and the environment.”

Section 2.4 notes the following:

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. A typical double-deck bus takes up the same road space as three standard cars but typically carries 50-100 times the number of passengers per vehicle. On average, a typical double-deck bus carries approximately 60-70 passengers making the bus typically 20 times more efficient in providing people movement capacity within the equivalent spatial area of three cars. These efficiency gains can provide a significant reduction in road network congestion where the equivalent car capacity would require 50 or more vehicles based on average occupancy levels. Consequently, by prioritising the movement of bus over cars, significantly more people can be transported along the limited road space available. Similarly, cyclists and pedestrians require significantly less roadway space than general traffic users to move safely and efficiently along the route. Making space for improved pedestrian and cycle infrastructure can significantly benefit these sustainable modes and encourage greater use of these modes.

The Proposed Scheme design involves the prioritisation of people movement, focusing on maximising the throughput of sustainable modes (i.e. walking, cycling and bus modes). A quantitative people-movement assessment, as part of the transport impact assessment, facilitates a comparison of the Do Minimum and Do Something peak-hour scenarios for the forecast years (2028 and 2043). The benefits resulting from the 2028 AM Peak Hour people-movement assessment shows that there is an increase of 123% in the number of people travelling by bus, an increase of 79% in people walking or cycling, and a reduction of 30% in the number of people travelling by car along the route of the Proposed Scheme. This is summarised in Image 2.12.



In relation to the cumulative impacts on Traffic and Transport and car usage Appendix A6.1 (Transport Impact Assessment) notes the following for Cumulative Assessment:

In general, total trip demand (combining all transport modes) will increase into the future in line with population. In general, total trip demand (combining all transport modes) will increase into the future in line with population and employment growth. A greater share of the demand will be by sustainable modes (Public transport, Walking, Cycling) as facilitated by the GDA Strategy implementation.

The analysis indicates that with the 12 BusConnects Proposed Schemes in place, there will be a high positive impact on sustainable mode share. The Proposed Schemes, along with other GDA Strategy measures, will prevent any increase in private car traffic within the study area and will instead result in a reduction in car trips below 2020 levels.

In the 2028 Opening Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 12% increase in public transport trips, 2% decrease in general traffic trips (i.e. motorists) and a 14% increase in cycling trips in the AM Peak Hour and a 12% increase in public transport, 3% decrease in general traffic and a 12% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario. In the 2043 Design Year scenario, it is estimated that for people travelling within the 500m catchment area (including City Centre) there will be a 6% increase in public transport trips, 6% decrease in general traffic trips (i.e. motorists) and a 10% increase in cycling trips in the morning peak hour and a 7% increase in public transport, 7% decrease in general traffic and a 11% increase in cycling trips each day (7am-7pm) compared to the Do Minimum scenario.

General traffic levels reduce more in 2043 than when compared to 2028 due to the increased level of additional non-bus public transport infrastructure and services (MetroLink, Luas extensions and DART+ from the GDA Strategy) in tandem with the road capacity reduction measures as part of the Proposed Scheme leading to increased usage on all public transport modes.

The modelling outputs for the 2028 Cumulative Opening Year scenario demonstrate that there is a high growth in bus patronage along all the Proposed Schemes in the AM Peak Hour. The bigger increases occur in the inbound direction on the Blanchardstown to City Centre, the Proposed Scheme and the Bray to City Centre scheme where the loadings reach more than 2,000 additional passengers per Hour compared to the Do Minimum scenario.

In the 2028 Opening Year AM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 10% more passenger boardings across all public transport services and 17% more boardings on bus services. In the 2028 Opening Year PM Peak Hour scenario with the Proposed Schemes in place, there will be an estimated 11% increase in total passengers boarding Public transport services and 18% more passengers boarding buses services.

In the 2043 Design Year AM and PM Peak Hour scenarios, increase in total passengers boarding all public transport services will be 7% and 8% respectively, and the increase in passengers boarding bus services will increase by 11% and 14% respectively.

*Overall, the Proposed Schemes are expected to deliver a **High Positive** impact for People Movement by sustainable modes.*

The significant benefits of the scheme are elaborated upon throughout the EIAR with a summary of the key benefits presented in Section 2.1.1 of this response. 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.

Option Selection and Land Acquisition

It should be noted that throughout the assessment process, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives. This approach was adopted to balance the necessity of the development with the preservation of the interests and rights of property owners in the area.

In this particular area, a large number of options have been considered that included a variety of online design options as well as offline cycle options that could reduce the cross-section requirements along Rathfarnham Road. The optioneering undertaken is summarised in Section 2.3.2 of this response document.

As described in section 2.3.2 of this response document, and EIAR Volume 2 Chapter 3 Consideration of Reasonable Alternatives and Preferred Route Option Report, the design of the Proposed Scheme has evolved through comprehensive design iteration, with particular emphasis on minimising the potential for environmental impacts where practicable, whilst ensuring the objectives of the Proposed Scheme are attained. Section 4.5.2.1 of the EIAR Chapter 4 describes the general overview of the Proposed Scheme at Section 2: *Nutgrove Avenue to Terenure Road North – Grange Road, Rathfarnham Road*. At the section adjacent to 145 Rathfarnham Road, between Dodder Park Road and Rathdown Park:

The section of Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. This 30 kph speed limit will continue from here to the City Centre, due to the presence of multiple urban villages along the route, as well as other sections where cyclists share the bus lane. This consistent speed limit is proposed to ensure legibility for road users along the route and to avoid frequent increases and decreases in speed limits.

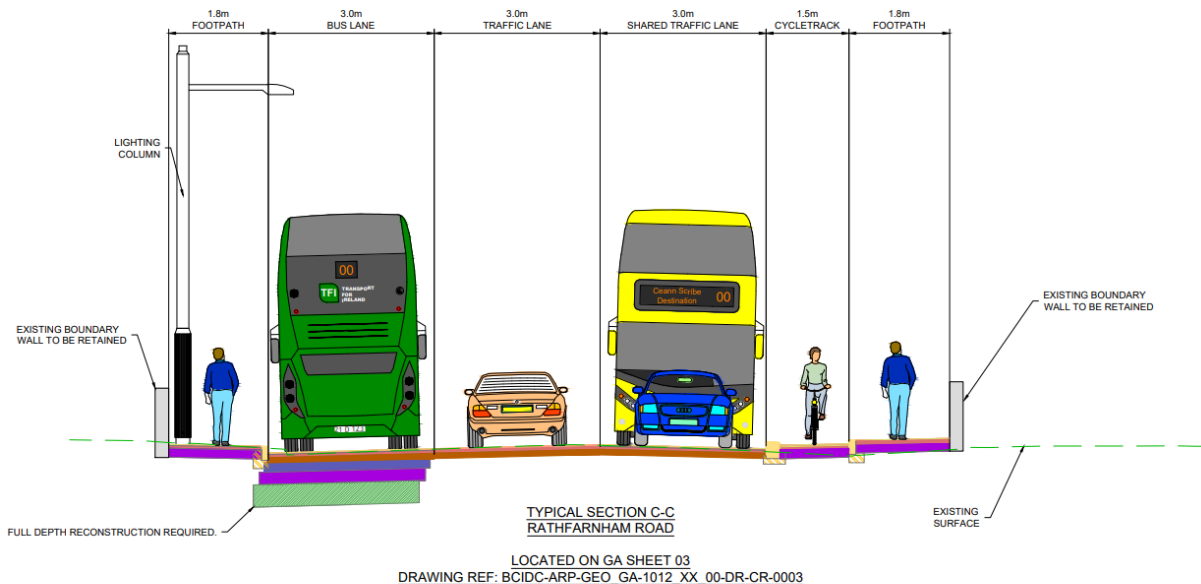


Figure 3.61.6 Typical Cross-section Rathfarnham Road

To facilitate the optimum cross-section on Rathfarnham Road between Castleside Drive and Dodder Park Road, described in section 4.5.2.1 of Chapter 4 (*Proposed Scheme Description*) and depicted in Figure 3.61.6, a cross-section width of 14.1 meters is necessary. This required width is attainable throughout the specified stretch of Rathfarnham Road, except the section adjacent to Nos 141 and 153. To facilitate the implementation of the optimal cross-section, a minor land acquisition is proposed from the aforementioned properties.

At the specific area outside 145 Rathfarnham Road, the proposed cross-section and subsequent land acquisition have been considered and deemed necessary to facilitate the optimum scheme as presented in EIAR Volume 3 Chapter 4 Proposed Scheme Description and General Arrangement drawings. Section 5 of Appendix A4.1 BusConnects Preliminary Design Guidance Booklet (PDGB) of the EIAR sets out the guidance for the proposed cross-sectional width of all proposed facilities including footpath and cycle tracks. This sets the absolute minimum width of 1.8m for footpaths and desirable width of 2m for cycle tracks. At this location a 1.8m footpath has been provided. However, as noted in table 4.3 of Chapter 4 of the EIAR, a reduced width cycle track of 1.5m is provided through this area in order to minimise impacts on adjacent properties while also meeting the scheme objectives. The proposed land acquisition represents the minimum required to achieve the optimal cross-section, as detailed in the EIAR Volume 2 Chapter 4 and the Preferred Route Option Report.

It is noted that the Proposed Scheme at this location has evolved through the positive consultation with residents in this area a subsequent optioneering as referenced above, reducing the impact on 145 Rathfarnham Road by approximately 1.5m compared to the options presented during public consultations.

Landowner Engagement

In terms of engagement with landowners of potentially impacted properties, section 1.7.3 of Chapter 1 of the EIAR sets out the various direct communications over the course of the project:

Since the initiation of the pre-application public consultation process in February 2019 there has been ongoing engagement with landowners, and / or anyone with an interest in potentially impacted properties or lands along the corridor of the Proposed Scheme, as the design development has progressed.

As set out in the Consultation Section (Section 1.6) during each round of public consultation those landowners identified as being either potentially impacted or no-longer potentially impacted were written to directly to receive information on the consultation in advance of any wider publication of the proposals. One-to-one meetings were offered on a face-to-face basis pre-COVID, and via Zoom or over the phone since March 2020, for those who wished to discuss the proposals further in relation to their own property with the minutes being recorded as part of the consultation process. Over the three rounds of consultation, approximately 734 letters of this kind were issued.

In addition, approximately 217 letters were issued between August 2020 and November 2020 to request access to properties to undertake more detailed noise or topographical surveys.

Throughout the planning process any requests for meetings, phone conversations, or other requests for information have been accommodated where possible. Many of the submissions received during consultations have included from those potentially impacted owners and as with all other submissions they have been considered in the design development.

Most recently during December 2022 and February 2023, approximately 509 letters (registered) have been issued to properties likely to be the subject of the Proposed Scheme Compulsory Purchase Order (CPO) process seeking to engage with them to ascertain ownership details (or to confirm ownership details based on Property Registration Authority – Registry of Deeds referencing research), or to ascertain any others with an interest in the property/lands. Follow-up conversations have been facilitated as a result of these letters on request.

Over the course of the engagements, affected property owners have had the opportunity to discuss, among other things, the following aspects with the BusConnects Infrastructure team:

- Overall scheme proposals and potential impacts;*
 - Timelines for the scheme design development and associated EIAR assessment;*
 - Procedural matters such as planning and CPO process;*
 - Specific details of impact of scheme on landowner property including approximate extent of encroachment; and*
 - General information around reinstatement and accommodation works.*
- ii. Changes to work patterns due to the COVID-19 pandemic

A detailed response to this item has been provided in Section 2.1.1.

- iii. Property value

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, including on Rathfarnham Road, 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.

EIAR Chapter 10 'Population' includes Appendix A10.2 'Economic Impact of the Core Bus Corridors'. Section 3 on page 14 of the appendix assesses what the economic impact of the provision of bus corridor infrastructure on the communities along the route using evidence from international Case Studies for similar schemes. This economic impact includes effects on property values. The conclusion reached is that in overall terms the public realm improvements planned by the NTA may in fact lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors.

The report notes: *“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.” and “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 on Rathfarnham 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.

- iv. Increase in air and noise pollution.

The permanent acquisition of up to 0.4m of land is to allow for the construction of the Proposed Scheme cross-section at this location. The acquisition of the land is particularly required to construct the northbound bus lane on Rathfarnham Road. The proposed bus lane will bring traffic 1.8m closer to the property than in the current condition, measuring from the cycle lane road edge.

Noise Pollution

In relation to noise pollution, the impact of the Proposed Scheme on noise and vibration have been assessed and are reported in Chapter 9 Noise and Vibration of Volume 2 of the EIAR. The traffic noise impacts associated with the Proposed Scheme have fully considered any physical changes along the Proposed Scheme. Section 9.4.4.1 of EIAR Volume 2 Chapter 9 Noise and Vibration 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 of the Proposed Scheme within the 1km study area, impacts as a result of traffic redistribution are determined to indirect, positive, imperceptible to slight, and short to medium term to negative, slight to moderate, and short to medium term 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 traffic noise level above a daytime noise level of 55 dB LAeq,16hr an increase in noise level greater than 3 dB.*”. Table 9.39 lists these roads and Rathfarnham Road is not identified, indicating that there are no potential significant noise impacts envisaged along Rathfarnham Road.

Section 9.6.1 sets out the residual noise and vibration impacts of the Proposed Scheme stating that: “*Once the various mitigation measures are put in place, noise impacts associated with the Construction Phase will be Negative, Not Significant to Slight to Moderate and Temporary during all key Construction Phases during daytime periods.*”

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 in Volume 2 of the EIAR (and are also summarised in Appendix 5.1 (Construction Environmental Management Plan) in Volume 4 of the EIAR).

Section 9.5.1.1 of EIAR Volume 2 Chapter 9 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. The mitigation measures outlined below for the Construction Phase have also been included in the Construction and Environmental Management Plan (CEMP) in Appendix A5.1 in Volume 4 of this EIAR.

These measures will ensure 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); and*
- *The best means practicable, including proper maintenance of plant and equipment, will be employed to minimise the noise produced by on site operations*

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 EIAR Chapter 9 sets out the Construction Noise Threshold (CNT) Levels for the Proposed Scheme].

Section 9.5.1.1.4 of Chapter 9 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. 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 9.30), other construction activities will be scheduled to not result in significant cumulative noise levels.

In summary the NTA is satisfied that 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.

Air pollution

In relation to air pollution, EIAR Volume 2 Chapter 7 Air Quality provides details of the air quality assessment undertaken for the Proposed Scheme. Overall, the assessment concluded that the residual effects on air quality because of the Proposed Scheme’s operation are neutral and long-term.

Section 7.6.2 describes the residual impacts for the Operational Phase: *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. In 2043 all receptors are expected to have ambient air quality in compliance with the ambient air quality standards for the DM and DS scenarios. There are localised residual moderate adverse effects expected on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road as a result of the 2028 Operational Phase of the Proposed Scheme which are considered significant as NO₂ concentrations are predicted to exceed the limit value. However, these are expected to reduce to negligible by 2043, due to a significant reduction in emissions between 2028 and 2043 from advancements in engine technology and the addition of a higher percentage of electric vehicles to the fleet. The localised impacts at human receptors on the R137 Clanbrassil Street Lower junction with the R811 South Circular Road due to the 2028 Operational Phase of the Proposed Scheme are therefore considered negative, significant and short-term.*

Overall, it is considered that the residual effects as a result of the Proposed Scheme’s operation are neutral and long-term.

In addition, the EIAR Volume 3 Figure 7.1 – 7.8 indicates all the receptors located adjacent to Rathfarnham Road. In all cases, the significance of the modelled change in the annual mean NO₂, PM₁₀, PM_{2.5} during the operation phase (2028) and construction stage (2024) of the Proposed Scheme were negligible.

Section 7.1 ‘Introduction’ briefly outlines the assessment process and noted the following:

During the Construction Phase, the potential air quality impacts associated with the development of the Proposed Scheme have been assessed. This included construction activities such as utility diversions, road carriageway / cycleway / footway resurfacing and kerb road realignments. Construction traffic construction access routes are also assessed as part of the study area for this phase of the works.

In terms of construction impacts, section 7.4.2.3 of Chapter 7 provides the construction phase predicted change in and impact on pollutant concentrations. The significance of the changes in the concentration of each of the ambient receptors has been determined in the context of the TII significance criteria (TII 2011).

- As shown on figure 7.6 of Volume 3 of the EIAR, the receptors along Rathfarnham Road will experience a negligible to moderate beneficial impact in terms of the annual mean NO₂ concentration.
- As shown on figure 7.7 of Volume 3 of the EIAR, the receptors along Rathfarnham Road will experience a negligible impact in terms of the annual mean PM₁₀ concentrations.
- As shown on figure 7.8 of Volume 3 of the EIAR, the receptors along the Rathfarnham Road will experience a negligible impact in terms of the annual mean PM_{2.5} concentration.

Overall, Section 7.4.2.3 states that in accordance with the EPA Guidelines (EPA 2022) the impacts associated with the Construction Phase traffic emissions are overall neutral and short-term.

Section 7.5.1.1 of Chapter 7 outlines the dust mitigation measures during the construction phase 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 works will be regularly inspected for soiling associated with the construction activities and cleaned as necessary;
- Material handling systems and 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 7.5.1.2 also outlines the following in relation to construction traffic:

In terms of construction traffic impacts, the Proposed Scheme will have a generally neutral impact on air quality, with some slight beneficial impacts. Due to worst-case scenario modelling where in reality the works will be short-term and temporary in nature, the impact on air quality will not be significant. Therefore, no specific Construction Phase mitigation or monitoring measures are required.

v. Impact on Rathfarnham Castle

A detailed response to this item is presented in Section 2.3.2.

vi. Permanent loss of driveway space and future development of front garden

The permanent acquisition will result in the loss of between 0.4m and 0.3m of lands with an additional 2.0m temporarily required to allow for the construction of boundary treatment works and tying into the existing garden/driveway. The edge of the nearest proposed traffic lane will be 1.8m closer to the residence than the kerb of the existing general traffic lane. The 9.0m long front boundary wall, including pillars and entrance between the pillars will be at least 8.6m from the front of the house. It is believed that this would not introduce any additional risk to the owners during the operation of the Proposed Scheme with access and egress to/from the property achieved similar the current scenario and that this should not hinder the ability to park two cars in the driveway as is currently the case.

The principle of how residents can access/egress their property is unchanged by the scheme proposals. The existing access/egress scenario is similar to the proposed with the requirement for a vehicle to be driven across a footpath. The objection notes that it is illegal to reverse onto a road. However, it is not illegal to reverse from a driveway onto a road; in accordance with Statutory Instrument S.I. No. 182/1997 - Road Traffic (Traffic and Parking) Regulations, 1997 Section 12 (3) "A driver shall not reverse from a place adjacent to a public road onto a public road save where it is clear to the driver that to so reverse would not endanger other traffic or pedestrians."

Also, in relation to S.I. No. 182/1997 Section 13 Driving on Footway, a vehicle is allowed to be driven across the footpath for the purpose of access to or egress from a place adjacent to the footpath, and in accordance with S.I. No. 182/1997 Section 14 Cycle Tracks that a vehicle is also allowed to be driven across the cycle track for the purpose of access to or egress from a place adjacent to a cycle track.

In addition, as noted in Appendix M2 Stage 1 Road Safety Audit of the Preliminary Design Report:

"The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety and considers the perspective of all road users."

All recommended measures or alternative measures proposed by the Designer were accepted by the Road Safety Audit Team.

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. If the CPO is confirmed by An Bord Pleanála, 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 3.61.7 Proposed Permanent and Temporary land acquisition at Earl Court

The submission also notes that the proposed land acquisition would inhibit the ability for the owner to install a wheelchair ramp in future. As noted above, the permanent acquisition will result in the loss of between 0.4m and 0.3m of lands. It is not believed that this would prevent the introduction of a wheelchair ramp in future if required.

vii. Impact on community in Rathfarnham

The submission states that the Proposed Scheme will negatively impact the community life along Rathfarnham Road.

EIAR Volume 2 Chapter 10 Population, has considered the potential community and economic impacts on the human population associated with the Construction and Operational Phases of the Proposed Scheme. Section 10.1 states:

These potential impacts can affect the way in which people live, work, relate to one another, organise to meet their needs, and generally operate as members of society. This population assessment will consider both social impacts on communities (community assessment) as well as economic impacts on commercial businesses (economic assessment). The assessment also considers the ways in which the Proposed Scheme will improve walking, cycling and bus facilities and is anticipated to encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme. This Chapter drew on the outcomes of the assessments in the following EIA chapters (Volume 2):

- Chapter 6 (Traffic & Transport);
- Chapter 7 (Air Quality);
- Chapter 9 (Noise & Vibration); and
- Chapter 17 (Landscape (Townscape) & Visual).

Section 10.4.4.1.1 of Chapter 10 outlines the impact of the Proposed Scheme on community amenity:

Chapter 6 (Traffic & Transport) identified a Positive, Moderate and Long-Term impact from a reduction in general traffic along the Proposed Scheme and a Negative, Slight and Long-Term impact from redistributed traffic along the surrounding road network. No road junctions in the surrounding road network are expected to be significantly impacted by the operation of the Proposed Scheme.

Chapter 7 (Air Quality) identified a Neutral and Long-Term residual impact on human receptors during the Operational Phase.

Chapter 9 (Noise & Vibration) identified a Direct, Positive, Imperceptible to Slight, Short to Medium term impact to Direct, Negative, Slight to Moderate, Short to Medium impact from traffic noise along the Proposed Scheme and an Indirect, Positive, Imperceptible to Slight and Short to Medium-Term to Indirect, Negative, Moderate and Short to Medium-Term in the surrounding road network.

Chapter 17 (Landscape (Townscape) & Visual) identified the following impacts on townscape and streetscape character during the Operational Phase within 1-year of the Proposed Scheme:

A Negative, Very Significant and Short-Term impact between Nutgrove Avenue and Terenure Road North;

*These environmental impacts have been considered together to identify if there will be an in-combination of impacts acting upon the same community facilities. The assessment concluded that these residual air quality, noise, traffic and visual impacts will combine to create a **Negative, Slight and Long-Term** impact on community receptors located along the Proposed Scheme between Nutgrove Avenue and Terenure Road North.*

Section 10.4.4.1.2.2 outlines the impact of the Proposed Scheme on accessibility:

Community accessibility relates to the ability of users to access community facilities, recreational resources, and residential properties. The nature of the Proposed Scheme means that accessibility impacts will differ based on the mode of travel used. The assessment has therefore separately assessed accessibility impacts on pedestrians, cyclists, bus users and private vehicles. The significant improvements 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 (The Economic Impact of the Core Bus Corridors) (EY 2021) in Volume 4 of this EIA.

Chapter 6 (Traffic and Transport) identified a Positive, Significant and Long-Term impact on pedestrian infrastructure and a Positive, Moderate to Significant and Long-Term impact on cycling infrastructure along the Proposed Scheme.

Chapter 6 (Traffic and Transport) identified a Positive, Moderate to Very Significant and Long-Term impact on bus infrastructure and a Positive, Very Significant and Long-Term impact on bus network performance (which includes journey times and journey time reliability). It is therefore expected that access to community facilities by bus users will also improve along the Proposed Scheme.

These impacts on access to community facilities for pedestrians, cyclists and bus users are expected to be experienced by community areas located predominantly along the Proposed Scheme as these will be where signal controlled junctions and improved footpath and cycle tracks will be provided. The community areas likely to experience these positive impacts are Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

On the whole, the community areas that are likely to experience Positive, Moderate and Long-Term impacts on change in access to community facilities, as a result of the reduction in general traffic, are those situated along the Proposed Scheme, such as Willington, Templeogue, Rathfarnham, Terenure, Rathgar, Harolds Cross, Rathmines, Harrington Street, Whitefriar Street and Meath Street and Merchants Quay.

3.62 CPO-62 –Zorana and Sladjan Kuzmanovic– 60 Terenure Road East

3.62.1 Description of Proposed Scheme at this location

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.3.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Terenure Road East, between the Terenure Road North junction and St. Joseph’s Church, due to the proximity of existing built form to the carriageway, it is proposed to provide a single general traffic lane in each direction with signal-controlled priority facilitating bus priority through this area. Bus lanes and traffic lanes will be provided in each direction for the remainder of Terenure Road East. It is also proposed to widen the footpaths within this section and to provide high-quality urban realm within Terenure Village.

To accommodate this cross section, land acquisition will be required along Terenure Road East. Land acquisition is proposed on the northern and southern side of the Terenure Road East between the Greenmount Road and Brighton Road.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed at the 60 Terenure Road East, with the permanent width of land to be acquired between 0.8 and 2.0m and temporarily acquired of approximately 2.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.62.1.

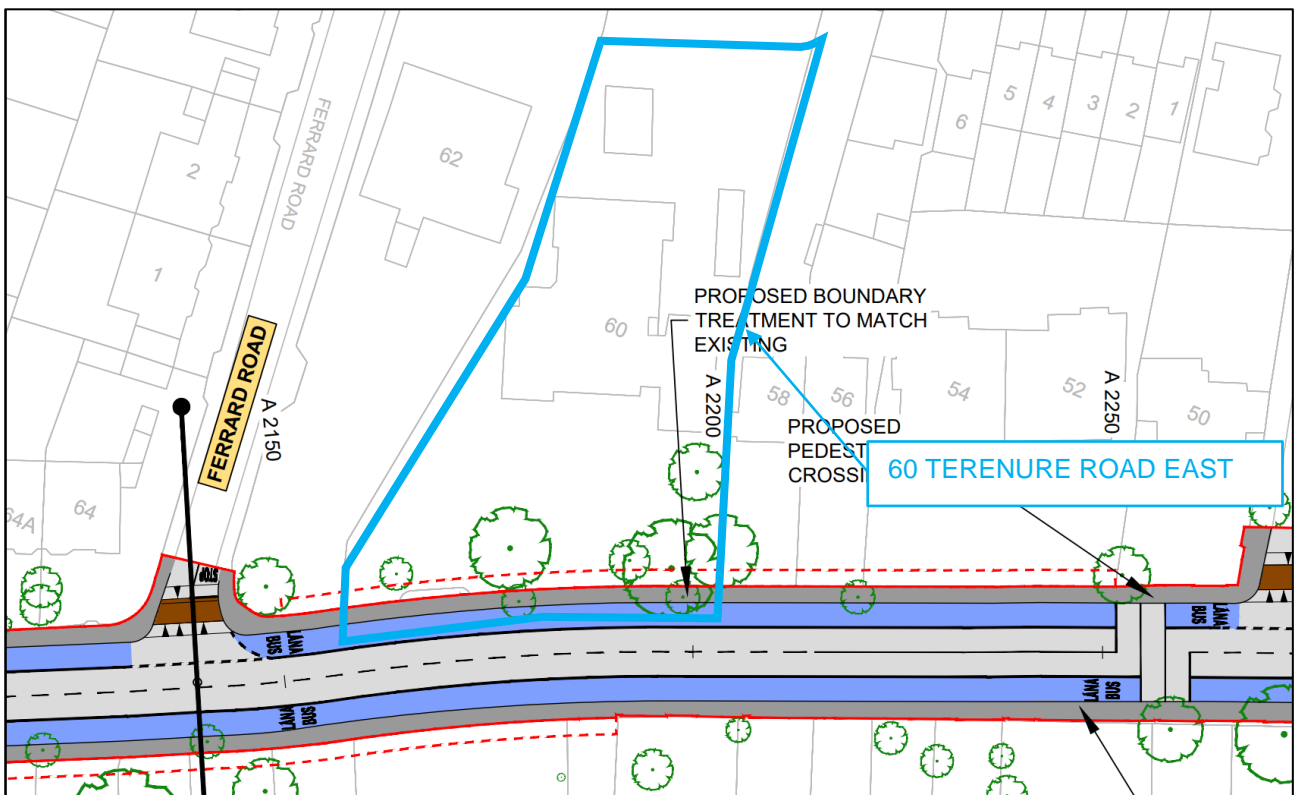


Figure 3.62.1 General Arrangement of Proposed Scheme adjacent to 60 Terenure Road East (Sheet 07)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.62.2.

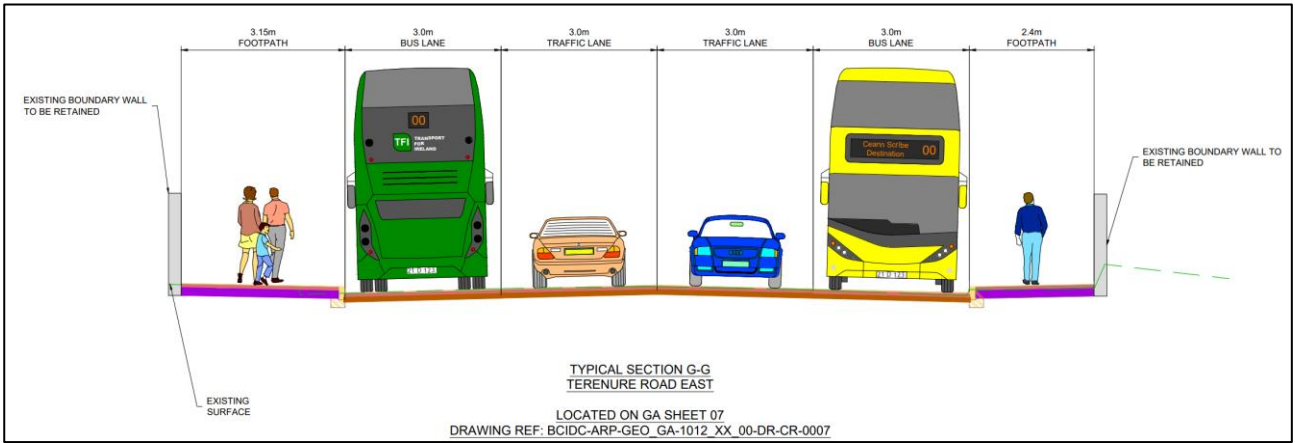


Figure 3.62.2 Typical Cross-Section adjacent to 60 Terenure Road East

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition areas at 60 Terenure Road East is shown in Figure 3.62.3.

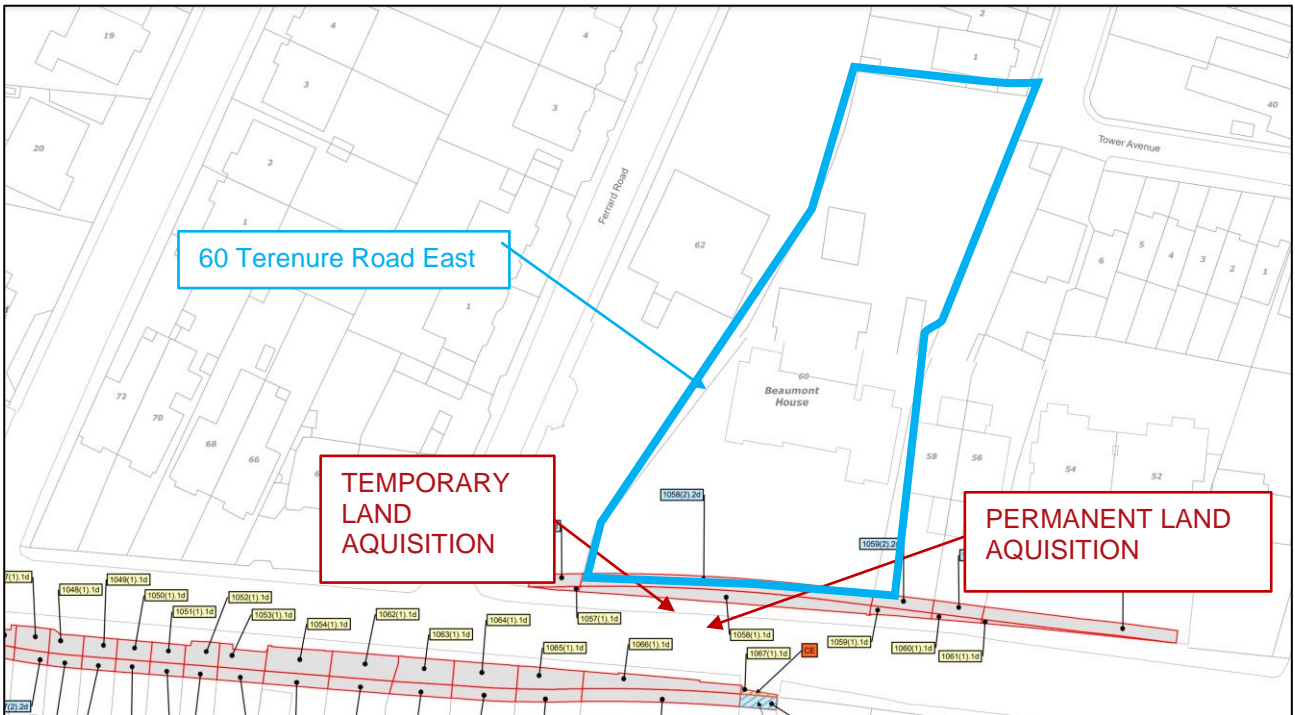


Figure 3.62.3 Extract from CPO Deposit Maps adjacent to 60 Terenure Road East

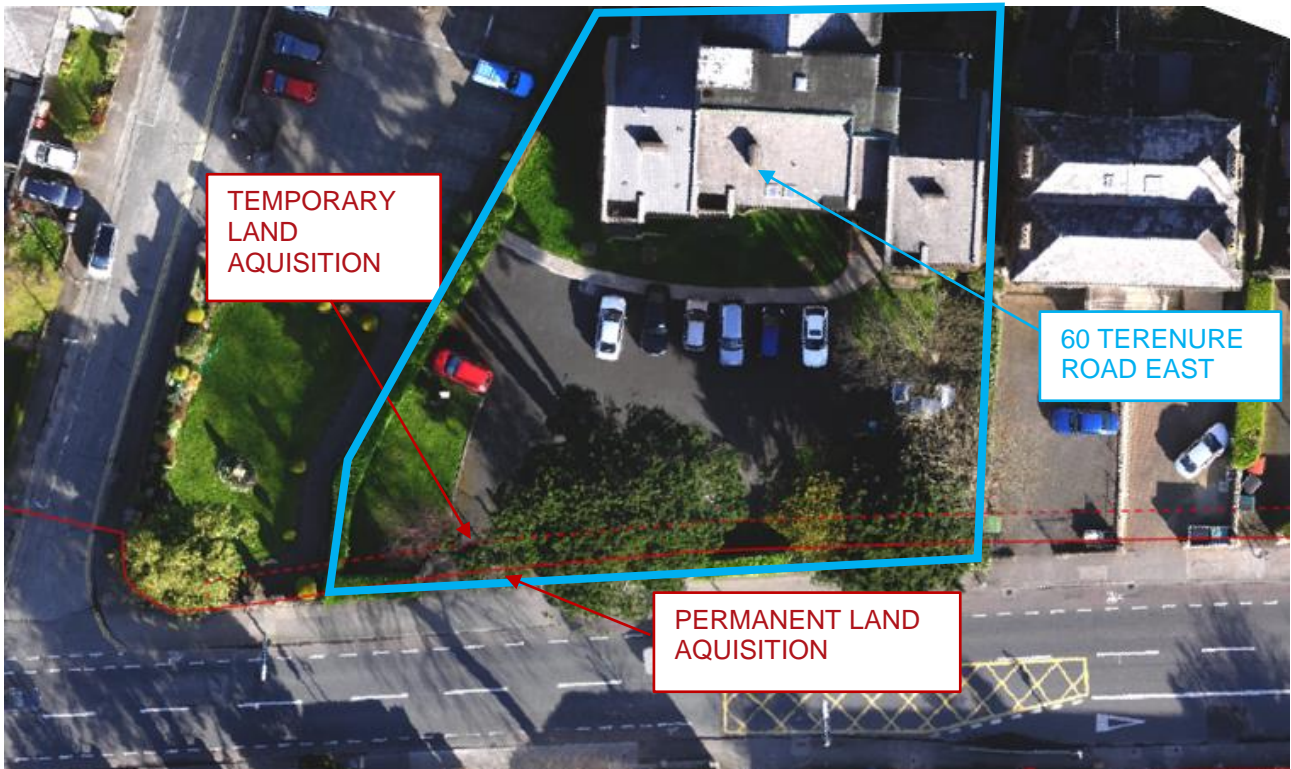


Figure 3.62.4 Proposed Land Acquisition lines adjacent to 60 Terenure Road East

The existing property frontage is shown in Figure 3.62.5.



Figure 3.62.5 Existing frontage of 60 Terenure Road East (Image source: Google)

3.62.2 Summary of the Points of Objection to the CPO by Zorana and Sladjan Kuzmanovic

This submission objected to CPO for the reasons summarised in the following section.

- i. Bus service

The submission states that the Proposed Scheme will not consists of an increase in buses along the route. It also notes that the proposals will not result in significant time savings.

ii. Cycling Infrastructure

The submission states that the Proposed Scheme does not provide continuous safe cycling infrastructure.

iii. Bus gates

The submission states that the proposed bus gates will have adverse impacts on residential streets due to the redistribution of traffic. It also notes that the current signal-controlled bus priority work efficiently. The submission also states that the changes to traffic management arising from the proposed bus gates will result in longer journey times for residents.

iv. Impact on Trees

The submission states that the Proposed Scheme will have an adverse impact on trees, noting that there are trees proposed for removal at locations where it is unnecessary. The submission gave an example of Bushy Park and Rathdown Drive.

v. Impact on Local Business

The submission notes that there will be an impact on business in urban villages that the Proposed Scheme passes through.

vi. Impact on Access Routes as a result of traffic management measures

The submission states that the Proposed Scheme will result in long diverted journeys impacting on residents.

vii. Alternative solutions

The submission states that Dublin needs a long-term transport solution such as light rail or Metro.

3.62.3 Responses to the Points of Objection

i. Bus service

The Proposed Scheme will facilitate opportunities to change bus network capacity operating along the corridor due to the extensive priority provided. This will allow increases in service provision as demand increases.

As noted in 6.4.6.1.14 Increased Bus Frequency – Resilience Sensitivity Analysis of Chapter 6 states the following:

For the purposes of this EIAR and the transport modelling undertaken in support of the EIAR, no increase in bus service frequency beyond that planned under the current Bus Connects Network redesign proposals was assessed. The bus frequencies used in the modelling are based on the proposed service rollout as part of the BusConnects Network Redesign and are the same in both the Do Minimum and Do Something scenarios. This rollout is currently underway. The rationale for undertaking this approach was that the planning consent being sought and which this EIAR supports is solely for the infrastructural improvements associated with providing bus priority and other sustainable modes measures along the Proposed Scheme.

This analysis, however, is conservative as the bus priority infrastructure improvements and indeed the level of protection it will provide to bus journey time consistency and reliability will provide a significant level of resilience for bus services that will use the Proposed Scheme from implementation into the future. The resilience provided by the Proposed Scheme will allow the service pattern and frequency of bus services to be increased into the future to accommodate additional demand without having a significant negative impact on bus journey time reliability or the operation of cycle and pedestrian facilities. In order to assess this resilience and the potential impacts of this resilience on carbon emissions, an additional analysis has been undertaken.....

In terms of bus journey time savings, Section 6.4.6.3 of Chapter 6 of Volume 2 of the EIAR notes the following:

*A micro-simulation model assessment has been developed and network performance indicators established for bus operations along Proposed Scheme. The results of the assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 12% 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, 7.4 hours of savings in 2028 and 6.2 hours in 2043, when compared to the Do Minimum combined across all buses. Overall it is anticipated that the improvements to the network performance indicators for bus users along the Proposed Scheme will have a **Positive, Very-Significant and Long-term effect**.*

ii. Cycling Infrastructure

One of the objectives of the Proposed Scheme outlined in Chapter 1, Introduction of Volume 2 of the EIAR is to *Enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.*

Chapter 3 Consideration of Reasonable Alternatives of Volume 2 of EIAR outlined the extensive options assessment exercise which has been undertaken to determine the Preferred Route. In the vicinity of the property to which this submission relates, the alternatives considered are detailed in section 3.3.2.2.1 A number of options were considered in this area which included dedicated online cycle facilities (Option TVR3) as well as alternative routes for cyclists. On balance the Proposed Scheme was selected as the preferred option. It is noted that in this area, cyclists will share with the bus lane and the speed limit has been reduced to 30km/h.

It should be noted that the assessment of routes and options was an iterative process and, great care was taken to minimise the impact on adjacent properties and to reduce land acquisitions to the extent possible while still meeting the project's objectives.

Table 4.1 of EIAR Volume 4 Proposed Scheme Description provides a summary of changes as a result of the Proposed Scheme. The table notes that in the existing scenario, 28% of cycling facilities, covering 11km in both directions, are segregated. However, under the Proposed Scheme, 85.4% of cycling facilities will be segregated, totalling 23.3km. This represents a substantial 112% increase in segregated cycling facilities along the proposed route.

Features	Existing (km)	Proposed Scheme (km)
Bus Lanes		
Inbound	4.4	6.1
Outbound	1.5	5.4
Bus Priority Through Traffic Management		
Inbound	0.1	2.9
Outbound	0.3	3.0
Total Bus Priority (both directions)	6.3	17.4 (+175%)
Bus Measures		
Proportion of Route with Bus Measures	32%	87%
Cycle Facilities Segregated		
Inbound	1.3	9.6
Outbound	1.8	10.3
Cycle Facilities – Non segregated		
Inbound	3.3	1.7
Outbound	4.6	1.7
Cyclist Facilities – Overall		
Total Cyclist Facilities (both directions)	11	23.3 (+112%)
Proportion segregated	28%	85.4%
Other Features		
Number of Pedestrian Signal Crossings	76	106
Number of Residential Properties with Land Acquisition	Not applicable	72

Figure 3.62.6 Summary of Changes as a result of the Proposed Scheme (Table 4.1 in EIAR Chapter 4)

iii. Bus gate

A detailed response to the impacts and assessment of the Templeogue Road inbound bus gate is presented in Section 2.2.2.

A detailed response to the impacts and assessment of the Rathmines Road bus gate is presented in Section 2.5.2.

iv. Impact on Trees

Figure 3.62.6 to Figure 3.62.9 are extracts from the Landscaping 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. These drawing show the proposed landscaping along Templeogue Road in the area referenced in the submission and identify trees to be removed (trees with red outlines).

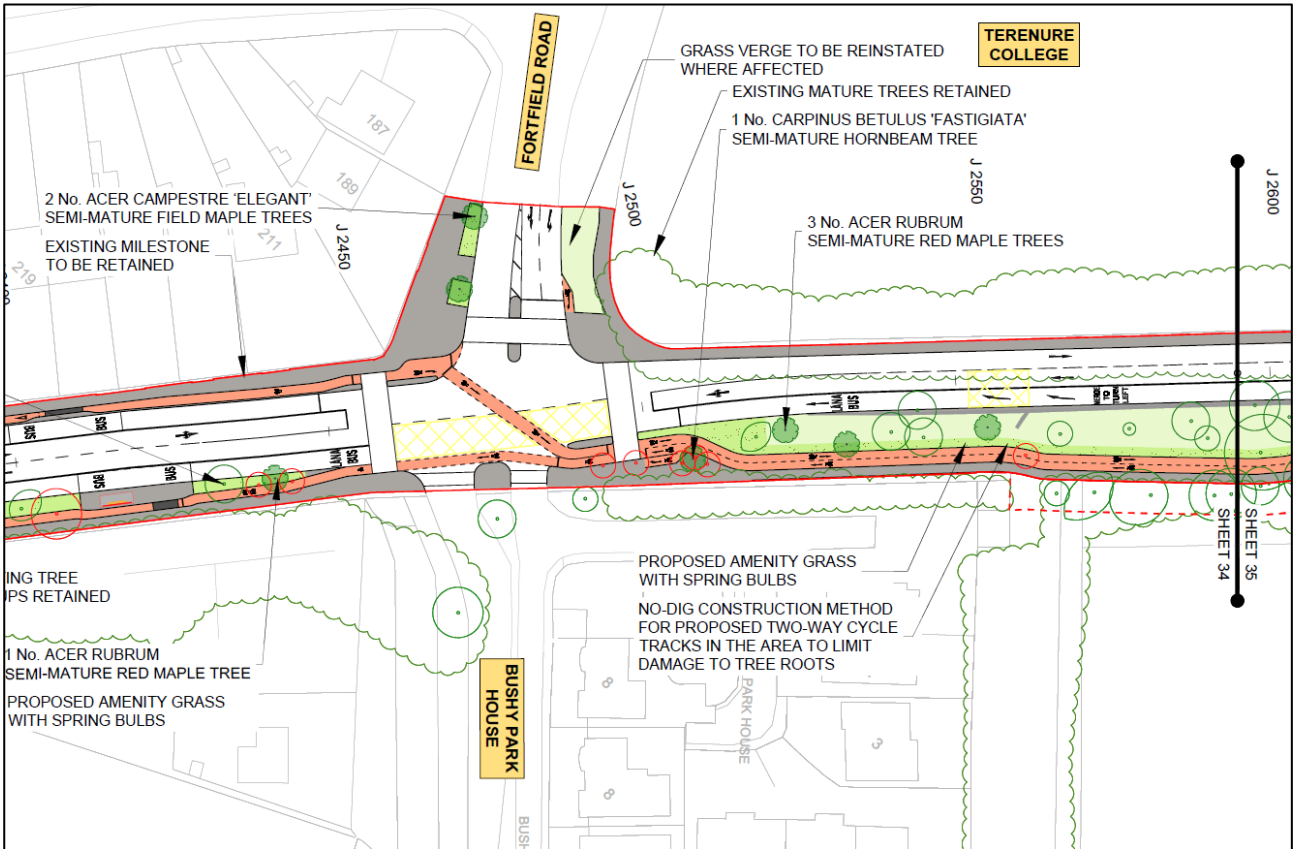


Figure 3.62.7 Extract from Landscaping General Arrangement Drawings (Sheet 34)

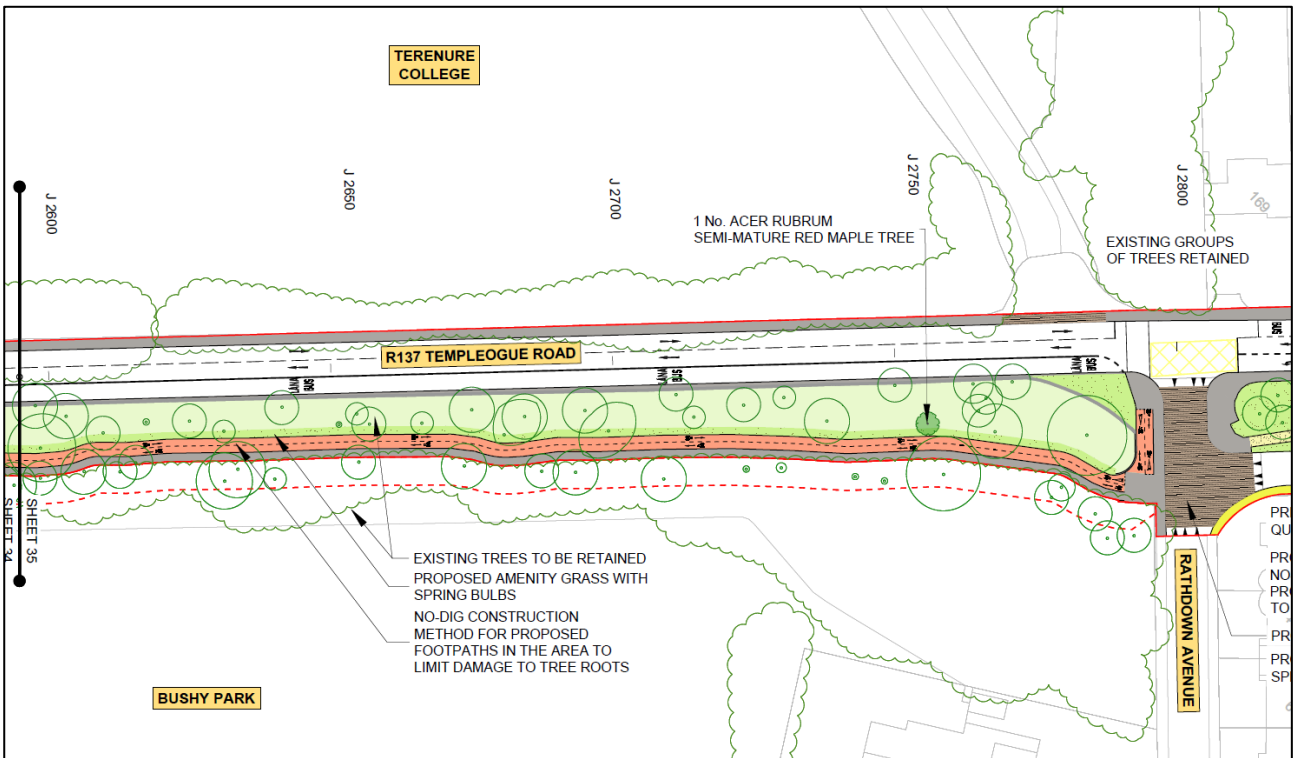


Figure 3.62.8 Extract from Landscaping General Arrangement Drawings (Sheet 35)

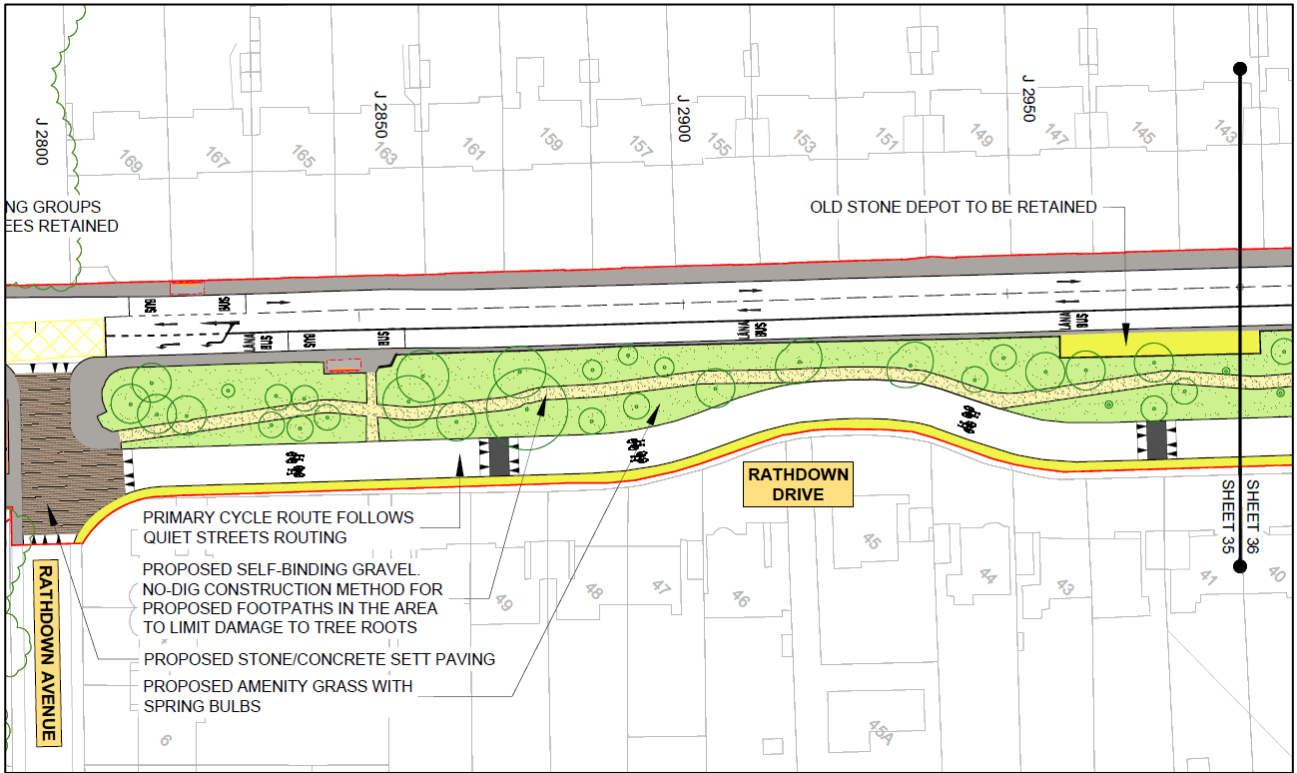


Figure 3.62.9 Extract from Landscaping General Arrangement Drawings (Sheet 35)

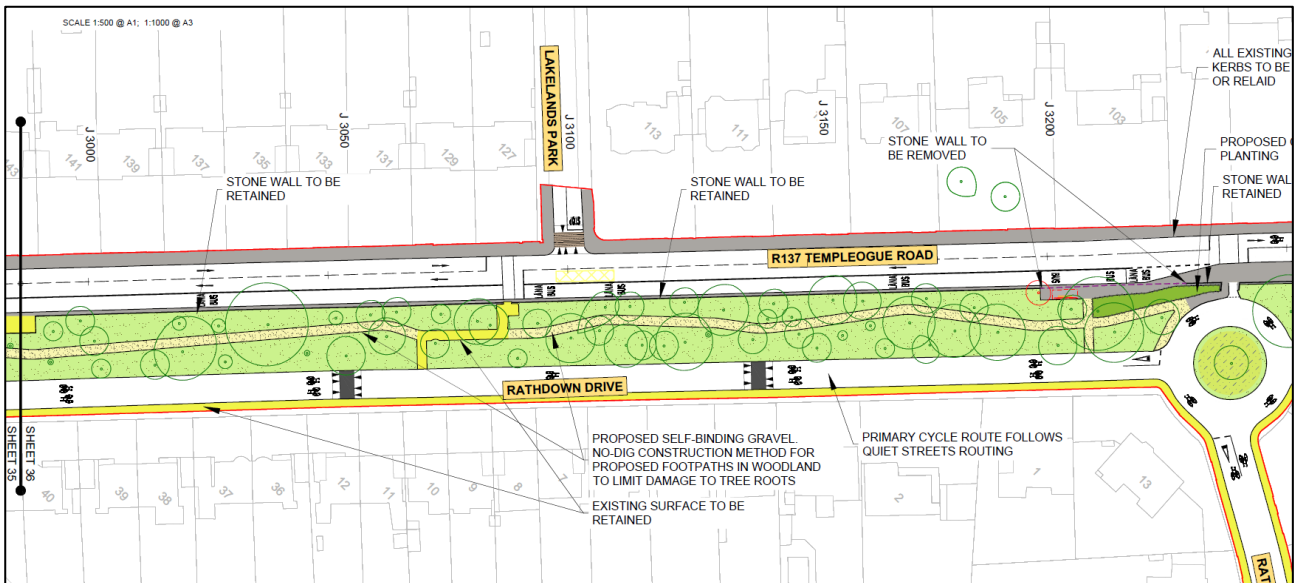


Figure 3.62.10 Extract from Landscaping General Arrangement Drawings (Sheet 36)

It is noted that in the area of concern to this submission:

- 5 trees are identified for removal just north of the Fortfield Road/Bushy Park House junction;
- 1 tree is identified for removal within Bushy Park; and
- 1 tree is identified for removal in the area between Templeogue Road and Rathdown Drive.

In summary 7 trees are to be removed in this area.

Within Bushy Park, it is noted that the design has considered the impact on trees and in this area, it is proposed to deviate slightly from the required minimums in order to retain trees. This is explained in Table 4.3 of Chapter 4 for of the EIAR, and extract of which is presented below.

Ch. J2500-J2790	Two-Way Cycle Track	3.25	Departure	2.5m	Cycle track width reduced over a distance of approximately 290m to mitigate any impact on existing mature trees. Existing width of shared pedestrian and cycle facility maintained.
Ch. J2500-J2790	Footpath (within Bushy Bark)	2.0m	Departure	1.5m	Footpath width reduced over a distance of approximately 290m to mitigate any impact on existing mature trees. Existing width of shared pedestrian and cycle facility maintained.

Figure 3.62.11 Extract from Chapter 4 of the EIAR (Table 4.3)

As noted in Section 4.6.13.2.1:

In some locations, existing street trees have disturbed or broken footpath surfaces. The footpath around such trees will be replaced where appropriate with self-binding gravel to improve the vitality of the trees and ensure accessible pedestrian facilities.

This approach has been taken in the area between Templeogue Road and Rathdown Drive to ensure trees are retained.

v. Impact on Local Business

The Proposed Scheme is to provide enhanced walking, cycling and bus infrastructure on Templeogue Road and surrounding area, 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, including on Templeogue Road, by providing significantly improved sustainable transport options. It is therefore expected that the improvements to the sustainable transport options on Templeogue Road and surrounding areas will promote more frequent local trips to nearby amenities, such as Templeogue and Terenure Village.

EIAR Volume 4 Chapter 9 Appendix A10.2 The Economic Impact of the Core Bus Corridors, concludes that businesses along the corridors are not likely to see reduction in footfall, desire likely reductions in general traffic along the Proposed Scheme. Section 2 states that *“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”*.

Section 3 of the Economic Impact Report states that there is likely to be increased commercial opportunities and improved sales for the majority of impacted businesses. Section 3 states *“Evidence suggests that those travelling to shops via car spend on average more per trip, as can be seen in the graph to the left. However due to the frequency of visits by bus, bike or walking, the average total spend is much higher for this cohort. As such, local businesses could benefit financially from greater access to customers through these modes of transport.”*

A detailed response to this item for Terenure and Rathgar Villages is presented in Section 2.4.2.

vi. Alternative solutions

A detailed response to this item is presented in Section 2.1.1.

3.63 CPO-63 – South Dublin County Council

3.63.1 Description of Proposed Scheme at this location

This submission raises concerns at a number of plots included in the CPO as described in the following sections.

Proposed site compound on Dodder Park Road

Construction Compound TR3 will be located along Dodder View Road, across the road from Bushy Park, in the greenfield area between Dodder View Road, Woodview Cottages and Church Lane.

The area of Construction Compound TR3 is approximately 5,120m². In order to facilitate the compound, a temporary land acquisition is required.

The relevant extract from the CPO Deposit Maps showing the proposed temporary land acquisition area at the proposed compound location on Dodder Park Road is shown in Figure 3.63.1.

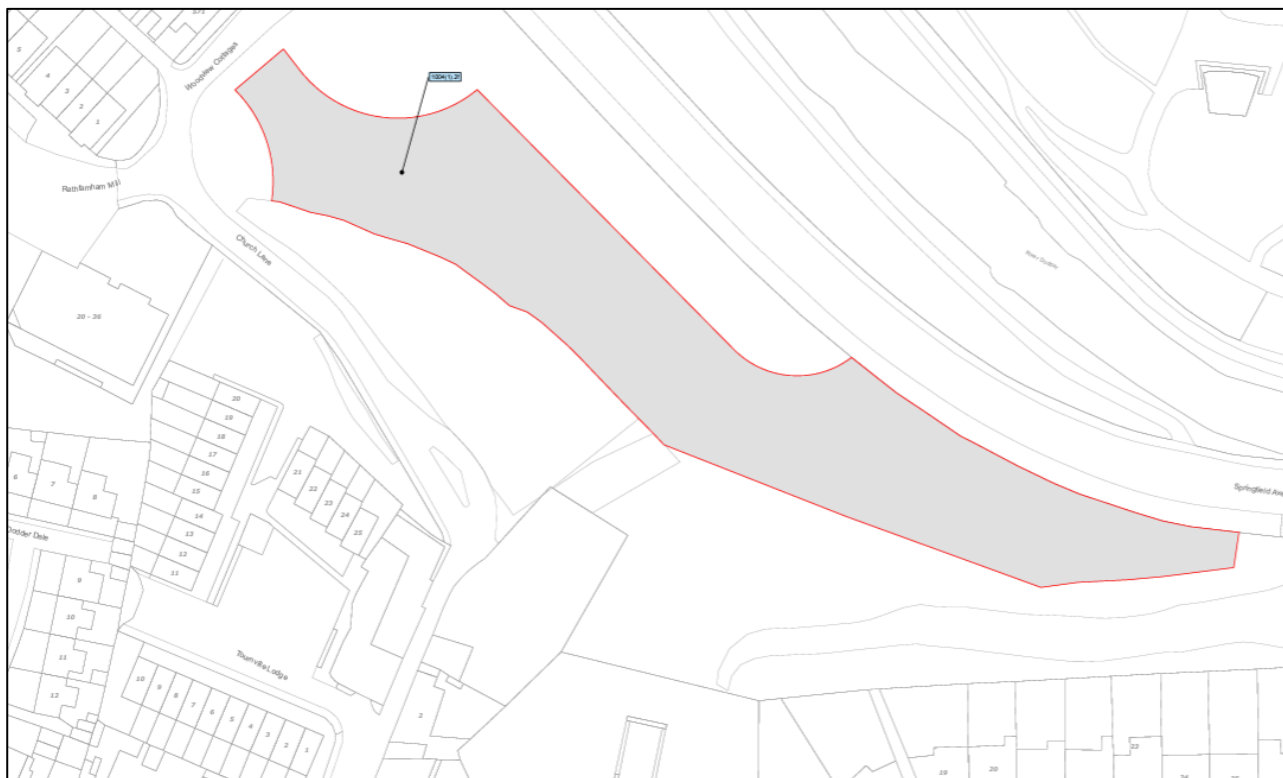


Figure 3.63.1 Extract from CPO Deposit Maps at the proposed compound location on Dodder Park Road

Proposed site compound on Spawell Link Road

Construction Compound TR6 will be located on Spawell Link Road, between Spawell Roundabout and Firhouse Road. The area of Construction Compound TR6 is approximately 3,170m². In order to facilitate the compound, a temporary land acquisition is required.

The relevant extract from the CPO Deposit Maps showing the proposed temporary land acquisition area at the proposed compound location on Spawell Link Road is shown in Figure 3.63.2.



Figure 3.63.2 Extract from CPO Deposit Maps at the proposed compound location on Spawell Link Road
Proposed CPO at Grange Road/Nutgrove Avenue Junction

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, Section 2 of the Proposed Scheme will commence at the junction of Grange Road and Nutgrove Avenue, where it will tie into the Grange Road Cycle scheme. It is proposed to upgrade this junction through the provision of kerb protection for cyclists. It is proposed to reconfigure the existing car park adjacent to this junction to facilitate the revised road arrangement and to install a new island bus stop layout in this location.

The existing junctions along this portion of the Grange Road (R821) will be upgraded to cycle protected signalised junctions with the provision of segregation islands proposed where practical.

To accommodate this cross-section, permanent land acquisition is proposed at this location.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.63.3.

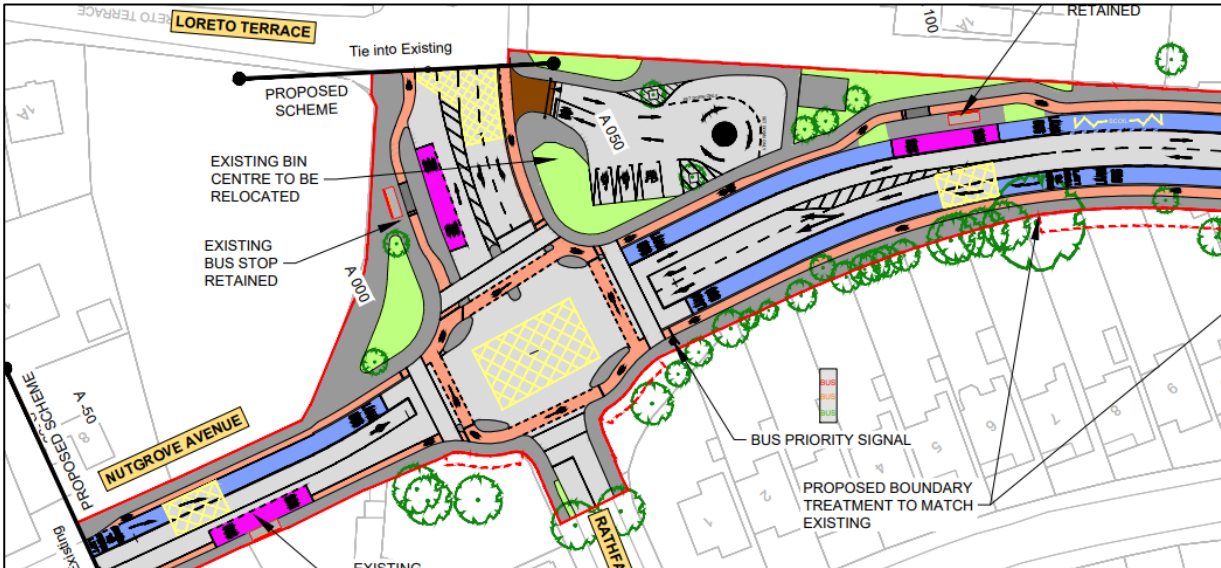


Figure 3.63.3 General Arrangement of Proposed Scheme adjacent to Grange Road/Nutgrove Avenue Junction (Sheet 1)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 is shown in Figure 3.63.4.

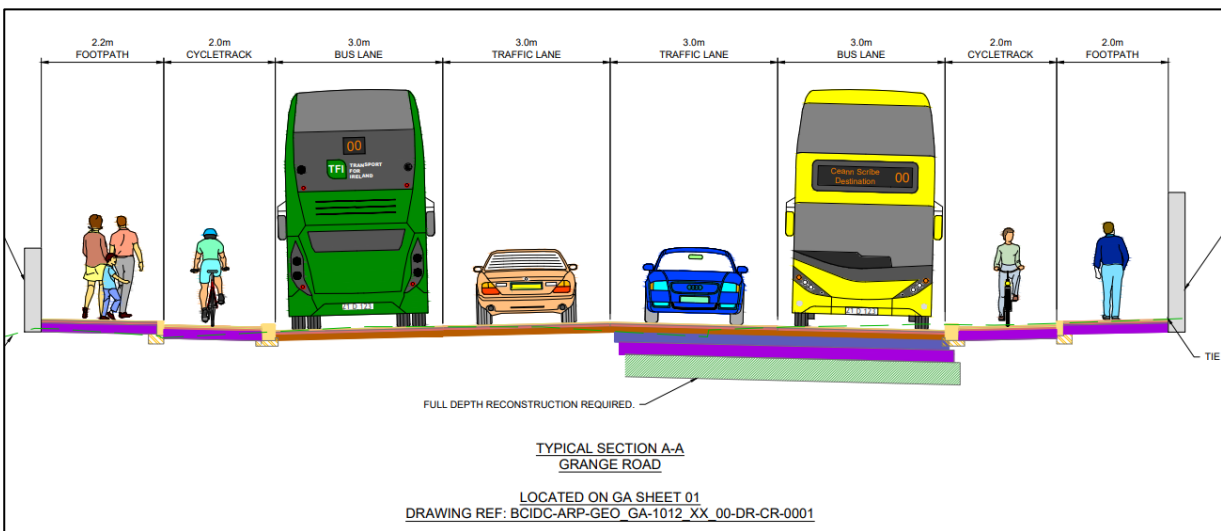


Figure 3.63.4 Typical Cross Section adjacent to Grange Road/Nutgrove Avenue Junction

The relevant extract from the CPO Deposit Maps showing the proposed permanent land acquisition area at the Grange Road/Nutgrove Avenue junction is shown in Figure 3.63.5.



Figure 3.63.5 Extract from CPO Deposit Maps at Grange Road/Nutgrove Avenue Junction

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.63.6.



Figure 3.63.6 Proposed Land Acquisition lines adjacent to Grange Road/Nutgrove Avenue Junction

The existing road view of the corner of Grange Road and Nutgrove Avenue Junction is presented in Figure 3.63.7.



Figure 3.63.7 Existing plot at Grange Road/Nutgrove Avenue Junction (Image Source: Google)

Proposed CPO at Rathfarnham Castle Park

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Grange Road, it is proposed to widen the existing R821 carriageway to accommodate enhanced bus, cycle and pedestrian facilities along the corridor.

Between this junction and the Castleside Drive junction it is proposed to provide a single bus lane alongside general traffic lanes and cycle tracks in both directions. To accommodate the road layout, it is proposed to utilise limited land-take from adjacent properties, including setting back the existing boundary wall to Rathfarnham Castle Park. The existing boundary wall of Rathfarnham Castle will be set back and reconstructed with a round capping roughcast render.

It is proposed to upgrade the junction of Rathfarnham Road and Willbrook Road through the provision of kerb protection for cyclists. It is also proposed to upgrade the junction of Rathfarnham Road and Butterfield Avenue through the provision of kerb protection for cyclists. This will require the removal of general traffic lanes on the Butterfield Avenue arm of this junction.

In order to achieve the desired design for the Proposed Scheme, permanent and temporary land acquisition is proposed in this section, as described with maximum permanent land acquisition of approximately 7.0m, reducing to 0.5m at the northern end of the plot and temporarily acquired of approximately 3.0m.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.63.8.

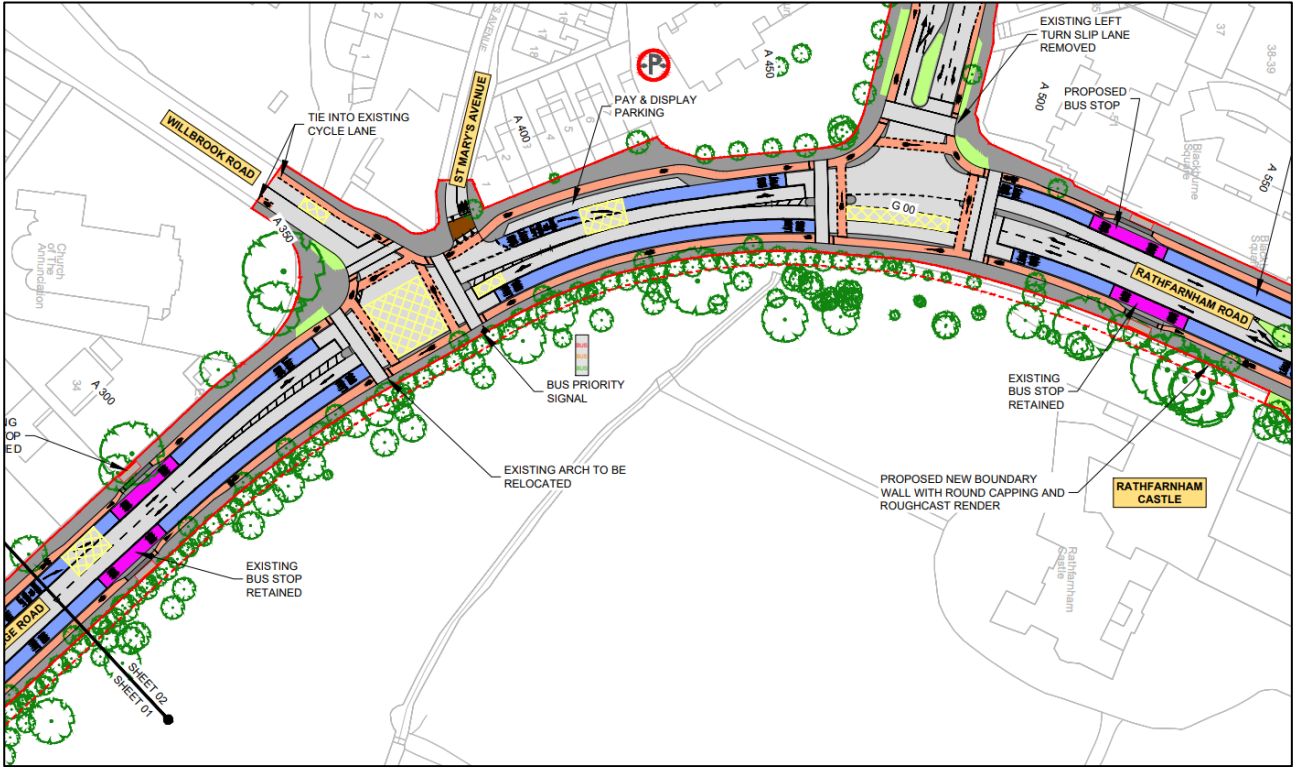


Figure 3.63.8 General Arrangement of Proposed Scheme adjacent to Grange Road/Nutgrove Avenue Junction (Sheet 2)

The relevant extract from the two typical cross-sections in the EIAR, Volume 3, Part 1 of 3, Chapter 4 is shown in Figure 3.63.9.

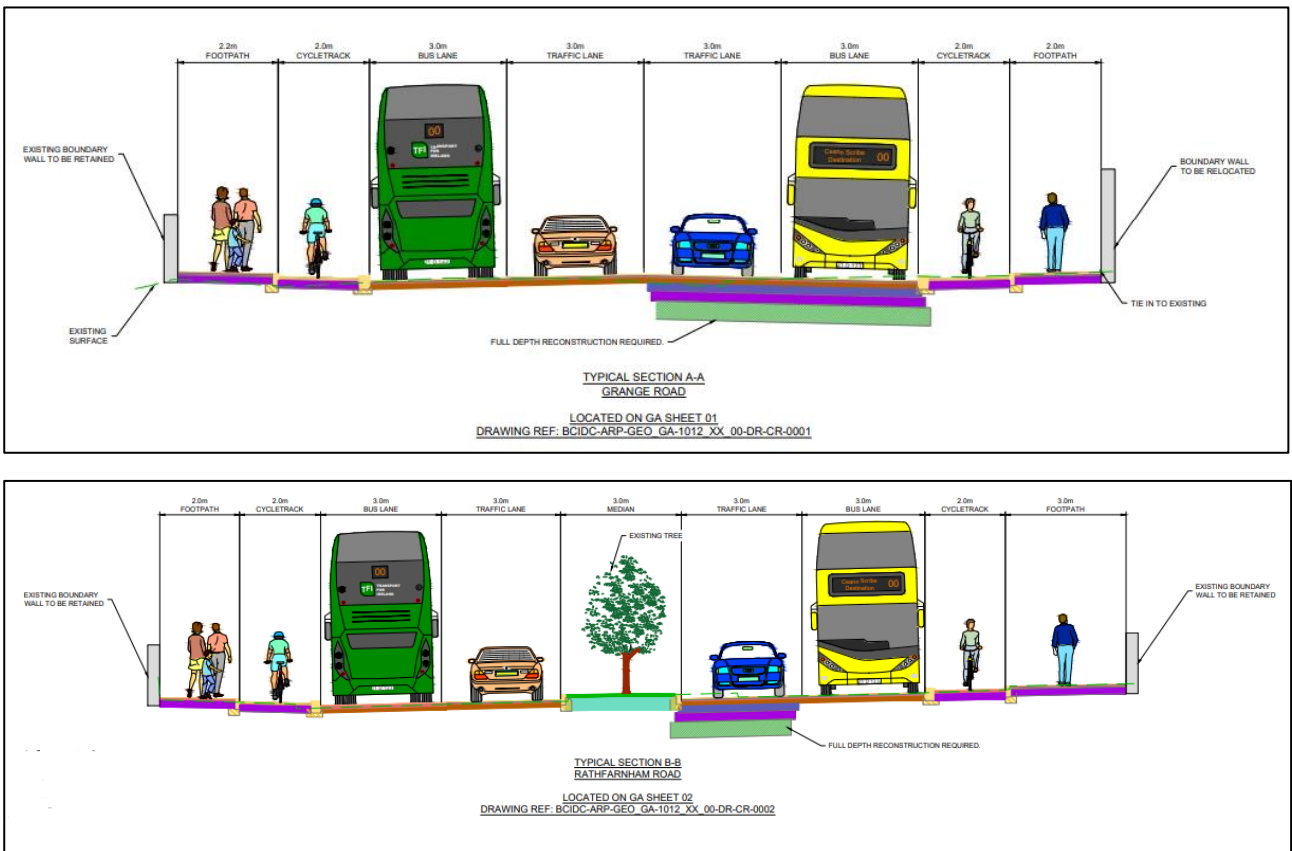


Figure 3.63.9 Typical Cross-Section adjacent to Rathfarnham Castle Park

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition area at Rathfarnham Castle Park is shown in Figure 3.63.10.

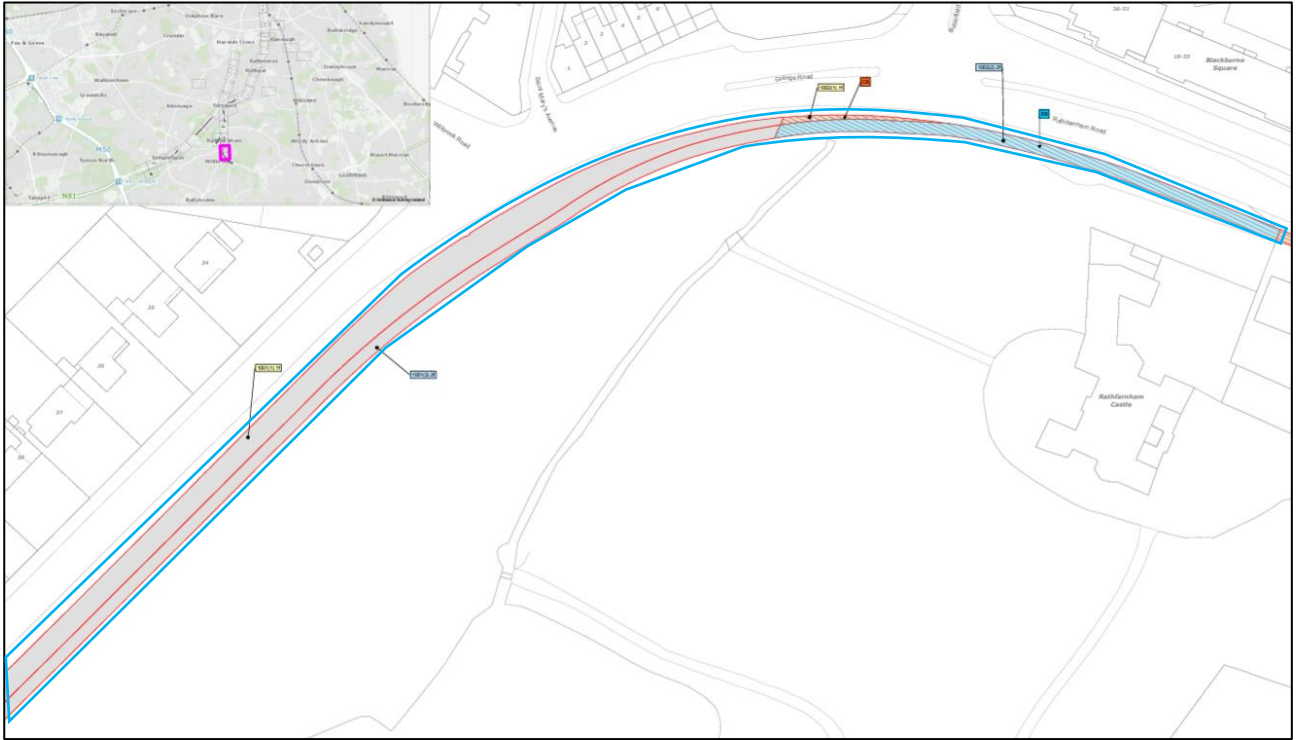


Figure 3.63.10 Extract from CPO Deposit Maps at Rathfarnham Castle Park

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.63.11.



Figure 3.63.11 Proposed Land Acquisition lines adjacent to Rathfarnham Castle Park shown across three images from Grange Road to Rathfarnham Road

Existing street view showing the bend where Grange Road and Rathfarnham Road meets.



Figure 3.63.12 Existing boundary from Grange Road and Rathfarnham Road junction of Rathfarnham Castle Park (Image Source: Google)

Proposed CPO at Rathfarnham Main St/Rathfarnham Road Junction

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions.

It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. To accommodate this cross section, land acquisition will be required along Rathfarnham Road. Land acquisition is proposed on the western side of the Rathfarnham Road.

In order to achieve the desired design for the Proposed Scheme, permanent land acquisition is proposed in this section, as described below.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure .

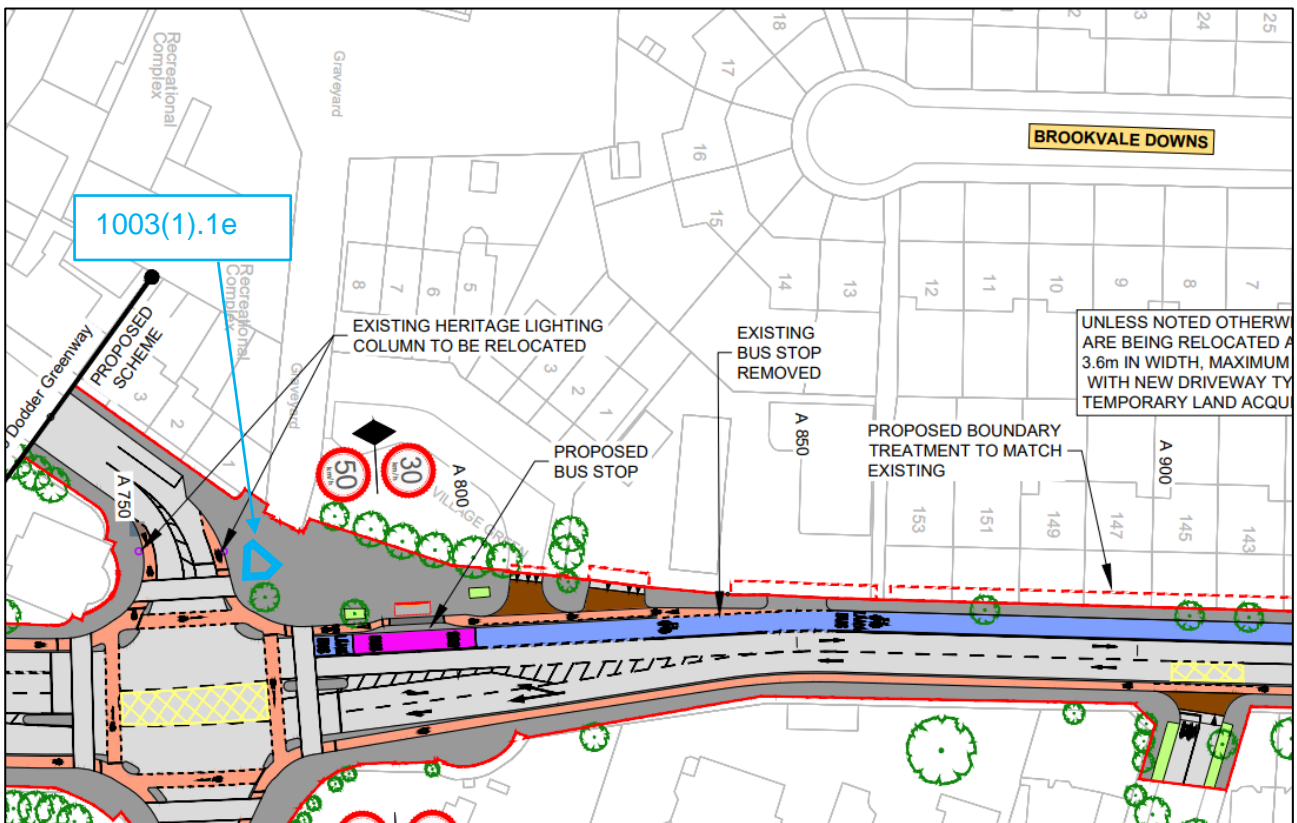


Figure 3.63.13 General Arrangement of Proposed Scheme adjacent to 3 Village Green (Sheet 03)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 is shown in Figure .

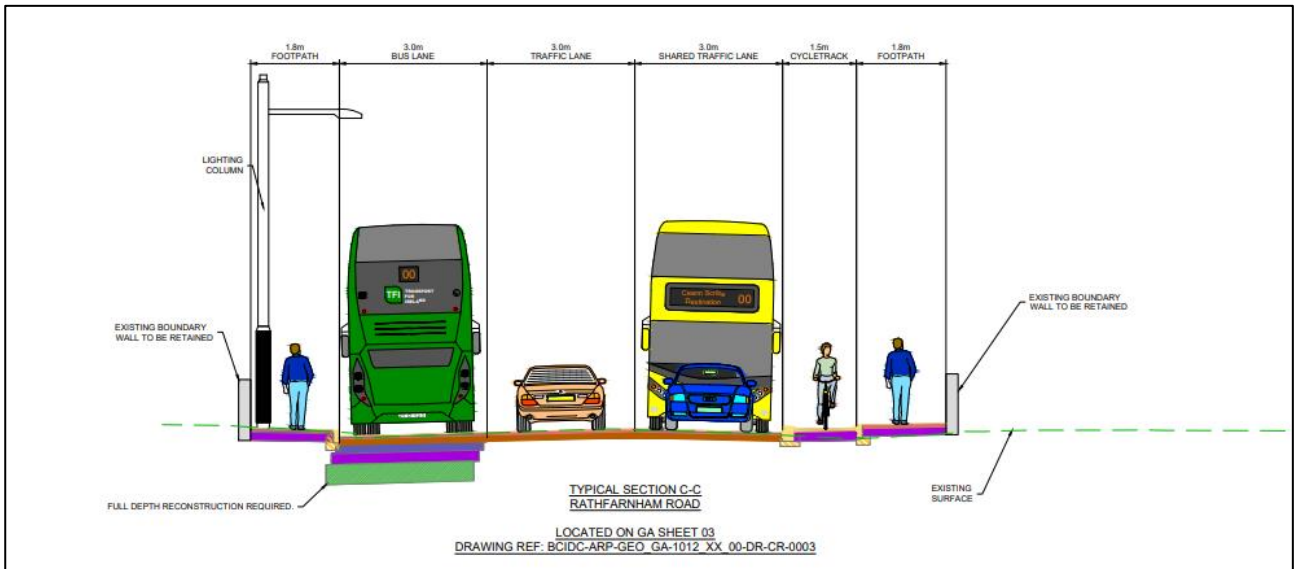


Figure 3.63.14 Typical Cross-Section adjacent to Village Green

The relevant extract from the CPO Deposit Maps showing the proposed permanent land acquisition area at the Rathfarnham Main St/Rathfarnham Road junction is shown in Figure 3.63.15.

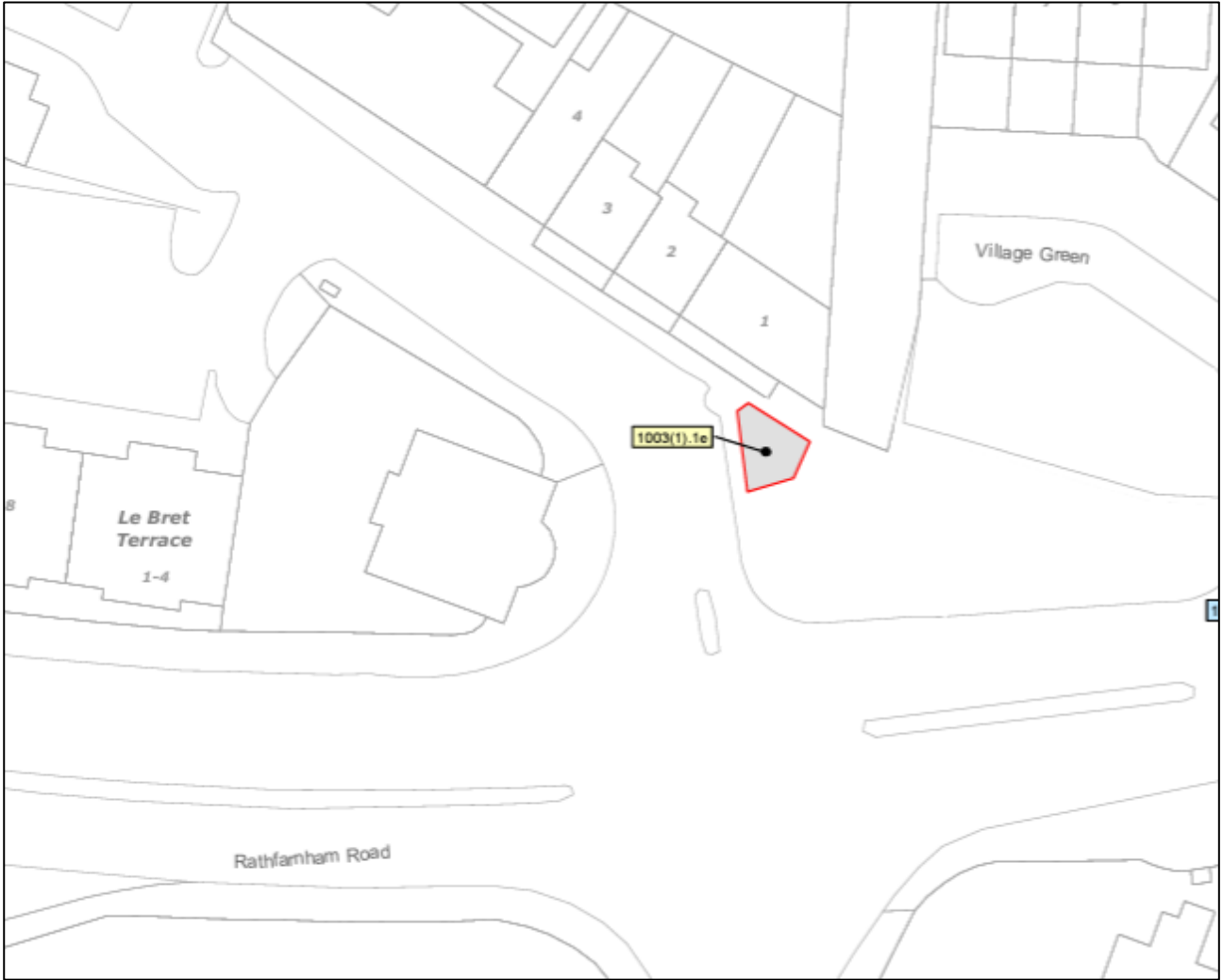


Figure 3.63.15 Extract from CPO Deposit Maps at Rathfarnham Main St/Rathfarnham Road Junction

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.63.16.



Figure 3.63.16 Proposed Land Acquisition lines adjacent junction to Rathfarnham Road and Main Street

The existing road view of this plot is shown as existing in Figure 3.63.17.



Figure 3.63.17 Plot as seen in Google maps street view (Image Source: Google)

Proposed CPO at Rathfarnham Road/Dodder Park Road Junction

In order to achieve the Proposed Scheme objectives along this section of the corridor, as described in paragraph 4.5.2.1 of Chapter 4 of Volume 2 of the EIAR, Proposed Scheme Description, on the section of Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to provide an inbound bus lane, two general traffic lanes and a 1.5m wide outbound cycle track, with outbound bus priority provided through signal-controlled priority. Due to construction related constraints, the inbound cycle track will be curtailed over approximately 270m, with cyclists utilising the bus lane over this short section. A section of inbound cycle track will be provided at either end of this section, on approach to junctions. It is proposed to introduce a 30 kph speed limit on Rathfarnham Road at this point due to the fact that inbound cyclists will be sharing the bus lane through this section. This 30 kph speed limit will continue from here to the City Centre, due to the presence of multiple urban villages along the route, as well as other sections where cyclists share the bus lane. This consistent speed limit is proposed to ensure legibility for road users along the route and to avoid frequent increases and decreases in speed limits.

To accommodate the new configuration on Rathfarnham Road between Castleside Drive and Dodder Park Road, it is proposed to utilise land-take from adjacent properties on the western side of the road, south of Brookvale Road.

To maintain bus priority through the Dodder Park Road and Rathfarnham Road junction, it is intended to provide signal-controlled priority on the southern and northern approaches to the junction. It is proposed to upgrade this junction through the provision of kerb protection for cyclists, which will tie into the proposed Dodder Greenway on Dodder View Road and Dodder Road Lower.

In order to achieve the desired design for the Proposed Scheme, permanent land acquisition is proposed in this section, as described below.

The relevant extract from the General Arrangement Drawings in the EIAR, Volume 3, Figures Part 1 of 3, Chapter 4 Proposed Scheme Description is shown in Figure 3.63.18.

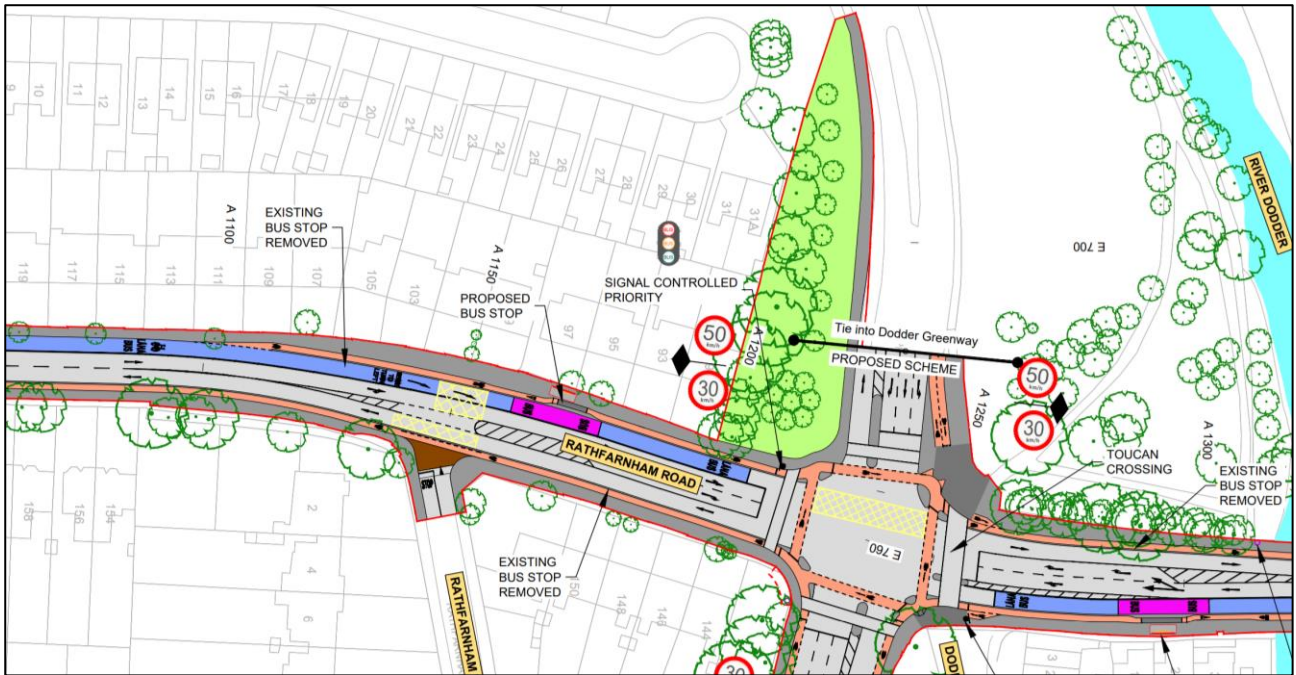


Figure 3.63.18 General Arrangement of Proposed Scheme adjacent to junction at Rathfarnham Road and Dodder Park Road Junction (Sheet 04)

The relevant extract from the typical cross-section in the EIAR, Volume 3, Part 1 of 3, Chapter 4 is shown in Figure 3.63.19.

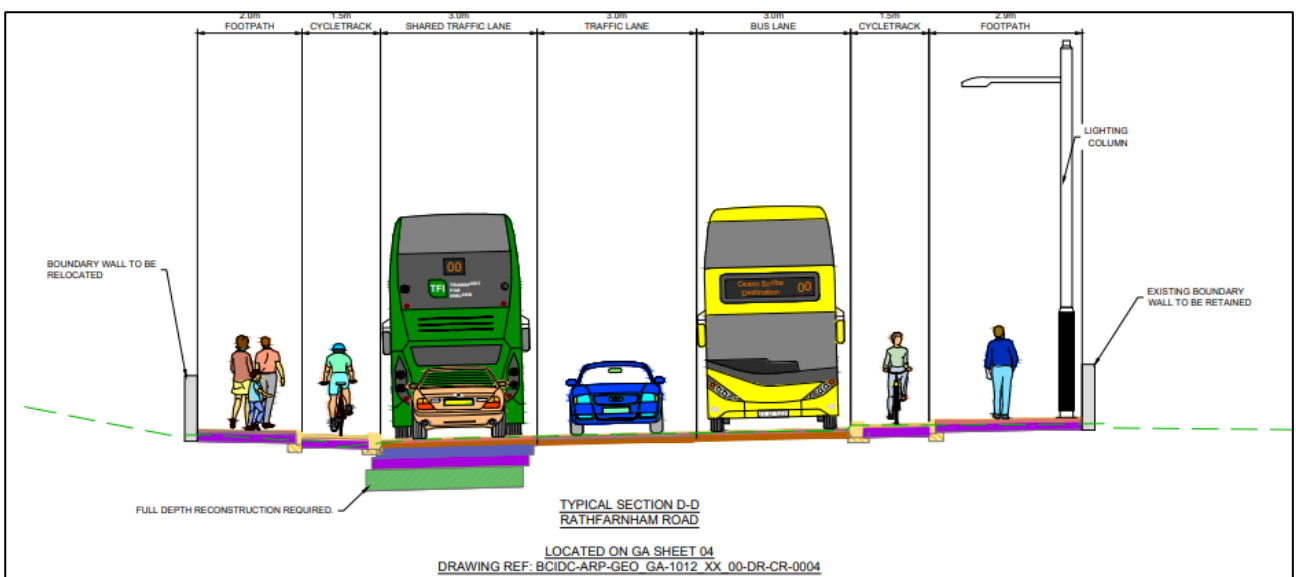


Figure 3.63.19 Typical Cross-Section adjacent to Rathfarnham Road and Dodder Park Road Junction

The relevant extract from the CPO Deposit Maps showing the proposed permanent and temporary land acquisition area at the Rathfarnham Main St/Rathfarnham Road junction is shown in Figure 3.63.20.

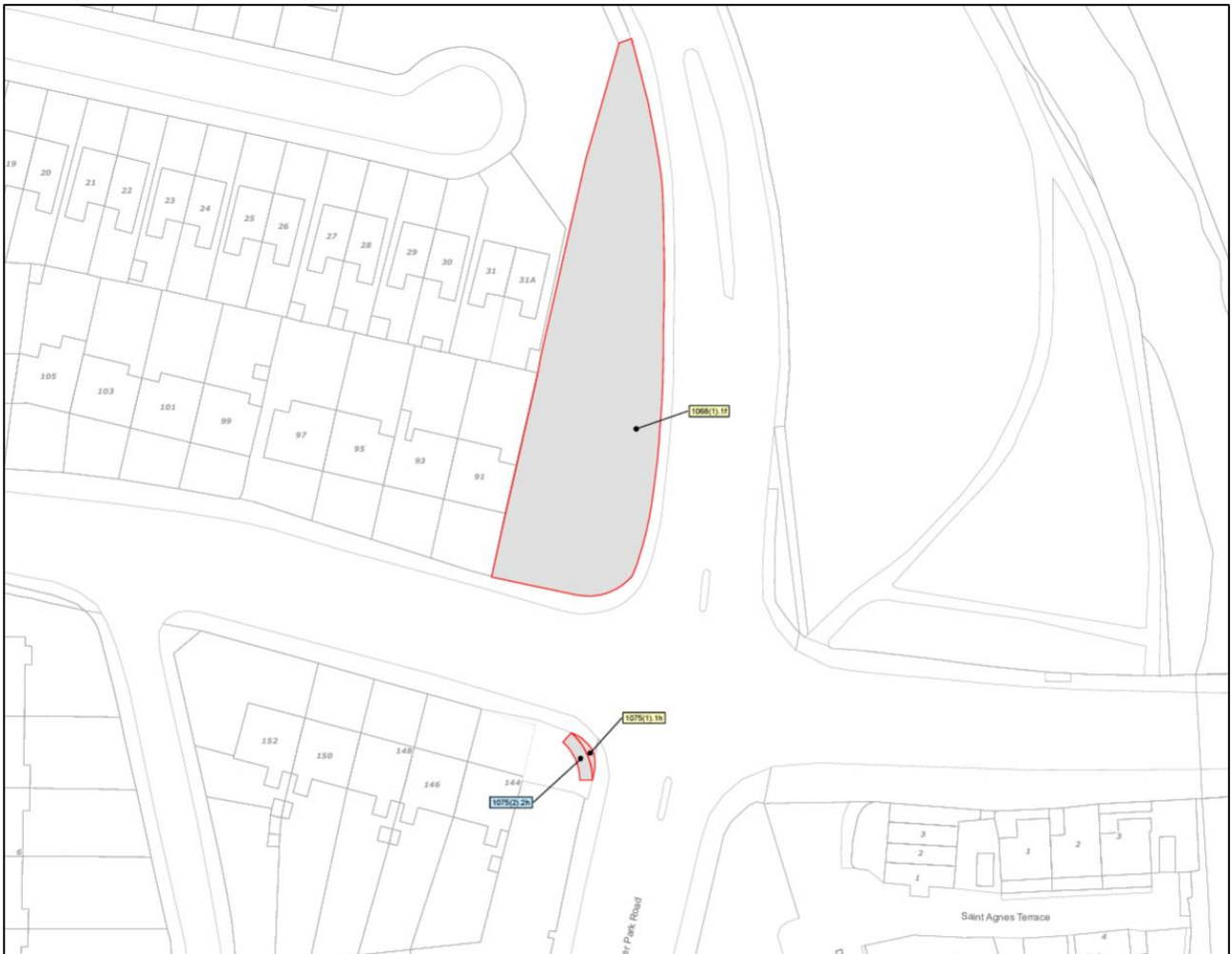


Figure 3.63.20 Extract from CPO Deposit Maps at Rathfarnham Road and Dodder Park Road Junction

The proposed permanent and temporary land acquisition lines overlain on aerial photography are shown in Figure 3.63.21.



Figure 3.63.21 Proposed Land Acquisition at Rathfarnham Road and Dodder Park Road Junction

The existing plot is shown in Figure 3.63.22.



Figure 3.63.22 Section as existing at Rathfarnham Road and Dodder Park Road Junction (Image Source: Google)

3.63.2 Summary of the Points of Objection to the CPO by SDCC

3.63.2.1 Overview of submission

South Dublin County Council's (SDCC) submission comprised of 46 pages. For ease of reference the section titles and order have been retained throughout the NTA's response as set out in the following paragraphs.

Advocate for the Proposed Scheme

Development Management Section

- i. Support for the scheme
- ii. South Dublin County Council Development Plan 2022-2028 Policy Context

Traffic and Transport Section

- i. Support for the scheme
- ii. Comments on Spawell Roundabout to Fortfield Road Section
 - a) Junction Improvements
 - b) Preservation of existing stone arch
 - c) Cycle Track alignment
 - d) Traffic Safety at Corrybeg Junction
 - e) Traffic Safety at Old Bridge Road Junction
 - f) Proposed Shared Area
 - g) Cycle Track Alignment
- iii. Comments on Nutgrove Avenue to Dodder Park Road Section
 - a) Rathfarnham Castle Wall
 - b) Possible Traffic Congestion at peak times
 - c) Construction Management Plan
 - d) Scheme Tie-In
 - e) Temporary Construction Compound
 - f) Land Management
 - g) Construction Traffic Management

Roads Maintenance Section

- 1) Construction specification.
- 2) Precast kerbing
- 3) Road structure bus bay specification.
- 4) Drainage system / SuDS.
- 5) Signage
- 6) Maintenance costs
- 7) Universal design principles

Public Realm Section

- i. Parks and Landscape Section Comments
 - a) Trees within Rathfarnham Castle Park
 - b) Natural SuDS
 - c) Construction Compounds
 - d) Other CPO Locations
 - e) Rathfarnham Castle Park
 - f) Dodder Greenway Tie-in at Pearse Bridge
 - g) Proposed Boundary Treatment at Rathfarnham Castle Park
 - h) Biodiversity and Ecology
 - i) Feasibility of Proposed Street Tree Planting
 - j) Lighting
 - k) IE8 Objective 6
 - l) Landscape Character Type: Green Space e.g., Tymon Park and Bancroft Park
 - m) Protection of Habitats and Species
 - n) Public Realm Enhancement

Water Services Section

Architectural Conservation Section

Conclusion

3.63.3 Responses to the Points of Objection

1. Advocate for the Proposed Scheme

Observations raised / clarifications sought

The submission outlines the numerous policy objectives within the County Development Plan 2022-2028 and confirm its support for the Proposed Scheme.

It is noted that SDCC Development Management Section (DMS) make a series of positive comments in its conclusion including that the Proposed Scheme would be *“very welcome....provide a good balance servicing existing communities.....it is also delivering on the wider remit of smarter travel”*

It also notes that *“Issues such as tree loss and the loss in carriageway width dedicated to cars are decisively outweighed by improved sustainable transport opportunities”*.

The DMS also notes that the Proposed Scheme:

- *“will support more efficient and intensive use of brownfield serviced urban sites, sustainable and vibrant communities, as well as housing delivery”;*
- *“will provide a good balance between servicing existing communities while not seriously and adversely affecting residential amenities, given its proposed routing”*
- will deliver the *“wider remit of smarter travel given proposed improvements to walking and cycling infrastructure”*
- SDCC notes from page 9 of their submission: *“SDCC Traffic and Transportation Section are broadly supportive of the proposal and are of the view that it aligns with the policies County Development Plan (2022 – 2028) The scheme supports the National Development Plan, RSES and the Transport Strategy for the Greater Dublin Area, (2022 – 2042). In particular the scheme supports the sustainable movement policies within this strategic plan.”*
- Also, from page 9 of their submission SDCC notes: *“[T]he proposed Templeogue / Rathfarnham core bus corridor scheme supports the actions contained in the latest Climate Action Plan 2023”*

The Traffic Department concludes their section of the submission by stating: *“The comments provided in this SDCC submission are mainly focussed on the construction management controls and minor design details of the scheme, To date many of our concerns have been addressed through the extensive consultation process that has been conducted by the NTA with the various stakeholders in our Local Authority area.”*

This Bus Connects project represents a big step forward in the delivery of sustainable transport alternatives in the South Dublin Local Authority Area.”

Response

The support for the scheme is noted and welcomed by the NTA.

2. Development Management Section

Observations raised / clarifications sought

- i. Support for the scheme
- ii. South Dublin County Council Development Plan 2022-2028 Policy Context

Response

i. Support for the scheme

See 1 above.

ii. South Dublin County Council Development Plan 2022-2028 Policy Context

In their submission SDCC set out the Policy Context of the Proposed Scheme.

In its submission, SDCC confirmed its support for the Proposed Scheme, and stated in their conclusion on page 40 of the submission:

“SDCC welcomes the proposed Templeogue/Rathfarnham to City Centre Core Bus Corridor route which will provide high quality public transport infrastructure.”

In relation to planning policy, the NTA welcomes at page 9 of their submission: *“SDCC are broadly supportive of the proposal and are of the view that it aligns with the policies of the County Development Plan (2022 – 2028) The scheme supports the National Development Plan, RSES, and the Transport Strategy for the Greater Dublin Area, (2022 – 2028). In particular, the scheme supports the sustainable movement policies within this strategic plan.*

In addition, the proposed Templeogue /Rathfarnham core bus corridor scheme supports the action contained in the latest Climate Action Plan 2023.”

3. Traffic and Transport Section

Observations raised / clarifications sought

- i. Support for the scheme
- ii. Comments on Spawell Roundabout to Fortfield Road Section
 - a) Junction Improvements
 - b) Preservation of existing stone arch
 - c) Cycle Track alignment
 - d) Traffic Safety at Corrybeg Junction
 - e) Traffic Safety at Old Bridge Road Junction
 - f) Proposed Shared Area
 - g) Cycle Track Alignment
- i. Comments on Nutgrove Avenue to Dodder Park Road Section
 - a) Rathfarnham Castle Wall
 - b) Possible Traffic Congestion at peak times
 - c) Construction Management Plan
 - d) Scheme Tie-In
 - e) Temporary Construction Compound
 - f) Land Management
 - g) Construction Traffic Management

Response to Issue

i. Support for the scheme

SDCC set out (at page 9 of its submission) that: *“SDCC are broadly supportive of the proposal and are of the view that it aligns with the policies of the County Development Plan (2022 – 2028). The scheme supports the National Development Plan, RSES, and the Transport Strategy for the Greater Dublin Area, (2022 – 2024). In particular, the scheme supports the sustainable movement policies within this strategic plan.*

In addition, the proposed Templeogue / Rathfarnham core bus corridor scheme supports the actions contained in the latest Climate Action Plan 2023. Contained within this document is the statement “the NDP continues the Programme for Government commitment to rebalance the share of capital expenditure to favour new public transport schemes over road projects”.

South Dublin County Council went on to state: *“The comments provided within this SDCC submission report are mainly focused on the construction management controls and minor design details of the scheme. To date many of our concerns have been addressed through the extensive consultation process that has been conducted by the NTA with the various stakeholders in our Local Authority area.”*

Response

The NTA notes the view expressed by the submission.

The NTA is grateful for the positive and constructive liaison that has occurred with the SDCC throughout the design and planning process to date, and through that liaison with other Departments and Sections within SDCC regarding the progression of the Proposed Scheme.

ii. Comments on Spawell Roundabout to Fortfield Road Section

a) Junction Improvements

In their submission SDCC notes that they welcome the conversion of the Spawell roundabout on the R137 to a traffic-light controlled junction with marked improvements for bus priority, and active travel movements.

Response

The NTA notes and welcomes the support for the proposed junction improvements at the Spawell roundabout.

b) Preservation of Existing Stone Arch

SDCC in their submission notes that the traffic section welcomes the preservation of the stone arch on Sheet 30 of 42 of the General Arrangement Drawings, and the opening of this amenity to the public.

Response

The NTA notes and welcomes the support for the proposed preservation of the existing stone arch on Templeogue Road. The NTA also acknowledges the extensive consultation which SDCC have facilitated in relation to this proposal.

c) Cycle Track Alignment

The SDCC submission states that there are quite severe changes in direction of the cycle track around the back of the proposed inbound bus stop on Sheet 31 of 42 of the General Arrangement Drawings.

Response

The proposed inbound bus stop on Sheet 31 of 42 of the General Arrangement drawings is an island bus stop arrangement. Section 4.6.5.5.1 of EIAR Chapter 4 Proposed Scheme Description, sets out the proposed arrangement for Island bus stops as follows:

“Where sufficient space allows, Island Bus Stops are the preferred bus stop option for the Proposed Scheme.

This option will reduce conflict between cyclists and stopping buses by deflecting cyclists behind the bus stop. To address the pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop area. Part-time signals will enable controlled crossing when. Visually impaired pedestrians may call for a fixed green signal when necessary and the cycle signal will change to red. The cycle track will narrow from 2.0m to 1.5m for single file cycling through the bus stop, as overtaking is not required in this area.

An example of an Island Bus Stop is showed in Image 4.8 (One-way Cycle Track) and Image 4.9 (Two-way Cycle Track).

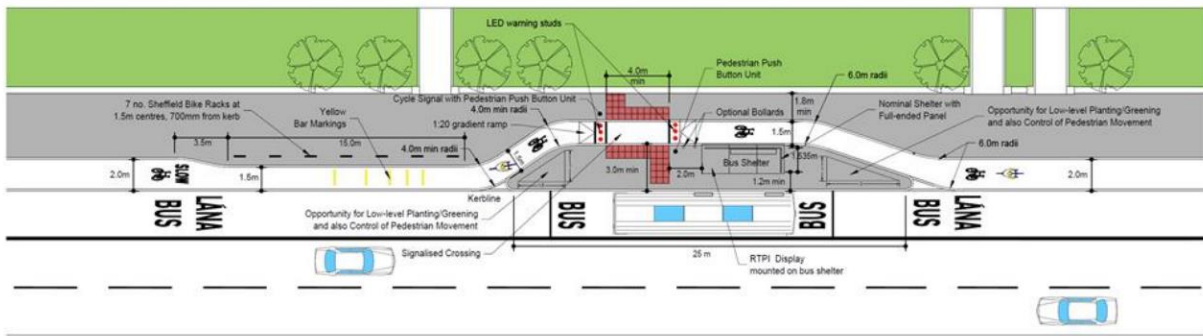


Image 4.8: Island Bus Stop – One Cycle Track

Figure 3.63.23 Island Bus stop arrangement

The cycle track is deflected behind the bus shelter in order to remove the potential for conflict between cyclists and bus passengers boarding/alighting. Minimum radii and suggested angle of deflection are outlined in Figure 3.63.23. The bus stop on Sheet 31 has been designed in accordance with the principles set out in the Preliminary Design Guidance Booklet.

d) Traffic Safety at Corrybeg Junction

SDCC comment that there is an existing no right turn existing out of the Corrybeg estate, and state that this no right turn must be maintained for traffic safety reasons.

Response

The NTA notes this comment. The Proposed Scheme does not propose any change to the existing traffic management measures at the Corrybeg junction. There is an existing no right turn sign, located outside of the red line boundary of the Proposed Scheme as shown in Figure 3.63.24, which will be retained.



Figure 3.63.24 Existing no right turn sign on Corrybeg

e) Traffic Safety at Old Bridge Road Junction

The SDCC submission notes that the traffic section is pleased that the existing right turn ban for all vehicles coming from the Old Bridge Road except buses, is retained as part of the Proposed Scheme.

Response

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

f) Proposed Shared Area

SDCC notes in their submission that the traffic section is supportive of the shared area in front of no. 258 to no. 252 Templeogue Road being retained for access to these dwellings.

Response

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

g) Cycle Track Alignment

The SDCC submission states that there are sharp changes in direction of the cycle track in the vicinity of the Springfield Road junction on Sheet 34 of 42 of the General Arrangement Drawings.

Response

The NTA notes this comment. The alignment of the cycle track in this location has been designed to retain the existing mature trees in this location where practicable. The NTA is satisfied that the cycle track as designed will provide a high level of service for cyclists.

iii. Comments on Nutgrove Avenue to Dodder Park Road Section

a) Rathfarnham Castle Wall

The submission notes the following: *“The Traffic Section have received significant negative feedback in relation to the Nutgrove Avenue / Grange Road set back of the existing wall and possible loss of mature trees as illustrated in Figure 2 and detailed in (General Arrangement drawing: 1 of 42).*

Significant mitigation measures are required to make up for the loss in biodiversity at this location.”

Response

Refer to detailed response in Section 2.3.2.

b) Possible Traffic Congestion at peak times

SDCC notes that the proposal involves loss of the left turning lane northbound into Butterfield Avenue, and that traffic which currently queues within two lanes will now only have one lane to queue. The submission further notes that the traffic signal timings at the Butterfield Avenue junction need careful consideration to avoid long tail backs past the previous junction at St. Marks Avenue and Willbrook Road.

Response

The NTA notes SDCCs comments in relation to the removal of an existing general traffic turning lane at the junction of Rathfarnham Road and Butterfield Avenue. This general traffic lane is proposed to be converted to an inbound bus lane, to provide priority for inbound buses on approach to this junction, in line with the objectives of the Proposed Scheme. In relation to the potential for impact on the surrounding road network, extensive traffic modelling has been undertaken, as detailed in Chapter 6 of the EIAR, to determine the likely impacts of the Proposed Scheme on the surrounding road network.

Section 6.3.2 of Chapter 6 of the EIAR notes the following in relation to the Proposed Scheme impact assessment modelling tools:

“This section summarises the various transport modelling tools that have been developed and used to inform the preparation of the TIA and this chapter of the EIAR. The purpose of each tool has been detailed and its use for each element of the Proposed Scheme assessment has been defined.

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 passed from the ERM 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.

In summary, there are four tiers of transport modelling which have been used to assess the impacts of the Proposed Scheme:

- **Tier 1 (Strategic Level):** *The NTA’s East Regional Model (ERM) is the primary tool which has been used to undertake the strategic modelling of the Proposed Scheme and has provided the strategic multi-modal demand outputs for the proposed forecast years;*
- **Tier 2 (Local Level):** *A Local Area Model (LAM) has been developed to provide a more detailed understanding of traffic movement at a local level. The LAM is a subset model created from the ERM and contains a more refined road network model used to provide consistent road-based outputs to inform the TIA, EIA and junction design models. This includes information such as road network speed data and traffic redistribution impacts for the Operational Phase. The LAM also provides traffic flow information for the micro-simulation model and junction design models and has been used to support junction design and traffic management plan testing;*
- **Tier 3 (Corridor Level):** *A micro-simulation model of the full ‘end to end’ corridor has been developed for the Proposed Scheme. The primary role of the micro-simulation model has been to support the ongoing development of junction designs and traffic signal control strategies and to provide bus journey time information for the determination of benefits of the Proposed Scheme; and*
- **Tier 4 (Junction Level):** *Local junction models have been developed, for each junction along the Proposed Scheme to support local junction design development. These models are informed by the outputs from the above modelling tiers, as well as the junction designs which are, as discussed above, based on people movement prioritisation.”*

In relation to this junction in particular, the Junction Design Report, contained in Appendix A6.3 in Volume 4 of the EIAR notes that the junction referenced operates within capacity within both the AM and the PM peaks, with 32% Practical Reserve Capacity, which is the available spare capacity at the junction, in the AM peak and 16% Practical Reserve Capacity in the PM peak. This is illustrated in Figure 3.63.25 below.



Figure 3.63.25 Extract from junction design report showing Practical Reserve Capacity (PRC) at Rathfarnham Road/Butterfield Avenue junction.

The NTA notes SDCCs comment in relation to the careful consideration required for traffic signal timings at this junction. The modelling undertaken, 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. Through the very positive and constructive liaison with the SDCC BusConnects Liaison Office throughout the design and planning process, SDCC’s Traffic Department is confirming that SDCC will utilise its adaptive traffic control system 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.

c) Scheme Tie In

SDCC notes that the Proposed Scheme should tie in seamlessly with the Dodder Greenway Scheme.

Response

The NTA notes this comment. Significant liaison has been carried out during the design of the Proposed Scheme with the Dodder Greenway design team. Section 3.2.3 of the Preliminary Design Report outlines the co-ordination which has been carried out to ensure that the Proposed Scheme is integrated with the Dodder Greenway Scheme, noting the following regarding the Dodder Greenway Scheme:

“This scheme involves the provision of cycle facilities adjacent to Dodder Park Road as well as the provision of cycle facilities on Spawell Road. The Proposed Scheme has been coordinated with the proposals.”

The NTA is satisfied that the Proposed Scheme as submitted will tie in with the Dodder Greenway at all interfaces.

d) Temporary Construction Compound

SDCC notes that there are concerns about the proposed construction compound in Woodview Cottage Green. SDCC state that the location of the proposed compound is believed to be too close to residential properties and note that the location has been a well-used amenity area for a long time. SDCC further note that residents have raised safety concerns in relation to the proposed siting of a construction compound with the associated HGV traffic, in close proximity to a busy residential area. SDCC goes on to state, that if no alternative location can be identified, that the NTA should propose upgrade works to improve the amenity value of the green space in compensation for its temporary loss to residents.

Response

The NTA notes SDCCs comment in relation to the proposed Construction Compound in this location. The EIAR documents reflect the sensitivity of the site with its surrounds and records the impacts on the proposed temporary use of the site as a compound. Section 5.7.1 of Chapter 5 of the EIAR notes the following in relation to the proposed siting of Construction compounds:

“The location of the Construction Compounds in relation to the Proposed Scheme are shown in Figure 5.1 in Volume 3 of this EIAR. 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 this EIAR for an assessment of the construction traffic.”

The construction compound referred to by SDCC is compound TR3, which is illustrated in Figure 3.63.26.

“Construction Compound TR3 will be located along Dodder View Road, across the road from Bushy Park, in the greenfield area between Dodder View Road, Woodview Cottages and Church Lane, as shown in Image 5.3. The area of Construction Compound TR3 is approximately 5,120m².”

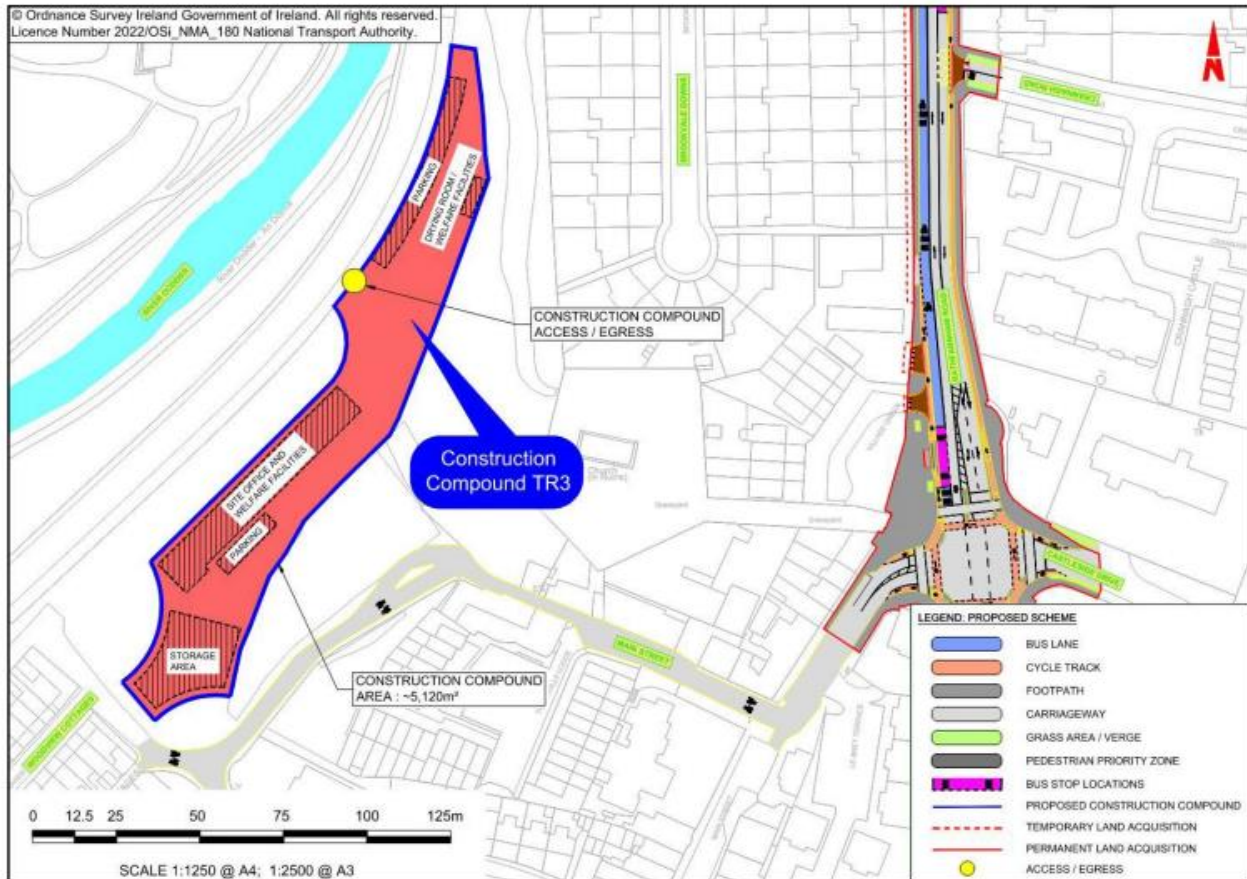


Image 5.3: Location and Extent of Construction Compound TR3

Figure 3.63.26 Construction Compound TR3 layout

Section 5.7.3 notes the following into the mitigation measures which will be implemented to minimise potential impacts at Construction Compounds:

“Appropriate environmental management measures will be implemented at the Construction Compounds, for example, to minimise the risk of fuel spillage, and to ensure that the Construction Compounds and the approaches to it are appropriately maintained. Further information on the air quality, noise and vibration and water related mitigation measures that will be implemented is included in Chapter 7 (Air Quality), Chapter 9 (Noise & Vibration) and Chapter 13 (Water) of this EIAR.

Following completion of the construction works, the Construction Compound areas will be cleared and reinstated to match pre-existing conditions.”

A Construction Environmental Management Plan (CEMP) has been prepared and submitted as part of the planning application and is included as Appendix A5.1 in Volume 4 of the EIAR. A Construction Traffic Management Plan has been prepared to inform the CEMP, 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 is further noted that a construction compound has been located at this site, during recent construction works carried out for the Dodder Greenway Scheme.

e) Land Management

SDCC notes that further engagement between SDCC and the NTA is encouraged as to the exact parcels of public land identified within the Proposed Scheme. SDCC further notes that they would like discussion on the hand on of lands identified as CPO plots into Local Authority management, and the particular maintenance implications of such additional infrastructure and land bank. In summary, SDCC notes that they need complete clarity on what land will become public realm after the scheme is completed and the maintenance implications of such land.

Response

The NTA notes the above comments. 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 SDCC 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 South Dublin County Council.

Notwithstanding the above, the NTA intends to continue the close liaison with SDCC 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 SDCC, 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 SDCC and the NTA, in the absence of any approval condition.

f) Construction Traffic Management

SDCC notes that detailed construction traffic management plans are required to ensure the efficient and safe delivery of the Proposed Scheme and sets out in detail their requirements in respect of same.

Response

The Construction Environmental Management Plan (CEMP) for the Proposed Scheme is included as Appendix A5.1 of EIAR Volume 4 Part 1 of 4. In Section 5.1.1 of Appendix A5.1 it states that *“The CEMP will be updated by the National Transport Authority (NTA) (the Employer for the construction works) 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. The NTA shall set out the Employer’s Requirements in the Construction Contract including all applicable mitigation measures identified in this EIAR, as well as additional measures required pursuant to conditions attached to any decision to grant approval.”*

Section 5.2 of the CEMP relates to the required Construction Traffic Management Plan, and Section 5.2.3 notes that the appointed contractor will be responsible for developing a CTMP to effectively manage traffic and transport during the Construction Phase of the Proposed Scheme. Section 5.2.3 also lists a number of aspects that the appointed contractor will address during the preparation of the CTMP. Further details of the aspects listed are provided in Section 5.2.3.1 to Section 5.2.3.19 of the CEMP. It is also noted that Chapter 6 of the EIAR considers the impact of construction traffic on the road network.

In addition, Table 5.2 of the CEMP summarises the Construction Phase mitigation (i.e., which the appointed contractor will implement), outlined in the relevant EIAR technical assessment chapters.

Section 5.5 of the CEMP provides a Construction and Demolition Resource and Waste Management Plan and Section 5.5.1 states that: *“This Construction and Demolition Resource and Waste Management Plan (CDRWMP) has been prepared to ensure that waste arising during the Construction Phase and Demolition Phase of the Proposed Scheme, will be managed and disposed of in a way that ensures compliance with the provisions of the Waste Management Act, as amended, and associated Regulations to ensure that optimum levels of reduction, reuse and recycling are achieved. The purpose of this CDRWMP is to facilitate reuse and recycling and divert waste from landfill.*

The CDRWMP is consistent with best practice management practices and any relevant mitigation measures as contained within the EIAR. The content and headings used in this CDRWMP comply with the EPA Best Practice Guidelines for the Preparation of Resource Management Plans for Construction and Demolition Projects (EPA 2021a).

This CDRWMP is based on the estimated quantities of waste generation and the proposed management measures from the Proposed Scheme at planning stage.”

Table 3.63.1 below presents the list of aspects that the appointed contractor will address and identifies where each of the 12 points raised by SDCC is covered.

Table 3.63.1 Summary of where SDCC Points are Addressed by the CEMP

Aspect Listed in CEMP Section 5.2	SDCC Point Raised
<i>Access and egress;</i>	(ix) Access arrangements (x) Measures to obviate queuing on adjoining road network
<i>Construction Compounds;</i>	(ii) on-site car parking (v) Location of materials compound (vi) Security fencing
<i>Routing of construction vehicles;</i>	(ix) Routes to be used by construction traffic
<i>Pedestrian (including able-bodied pedestrians, wheelchair users, mobility impaired pedestrians, pushchair users etc.) and cyclist provisions;</i>	(xii) Arrangements for pedestrians
<i>Public transport provisions;</i>	
<i>Parking and access;</i>	
<i>Lighting;</i>	
<i>CSMMP;</i>	
<i>Traffic management signage;</i>	
<i>Timings of material deliveries;</i>	
<i>Traffic management speed limits;</i>	
<i>Vehicle cleaning;</i>	(i) Vehicle cleansing / wheel washing
<i>Road cleaning;</i>	(iv) Road sweeper
<i>Road condition;</i>	
<i>Road closures and diversions;</i>	
<i>Enforcement of Construction Traffic Management Plan;</i>	
<i>Interface with other projects;</i>	
Other Sections of CEMP	SDCC Point Raised
<i>Table 5.2 Mitigation and Monitoring</i>	(ii) Dust suppression measures (xi) Measures to protect watercourses
<i>CDRWMP</i>	(viii) Use and control of spoil
Other Comments	SDCC Point Raised
<i>Details of Contractor not yet known</i>	(vii) Name and address of site manager

The NTA acknowledges the close liaison with SDCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within SDCC. 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.

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised (relating to hours of operation, construction traffic and noise) can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

It is noted that Section 6.5.4 of Chapter 6 of Volume 2 of the EIAR considers the potential temporary traffic and transport impacts that construction of the Proposed Scheme will have on the direct and indirect study areas during the construction phase.

g) Summary of Traffic & Transport views on the proposal

The submission states that SDCC Traffic and Transport Section are broadly supportive of the proposal and notes that *“the comments provided are mainly focussed on the construction management controls and minor design details of the scheme.”*

Response

The support for the scheme is noted and welcomed by the NTA.

4. Road Maintenance Section

Observations raised

The submission makes 7 points; the first 3 relating to construction and the next 4 relating to design.

Construction observations

1. SDCC request that all works are be constructed as per TII Specifications unless agreed separately with SDCC Road Maintenance.
2. SDCC request that precast kerbing is not permitted.
3. SDCC requests that the road structure of the bus bay should be 300mm thick reinforced concrete slab with a geogrid overlapping the joints, a 60mm binder course and 40mm surface course.

Response

The NTA notes the comments in items 1 and 2.

In relation to point 3, Section 7.1.3.1 of the Preliminary Design Report, included in the Supplementary Information, notes the following:

“At Specimen Design stage, the selection of appropriate pavement materials will be made with the following considerations:

- *Which pavement structure is the most appropriate and compatible with the existing pavement? (i.e., Fully flexible vs. Flexible Composite vs. Rigid pavement);*
- *Which materials are most appropriate from a noise, permeability, colour, texture, etc. perspective?; and*
- *Which materials, from a lifecycle perspective, provide the best value in terms of environmental impact, durability, maintainability, repairability, recyclability, cost, etc.?*

Specific materials will be selected for specific loading areas. The ambition in terms of pavement materials is to reuse or recycle all of the excavated materials. The specification of materials and processes with a reduced environmental impact will be prioritised.”

It is noted that material selection and construction details will be developed in the next design stage.

The NTA acknowledges the close liaison with SDCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within SDCC.

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.

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised (relating to hours of operation, construction traffic and noise) can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

Design observations

1. Drainage system to be design using SuDS
2. Signage to be kept to minimum
3. The proposals will present an increased financial management issue for SDCC
4. Universal Design principle should be employed in the design

Response

Drainage system designed using SuDS.

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 EIAR Volume 4 Appendices Part 1 of 4, A2.1 Planning Report for the Proposed Scheme.

Further, some additional observations by DCC over and above those already provided within Table 3.13 of the Planning Report in relation to the Dublin City Development Plan 2022-2028 are welcomed, including that the Proposed Scheme is consistent with Policy SMT11 of the Development Plan, which sets out the necessity to protect, improve and expand on the pedestrian network, linking key public buildings, shopping streets, public transport points and tourist and recreational attractions whilst ensuring accessibility for all, which directly aligns with the Proposed Scheme objectives.

Similarly, it is acknowledged that Policy SC9 of the Development Plan has a direct correlation with the Proposed Scheme's objectives given the various improvements to Key Urban Villages, Urban Villages and Neighbourhood Centres, to support the sustainable consolidation of the city, to align with the principles of the 15 minute city, to provide for the essential economic and community support for local neighbourhoods and to promote and enhance the distinctive character and sense of place of these areas.

Signage kept to minimum.

The NTA notes this comment. Significant efforts have been made during the design process to minimise above-ground utility infrastructure/ signage where practicable. Where such infrastructure is necessary, it has been sited in appropriate locations, and rationalised where practicable.

Section 17.4.1.4.4 of Chapter 17 Landscape and Visual notes that, inter alia, the following specific landscape / townscape and visual measures are included within the Proposed Scheme:

“Proposals for the treatment of the urban realm within the streetscape impacted by the Proposed Scheme will have regard to the existing character of the street or location, to emerging policies, objectives and proposals for the urban realm and to opportunities for mitigation of impact on the urban realm and the streetscape. Proposals will have regard to historic details and features, to the quality of existing and proposed materials, to the reduction of clutter, ease of legibility, and management and maintenance requirements.”

Maintenance costs.

As noted, 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 South Dublin County 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 anticipates continuing its collaboration with SDCC 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 SDCC and the NTA.

Universal design principles should be employed in design

Accessibility for mobility impaired users is a core element of the Proposed Scheme design. As set out in Section 4.5 of Chapter 4 (Proposed Scheme Description), in Volume 2 of the EIAR, “...*The assessment of the existing street infrastructure and its ability to support access for disabled users has been based mainly on the Irish Wheelchair Association [IWA] ‘Best Practice Guidelines, Designing Accessible Environments’ and The National Disability Authority’s [NDA] ‘Building for Everyone: A Universal Design Approach’.*”

Accessibility for mobility impaired users is a core element of the Proposed Scheme design and it has been informed by the principles of Best Practice Guidelines, Designing Accessible Environments (Irish Wheelchair Association 2020) and Building for Everyone: A Universal Design Approach (NDA 2020). Accessibility is also addressed in Chapter 12 of the PGDB. Further detail on accessibility for mobility impaired users is given in Section 4.6.5.”

Accessibility is also addressed in Chapter 12 of the PGDB (Appendix A4.1 in Volume 4 of the EIAR).

Further detail on accessibility for mobility impaired users is given in Section 4.6.5 in Chapter 4 of Volume 2 of the EIAR. It acknowledges that *“the Disability Act 2005 (as amended) places a statutory obligation on public service providers to consider the needs of disabled people. A Disability Audit of the existing environment and proposed draft preliminary design for the corridor was undertaken. The Audit provided a description of the key accessibility features and potential barriers to disabled people based on the Universal Design standards of good practice. The Audit was undertaken in the early design stages with the view to implementing any key measures identified as part of the design development process.*

In achieving the enhanced pedestrian facilities there has been a concerted effort made to provide clear segregation of modes at key interaction points along the Proposed Scheme which was highlighted as a potential mobility constraint in the Audit. In addressing one of the key aspects to segregation, the use of the 60mm set down kerb between the footway and the cycle track is of particular importance for guide dogs, whereby the use of white line segregation is not as effective for establishing a clear understanding of the change of pavement use and potential for cyclist/pedestrian interactions.

One of the other key areas that was focused on was the interaction between pedestrians, cyclists and buses at bus stops. The Proposed Scheme has prioritised, where possible, the use of island bus stops, including signal call button for crossing of cycle tracks, to manage the interaction between the various modes with the view to providing a balanced safe solution for all modes.”

In Chapter 10 (Population), the assessment has had cognisance of vulnerable groups such as people with disabilities. In Section 10.2.4.1.2.1 addressing land take, a high sensitivity has been applied to residential properties which; *“...ensures that all populations are considered in the assessment including vulnerable groups such as young children, elderly, and people with disabilities.....”*

Section 11.3.2 in Chapter 11 (Human Health) addresses deprivation, disability and health inequalities. Table 11.5 sets out the population, disability and relative deprivation within the study area. The data in Table 11.4 shows that approximately 2% of people within the study area have at least one disability. This is a substantially lower proportion of the population than average for Dublin (14.9%) but nevertheless equates to 2,054 people. An analysis of 2016 Census data by Disability Federation Ireland (DFI) identified that 44% of people in Dublin City and 21% of people in South Dublin who have a disability do not have access to a car, compared to 31% of the general population.

Section 11.4.4.6 addresses impacts on health inequalities. It states in the section that the Proposed Scheme: *“...may help to reduce inequalities by improving access to employment for those dependent on public transport. Groups that would benefit most are the socially disadvantaged and some people with disabilities, noting that there is often an interrelationship between disability and deprivation and that car ownership among disabled people is lower (see Section 11.3.2).*

The Proposed Scheme has been designed following the guidelines Building for Everyone – A Universal Design Approach (Centre for Excellence in Universal Design 2020) ensuring it will meet current Universal Design good practice standards, or at least make it no worse than the current situation. An accessibility audit identified several issues with the existing urban environment and the audit report sets out recommendations for the Proposed Scheme to address these issues. The recommendations include issues such as accessible parking, accessible routes (including use of tactile paving), appropriate changes in levels, appropriate surface materials, use of street furniture and management of shared spaces. Assuming these design measures are correctly installed the urban environment will be easier and safer for a wider variety of pedestrians including visually impaired, wheelchair users and people with mobility difficulties, parents with young children and pushchair users. Details of provision for mobility impaired are set out in Chapter 4 (Proposed Scheme Description). This would help to reduce health inequalities in terms of access in the urban environment particularly for people with disabilities (see Section 11.3.2).

The introduction of a reliable public transport corridor, with improved accessibility for public transport users and pedestrians, would have a likely positive effect in the short to medium term for reducing health inequalities associated with accessibility for disabled people in particular. The potential impact will be Positive and Significant in the Short to Medium-Term on the basis that the study area has a smaller proportion of disabled residents and lower levels of deprivation than average for Dublin, so the benefits may influence health inequalities for some individuals.”

Section 11.6.2 in Chapter 11 sets out the predicted operational phase residual impacts. It states that: “...*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...*”.

Providing accessibility for mobility impaired users is a core element of the Proposed Scheme and the potential impact on people with disabilities has been appropriately considered in both the scheme design and the impact assessment.

5. Public Realm Section

Overview of observations raised / clarifications sought

The submission from the Public Realm Section covers the following aspects:

- i. Parks and Landscape Section Comments
 - a) Trees within Rathfarnham Castle Park
 - b) Natural SuDS
 - c) Construction Compounds
 - d) Other CPO Locations
 - e) Rathfarnham Castle Park
 - f) Dodder Greenway Tie-in at Pearse Bridge
 - g) Proposed Boundary Treatment at Rathfarnham Castle Park
 - h) Biodiversity and Ecology
 - i) Feasibility of Proposed Street Tree Planting
 - j) Lighting
 - k) IE8 Objective 6
 - l) Landscape Character Type: Green Space e.g., Tymon Park and Bancroft Park
 - m) Protection of Habitats and Species
 - n) Public Realm Enhancement

In the introduction to their submission SDCC Public Realm Section notes that the Proposed Scheme is delivering on a remit of smarter travel with proposed improvements to walking and cycling infrastructure. SDCC notes that the loss in carriageway width for private cars is decidedly outweighed by improved sustainable travel opportunities and a knock-on increase in scope to accommodate higher density development in the vicinity of the Proposed Scheme. SDCC notes that the decrease in space allocated to private cars could be viewed as advantageous in promoting modal shift.

SDCC go on to state however, that the same cannot be said of the proposed loss of existing trees, and the lack of a comprehensive new tree planting proposal. SDCC notes that the low level of new tree planting is a concern and note that increased retention of existing trees and the provision of additional replacement trees is recommended to improve the scheme.

Response

The NTA notes the support for the objective of the Proposed Scheme to provide greater opportunity for sustainable travel, and in facilitating modal shift to more sustainable modes. SDCCs comments are noted in relation to the potential for higher density development in the vicinity of the Proposed Scheme.

The NTA also notes SDCCs comments in relation to the loss of existing trees and the provision of new trees.

The following sections of EIAR Chapter 4 Proposed Scheme Description provides a description of specific landscape and urban realm design works in the sections of the Proposed Scheme with South Dublin County Council's area.

Section 4.5.1.8, Section 1: "The designed areas of the Proposed Scheme will incorporate the mid-18th century stone archway at Templeogue Road. The old archway is part of the wider planned Baroque landscape of Templeogue House Demesne and is designated as a Protected Structure (SDD RPS 244). Following conservation and repair works, soft and hard landscaping with tree planting, the old archway will be opened to the public and will substantially contribute to the character of the area through the reintegration of this historic landmark into the urban realm. Proposals include a high-quality paving scheme which is sympathetic to the aesthetic of the arch. Areas of seating and ornamental planting will be provided to enhance sense of place and provide opportunities for passive recreation (refer to Image 4.1).

Templeogue Road is narrow and variable in width and will require realignment of a number of private property boundaries to establish continuous facilities along the street. Realigned boundaries will be rebuilt along the new alignment and landscaping re-established so that higher quality footpaths will be continuous either side of the village and will tie into the permitted Part 8 village upgrade scheme and will incorporate new street tree planting. The existing junction with Springfield Road will be rationalised to eliminate slip lanes and to create pocket park areas at each corner of the revised junction with increased soft landscaping and tree planting and better-quality pedestrian and amenity facilities. Cycle traffic and pedestrians along Templeogue Road will be catered for off road within the perimeter of Bushy Park and along Rathdown Drive where a more attractive and safer environment for cyclists and pedestrians can be provided and leaving the adjoining roadway principally for vehicular use."

Section 4.5.2.8, Section 2: "The Grange Road junction is to be rationalised to reduce the overarching vehicular dominance and to provide additional landscape areas that will enhance pedestrian amenity and public realm. Grange Road will be widened further, requiring encroachment into the grounds of Rathfarnham Castle however the realigned boundary will facilitate planting street trees in the new footpath to soften and enhance the appearance of the existing roadway and to provide a sense of separation between the pedestrian space and roadway. The existing poor quality boundary wall will be replaced with a new boundary wall finished in roughcast render, which will be more in keeping with the construction of the castle. The impacted woodland will be replanted with native species and the existing playground will be integrated with the new planting and setback wall alignment (refer to Image 4.2).

Similarly, the junction at Butterfield Avenue will be rationalised to introduce better pedestrian and cycle facilities with widened footpaths facilitating provision of additional landscaping and tree planting. Rathfarnham Road, either side of the Dodder River, will require encroachment into private front gardens. There will be loss of existing trees and vegetation, both on street and with front garden boundaries, however, the proposals include for reinstatement of garden boundaries and landscaping and the provision of new street trees along the public footpath. Leading into Terenure Village, the roadway will be rationalised to provide continuous pedestrian and cycle facilities with refurbishment and re-building footpaths so as to upgrade the appearance and integrity of the public realm. New tree planting will be incorporated to replace existing trees felled and the overall quality of the public realm will be upgraded as it leads into the village core beyond."

Section 4.5.3.8, Section 3: *“Terenure Road East will incorporate wider footpaths within the village core and reduced carriageways so as to enhance pedestrian facilities. Widened footpaths will be built using quality material commensurate with that of the built context of the village so as to enhance the character of the village locality. Immediately east of the village, bus lanes are proposed on Terenure Road East, and this will require encroachment into private properties, including associate tree felling and realignment of boundary walls and gates. New tree planting will be provided post construction to mitigate the loss of existing trees. Further east, the majority of interventions are related to re-allocation of existing carriageway in order to provide dedicated bus lanes and physical changes comprising rebuilding of kerbs and upgrade of footpaths to match those existing.*

At Rathgar Village, the carriageway at the adjoining junction is to be rationalised to reduced vehicular space and to provide additional pedestrian and public realm space. The slip lane from Highfield Road will be removed and this will facilitate the provision of a greatly increased public realm amenity space, with hard and soft landscaping along the shop frontages, that will incorporate seating, tree planting and low-level planting to encourage passive amenity. Medians will be introduced and will incorporate low level planting to further reduce the apparent width of the carriageways. Pavement and kerbs will be re-built using high quality materials sympathetic to the form of the surrounding traditional buildings and the character of the village setting. Importantly, the emerging design avoids impacting the boundary of Christ Church and the mature trees within the grounds and the distinctive focal point of the village will be retained as existing (refer to Image 4.3).”

Section 4.5.4.8, Section 4: *“Along Rathmines Road, the carriageway will be re-allocated to eliminate general through traffic and thereby reduce the overall vehicular demand and provide opportunities for improving pedestrian and cycle facilities along the road. The wider pavements and cycle tracks will combine visually to substantially widen the pedestrian zone along both side of the street and to reduce the perception of carriageway to the minimum. New footpaths and cycle lanes will be built using high quality materials to enhance the character and presentation of the streetscape and to provide greater pedestrian facilities and amenity that will in turn underpin the vitality of the retail and services business along the street. There will be some new street tree planting together with localised soft landscaping interventions to soften and add diversity and amenity to the streetscape.”*

Section 4.6.12.1 states: *“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.”*

Section 4.6.13.3.1 of EIAR Chapter 4 Proposed Scheme Description details the softscape planting strategy as follows: *“The planting strategy has been developed in response to the objectives set out in both the South Dublin County Development Plan 2022 – 2028 (SDCC 2021) and the Dublin City Development Plan 2022 – 2028 (DCC 2021). The planting strategy is also in response to landscape and urban realm opportunities arising from the Proposed Scheme to integrate new infrastructure within the existing local context and to enhance the visual and amenity value of streets and spaces.*

The planting strategy includes replacement of street trees and groups of trees that may be impacted by the Proposed Scheme, but also the introduction of new tree planting and street trees within other spaces and along streets. Reinforcement of green infrastructure along the route will improve the overall amenity, character and appeal of the route corridor and localities along it, as well as enhancing biodiversity.

In addition to trees and street trees, other vegetation is also proposed along the route including hedgerows, ornamental planting and amenity grassland, shrub and meadow grass areas. These will be utilised to reinstate property boundaries altered by the Proposed Scheme.”

Section 4.6.13.4 of EIAR Chapter 4 Proposed Scheme Description states that an Arboricultural Impact Assessment (AIA) Report is included in Appendix A17.1 in Volume 4 of the EIAR. This identifies the likely direct and indirect impacts to trees of the Proposed Scheme along with suitable mitigation measures, as appropriate to allow for the successful retention of significant trees, or to compensate for trees to be removed.

Section 14.6.2 of the Preliminary Design Report (PDR), included in the Supplementary Information, states that “Despite the best efforts to protect trees, especially trees of a mature and significant stature there will be inevitable impacts on local trees. In total it is estimated that there will be 720 trees lost, refer to Table 14-1 below. This loss has been addressed through mitigation and replanting efforts as outlined in the planting strategy (Section 14.6.3) below resulting in a substantial tree planting plan with a net increase of 231 additional semi-mature trees along the Proposed Scheme.”

Table 14-1 of the Preliminary Design Report (PDR), included in the Supplementary Information provides a summary of the tree removal and proposed tree planting, as shown in Figure 3.63.27.

Templeogue / Rathfarnham to City Centre Scheme Core Bus Corridor Scheme	
Trees	
Existing Tree to be removed	169
New Trees to be planted (comprising as follows:)	400

Figure 3.63.27 Table 14-1 of the Preliminary Design Report

As shown in Figure 3.63.27, 169 trees are to be removed and 400 are to be planted, which represents a 237% re-provision. The number of trees to be replanted is also stated in Section 12.5.1.2 in Chapter 12 Biodiversity in Volume 2 of the EIAR.

Section 4.6.13.5 of EIAR Chapter 4 describes the typical planting typologies that will be employed on the Proposed Scheme. With regard to new street trees, in Section 4.6.13.5.1, it states that: “Typically, trees will be semi-mature and where appropriate, selected for having a clear stem height to facilitate visual permeability.”

With regard to new woodland/parkland areas and tree groups, Section 4.6.13.5.2 states: “.....Elsewhere along the Proposed Scheme, there are a range of existing and proposed woodlands and street trees. While it is proposed to retain and protect existing trees wherever possible, some will be impacted. The Proposed Scheme includes replacement and additional planting of semi-mature street trees to mitigate the loss of existing trees and to maintain the long-term tree-lined character of streets.

The Proposed Scheme incorporates additional landscaping arising from junction reconfiguration, reinforcement of existing vegetation areas, and the establishment of new urban realm and landscape opportunity areas. Tree species will be determined by location and will comprise of either native woodland / parkland trees as set out above. Landscaping proposals respond to the different localities and may include grass planting, hedgerows, trees, grasses, ornamental planting and swathes of bulbs.”

Section 17.5.1 (Construction Phase) of EIAR Chapter 17 Landscape and Visual describes mitigation and monitoring measures which are proposed to ameliorate, remediate or reduce significant landscape (townscape) and visual impacts from the Construction and Operational Phases wherever possible. It states:

“A series of mitigation and management measures are proposed to avoid, reduce or remediate, wherever practicable significant negative landscape (townscape) and visual effects of the Construction Phase of the Proposed Scheme. These measures are to be applied across the scheme wherever necessary to avoid disturbance of landscape features or characteristics to be retained. Generally, the effect rating post-mitigation will be the same as pre-mitigation, however the measures proposed should still be applied as necessary to manage the potential effects of construction activities. A summary of predicted Construction Phase effects following the implementation of mitigation and monitoring measures is listed in Table 17.9.

- *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. For details of trees to be retained refer to Tree Protection Plans (Appendix A17.1 Arboricultural Impact Assessment in Volume 3 of this EIAR);*
- *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. For details of trees and vegetation to be removed refer to Tree Protection Plans (Appendix A17.1 Arboricultural Impact Assessment in Volume 3 of this EIAR) and Landscape General Arrangements (BCIDA-ARP-ENV_LA-1012_XX_00-DR-LL-9001 in Volume 3 of this EIAR).*

- *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 on-going monitoring of retained trees during the Operational Phase;....” [list continues].*

In summary, the Planting Strategy for the Proposed Scheme has ensured that the green infrastructure within the Proposed Scheme has been examined, developed and enhanced within the development, in South Dublin and Dublin City areas.

a) Trees within Rathfarnham Castle Park

SDCC raise a number of concerns regarding the assessment of the impact on existing trees within Rathfarnham Castle Park. SDCC state that they are of the opinion that there is an under estimation of the number of trees that will be impacted by the Proposed Scheme within Rathfarnham Castle Park, and an over optimistic view of the proposals to protect schemes proposed for retention. SDCC make the following detailed comments.

- SDCC notes that with some exceptions, the survey has been primarily confined to the areas where land acquisition is proposed. SDCC notes that there are trees outside of this area, whose root zone may extend into the proposed works area, which may have not been assessed. The submission includes two photographs referencing areas where SDCC state that trees have not been included within the tree survey.
- SDCC notes that the topographical survey does not seem to reflect the accurate position of existing trees. SDCC notes that there are some trees shown for removal which could in reality be retained, and some trees shown for retention which in reality will require removal. SDCC provide an example, tree number 1919 which is located within the permanent land take boundary but is shown on the drawings as being further back and to be retained.
- SDCC notes that the tree survey report notes that where proposed walls are in the vicinity of root zones of trees to be retained, that a pad/pile and raft foundation would be considered. SDCC notes that due to level differences between the carriageway side of the existing wall and the Rathfarnham Castle side of the wall that this may not be feasible, without lowering the existing ground level within Rathfarnham Castle Park and impacting on tree root zones.
- SDCC notes that a ‘no-dig’ type construction would be utilised to minimise impacts on trees shown for retention where surfaces will run through the root zone of these trees. SDCC notes that due to the undulating nature of the lands within the Rathfarnham Castle Park, that it will be necessary to excavate down in some locations to match the finished levels of the new path to the carriageway levels, with corresponding impact on tree root zones. Additionally, where it is necessary to build up levels, this could lead to excessive build up on top of tree roots.
- SDCC notes that services, including surface water drainage, are proposed within the new paths within Rathfarnham Castle Park, within the root zones of trees shown to be retained.

The submission notes that the impact assessment in the EIAR states that *“The magnitude of change in the baseline environment is very high”*.

SDCC goes on to state that the magnitude of the impact will be greater than that indicated within the submitted documentation. They state that more trees will likely require removal than what is shown in the submission and that the removal of woodland edge trees will have a knock-on effect due to previously sheltered trees being exposed to edge conditions.

SDCC recommends that further assessment is required with regard to the proposals along and within the boundary of Rathfarnham Castle Park. They state that the tree survey and report should be reviewed to include all trees impacted by the proposals, as well as the topographical survey reviewed to ensure that all trees are accurately positioned, and to ascertain the feasibility of the proposed no dig technique. If following this review, it is still proposed to proceed with the proposal, SDCC recommends that sufficient replacement woodland habitat be established as close as possible to Rathfarnham Castle Park.

Response

The NTA notes the concerns raised by SDCC in relation to the proposed tree removal within Rathfarnham Castle Park to facilitate the proposed improvements to bus priority and cycle infrastructure in this area. It is acknowledged within the EIAR that there is a significant impact on existing trees in this location.

It is noted that considerable consultation has been undertaken on the proposals in this area with SDCC, the OPW, Dept. of Housing, Local Government and Heritage and is acknowledged within the SDCC submission.

Section 17.4.3.1.2 of Chapter 17 of the EIAR notes the following in relation to the Construction Stage impact of the Proposed Scheme in this location:

“The baseline townscape is of high sensitivity and the Proposed Scheme involves the reconstruction and resurfacing of the roads, footpaths, and cycle track pavements. New kerbs will also be provided following the realignment of the existing kerb lines. Construction activities will also consist of the installation of additional signage, new road markings, new and amended traffic signal infrastructure, new road lighting, new street furniture (rubbish bins, seats, lighting, benches, planters, bollards, cycle racks, bus stop (including shelters and information displays etc.)), landscape works and substantial removal of sections of trees and planting. Sections of the existing boundary walls along the eastern side of Grange Road and Rathfarnham Road, adjacent to Rathfarnham Castle Park, will be realigned and reconstructed due to the proposed widening of the carriageway. The low height wall at the junction with Rathfarnham Wood will also be realigned and reconstructed to accommodate the upgrade of the traffic signalised junction. The Construction Phase involves substantial acquisition from residential properties along Rathfarnham Road, and from Rathfarnham Castle grounds with associated removal of a substantial section of mature woodland edge as well as garden hedges and other plantings. This element of works will result in considerable changes along this section of the Proposed Scheme. Construction Compound TR3 will be located along Dodder View Road, across the road from Bushy Park, in the greenfield area between Dodder View Road, Woodview Cottages and Church Lane, and will result in some short-term removal of grassland but no impact on the surrounding mature trees or woodland. The construction works will not alter the overall townscape character along this section of the Proposed Scheme, however, the works will detract from the streetscape character and amenity. The magnitude of change in the baseline environment is very high.

The townscape / streetscape impact of the Construction Phase is assessed to be Negative, Very Significant and Temporary / Short-Term.”

The following is noted in Section 17.4.4.1.2 in relation to the Operational Stage impacts of the Proposed Scheme:

“The sensitivity of this section is high. The Operational Phase of the Proposed Scheme involves substantial changes along the corridor of the Proposed Scheme. Most notably there will be continuing negative effects from loss of trees removed during the Construction Phase at Rathfarnham Castle and along sections of residential properties along Rathfarnham Road. There will be the provision of a new boundary wall to the castle demesne in roughcast render which, while less aesthetically pleasing than the sections of existing stone boundary wall, will represent a neutral change when compared to the overall inharmonious boundary treatment which varies in quality and condition of materials used.

There will be provision of substantial new tree planting within the castle demesne to consolidate the new edge to the woodland group and ensure the amenity of the open space is restored. There will also be substantial replacement and additional street tree planting throughout this section, including medians, footpaths and roadside spaces. There will be an improvement to the setting of the Yellow House and the Church of the Annunciation in Willbrook with provision of stone paving to existing concrete footpaths. There will be a notable improvement to an existing grassland space within the River Dodder corridor with provision of new tree planting and species-rich grassland. An enhanced paving scheme will be provided at numerous locations throughout this section, most notably with the provision of stone paving to the frontages of the Church of the Annunciation and the Yellow House public house, as well as the provision concrete paving to footpaths at major junctions and sett paving to pedestrian crossing points at side roads. The Operational Phase will not alter the overall townscape character of this section but will result in substantial localised changes to the streetscape character of the section. The magnitude of change in the baseline environment is very high.

The townscape / streetscape impact of the Operational Phase is assessed to be Negative, Very Significant and Short-Term becoming Neutral, Moderate and Long-Term.”

A number of photomontages have been prepared in this location due to the significance of the impact and the sensitivity of the baseline environment. The before and after photomontages are reproduced in Figure 3.63.28, Figure 3.63.29, Figure 3.63.30 and Figure 3.63.31 below.



Figure 3.63.28 EIAR Figure 17.2.2.1 View from Grange Road at Willbrook Road - As Existing Photomontage



Figure 3.63.29 EIAR Figure 17.2.2.2 View from Grange Road at Willbrook Road - As Proposed Photomontage



Figure 3.63.30 EIAR Figure 17.2.3.2 View from Rathfarnham Road at Willbrook Road - As Existing Photomontage



Figure 3.63.31 EIAR Figure 17.2.3.2 View from Rathfarnham Road at Willbrook Road - As Proposed Photomontage

The EIAR has assessed the impact of the Proposed Scheme in relation to tree removal within Rathfarnham Castle Park, and this impact has been documented and considered within the EIAR.

Responses to specific points raised are included below:

- A) Rathfarnham Castle Park is a densely wooded area with hundreds of existing trees. It would not be practicable as part of the assessment of the Proposed Scheme to survey every tree within the park. As such, the tree survey has only documented trees within the zone of influence of the Proposed Scheme. The methodology by which the Tree Survey was carried out is documented within Section 1.2 of the Arboricultural Impact Assessment Report, which is included as Appendix A17.1 in Volume 4 of the EIAR. The following is noted:

“An initial tree survey and visual condition assessment was undertaken on the 24th and 25th of August 2020. As part of this report and in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction - recommendations, only trees with diameters of 75mm or greater were surveyed. Also, in accordance with section 4.4.2.3 of the British standard document, where trees formed obvious groups, these were assessed and recorded as groups. The survey commenced at the junction of Grange Road and Nutgrove avenue, and at Junction 11 of the M50 and finished at Dame Street, including the Terenure Road North / Harold’s Cross Road section and the Wasdale Park, Wasdale Grove, Victoria Road, Zion Road and Orwell Road section of the Proposed Scheme.

Section 4.4.2.3 of BS 5837: 2012 states:

Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).

NOTE: The term “group” is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture), in respect of each of the three subcategories.

The survey concentrated primarily on the significant trees/hedgerows and groups located within 20m of any development works which could impact on the tree (this could include excavation, resurfacing, utility installation, new signage/lighting etc) within and adjacent to the Proposed Scheme and has been based on the topographical survey plan provided. The objective of this survey was to gather information regarding the trees along the Proposed Scheme and to assess the impact the Proposed Scheme may have on the trees. Refer to Appendix A for the tree survey schedule.”

Figure 3.63.32 and Figure 3.63.33 below, are extracts from the Tree Protection Plans, included in Appendix C of the Arboricultural Impact Assessment Report (in Appendix A17.1 in Volume 4 of the EIAR). These figures demonstrate that the Tree Survey has considered trees beyond the boundary of the extent of permanent and temporary works of the Proposed Scheme. It is noted, as set out in Section 1.2 Methodology of the Arboricultural Impact Assessment Report, that trees with diameters of less than 75mm were not included in the survey. The NTA design team is satisfied that all trees, whose root zone may be impacted by the Proposed Scheme, have been assessed.

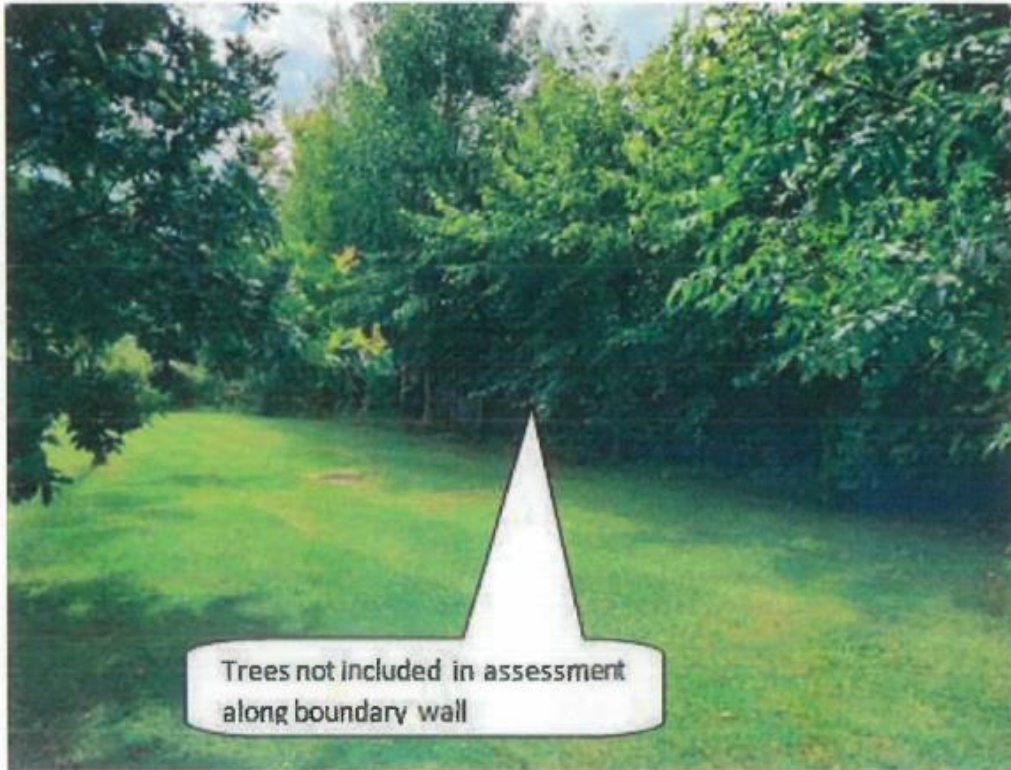


Figure 4 Photograph No. 1: shows a line of trees located along Rathfarnham Castle Park's western boundary wall at the northern end which have not been included within the survey drawing.

Figure 3.63.34 Photograph 1 from SDCCs submission

It is not clear from the submission the exact location, which is referred to, however the NTA understands that it refers to an area behind the boundary wall, opposite the Butterfield Road junction, as highlighted in red in Figure 3.63.35.



Figure 3.63.35 Location believed to be referenced in Photograph 1 of SDCC submission

Figure 3.63.36 is a Google Streetview image from September 2022 highlighting the area referenced in Photograph 1 of the SDCC submission. Figure 3.63.37 is a Google Streetview image of the same location from May 2021. It is understood that from this figure that at the time of the survey (August 2020), these trees may not have been as mature and as such were not documented in the Tree survey, in line with the methodology outlined in section 1.2 of the Arboricultural Impact Assessment Report.

Notwithstanding this and acknowledging that these trees have grown in the time since the survey was undertaken, it is considered that the impact rating documented in the assessment is conservative in nature and takes account of the impact of the removal of the trees identified and the impact of the Proposed Scheme on Rathfarnham castle. Section 17.4.3.2.9 in Chapter 17 of Volume 2 of the EIAR sets out the construction phase impact due to the removal of existing trees:

“Construction of the Proposed Scheme will require removal of existing trees and other plantings at specific locations along the road corridor. These include trees and plantings around Rathfarnham Castle, some street trees and from many properties along the corridor of the Proposed Scheme, including loss of prominent mature specimens. The sensitivity is high, and the magnitude of change is high / very high. The townscape and visual impact of the Construction Phase on trees and plantings is assessed to be Negative, Significant / Very Significant and Temporary / Short-Term.”

Section 17.4.4.2.4 in Chapter 17 in Volume 2 of the EIAR addresses the potential operational phase impacts on protected structures and national monuments (which includes Rathfarnham Castle):

There will be a change at Rathfarnham Castle, a National Monument and Protected Structure, most notably there will be continuing adverse effects from loss of land and from trees removed during the Construction Phase. However, there will be provision of substantial tree planting to consolidate the woodland edge to the demesne, which will reduce the negative effects over the long-term. The provision of a new cohesive boundary wall in a material sympathetic to the construction of the castle itself will be a positive impact. Overall, the effect will be initially negative in the short-term becoming neutral over the long-term. The sensitivity is high and the magnitude of change is high. The potential townscape / streetscape and visual impact of the Operational Phase on Rathfarnham Castle is assessed to be Negative, Significant and Short-Term becoming Neutral, Moderate / Significant and Long-Term.



Figure 3.63.36 September 2022 Streetview image highlighting location of Photograph 1

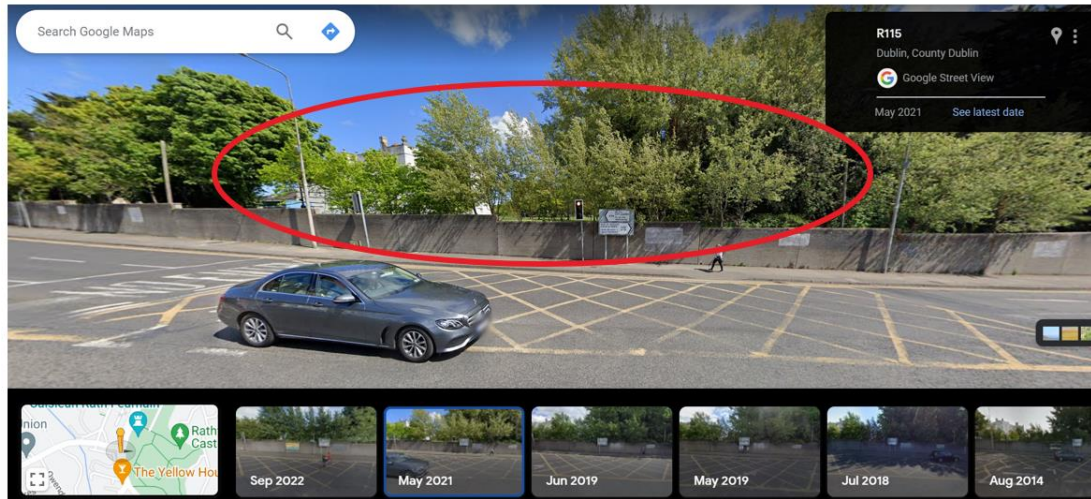


Figure 3.63.37 May 2021 Streetview image highlighting location of Photograph 1

Figure 5 Photograph No. 2 refers to large trees which are located outside of the land take but would have root zones which would extend into the land take area. SDCC notes that there may be implications on the health of these trees, and that some of these trees have not been picked up on the tree survey or plotted on the topographical survey.



Figure 5 Photograph No. 2: some of these large size trees are located outside the land take, but would have root zone calculations which would extend into the land take area with possible implications on the health of these trees. Some of these trees have not been picked up on the tree survey or plotted on the topographical survey.

Figure 3.63.38 Photograph 2 from SDCCs Submission

It is noted that Photograph 2 indicates two trees labelled Nos. 1912 and 1913. An extract from the Tree Protection Plans highlighting these trees is included in Figure . Relative to the positions of Trees No. 1912 and 1913, the large trees referenced by SDCC appear to be significantly set back from the proposed works area and as such would not have been included in the tree survey.

The project arborist has considered the root protection zone of such trees outside of the boundary and considered that there is no impact predicted on these trees due to their separation from the works area.

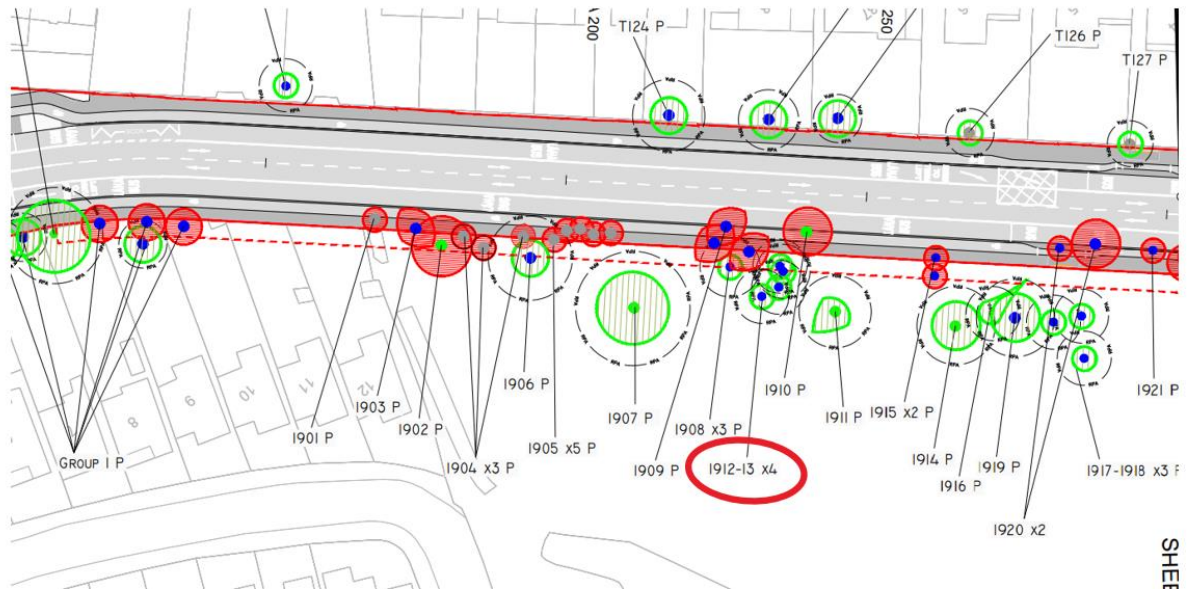


Figure 3.63.39 Extract from Tree Protection Plans highlighting location of trees reference 1912 and 1913

- B) The NTA notes this comment. While the Tree survey has been based on the topographical survey, the project arboriculturist has also carried out a number of site visits to confirm the location of trees as surveyed. The NTA design team is confident that the trees shown in the Tree Protection Plans are reflective of the existing trees in this location.

The NTA also note that two photographs are included under point B) which reference specific locations. These are discussed below.

Figure 6 Photograph No. 3 shows an image of a tree growing close to the boundary wall and notes that this tree has mistakenly been shown in another location on the Tree Protection Plans as Tree No. 1919.

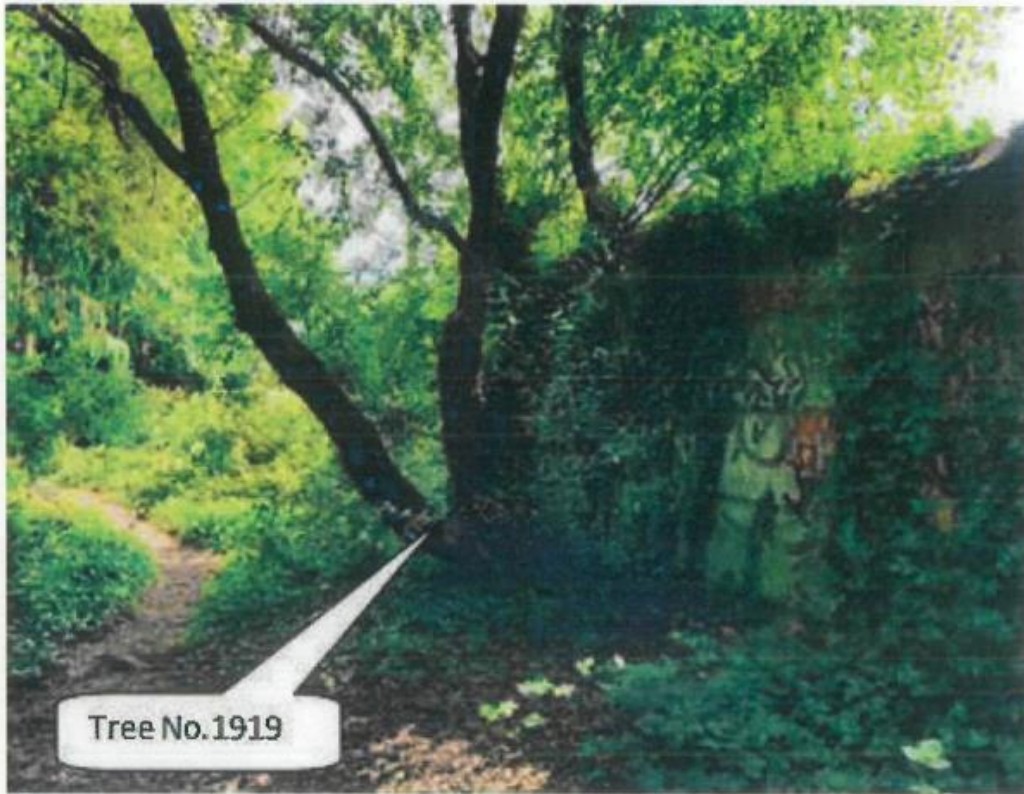


Figure 6 Photograph No. 3: shows Tree No. 1919 growing tight to the boundary wall, but shown on the tree survey drawing in a different location and marked for retention.

Figure 3.63.40 Photograph 3 from SDCCs Submission

Figure 3.63.41 shows the location of Tree No. 1919 which is set back from the existing boundary wall by approximately 10m. It is noted that another tree, tree 1920, is located in close proximity to this location and adjacent to the boundary wall, and that this may be the tree SDCC refers to in Photograph 3.

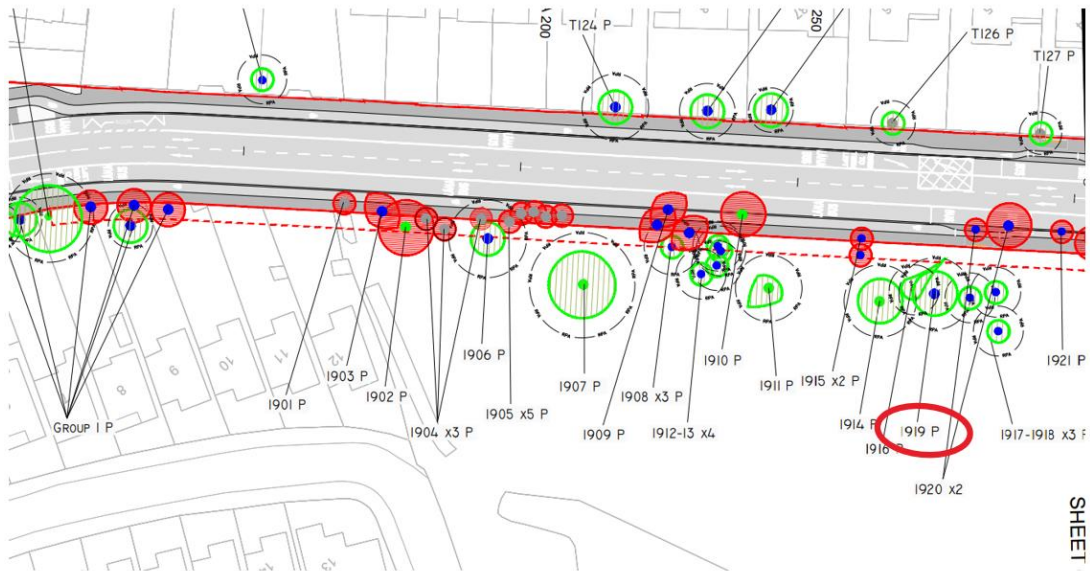


Figure 3.63.41 Extract from Tree Protection Plan showing location of Tree 1919

Figure 7 Photograph No. 4 shows an image of a number of trees within the Rathfarnham Castle grounds and notes that there are significantly more than the 16 trees referenced in the Tree Protection Plans in this location. SDCC do not provide the location for Photograph No. 4 and as such the NTA cannot ascertain exactly where this image is located. The methodology outlined in Section 1.2 of the Arboricultural Impact Assessment Report (in Appendix A17.1 in Volume 4 of the EIAR), is again noted, and it is highlighted that not every tree within Rathfarnham Castle Park has been surveyed. The NTA design team is confident that the survey has captured all relevant trees within Rathfarnham Castle Park.

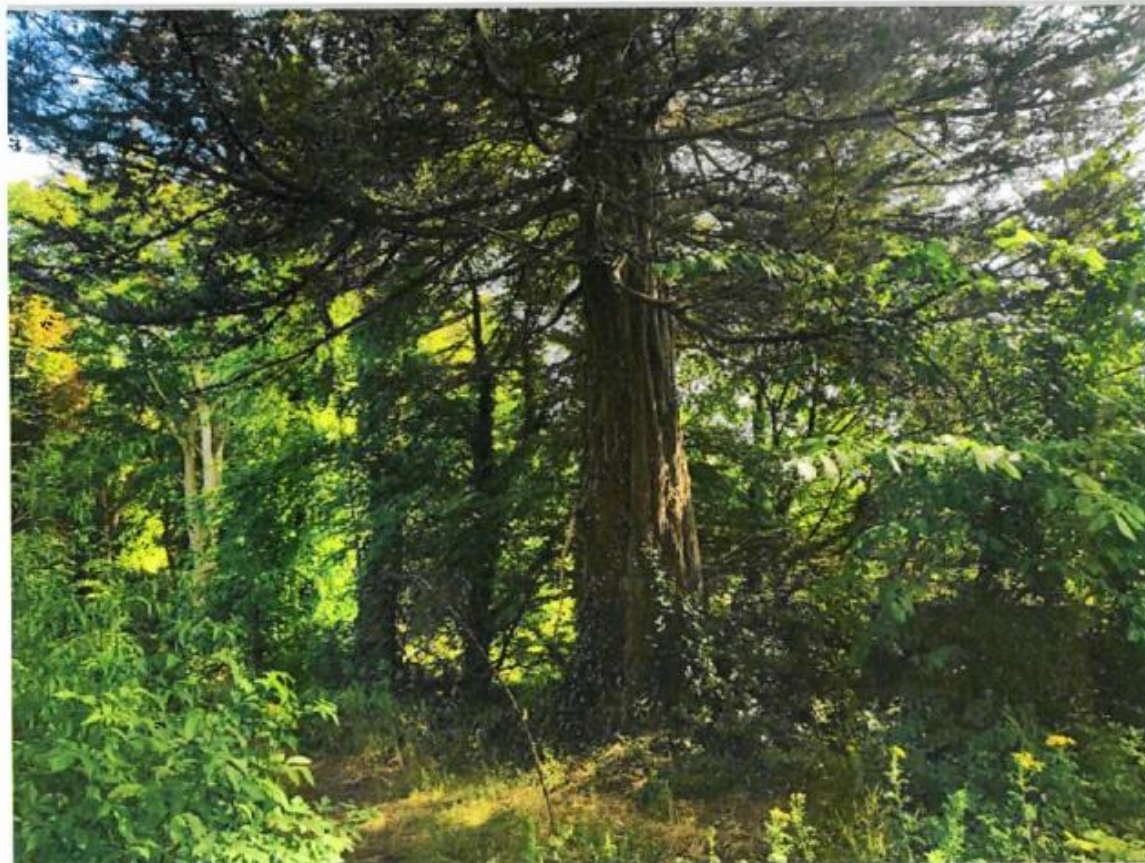


Figure 7 Photograph No. 4: One location within Rathfarnham woodland, which has a greater number of trees than the 16 No. trees marked on the tree survey drawing for this location.

Figure 3.63.42 Photograph No. 4 from SDCCs submission

- C) The NTA notes this comment. The existing levels within Rathfarnham Castle Park have informed the assessment contained within the Arboricultural Impact Assessment Report. The NTA design team is confident that the trees marked for retention can be retained.
- D) The NTA notes this comment. The existing levels within Rathfarnham Castle Park have informed the assessment contained within the Arboricultural Impact Assessment Report. The NTA design team is confident that the trees marked for retention can be retained.
- E) The NTA notes this comment. The positioning of new services in the vicinity of Rathfarnham Castle Park has taken due consideration of the existing tree root zones, and this has informed the assessment contained within the Arboricultural Impact Assessment Report (in Appendix A17.1 in Volume 4 of the EIAR). Section B22 of Appendix B contained within the Arboricultural Impact Assessment Report notes the following in relation to the diversion of existing or installation of new utilities:

“Utility diversion and new utilities have not been fully defined at this stage. The default position is that all services be located outside of the RPA of retained trees. In the context of this Site, it is not feasible to fully avoid the RPA of retained trees and therefore either trenchless installation below tree root systems or hand dug/compressed air excavation through RPAs where significant roots can be retained and worked around, will be required.

Use of trenchless techniques:

Where services can't avoid the RPA of retained trees, the primary consideration must be to install them using trenchless insertion techniques such as impact moiling, direct drilling or equivalent.

Insertion and retrieval pits must be located outside of the RPA of retained trees. The depth of the run must be at least 2m below ground level and should be located as far from the tree as practicable.

The mole must be lubricated with water only. Installation must follow the principles set out in the National Joint Utilities Group (NJUG) Vol 4: Guidelines for the planning, installation, and maintenance of utility apparatus in proximity to trees (issue 2) and BS5837 Section 7.7 and Table 3.

Replacement pipes must be installed via pipe bursting, relining or equivalent trenchless techniques where they are located within the RPA of a retained tree. Pipe bursting or relining equipment must be positioned outside of the RPA at all times.

Hand digging:

Where trenchless installation isn't feasible, shallow utility runs can be installed via hand or compressed air/soil vacuum excavation. The excavation will be located as far from the stem of the tree as practicable and must be carried out by hand (ideally using compressed air such as an Air Spade and soil vacuum) under the supervision of the Project Arboriculturist.

Pedestrian only access will be permitted, and ground protection measures as set out in Section B10 will be employed where no hard surfacing is in place, with fencing positioned immediately adjacent to restrict any further access into RPAs.

Excavation will be supervised by the Project Arboriculturist who will be on hand to advise on the management of any roots encountered and to ensure the approved tree protection methodology is fully adhered to. Roots smaller than 25mm in diameter can be cut with a clean sharp tool where they pose an obstruction.

Should significant roots (larger than 25mm diameter or large clumps of smaller roots) be encountered, these will be retained and wrapped in dampened hessian to prevent drying out and pipes will be routed around them wherever practicable. If significant roots are encountered which cannot be feasibly worked around and retained, appropriate action will be agreed with the Project Arboriculturist.

Pipes must be constructed to resist future incursion by tree roots.

All spoil/ arisings from excavation will be placed onto ground protection boards to prevent compaction, ground level changes and to assist in removal or reinstatement. Backfill is to utilise the excavated parent material where feasible, applied to restore the soil profile to its original structure (i.e., topsoil will be installed last) and must be lightly hand tamped only.

Services shall be installed following the principles set out in the National Joint Utilities Group (NJUG) Vol 4: Guidelines for the planning, installation, and maintenance of utility apparatus in proximity to trees (issue 2)."

The following is also noted in Section 5.5.2.4 of Chapter 5 of the EIA:

"Trees to be retained within and adjoining the works areas will be suitably protected as necessary as per the British Standards Institution (BSI) British Standard (BS) 5837:2012 Trees in Relation to Design, Demolition and Construction (BSI 2012). Trees identified for removal will be removed in accordance with BS 3998:2010 Tree Work. Recommendations (BSI 2010). The location of trees to be retained, and trees to be removed is shown on the Landscaping General Arrangement drawings (BCIDA-ARP-ENV_LA-0809_XX_00-DR-LL-9001).

A suitably qualified arborist will be appointed by the contractor to monitor tree protection, and tree removal related activities. The design has been developed to ensure removal of trees has been minimised in so far as practicable. Where necessary, protective fencing will be erected, and mitigation measures will be put in place, prior to construction works commencing in the immediate vicinity.

Works required within the root protection area of trees to be retained will follow the arboricultural methodology included in Appendix A17.1 Arboricultural Impact Assessment in Volume 4 of this EIAR. Further information on mitigation measures with regards to the removal and protection of trees is provided in Chapter 12 (Biodiversity), and further information on the assessment of tree removal with regards to landscape and visual impact is provided in Chapter 17 (Landscape (Townscape) & Visual) of this EIAR.”

The NTA design team is confident that the trees marked for retention can be retained.

The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the SDCC Public Realm Section comments as these matters were the subject of extensive liaison with SDCC, the OPW, Dept. of Housing, Local Government and Heritage throughout the design development process.

NTA will continue the very positive and constructive liaison with SDCC throughout the procurement and construction process including in relation to the landscape strategy/ Green Infrastructure Strategy.

b) Natural SuDS

The submission raises concerns about the overall extent of natural SuDS across the scheme, requesting that this should be increased, and suggesting a planning condition requesting a detailed landscaping strategy. The submission also recommends that Natural Based Urban Drainage should be included particularly in areas where the road is being completely re-aligned, e.g., the entire Rathfarnham Road.

Response

Section 4.6.16.4 of EIAR Chapter 4 Proposed Scheme Description highlights that *“Whilst in some areas the Proposed Scheme will increase the impermeable areas, additional permeable areas are also provided by the softening of urban realm along the routes. The drainage design aims to sustain flow levels within the existing pipe network after a rainfall event by controlling the discharge rate within each catchment. 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.”*

The drainage design is based on a number of best practice general principles, which are set out in the document ‘BusConnects Core Bus Corridor Drainage Design Basis’ which is included as Appendix K 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. Areas where SuDS measures are proposed are presented in the Surface Water Drainage Drawings provided in Volume 3 of the EIAR.

In summary, SuDS have been proposed across the scheme wherever practicable and sized appropriately.

The NTA will continue to liaise closely with South Dublin County Council Public Realm Section and this collaboration will continue both in advance of, and during, the subsequent construction stage of the Proposed Scheme taking their requirements into consideration, where aligned with and consistent with the EIAR.

c) Construction Compounds

SDCC Public Realm section note that a number of construction compounds are proposed within public realm areas. SDCC question the need for CPO, either temporary or permanent, for proposed construction compounds. SDCC notes that in normal practice, contract managers liaise with the Council to agree suitable locations for construction compounds and agree mitigation and reinstatement measures directly with the council. SDCC Public Realm section note that they were not consulted in relation to the proposed CPO of these lands for the works and did not agree to them.

SDCC make comments in relation to specific compound locations, as outlined below.

Construction Compound TR1

SDCC strongly object to a permanent CPO at this location. SDCC notes that a permanent CPO is unnecessary and expect this land to be returned to SDCC in good condition at the completion of the construction stage. SDCC suggest that the location of the compound, mitigation and reinstatement measures should be agreed with SDCC public realm section by agreement rather than CPO.

Construction Compound TR3

SDCC notes that the proposed compound location is in the Dodder Valley and is close to the site of an existing term-limited, temporary construction compound where SDCC have agreements regarding full reinstatement of the compound area to planted, landscaped parkland. SDCC further states that the extent of the compound in this location is excessive and occupies most of the usable parkland in this location. SDCC states that it does not recommend ceding of this important location with a temporary CPO and recommends that the extent of the proposed compound should be limited to the existing compound location and that mitigation and reinstatement measures should be agreed with SDCC public realm section by agreement rather than CPO.

Construction Compound TR6

SDCC notes that the proposed compound location is in the Dodder Valley and is close to the site of an existing term-limited, temporary construction compound where SDCC have agreements regarding full reinstatement of the compound area to planted, landscaped parkland. SDCC states that it does not recommend ceding of this important location with a temporary CPO and recommends that the extent of the proposed compound should be limited to the existing compound location and that mitigation and reinstatement measures should be agreed with SDCC public realm section by agreement rather than CPO.

Response

Necessity

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 SDCC 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 South Dublin County Council. Consequently, all CPO lands acquired by NTA for purposes of the Proposed Scheme will be transferred to the relevant local authority.

NTA will however continue the very positive and constructive liaison with SDCC throughout the procurement and construction process including in relation to the CPO.

Construction Compound TR1

SDCC Urban Realm Section notes that a permanent CPO is proposed at the location of Construction Compound TR1. This is not the case, as the proposed Construction Compound is located within the existing roadbed, no CPO is proposed at this location.

Figure 3.63.43, is an extract from Landscape General Arrangement Drawings from Figures: Part 1 of 3 of Volume 3 of the EIAR and shows the proposed enhanced landscaping proposals for the green area that will be implemented once the temporary construction compound is removed.

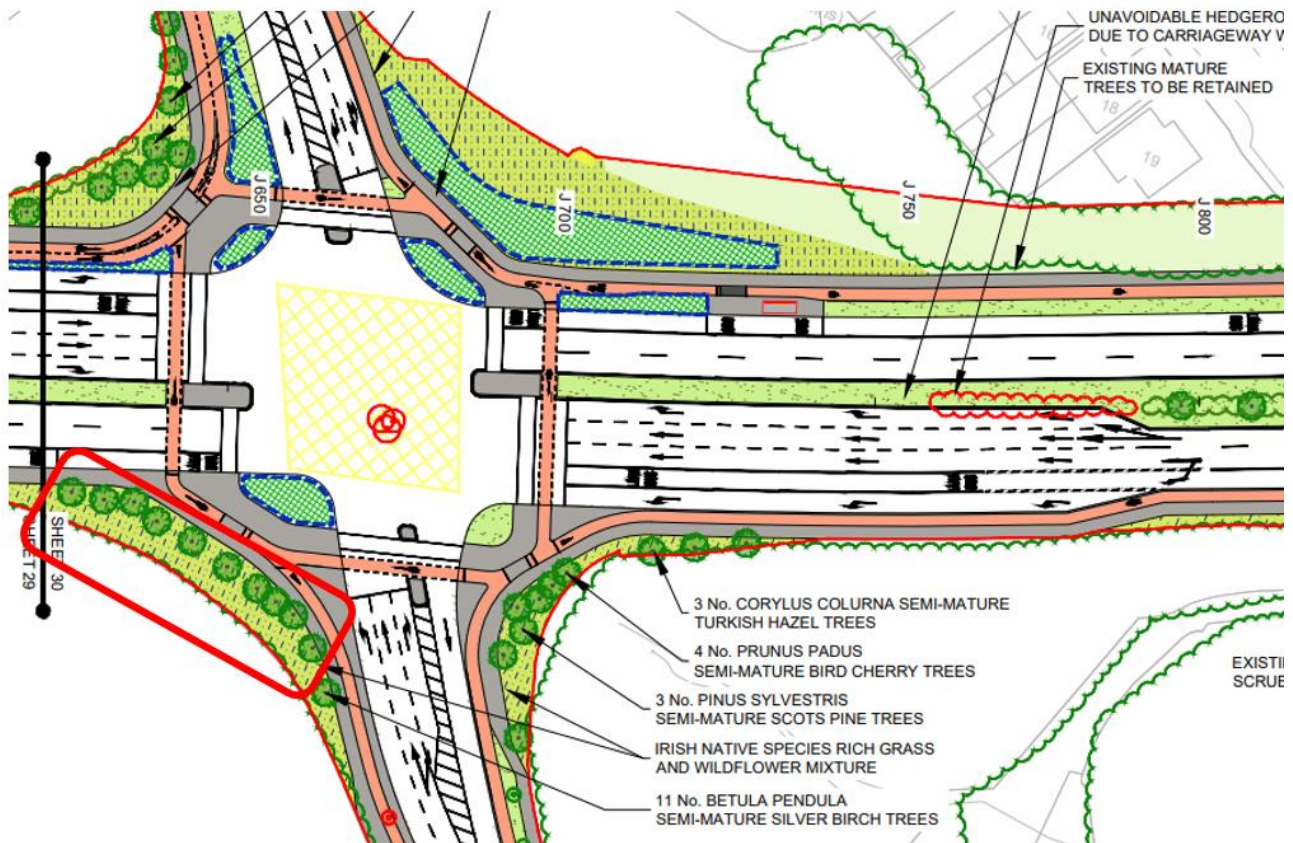


Figure 3.63.43 Extract from Landscaping General Arrangement Drawings from Figures: Part 1 of 3 of Volume 3 of the EIAR Compound TR1 location circled in red

As identified in Figure 3.63.43, no existing trees will need to be removed to allow the area to be used for Construction Compound TC1 during construction of the Proposed Scheme. In addition, a number of new trees are proposed to be planted here, within a new landscaped area.

Section 4.6.19.1 of EIAR Chapter 4 states 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 NTA acknowledges the close liaison with SDCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within SDCC. 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.

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

Construction Compound TR3

The NTA has provided a detailed response in relation to the use of this location as a temporary construction compound in response to Section iii) d) above.

Construction Compound TR6

The NTA notes SDCCs comment in relation to the proposed Construction Compound in this location. Section 5.7.1 of Chapter 5 of the EIAR notes the following in relation to the proposed siting of Construction compounds:

“The location of the Construction Compounds in relation to the Proposed Scheme are shown in Figure 5.1 in Volume 3 of this EIAR. 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 this EIAR for an assessment of the construction traffic.”

The construction compound referred to by SDCC is compound TR6, which is illustrated in Figure 3.63.44.

“Construction Compound TR6 will be located on Spawell Link Road, between Spawell Roundabout and Firhouse Road, as shown in Image 5.6. The area of Construction Compound TR6 is approximately 3,170m².”

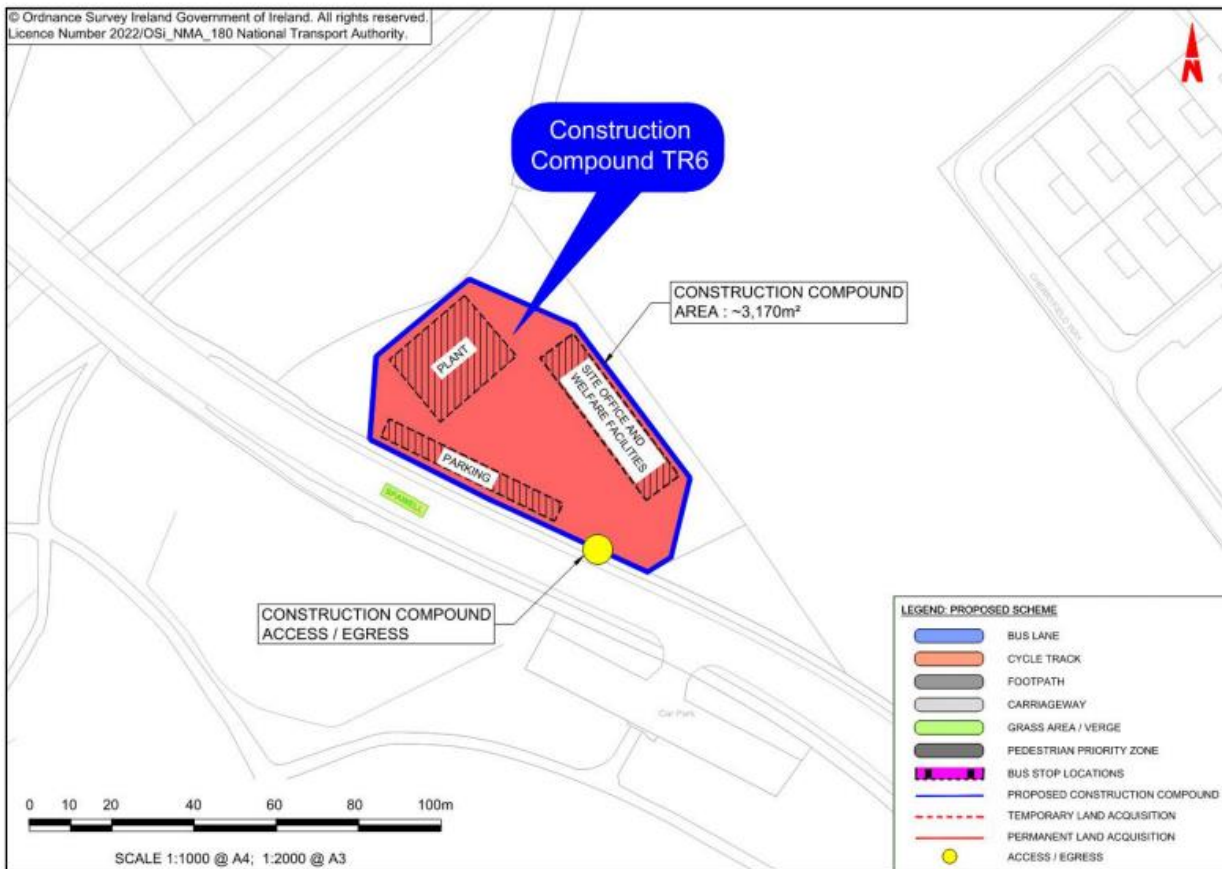


Image 5.6: Location and Extent of Construction Compound TR6

Figure 3.63.44 Construction Compound TR6 layout

Section 5.7.3 notes the following in relation the mitigation measures which will be implemented at Construction Compounds required to construct the Proposed Scheme:

“Appropriate environmental management measures will be implemented at the Construction Compounds, for example, to minimise the risk of fuel spillage, and to ensure that the Construction Compounds and the approaches to it are appropriately maintained. Further information on the air quality, noise and vibration and water related mitigation measures that will be implemented is included in Chapter 7 (Air Quality), Chapter 9 (Noise & Vibration) and Chapter 13 (Water) of this EIAR.

Following completion of the construction works, the Construction Compound areas will be cleared and reinstated to match pre-existing conditions.”

A Construction Environmental Management Plan (CEMP) has been prepared and submitted as part of the planning application and is included as Appendix A5.1 in Volume 4 of the EIAR. A Construction Traffic Management Plan has been prepared to inform the CEMP, 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 is further noted that a construction compound has been located at this site, during recent construction works carried out for the Dodder Greenway Scheme.

d) Other CPO Locations

SDCC notes a number of locations where CPO is proposed of public lands to deliver the Proposed Scheme and question the necessity and validity of CPO in these locations. The following locations are referenced in the submission:

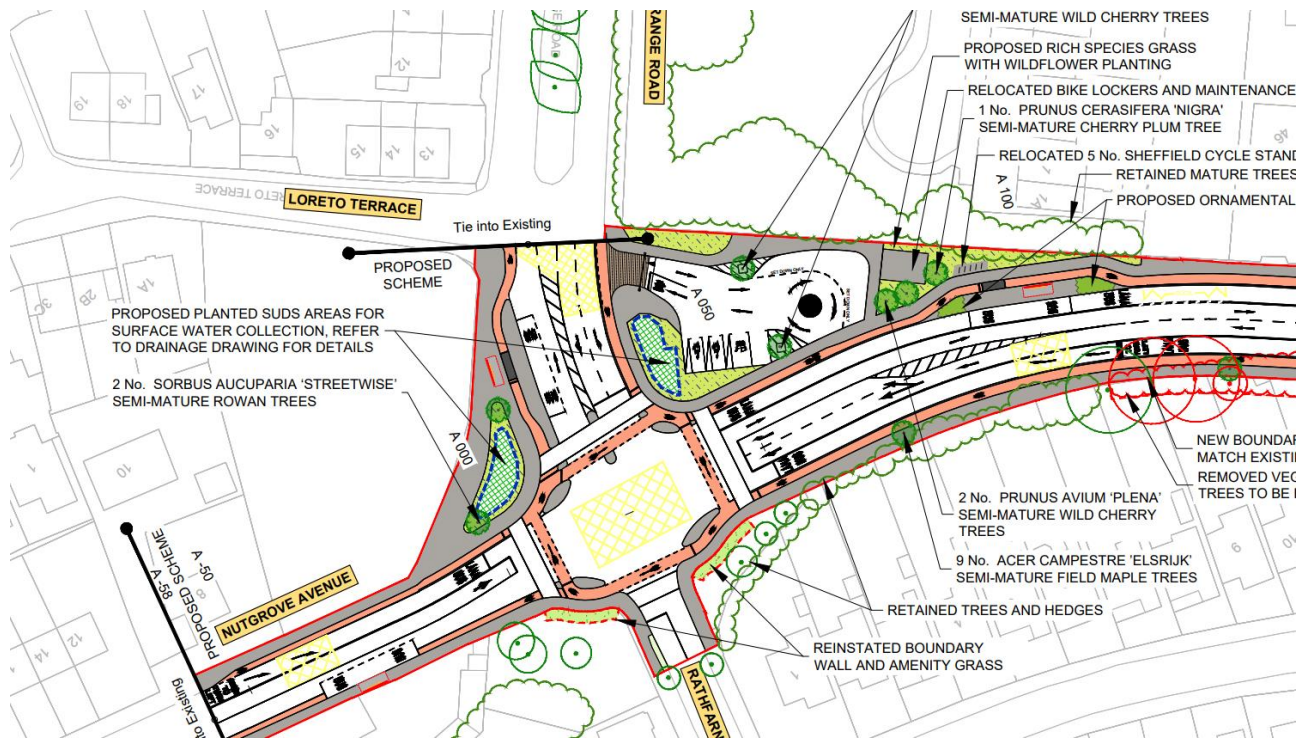
- **Junction of Grange Road with Nutgrove Avenue** - SDCC notes that they have recently upgraded the car park at this location, and further notes that permanent CPOs are proposed to land either side of the south side of the junction. SDCC are not clear why CPO is required in these locations and recommend that CPO is not granted.
- **Rathfarnham Castle Park** – SDCC notes the loss of parkland and amenity within Rathfarnham Castle Park due to the proposed permanent and temporary CPO in this location. SDCC notes, that if granted, the NTA should be requested to agree with SDCC compensatory and mitigation measures within SDCC public open space for significant loss of landscape and amenity in SDCC lands. SDCC notes that it does not support the CPO proposed at the exit from the Rathfarnham Castle car park.
- **Junction of Rathfarnham Main Street and Rathfarnham Road** – SDCC notes that they are unsure why there is a permanent CPO proposed at the junction of Rathfarnham Main Street and Rathfarnham Road, as there does not seem to be any relevant proposal in the general arrangement drawings in this area. SDCC notes that this is the access route for maintenance to the historic graveyard and is used by local traders for on-street display. SDCC request that a permanent CPO is not granted in this location. SDCC further note that this plaza area was improved during recent public realm improvement scheme and note that the Proposed Scheme will impact on the works carried out, including recently planted trees. SDCC notes that the Proposed Scheme does not include a compensatory landscape layout for the area and SDCC request that ABP apply a condition for the NTA to agree a landscape proposal for this area including replacement trees, incorporation of natural SuDS and other landscape interventions.
- **Dodder Greenway tie-in at Pearse Bridge** – SDCC state that the extent of proposed permanent CPO at this location is excessive. They further note that there are no proposals that would require the NTA to be in control of this land and recommend that the CPO is not granted.

Response

The NTA notes these comments from SDCC. Acquisition of both private and public lands has been minimised during the development of the Proposed Scheme as far as practicable, however is required in some locations to deliver the Proposed Scheme. The NTA has consulted with SDCC in relation to the extent of public lands required to deliver the Proposed Scheme. Specific responses to the locations referenced by SDCC are included below.

Junction of Grange Road with Nutgrove Avenue

The proposed layout at this junction has been co-ordinated with the recently completed Grange Road Walking and Cycling Scheme to ensure that the schemes tie-in. This includes the recently upgraded car park layout, which will be modified slightly to facilitate the Proposed Scheme. Figure 3.63.45, which is an extract from the Landscape General Arrangement drawings, shows that it is proposed to install planted SuDS features within green spaces at this junction.



**Figure 3.63.45 Extract from Landscape General Arrangement Drawings at Grange Road / Rathfarnham Road junction
Rathfarnham Castle Park**

The NTA notes the comments by SDCC regarding the loss of parkland and amenity space within Rathfarnham Castle Park. This impact has been documented and assessed in Chapter 17 of the EIAR. Section 17.4.3.2.5 notes the following in relation to the Construction Stage impacts of the Proposed Scheme in this location:

“A number of amenities are located along the Proposed Scheme. These include the Spawell golf grounds and outer sections of the River Dodder corridor, as well as major formal amenities of Bushy Park, Rathfarnham Castle, and the River Dodder corridor, the latter being an area of outstanding character and amenity.

The Construction Phase will result in changes to Rathfarnham Castle Demesne, as described in Section 17.4.3.2.4. Most notably the works will result in the removal of mature trees and the loss of a section of woodland amenity space to enable road widening. There will be temporary removal of the boundary walls separating the space from the adjacent roads and this will impact on the amenity of the open space through an increase in traffic noise and visibility, until the boundary is reinstated at a setback location. In addition, the presence of construction activity within the space will also be detrimental. The sensitivity is high, and the magnitude of change is high.

The potential townscape / streetscape and visual impact of the Construction Phase on open space at Rathfarnham Castle Demesne is assessed to be Negative, Significant and Temporary / Short-Term.”

Section 17.4.4.2.5 notes the following in relation to the Operational Stage impacts of the Proposed Scheme in this location:

“There will be a change at Rathfarnham Castle Demesne, most notably there will be continuing adverse effects from loss of land and from trees removed during the Construction Phase. However, there will be provision of substantial tree planting to consolidate the woodland edge to the demesne and restore the recreational amenity, which will reduce the negative effects over the long-term. Overall, the effect will be initially negative in the short-term becoming neutral over the long-term. The sensitivity is high and the magnitude of change is high.

The potential townscape / streetscape and visual impact of the Operational Phase on open space at Rathfarnham Castle Demesne assessed to be Negative, Significant and Short-Term becoming Neutral, Moderate / Significant and Long-Term.”

In relation to the proposed CPO at the existing exit of Rathfarnham Castle Car Park, it is proposed to realign this access to provide a safer environment for pedestrians and cyclists. Currently, the exit joins Rathfarnham Road at an acute angle, making it difficult for drivers exiting the car park to see oncoming cyclists, and encouraging higher vehicle speeds. It is proposed to provide a raised crossing for cyclists and pedestrians at this location, as well as to increase the angle between the side road and Rathfarnham Road, to provide a lower speed exit for vehicles and improve vulnerable road user safety at this exit.

Junction of Rathfarnham Main Street and Rathfarnham Road

The NTA notes this comment by SDCC. In preparing the schedule to the CPO a comprehensive property referencing exercise has been undertaken by the NTA. At the time of making the CPO on 18 April 2023 South Dublin County Council have been identified as the owners of plot no. 1003(1).1e. Trevor Baker and MOTO4U were included in the occupiers column in relation to plot no. 1003(1).1e as they were utilising the area for the purposes of displaying stock for sale from unit 1A Rathfarnham Main St. They were not included in the owners/reputed owners column or the lessees/reputed lessees column.

Further, the purpose of including persons/entities in the CPO schedule is to ensure that all potentially relevant persons are notified. However, ultimately, in the event that the CPO is confirmed by the Board, and the NTA exercise its powers of acquisition pursuant to such a confirmed CPO, Notices to Treat will be served on all those included in the confirmed CPO and it will then be for persons to make a claim for compensation and establish that they have a compensable interest in the land in question.

As outlined on sheet 3 of 37 of EIAR Chapter 4 Landscaping General Arrangement in Figure 3.63.46 below it is proposed to *retain existing public plaza, including stone paving, planters, stainless steel bollards*. In addition, the existing dropped kerb arrangement will be reinstated in the same location, including the removable bollard. In summary, vehicular access arrangement into the plaza will be reinstated as per the existing condition as part of the Proposed Scheme.

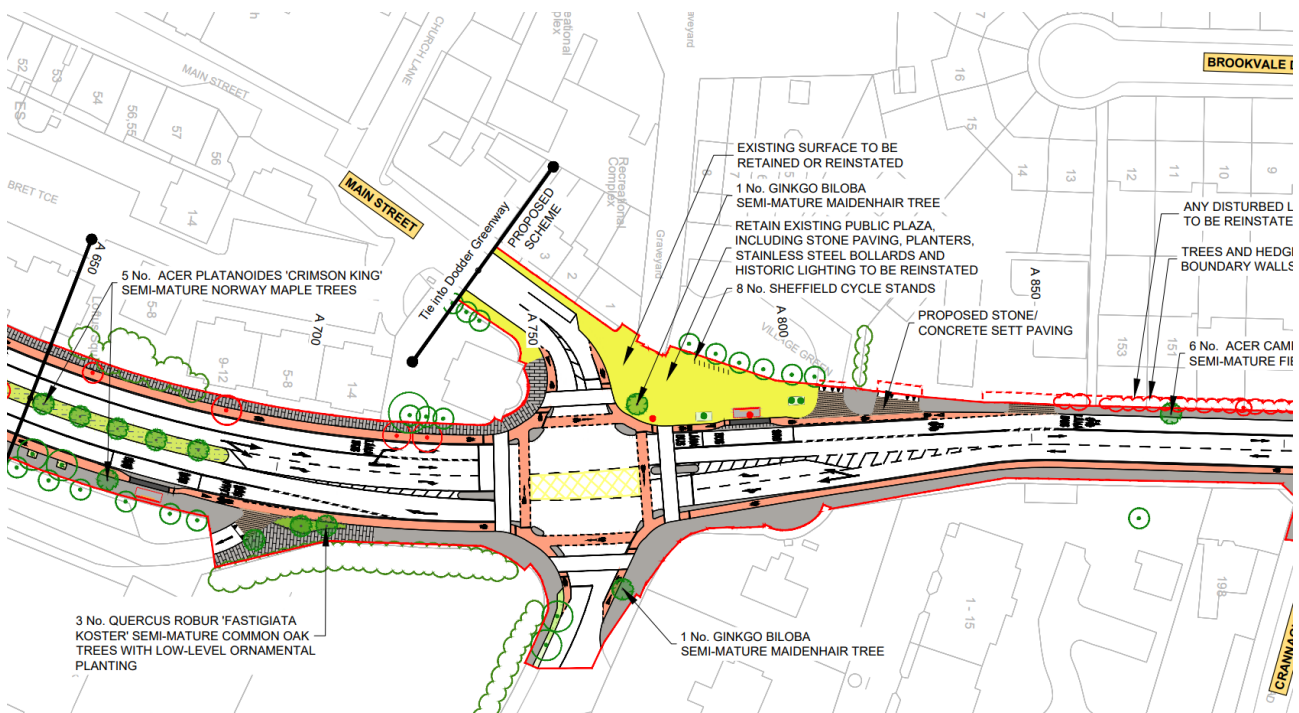


Figure 3.63.46 Extract from Landscape General Arrangement Drawings at Main Street Rathfarnham / Rathfarnham Road junction

Two existing semi trees are proposed to be removed in order to provide a protected junction for cyclists, and to relocate the existing bus stop to this location. The Arboricultural Impact Assessment notes the following in relation to these trees, which are referenced as Tag # 5925 x3:

“Represents 3 young Birch displaying over all fair condition. These trees are showing signs of decline. The middle tree is to be maintained.”

It is proposed to install a new Ginkgo Bilboa Semi-Mature Maidenhair tree in this location to mitigate the loss of the existing young trees.

They also note that given the Proposed Scheme proposes to relocate the boundary wall, raises questions about the adequacy of a bat transect remaining outside of the park boundary. It is further noted that the removal of the woodland edge will allow light into the woodland proper and the impact on the species within should have been surveyed and considered in that context.

SDCC further note that Pearse Bridge is a suspected location of a bat roost, and that the NTA should re-assess this location.

Response

The NTA notes these comments. Section 12.2.3.6.1 of Chapter 12 in Volume 2 of the EIAR notes the transect surveys which have been carried out:

“Walked bat activity transect surveys were conducted along preselected transect routes at seven locations along the Proposed Scheme. Transect routes were located at La Touch Bridge, Portobello, referred to as CBC1012BT001, Pearse Bridge Rathfarnham referred to as CBC1012BT002, along the River Dodder within Bushy Park referred to as CBC1012BT003, adjacent to Rathfarnham Castle, referred to as CBC1012BT004, Owendore Crescent referred to as CBC1012BT005, adjacent to Terenure College, referred to as CBC1012BT006 and adjacent to Dodder Valley Park, referred to as CBC1012BT007. The walked transect routes are shown on Figure 12.1.1 in Volume 3 of this EIAR.

Walked transect surveys comprised of four visits to each transect route across the three seasons of autumn, spring and summer as guided by Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins 2016) (see Table 12.2. for specific dates). Surveys were conducted in June to August 2018, September and October 2019, May 2020, and July 2020. Surveys commenced approximately 30 minutes after sunset to ensure that bats had emerged from their roosts. Surveys involved the surveyor walking each transect route at a slow pace using with a handheld ultrasound bat detector (Elekon Batlogger M) to record any bat species present.

Transect routes CBC1012BT001, CBC1012BT002 [Pearse Bridge Rathfarnham], CBC1012BT003, CBC1012BT004 [adjacent to Rathfarnham Castle] and CBC1012BT006 were surveyed across all seasons. Transect routes.....”

The surveys for bat activity focused on accessible areas where likely bat potential could occur. An activity transect was conducted along the Rathfarnham Road which captures the edge of Rathfarnham Castle Park. As is noted in Section 12.3.8.1 in Chapter 12 of the EIAR, no bat roosts were confirmed during surveys for the Proposed Scheme. Section 12.3.8.1.8 sets out the trees identified as having the potential to support roosting bats. Two number trees were identified (referenced as CBC1012PRF006/008 in Table 12.8 in Chapter 12, Volume 12 and Figure 12.7.2 in Volume 3 of the EIAR), based on standard guidance and typical features identified (Andrews 2018 – listed in Section 12.7 of Chapter 12)¹ as having the potential to support roosts.

However, Chapter 12 (Section 12.5.1.4.1) sets out appropriate mitigation to address if:

- a) a roost is present and or used in advance of the construction phase;
- b) There is adjacent bat activity identified.

Section 12.2.3.6.2 describes the inspections undertaken at bridges to assess their potential to support roosting bats. In relation to Pearse Bridge the following is stated:

“One bridge with visible crevices was identified: namely Pearse Bridge Rathfarnham. The bridge was graded to inform the decision on whether or not follow up dusk / dawn surveys were required. The standard approach to bridge assessments uses four simple grades to describe the presence, or likely presence of bats. It follows Billington and Norman (1997) and involves a grading system where the bridges examined are categorized as follows:

¹ Andrews, H. (2018). Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Bat Tree Habitat Key.

- *Grade 0 = no potential for bats: These are bridges where there are no opportunities for bats to roost in crevices or under mats of dense ivy. Modern concrete bridges and masonry bridges which have been well-pointed often fall under this category.*
- *Grade 1 = crevices possibly of use to bats: These are bridges which have small and a limited number of crevices which may be sub-optimal, perhaps due to dampness or localised disturbance. The possibility that bats could use these crevices cannot be entirely ruled out but is regarded to be low.*
- *Grade 2 = ideal crevices but no bat present: These are generally more substantial crevices, often more than 150mm deep, dry and sheltered which offer good roosting opportunities. No evidence of bats is confirmed. The possibility that bats could use these crevices is regarded to be likely.*
- *Grade 3 = evidence of bats: Bats are seen in-situ or their droppings or other field signs are seen.*

Following on from the visual assessment, which identified a large deep suitable crevice under the barrel of the bridge which could not be examined fully due to height, it was deemed necessary to undertake follow up dawn surveys at Pearse Bridge to establish if the bridge is being used as a roost.

Bat re-entry surveys were conducted at Pearse Bridge Rathfarnham, referred to as CBC1012RI001 between 2018 and 2020. The dawn re-entry surveys were conducted on the 27th July 2018, 16th October 2019, 22nd May 2020 and 24th July 2020 and commenced approximately 1.5 to 2 hours before sunrise to approximately .15 minutes after sunrise (in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins 2016).....”.

Section 12.4.3.4 acknowledges the evidence of bats at Pearse Bridge:

“ There is evidence of bats foraging and commuting within the study area of the Proposed Scheme, particularly along the River Dodder at Pearse Bridge in Rathfarnham (CBC1012BT002) and adjacent Bushy Park (CBC1012BT003). All parts of the Proposed Scheme which contain suitable habitat are likely to be within the CSZ of at least one bat roost. Considering the type of works proposed (e.g., upgrading of existing infrastructure for the most part), there is limited potential for the Proposed Scheme to act as a barrier to flight paths for bat species, as there will be no major changes to pre-existing habitats along most of the route.”

“The trees identified as having potential to support roosting bats, i.e., trees containing PRFs, are listed in Table 12.8 and shown on Figure 12.7.2 in Volume 3 of this EIAR. Each tree, or grouping of homogenous trees, was identified with regard to their potential to support roosting bats after Bat Surveys for Professional Ecologists: Good Practice Guidelines (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. Four of the trees containing PRFs will be removed as part of the Proposed Scheme, as indicated on the Landscaping General Arrangement (BCIDC-ARP-ENV_LA-1012_XX_00-DR-LL-0001 to 0037) for the Proposed Scheme.”

g) Feasibility of Proposed Street Tree Planting

SDCC notes that the Proposed Scheme includes the removal of a large number of trees within the SDCC area, and that this is not matched by proposed replacement trees within the SDCC area. The submission further queries the feasibility of the proposed street tree planting, and notes that where tree pits are proposed, that the NTA should demonstrate that the required CBR is achieved.

The submission refers to a number of specific locations as outlined below:

- **A850 – A1000:** The submission notes that trees proposed on the western side of the road seem to be proposed for the middle of the footpath, and request details of their feasibility.
- **Typical Section C-C:** The submission notes that this cross section illustrates the area referenced above but does not show trees.
- **The position of trees in conjunction with street lighting:** SDCC notes that existing street lights are retained along this section of the street, and it is unclear whether they are proposed to be replaced, SDCC notes that the position of the street lighting needs to be coordinated with the proposed tree planting. SDCC notes that this is applicable to the full scheme.

Response

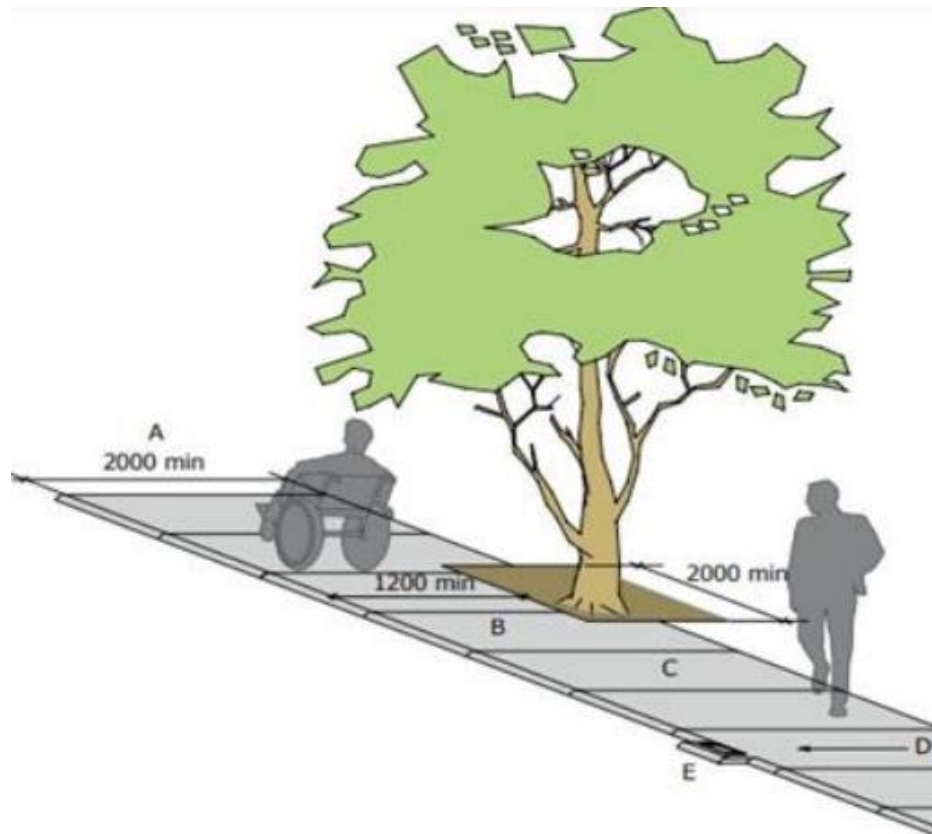
The NTA notes the comments. Table 14.1 in Section 14.7.5 notes that throughout the extent of the Proposed Scheme a total of 169 existing trees are proposed to be removed with a total of 400 new trees proposed to be planted. This equates to a net increase of 231 trees. Within the SDCC area a total of 114 trees are proposed to be removed with 326 new trees proposed to be planted. This equates to a net increase of 212 trees.

In relation to the feasibility of tree planting, new street trees have only been proposed where there is sufficient footpath width to accommodate them. A review of available existing underground utilities has also been undertaken to ensure sufficient space to accommodate the tree root ball. In relation to the CBR requirements, detailed ground investigations will be undertaken prior to construction.

Responses to specific queries are outlined below:

- **A850 – A1000:** It is not the design intent to position trees in the middle of proposed footpaths. As outlined in Section 4.3.1 of the Preliminary Design Report, a minimum clear width of 1.2m shall be maintained over short distances, such as at proposed trees. The following is noted:

“At specific pinch points, Building for Everyone: A Universal Design Approach, defines acceptable minimum footpath widths as being 1.2m wide over a 2m length of path (Figure 4.2). This minimum of 1.2m allows one wheelchair to pass. Refer to Table 4.2 for footpath widths recommended by DMURS.”



Key

- A. 2000mm minimum to allow two wheelchairs to pass each other
- B. Width reduced to 1200mm minimum for not more than 2m in length around existing obstructions
- C. Gradient should either be level along its length or should be gently sloping or incorporate ramp or ramps in accordance with building standards
- D. Crossfall gradient not more than 1:50
- E. Drainage gratings offset from access route where possible

Figure 4.2: Recommended absolute minimum footpath widths allowable over a short section

- **Typical Section C-C:** This cross-section is indicative and shows the proposed widths along this section of the road.
- **The position of trees in conjunction with street lighting:** The proposed positioning of new public lighting columns and new street trees has been coordinated. Existing and proposed lighting columns and existing and proposed tree locations are shown on the Street Lighting Drawings BCIDC-ARP-LHT_RL-1012_XX_00-DR-EO-0001 to BCIDC-ARP-LHT_RL-1012_XX_00-DR-EO-0037. Figure 3.63.48 is an extract from the Street Lighting drawings in the location referenced.

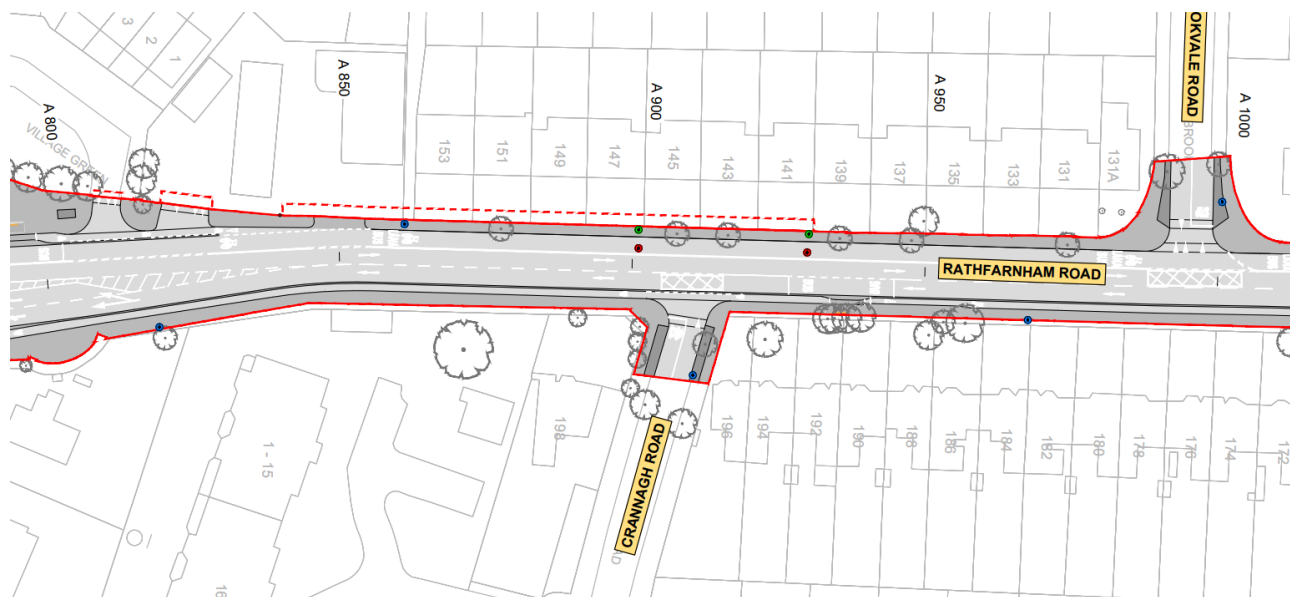


Figure 3.63.48 Extract from Street Lighting Drawings at Rathfarnham Road

h) Related Policies and Strategies

The submission notes a number of policies and strategies from the South Dublin County Development Plan 2022-2028 relating to public realm which is of relevance.

Response

The NTA notes the relevant policy referenced by SDCC. The South Dublin County Development Plan is a key policy document which has informed the development of the Proposed Scheme. Section 2.3.5.3 of Chapter 2 in Volume 2 of the EIAR outlines how the SDCC Development Plan is supportive of BusConnects. The SDCCDP 2022-2028 supports an integrated transport network that offers enhanced access and mobility throughout the county. The extensive number of policies and objectives relevant to the Proposed Scheme outlined within the SDCCDP 2022-2028 and the Proposed Schemes compliance against these policies and objectives have been set out in Table 1.3 in Appendix 1 Local Policy (which is contained in Appendix A2.1 in Volume 4 of the EIAR).

6. Water Services Section

Observations raised / clarifications sought

The Water Services Section have made the following comments on page 30-31 of the submission.

1. All structures should have setback distance to the outside diameter of surface water sewers as provided as per an attached table.
2. The setback distance for foul and watermain should be as per Irish Water Standards.
3. The Proposed Scheme is located in proximity to a riparian corridor near Cypress Grove Road and Templeogue Road. The submission notes that it is strongly recommended to review the relevant sections of the County Development Plan for relevant policy, objectives and criteria.

Response

The NTA notes the above comments.

As noted in Section 10.2 of the Preliminary Design Report provided as part of the Supplementary Information, preliminary consultations have been undertaken with utility asset owners, including Irish Water, so that conflict can be resolved by relocating or diverting services where necessary and protecting in-situ where appropriate. Section 10.2 notes that *“The services conflicts and the associated diversions will need to be considered in the design and construction of the Proposed Scheme. The design considerations have been taken into account as much as practicable at this stage, but it is likely that design modifications will be required at detailed design stage when further site investigations have taken place.”*

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works.

The riparian corridor referred to in the submission relates to the River Dodder. The NTA is satisfied that the relevant policies, objectives and criteria referenced in the SDCC Development Plan 2022 – 2028 have been considered in the development and assessment of the Proposed Scheme.

7. Architectural Conservation Section

Observations raised / clarifications sought

a) Support for the scheme

The submission states on page 38: *“The EIAR completed for the BusConnects Scheme Route (Templeogue/Rathfarnham to City Centre) includes a very detailed and comprehensive overview of Protected Structures and Architectural Conservation Areas and Architectural features/ items located within the vicinity of the proposed route. A methodology has been developed and is included in the Appendices of the EIAR.”*

Response

The NTA notes the view expressed by the submission.

b) Protection of architectural features

The submission notes that the Architectural Conservation department has been involved in lengthy conversations regarding two specific elements of the Proposed Scheme, namely:

- 1) The Gothic Arch on Templeogue Road (RPS Ref 244); and
- 2) Rathfarnham Castle (RPS Ref 221).

SDCC notes that the Gothic Arch will be opened up to the general public and will substantially contribute to the character of the area through the integration of this historic landmark into the urban realm. SDCC notes that the proposed paving is sympathetic to the aesthetic of the Arch, and that areas of seating and ornamental planting will be provided to enhance the sense of place and provide for passive recreation. On page 32 of their submission SDCC notes:

“The proposed works to include the conservation and repair of the Gothic Arch are welcomed along with the overall public realm design works ensuring the Arch is integrated into the design allowing it to be fully appreciated within the current landscape.”

The submission notes that a Schedule of Works and Method Statement for the proposed repair works to the Gothic Arch should be submitted for formal agreement and approval with SDCC Architectural Conservation Officer prior to the commencement of works. SDCC further note that works should be carried out by a suitably qualified conservation contractor with experience in the conservation and repair of historic structures.

The submission notes that the existing boundary wall of Rathfarnham Castle will be set back and reconstructed with a round capping roughcast render. The submission notes that the realigned boundary will facilitate planting street trees in the new footpath to soften and enhance the appearance of the existing roadway and to provide a sense of separation between the pedestrian space and the roadway. SDCC notes that the roughcast render wall was presented as the preferred option as it was felt that it would be more in keeping with the construction of the castle. They further note that the impacted woodlands will be replanted with native species and that the existing playground will be integrated with the new planting and setback wall alignment. The submission notes that the affected boundary walls are replacement boundaries built as part of previous road schemes and consist of concrete block walling. SDCC notes that the boundary treatment to Grange Road consists of coursed granite rubble, with railings and brick dressings near the pedestrian entrance to the park, which itself is of dressed stone blocks with a segmental arched lintel. It is noted that a number of trees will be removed and that there will be a negative visual impact during construction.

The submission notes that during 2022 SDCC Architectural Conservation Officer was presented with a number of options with regard to the proposed boundary treatment at Rathfarnham Castle. The submission highlights that a number of assessments and consultations were carried out at that time, and that the design of the Proposed Scheme in this location is based on these assessments and consultations, including with SDCC, the OPW, Dept. of Housing, Local Government and Heritage. The submission notes that SDCC Architectural Conservation department considers the proposal acceptable, and that the new boundary wall will improve views from the Castle and allow the boundary of the Castle Demesne to be more consistent and improve the overall visual impact and architectural detail.

The submission further notes that indirect physical Construction Phase impacts are anticipated in a three locations where protected structures of National Importance and High Sensitivity share a boundary with the Proposed Scheme. SDCC states that a safety statement should be completed, detailing how shared boundary features which form part of a Protected Structure site will be safeguarded during construction. SDCC state that this safety statement should be submitted for the agreement and approval of the Council Architectural Conservation Officer.

The submission notes that a summary of Construction Phase impacts and associated mitigation measures are provided in the submission. It states that the details have been assessed and are considered appropriate in the overall approach, and that when works are due to commence, that the BusConnects project team should contact the Local Authority Conservation Officer to discuss specifications for works/repairs where required.

In conclusion the submission notes that the EIAR completed is very detailed and comprehensive in relation to Protected Structures and Architectural Conservation Areas and Architectural features/items located in the vicinity of the proposed route.

The submission notes a number of recommended conditions for An Bord Pleanála's consideration, which relate to the aforementioned points.

Response

The NTA acknowledges the significant level of consultation which SDCC Architectural Conservation department have facilitated in relation to the development of the Proposed Scheme.

In relation to the Gothic Arch in Templeogue, the NTA welcomes SDCC's support for this important element of the Proposed Scheme. In relation to Rathfarnham Castle, the NTA again welcomes SDCC's comments in this regard. 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.

The NTA notes the request that a Schedule of Works and Method Statement for the proposed repair works to the Gothic Arch should be submitted for formal agreement and approval with SDCC Architectural Conservation Officer prior to the commencement of works. Section 16.5.1.1. in Chapter 16 of Volume 2 of the EIAR sets out the mitigation which will be implemented:

"...Removal of vegetation, supervised by an accredited structural engineer specialising in historic structures has already taken place and a structural appraisal prepared by CORA engineers is appended in Volume 4 of this EIAR (Appendix A16.4). Their recommendations for consolidation and repair of the arch are contained in Section 3.1 of the CORA report and will be implemented by the appointed contractor. In addition, mitigation will include protection and monitoring prior to, and for the duration of the Construction Phase to prevent damage to the arch. Protective measures and monitoring are 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 regard to protected structures, Section 16.5.1.1. in Chapter 16 of Volume 2 of the EIAR also sets out the mitigation which will be implemented:

“...The proposed mitigation is the recording, protection and monitoring of the Protected Structures 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...”

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

3.63.4 Conclusion

General Issues

In conclusion, SDCC's submission reiterates support for the scheme and reiterates 5 general issues that have been raised by the various sections within SDCC:

- 1) Avoiding an over-engineered approach
- 2) Adequate provision for walking and cycling
- 3) Ensuring adequate greening
- 4) Tying in with other proposed infrastructure
- 5) Consideration of operation of construction compounds on SDCC lands by agreement rather than by temporary CPO

Response

The NTA acknowledges the close liaison with SDCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within SDCC. 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.

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

Specific Proposals

The submission repeats 12 specific concerns that have been raised by the various sections within SDCC:

- a) Construction Compound TR3
- b) Detailed Construction Management Plans
- c) Public Land required to deliver the Proposed Scheme
- d) Schedule of Works and Method Statement for proposed works to Gothic Arch on Templeogue Road
- e) Liaison with SDCC Architectural Officer in advance of Construction Works
- f) Safety & Method Statements in relation to RPS boundaries
- g) Provision of additional green infrastructure
- h) Tree loss at Rathfarnham Castle
- i) More natural based SuDS along the full length of the route
- j) Setback to outside diameter of surface water sewers, foul sewers and watermains

- k) Review of relevant content within SDCC Development Plan relating to riparian corridors
- l) Ensuring environmental and ecological surveys are completed.

Response

Detailed responses to each of the above concerns have been provided in the relevant sections above.

The NTA acknowledges the close liaison with SDCC that has been in place during the planning and design stage of the Proposed Scheme, which included extensive dialogue with the relevant sections within SDCC. 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.

The NTA will continue the very positive and constructive liaison with SDCC throughout the preparation of the construction-stage documents and during the construction works. The NTA is satisfied that the matters raised can be successfully addressed between SDCC and the NTA, in the absence of any approval condition.

Appendix A

ESB Asset Alteration Drawings

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



M50 Junction 11

Lake

J 000

J 050

J 100

J 150

J 200

J 250

TALLAGHT ROAD

R137

TALLAGHT ROAD

M50 JUNCTION 11

SHEET 28

SHEET 29

LEGEND:

- EXISTING KERB LINE
- PROPOSED KERB LINE
- ESB - HIGH VOLTAGE - EXISTING UNDERGROUND
- ESB - HIGH VOLTAGE - EXISTING OVERHEAD
- ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND
- ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD
- ESB - LOW VOLTAGE - EXISTING UNDERGROUND
- ESB - LOW VOLTAGE - EXISTING OVERHEAD
- SITE BOUNDARY LINE
- ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
- TEMPORARY LAND TAKE
- ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED

NOTES:

1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Rev	Date	Drm	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client

Engineering Designer

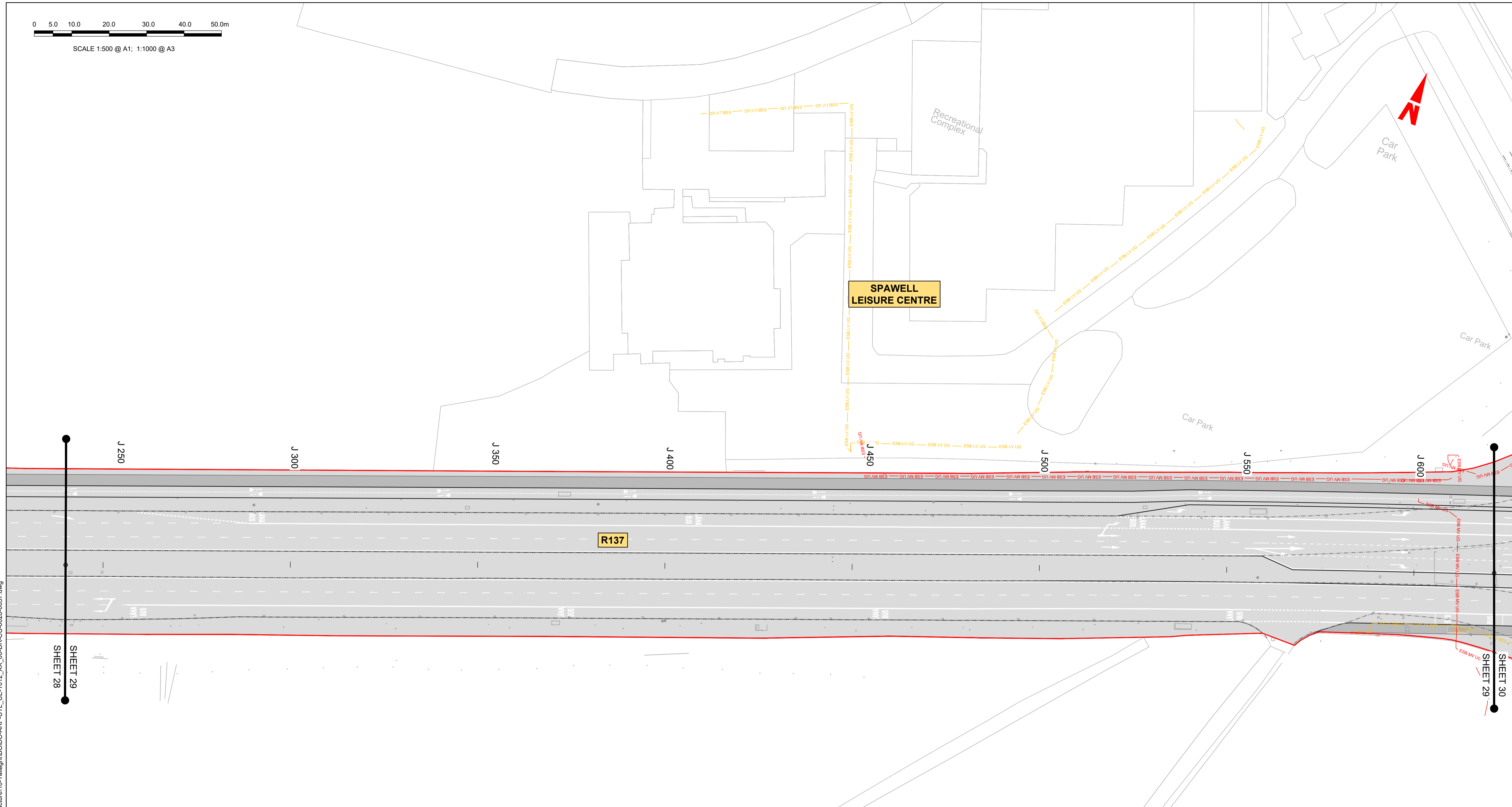
Programme Title		BUSCONNECTS DUBLIN	
		CORE BUS CORRIDORS INFRASTRUCTURE WORKS	
Drawing Title			
TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME			
ESB ASSET ALTERATIONS			
Drawing File Name	Sheet Number	Status	Rev
BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028	28 of 37	A	M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\26860002686401-004_Interna\4-02_Drawings\4-02-3_Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



LEGEND:

- EXISTING KERB LINE
- PROPOSED KERB LINE
- ESB - HIGH VOLTAGE - EXISTING UNDERGROUND
- ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - HIGH VOLTAGE - EXISTING OVERHEAD
- ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND
- ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD
- ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - LOW VOLTAGE - EXISTING UNDERGROUND
- ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - LOW VOLTAGE - EXISTING OVERHEAD
- ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
- SITE BOUNDARY LINE
- TEMPORARY LAND TAKE
- ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED

NOTES:

1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Rev	Date	Drm	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client

Engineering Designer

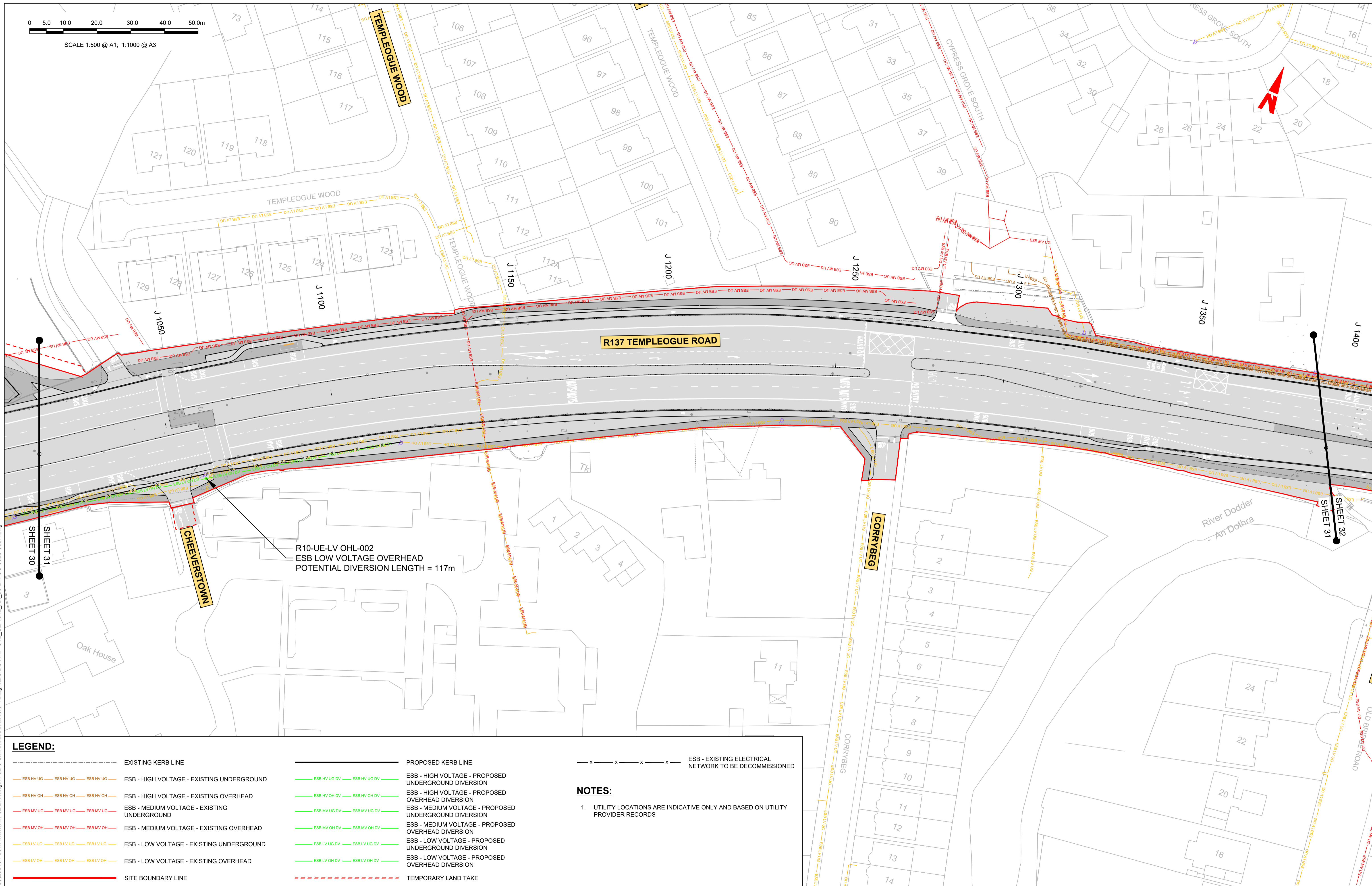
Programme Title		BUSCONNECTS DUBLIN	
		CORE BUS CORRIDORS INFRASTRUCTURE WORKS	
Drawing Title			
TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME			
ESB ASSET ALTERATIONS			
Drawing File Name	Sheet Number	Status	Rev
BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0029	29 of 37	A	M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\2686000268640-004_Interna\4-02-Drawings\4-02-3_Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 50 100 200 300 400 500m

SCALE 1:500 @ A1; 1:1000 @ A3



R10-UE-LV OHL-002
ESB LOW VOLTAGE OVERHEAD
POTENTIAL DIVERSION LENGTH = 117m

LEGEND:

	EXISTING KERB LINE		TEMPORARY LAND TAKE
	ESB - HIGH VOLTAGE - EXISTING UNDERGROUND		ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION
	ESB - HIGH VOLTAGE - EXISTING OVERHEAD		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
	ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
	ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
	ESB - LOW VOLTAGE - EXISTING UNDERGROUND		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
	ESB - LOW VOLTAGE - EXISTING OVERHEAD		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
	SITE BOUNDARY LINE		ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED

NOTES:

- UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drn	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client: **NTA**
Udaráis Náisiúnta Iompair
National Transport Authority

Engineering Designer: **ARUP**

Date: 07/12/2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: AG | Checked: SW | Approved: DC

Project Code: BCIDC | Originator Code: ARP | QMS Code: 268401-00

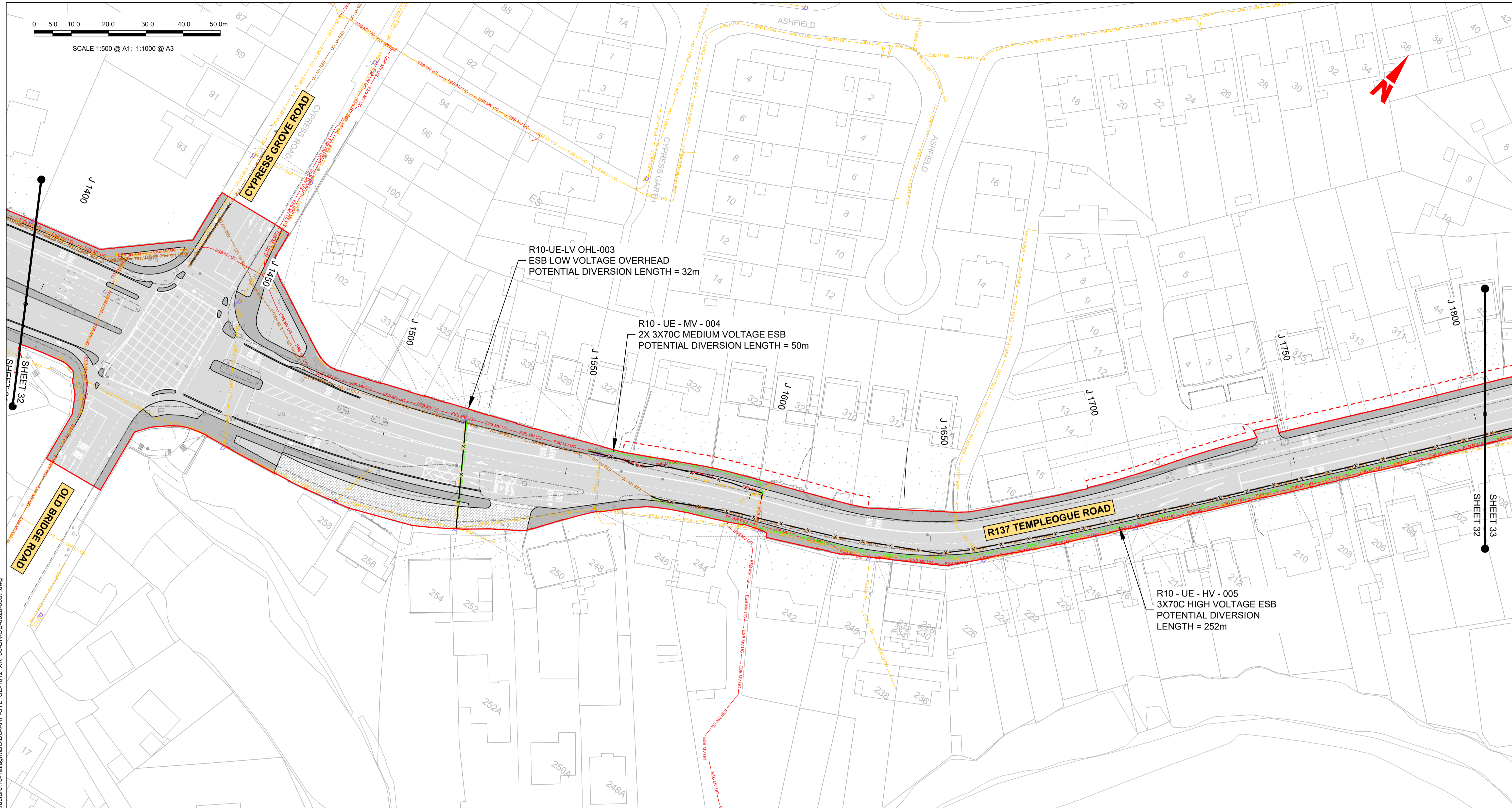
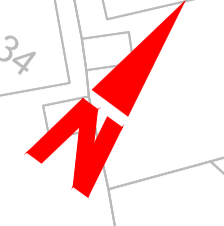
Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS			
Drawing File Name: BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0031	Sheet Number: 31 of 37	Status: A	Rev: M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\2686000268401-004_Interna\4-02_Drawings\4-02-3_Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg



SCALE 1:500 @ A1; 1:1000 @ A3



R10-UE-LV-OHL-003
ESB LOW VOLTAGE OVERHEAD
POTENTIAL DIVERSION LENGTH = 32m

R10 - UE - MV - 004
2X 3X70C MEDIUM VOLTAGE ESB
POTENTIAL DIVERSION LENGTH = 50m

R10 - UE - HV - 005
3X70C HIGH VOLTAGE ESB
POTENTIAL DIVERSION LENGTH = 252m

LEGEND:

	EXISTING KERB LINE		PROPOSED KERB LINE		ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
	ESB - HIGH VOLTAGE - EXISTING UNDERGROUND		ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION	NOTES:	1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS
	ESB - HIGH VOLTAGE - EXISTING OVERHEAD		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - LOW VOLTAGE - EXISTING UNDERGROUND		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - LOW VOLTAGE - EXISTING OVERHEAD		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	SITE BOUNDARY LINE		TEMPORARY LAND TAKE		

Disclaimer
 a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.
 b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.
 c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish

Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.
 d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drn	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client
NTA
 Údarás Náisiúnta Iompair
 National Transport Authority

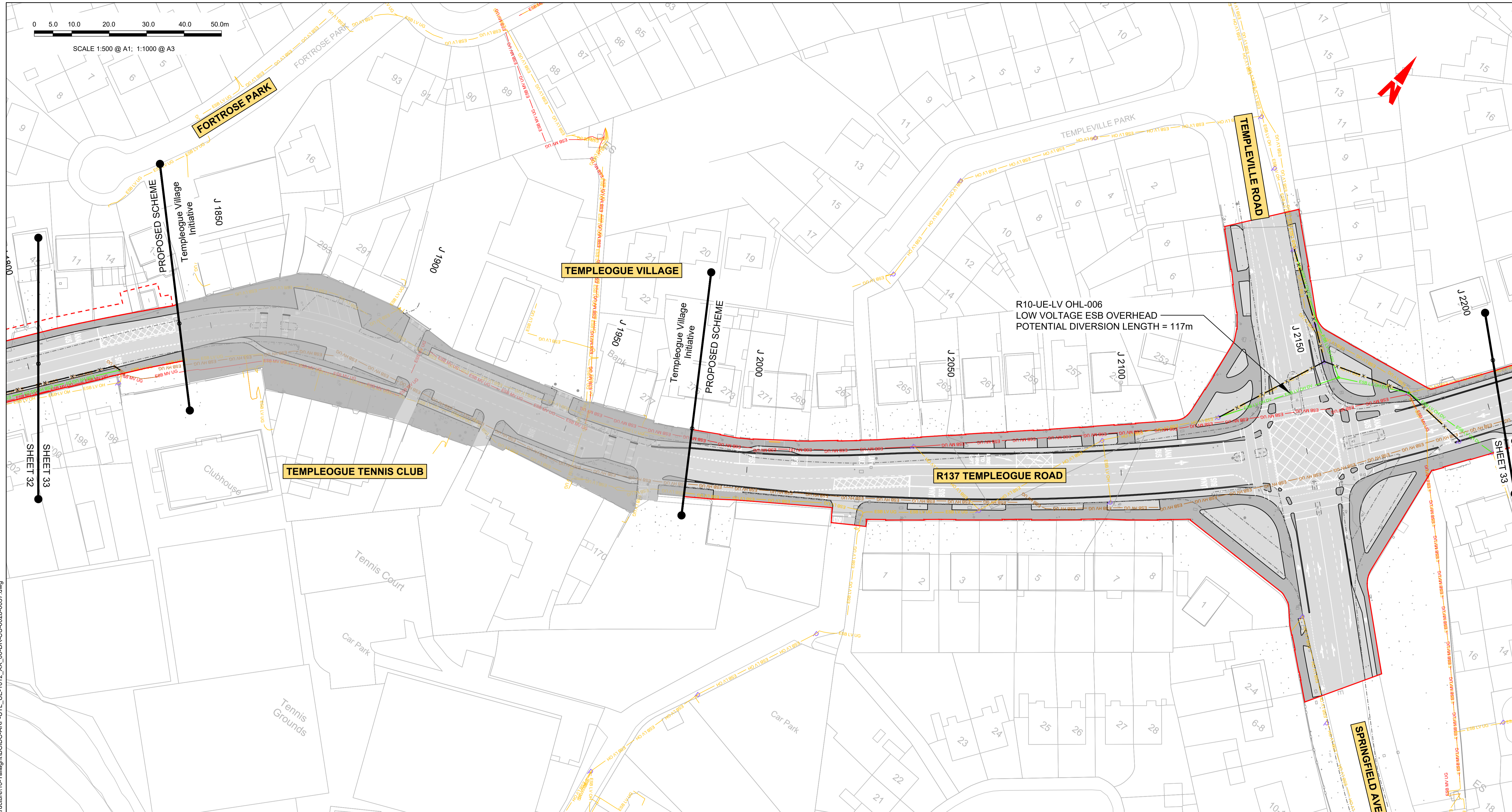
Engineering Designer
ARUP

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS	
Drawing Title TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS	
Drawing File Name BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0032	Sheet Number 32 of 37
Status A	Rev M02

I:\global\europa\Dublin\Jobs\268600026840-004_Interna\4-02_Drawings\4-02-3_Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 50 100 200 300 400 500m

SCALE 1:500 @ A1; 1:1000 @ A3



LEGEND:

	EXISTING KERB LINE		PROPOSED KERB LINE		ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
	ESB - HIGH VOLTAGE - EXISTING UNDERGROUND		ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
	ESB - HIGH VOLTAGE - EXISTING OVERHEAD		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
	ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
	ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
	ESB - LOW VOLTAGE - EXISTING UNDERGROUND		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
	ESB - LOW VOLTAGE - EXISTING OVERHEAD		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	SITE BOUNDARY LINE		TEMPORARY LAND TAKE		

NOTES:

- UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this information. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drm	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Engineering Designer: **ARUP**

Date: 07/12/2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: AG | Checked: SW | Approved: DC

Project Code: BCIDC | Originator Code: ARP | QMS Code: 268401-00

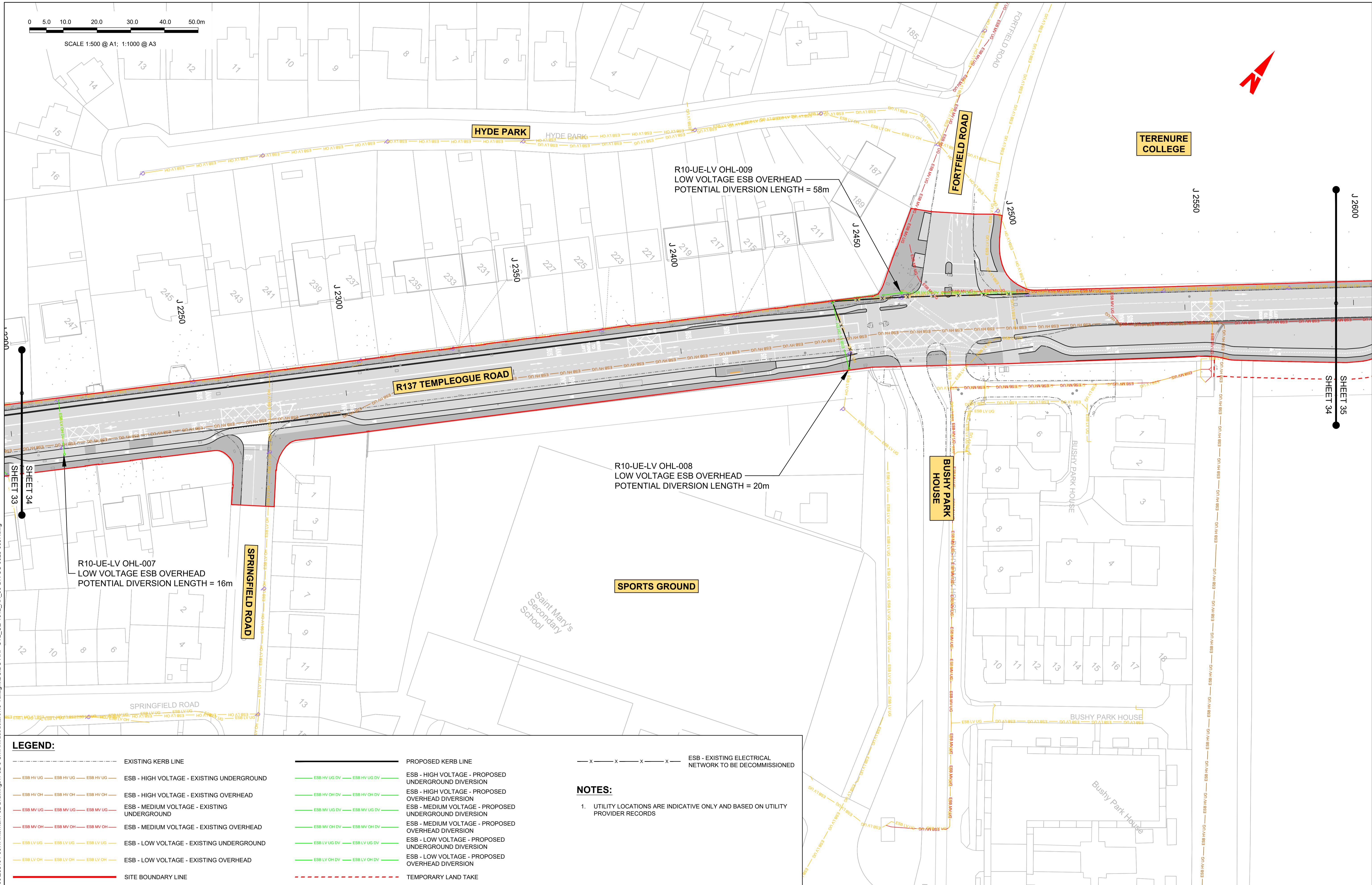
Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS	
Drawing Title: TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS	
Drawing File Name: BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0033	Sheet Number: 33 of 37
Status: A	Rev: M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

g:\global\europa\dublin\jobs\268401-00\4. Internal\4-02 Drawings\4-02-3 Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



LEGEND:

- EXISTING KERB LINE
- PROPOSED KERB LINE
- x---x---x---x--- ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
- ESB - HIGH VOLTAGE - EXISTING UNDERGROUND
- ESB - HIGH VOLTAGE - EXISTING OVERHEAD
- ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND
- ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD
- ESB - LOW VOLTAGE - EXISTING UNDERGROUND
- ESB - LOW VOLTAGE - EXISTING OVERHEAD
- SITE BOUNDARY LINE
- ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
- TEMPORARY LAND TAKE

NOTES:

1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.



c. O.S. data used for plans are printed under © Ordnance Survey Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSi Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drn	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client		Engineering Designer	
 Údarás Náisiúnta Iompair National Transport Authority			
Date	Scale	Drawn	Checked
07/12/2023	1:500 @ A1 1:1000 @ A3	AG	SW
Project Code	Originator Code	QMS Code	Approved
BCIDC	ARP	268401-00	DC

Programme Title			
BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title			
TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS			
Drawing File Name	Sheet Number	Status	Rev
BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0034	34 of 37	A	M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\2686000268401-004_ Internal\4-02-3 Civil Infrastructure\10-Tallaght\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



TERENURE COLLEGE

R10-UE-LV OHL-010
LOW VOLTAGE ESB OVERHEAD
POTENTIAL DIVERSION LENGTH = 1033m

R137 TEMPLEOGUE ROAD

RATHDOWN DRIVE

BUSHY PARK

RATHDOWN PARK

LEGEND:

	EXISTING KERB LINE		PROPOSED KERB LINE		ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
	ESB - HIGH VOLTAGE - EXISTING UNDERGROUND		ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - HIGH VOLTAGE - EXISTING OVERHEAD		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - LOW VOLTAGE - EXISTING UNDERGROUND		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - LOW VOLTAGE - EXISTING OVERHEAD		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	SITE BOUNDARY LINE		TEMPORARY LAND TAKE		

NOTES:

- UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drn	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Engineering Designer: **ARUP**

Date: 07/12/2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: AG | Checked: SW | Approved: DC

Project Code: BCIDC | Originator Code: ARP | QMS Code: 268401-00

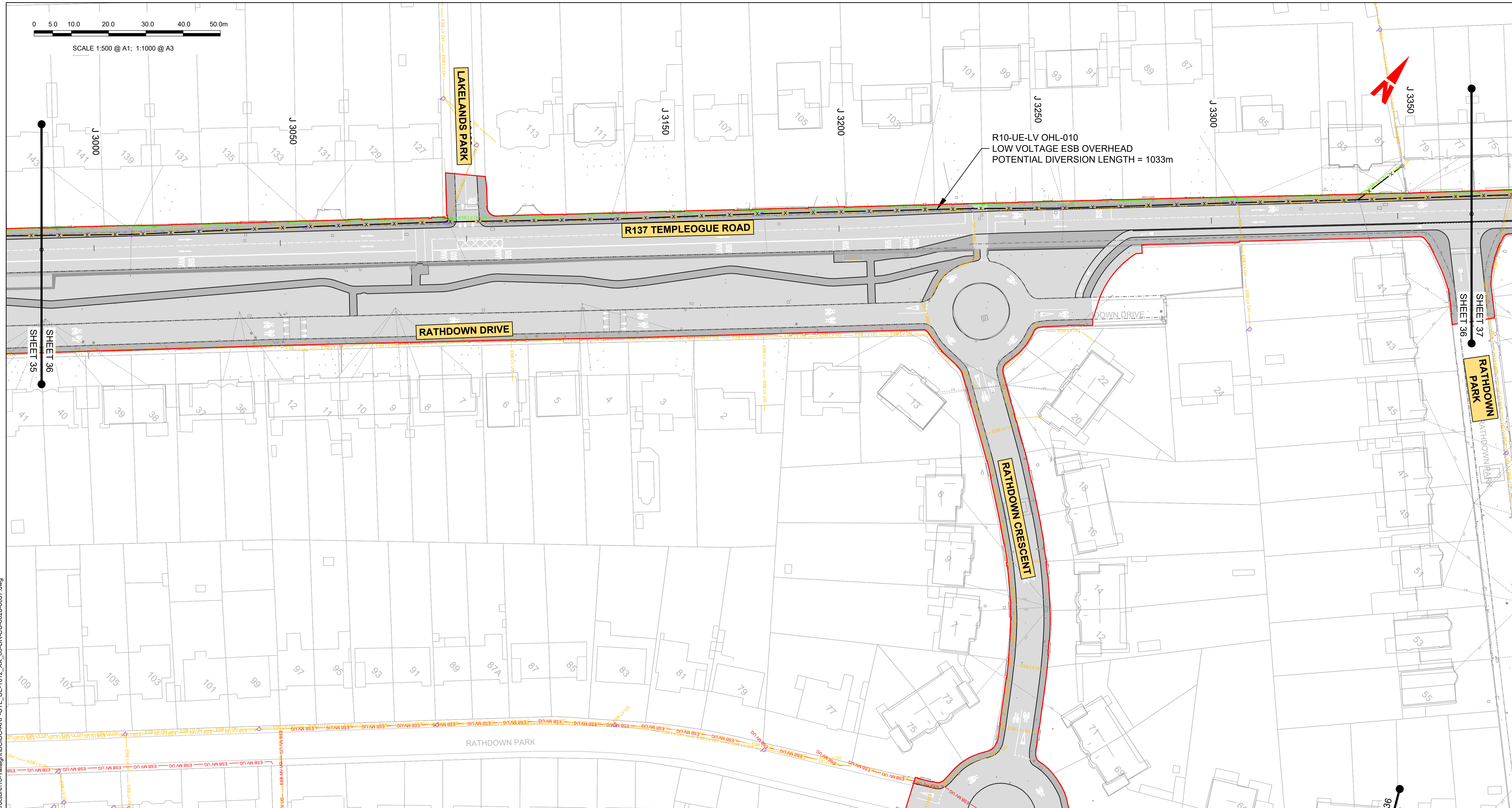
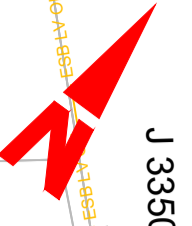
Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS			
Drawing File Name: BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0035	Sheet Number: 35 of 37	Status: A	Rev: M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\268401\0268401-004_1022\Drawings\4-02-3 Civil Infrastructure\BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 5.0 10.0 20.0 30.0 40.0 50.0m

SCALE 1:500 @ A1; 1:1000 @ A3



LEGEND:

- EXISTING KERB LINE
- PROPOSED KERB LINE
- x---x---x---x--- ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
- ESB - HIGH VOLTAGE - EXISTING UNDERGROUND
- ESB - HIGH VOLTAGE - EXISTING OVERHEAD
- ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND
- ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD
- ESB - LOW VOLTAGE - EXISTING UNDERGROUND
- ESB - LOW VOLTAGE - EXISTING OVERHEAD
- SITE BOUNDARY LINE
- ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION
- ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION
- ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION
- TEMPORARY LAND TAKE

NOTES:

1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer
 a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.
 b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.
 c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish

Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.
 d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superseded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drm	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client		Engineering Designer	
NTA Údarás Náisiúnta Iompair National Transport Authority		ARUP	
Date	Scale	BS @ A1	Drawn
07/12/2023	1:500 @ A3	BCDC	Checked
Project Code	Originator Code	QMS Code	Approved
BCDC	ARP	268401-00	DC

Programme Title				BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title				TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS			
Drawing File Name	Sheet Number	Status	Rev				
BCDC-ARP-UTL_UE-1012_XX_00-DR-CU-0036	36 of 37	A	M02				

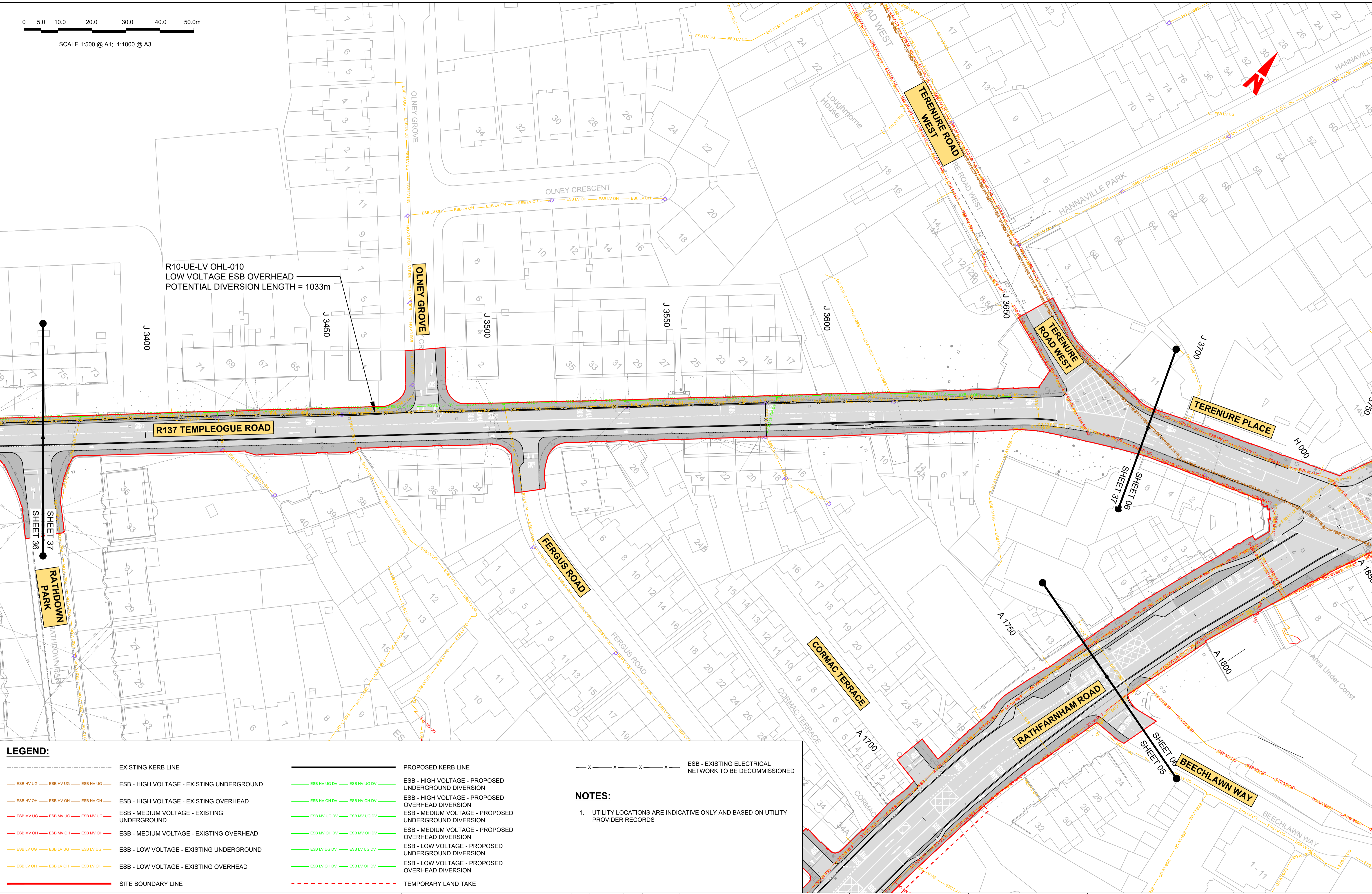
DO NOT SCALE USE FIGURED DIMENSIONS ONLY

I:\global\europa\dublin\joins\268401-004\Internal\4-02_Drawings\4-02-3_Civil Infrastructure\10-Tallaght\BCDC-ARP-UTL_UE-1012_XX_00-DR-CU-0028-0037.dwg

0 50 100 200 300 400 500m

SCALE 1:500 @ A1; 1:1000 @ A3

R10-UE-LV OHL-010
LOW VOLTAGE ESB OVERHEAD
POTENTIAL DIVERSION LENGTH = 1033m



LEGEND:

	EXISTING KERB LINE		PROPOSED KERB LINE		ESB - EXISTING ELECTRICAL NETWORK TO BE DECOMMISSIONED
	ESB - HIGH VOLTAGE - EXISTING UNDERGROUND		ESB - HIGH VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - HIGH VOLTAGE - EXISTING OVERHEAD		ESB - HIGH VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING UNDERGROUND		ESB - MEDIUM VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - MEDIUM VOLTAGE - EXISTING OVERHEAD		ESB - MEDIUM VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	ESB - LOW VOLTAGE - EXISTING UNDERGROUND		ESB - LOW VOLTAGE - PROPOSED UNDERGROUND DIVERSION		
	ESB - LOW VOLTAGE - EXISTING OVERHEAD		ESB - LOW VOLTAGE - PROPOSED OVERHEAD DIVERSION		
	SITE BOUNDARY LINE		TEMPORARY LAND TAKE		

NOTES:
1. UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS

Disclaimer

a. © National Transport Authority (NTA) 2022. This drawing is confidential and the copyright in it is owned by NTA. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of NTA.

b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number 2022/OSI_NMA_180 National Transport Authority. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the NTA as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superceded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the NTA but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the NTA nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.



Rev	Date	Drn	Chk'd	App'd	Description
M01	27/01/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING
M02	07/12/2023	AG	SW	DC	ISSUE FOR PHASE 4: PLANNING

Client: **NTA**
Údarás Náisiúnta Iompair
National Transport Authority

Engineering Designer: **ARUP**

Date: 07/12/2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: AG | Checked: SW | Approved: DC

Project Code: BCIDC | Originator Code: ARP | QMS Code: 268401-00

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: TEMPLEOGUE / RATHFARNHAM TO CITY CENTRE CORE BUS CORRIDOR SCHEME ESB ASSET ALTERATIONS			
Drawing File Name: BCIDC-ARP-UTL_UE-1012_XX_00-DR-CU-0037	Sheet Number: 37 of 37	Status: A	Rev: M02

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

\\global\europa\dublin\jobs\268401\0268401-004_1012_XX_00-DR-CU-0028-0037.dwg