



## Travel Plan

Proposed Strategic Housing Development at Belcamp, Dublin 17

April 2022

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## Quality Assurance – Approval Status

This document has been prepared and checked in accordance with  
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## Comments

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# 1. Introduction

## 1.1 Background of Report

This Travel Plan (TP) has been prepared by Waterman Moylan to accompany the Traffic and Transport Assessment (TTA) as part of the planning documentation for a proposed Strategic Housing Development (SHD) planning submission in Belcamp, Dublin 17.

The proposed development comprises a total of 473 houses, 274 duplexes and 1,780 apartment units in 18 no. blocks, all on a c.67.2 Ha site. All of the proposed houses/duplexes are in the northern portion of the site, within Fingal County Council, and there are 550 apartment units proposed in this portion of the site, with 1,230 apartment units proposed in the southern portion of the site, within Dublin City Council. The schedule of accommodation is set out in the Table below:

| Description           |                     | 1-Bed        | 2-Bed      | 3-Bed      | 4-Bed        | Total Residential           | Commercial Space                                   |
|-----------------------|---------------------|--------------|------------|------------|--------------|-----------------------------|--|
| Dublin City Council   | Block 1             | 94           | 139        | 40         | -            | 273                         | -  |
|                       | Block 2             | 71           | 73         | 16         | -            | 160                         | -  |
|                       | Block 3             | 96           | 176        | 25         | -            | 297                         | 925.8m <sup>2</sup> (Café/Retail and Childcare)    |
|                       | Block 4             | 70           | 178        | 37         | -            | 285                         | -  |
|                       | Block 5             | 37           | 51         | 8          | -            | 96                          | -  |
|                       | Block 6             | 19           | 80         | 20         | -            | 119                         | -  |
|                       | <b>DCC Subtotal</b> | <b>387</b>   | <b>697</b> | <b>146</b> | <b>0</b>     | <b>1,230</b>                | <b>925.8m<sup>2</sup></b>                          |
| Fingal County Council | Houses              | -            | 16         | 385        | 72           | 473                         | -  |
|                       | Duplexes            | 24           | 40         | 210        | -            | 274                         | -  |
|                       | Block A             | 8            | 15         | -          | -            | 23                          | -  |
|                       | Block B             | 8            | 15         | -          | -            | 23                          | -  |
|                       | Block C             | 7            | 20         | -          | -            | 27                          | -  |
|                       | Block D             | 22           | 15         | 5          | -            | 42                          | 1,020.5m <sup>2</sup> Pub/Restaurant & Retail      |
|                       | Block F             | 44           | 56         | 3          | -            | 103                         | 1,162.0m <sup>2</sup> Café/Bar/Restaurant & Retail |
|                       | Block G             | 29           | 36         | -          | -            | 65                          | 140.0m <sup>2</sup> Retail                         |
|                       | Block H             | 20           | 26         | -          | -            | 46                          | -  |
|                       | Block J             | 16           | 24         | -          | -            | 40                          | 472.0m <sup>2</sup> Retail                         |
|                       | Block L             | 20           | 26         | -          | -            | 46                          | -  |
|                       | Block M             | 24           | 32         | -          | -            | 56                          | -  |
|                       | Block N             | 26           | 25         | 5          | -            | 56                          | -  |
|                       | Block P             | 5            | 18         | -          | -            | 23                          | -  |
|                       | Crèche              | -            | -          | -          | -            | -                           | 606.7m <sup>2</sup> Childcare                      |
|                       | Clubhouse           | -            | -          | -          | -            | -                           | 97.0m <sup>2</sup> Changing Rooms                  |
| <b>FCC Subtotal</b>   | <b>253</b>          | <b>364</b>   | <b>608</b> | <b>72</b>  | <b>1,297</b> | <b>3,498.2m<sup>2</sup></b> |  |
| <b>TOTAL</b>          | <b>640</b>          | <b>1,061</b> | <b>754</b> | <b>72</b>  | <b>2,527</b> | <b>4,424.0m<sup>2</sup></b> |  |

**Table 1 | Schedule of Accommodation**



The development includes significant commercial areas, much of it centred at a proposed Belcamp Town Square near the centre of the site, within the FCC portion of the lands. The schedule of commercial development areas is set out in the Table below:

| Description  |                     |                     | Commercial Area             |                             |
|--------------|---------------------|---------------------|-----------------------------|-----------------------------|
|              |                     |                     | Unit Area                   | Total Per Block             |
| DCC          | Block 3             | Retail/Café 1       | 322.8m <sup>2</sup>         | 925.8m <sup>2</sup>         |
|              |                     | Retail/Café 2       | 95.0m <sup>2</sup>          |                             |
|              |                     | Childcare           | 508.0m <sup>2</sup>         |                             |
|              | <b>DCC Subtotal</b> |                     |                             | <b>925.8m<sup>2</sup></b>   |
| FCC          | Block D             | Pub/Restaurant      | 260.0m <sup>2</sup>         | 1,020.5m <sup>2</sup>       |
|              |                     | Retail Unit 1       | 116.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 2       | 141.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 3       | 55.0m <sup>2</sup>          |                             |
|              |                     | Retail Unit 4       | 96.0m <sup>2</sup>          |                             |
|              |                     | Retail Unit 5       | 117.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 6       | 103.0m <sup>2</sup>         |                             |
|              | Block F             | Retail Unit 7       | 132.5m <sup>2</sup>         | 1,162.0m <sup>2</sup>       |
|              |                     | Café/Bar/Restaurant | 219.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 8       | 152.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 9       | 196.0m <sup>2</sup>         |                             |
|              |                     | Retail Unit 10      | 194.0m <sup>2</sup>         |                             |
|              | Block G             | Retail Unit 11      | 193.0m <sup>2</sup>         | 140.0m <sup>2</sup>         |
|              |                     | Retail Unit 12      | 208.0m <sup>2</sup>         |                             |
|              | Block J             | Retail Unit 13      | 140.0m <sup>2</sup>         | 472.0m <sup>2</sup>         |
|              |                     | Retail Unit 14      | 144.7m <sup>2</sup>         |                             |
|              |                     | Retail Unit 15      | 91.3m <sup>2</sup>          |                             |
|              |                     | Retail Unit 16      | 91.3m <sup>2</sup>          |                             |
|              | Crèche              | Retail Unit 17      | 144.7m <sup>2</sup>         | 606.7m <sup>2</sup>         |
|              |                     | Childcare           | 606.7m <sup>2</sup>         |                             |
| Clubhouse    | Changing Rooms      | 97.0m <sup>2</sup>  | 97.0m <sup>2</sup>          |                             |
|              | <b>FCC Subtotal</b> |                     |                             | <b>3,498.2m<sup>2</sup></b> |
| <b>TOTAL</b> |                     |                     | <b>4,424.0m<sup>2</sup></b> |                             |

**Table 2 | Schedule of Commercial Areas**

The eastern portion of the site, between the Mayne River to the north and existing development to the south, is proposed to be used as a greenway. It will serve as a connection for pedestrians and cyclists between the subject site and the Malahide Road (R107).

There is a large open space proposed at the north-west of the site, in addition to several smaller open spaces throughout the development.

## 1.2 Scope

This Travel Plan will be a key operational element for the proposed residential development at Belcamp, Dublin 17. The owners will implement a Travel Plan on an ongoing basis with the triple objectives of promoting sustainability, enhancing the use of public transport and reducing dependency on the use of the private car.

This Travel Plan is intended to deal with the typical day-to-day operational conditions at the site. The targets set out in the plan will be achieved against the background of expanding public transport capacity.

The Plan will assess, examine, and manage the typical traffic that will be generated by the residential units during the operational phase of the development. It will also encourage the residents to avail of public transport by improving awareness of public transport options and providing information on bus and train routes and frequencies.

## 2. Site Location

The proposed development site is located in Belcamp. It is bounded to the west and north by agricultural lands, to the south by the R139 and to the east by the Malahide Road (R107). Mayne River runs west to east through the subject site and forms the boundary between Fingal County Council (FCC) and Dublin City Council (DCC). The subject site is located within the administrative areas of both FCC and DCC authorities. In the eastern portion of the Applicant's ownership lands to the north of Mayne River (FCC jurisdiction), Phase 1 of the Belcamp received a grant of planning permission under Planning Reference F15A/0609 and is currently under construction. The overall site location and the site under-construction of Belcamp Phase 1 is shown in Figure 1.

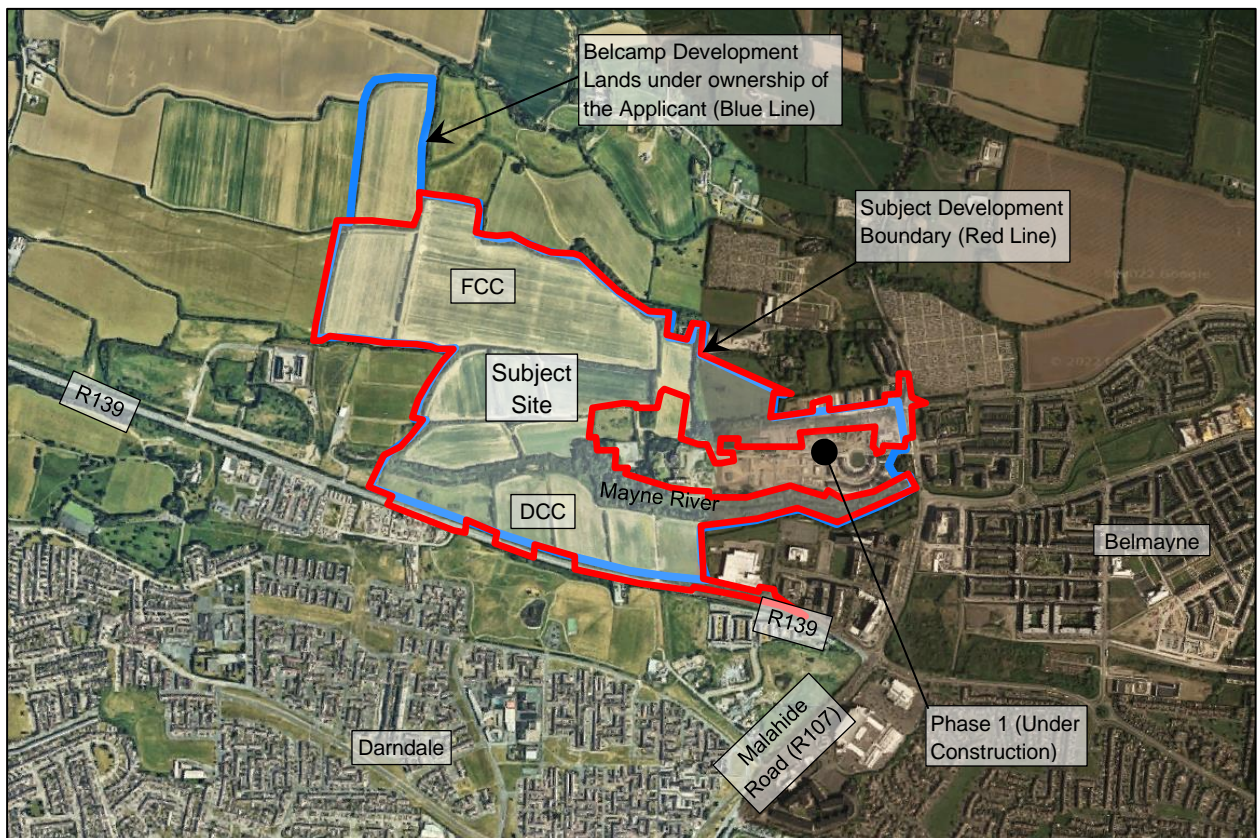


Figure 1 | Site Location (Source: Google Maps)

### 3. Site Accessibility and Receiving Environment

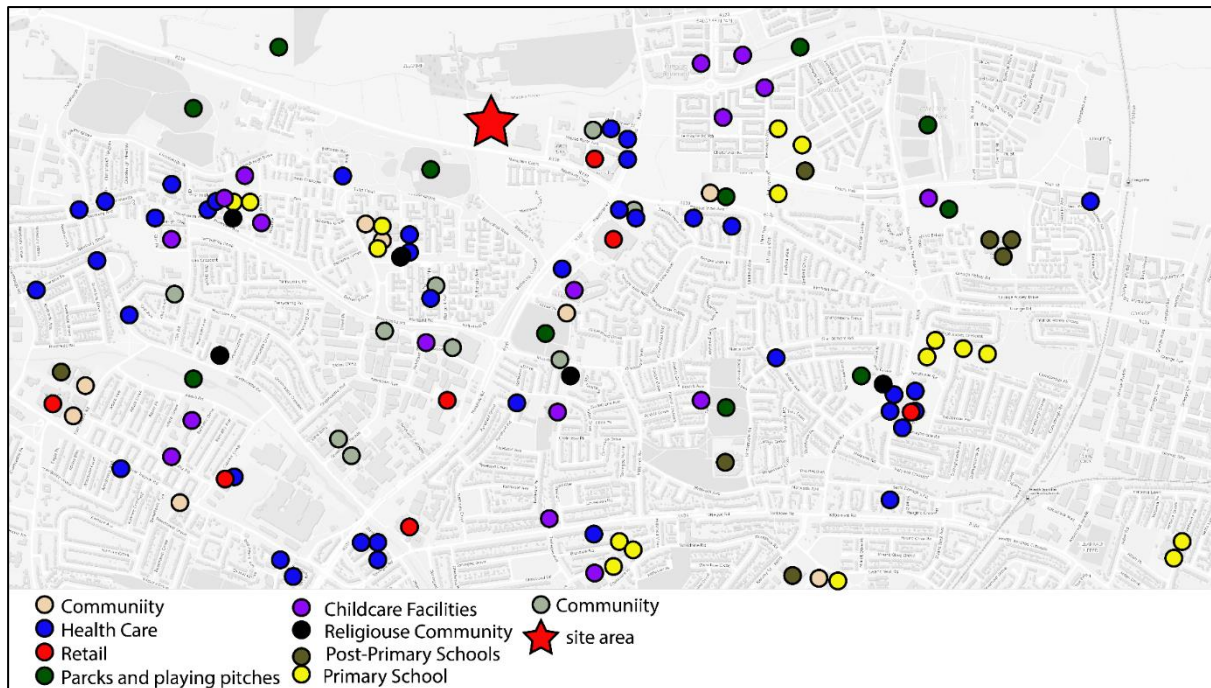
#### 3.1 Walking Accessibility

The “Guidelines for Providing for Journeys on Foot” published by the Institution of Highways & Transportation in 2000 indicates that acceptable walking distances will vary between individuals and circumstances, such as an individual’s fitness, physical ability and personal motivation; the size of the city itself and the quality of the surrounding footpath network. This document also suggests walking distances and times based on an average walking speed of 1.4m/sec (approximately 400m in five minutes). Table 3 below summarises these suggestions.

|                          | Town Centre        | Commuting / School / Site Seeing | Elsewhere          |
|--------------------------|--------------------|----------------------------------|--------------------|
| <b>Desirable</b>         | 200m (2.5-minutes) | 500m (6-minutes)                 | 400m (5-minutes)   |
| <b>Acceptable</b>        | 400m (5-minutes)   | 1,000m (12-minutes)              | 800m (12-minutes)  |
| <b>Preferred Maximum</b> | 800m (10-minutes)  | 2,000m (24-minutes)              | 1,200 (15-minutes) |

**Table 3 | Ideal Walking Distances - Source: "Guidelines for Providing for Journeys on Foot".**

As can be seen in Figure 2 below there are numerous amenities within the 2km walking radius (24 minute). 18 childcare facilities, 17 national primary schools, 6 post primary schools, 16 recreational facilities, 8 parks/playgrounds, 7 retail facilities, 43 healthcare facilities and 5 religious centres.



**Figure 2 | Site Accessibility - Walking Distances.**

As can be seen in Figure 3 below, a 30-minute walking isochrone (2.5 km) give access to several schools, services and amenities in the area.

There are several schools with the area such as Saint Michael's House west of the development, Belmayne Educate Together National School and St. Francis of Assisi Primary School east of the development and The Link Road just south of the development.

There are several bus stops also available to the north-east and south-east of the catchment that offer access to Dublin City Centre

The most significant retail centre being Clarehall Shopping Centre to the southeast of the proposed development. But there are multiple local shops to the south-east of the development.

There are several leisure, sports facilities and parks in the area namely Darndale Park, The Link Road, Belmayne and Carrs Lane all within close proximity to the development.

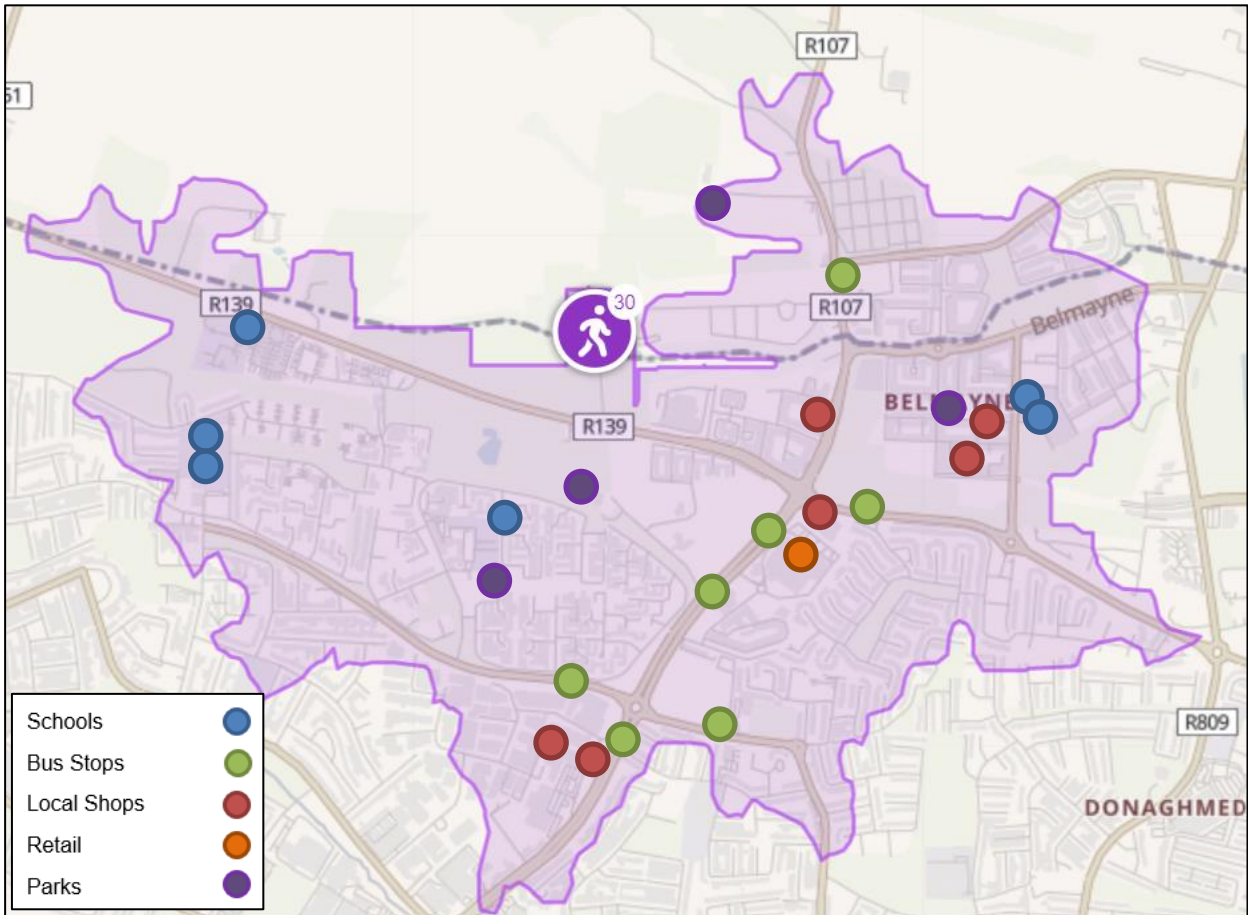
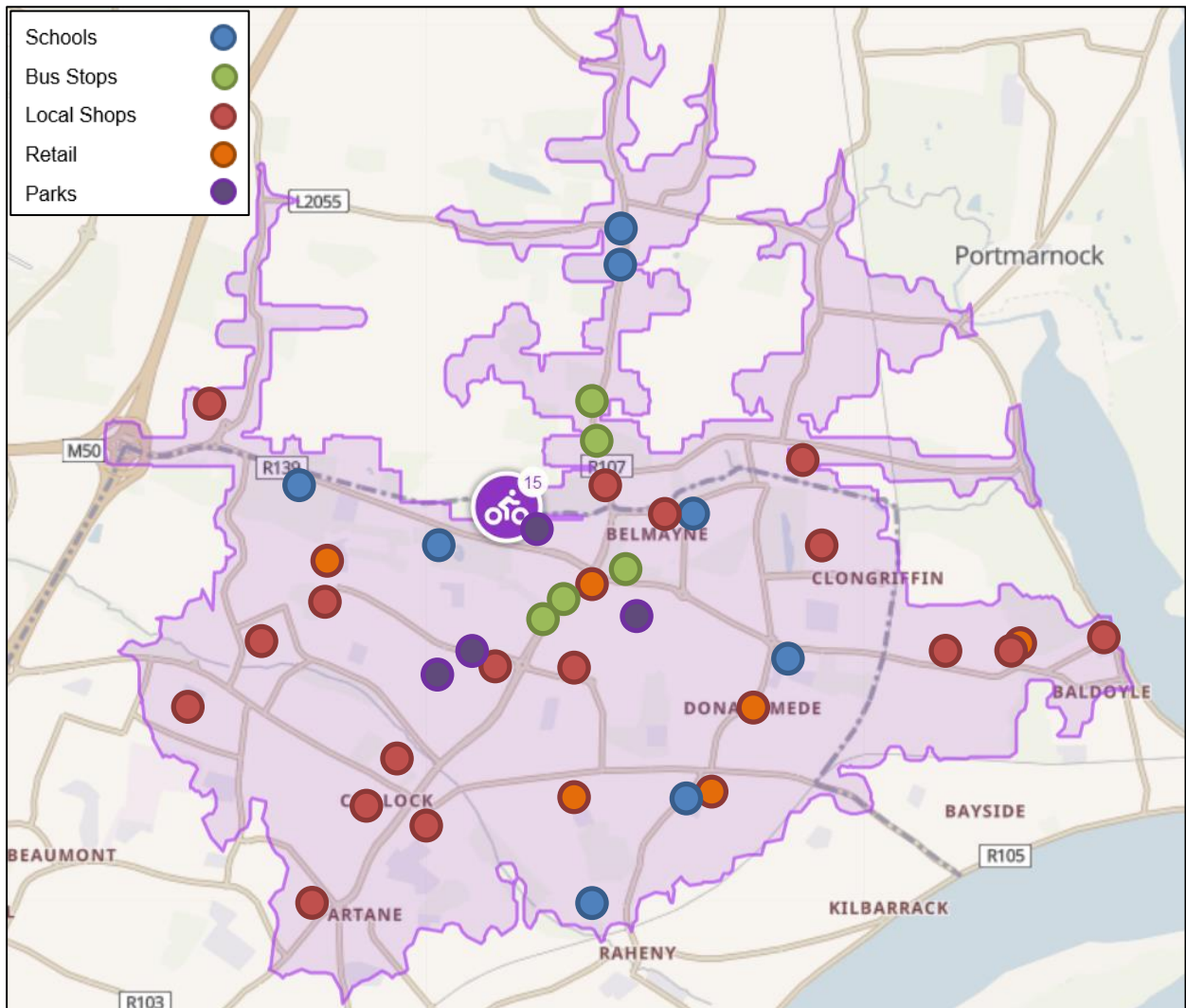


Figure 3 | Site Accessibility – Walking isochrone

### 3.2 Cycling Accessibility

As presented for walking, a similar catchment exercise has also been undertaken for the cycling mode of transport. Based on an average cycling speed of 3.3m/sec (i.e., 15km/h), Figure 4 below illustrates a 15-minute cycling isochrone to summarise the accessibility of the site by bicycle. A 15-minute cycling time equates to a distance of approximately 3.0km.



**Figure 4 | Site Accessibility – Cycling Distances.**

As can be seen in Figure 4 above, a 15-minute cycling isochrone give access to several schools, services and amenities in the area.

There are several schools within the area with The Link Road just south of the development, Saint Michael's House west of the development, Belmayne Educate Together National School and St. Francis of Assisi Primary School east of the development, Saint Nicholas of Myra and Malahide Portmarnock Educate Together National School just north of the development.

There are several bus stops also available to the north-east and south-east of the catchment that offer access to Dublin City Centre

There are several retail facilities within the catchment, the most significant being Clarehall Shopping Centre to the southeast of the proposed development. Directly west is Priorswood Shopping Centre. The further retail centres being south of the development are Edenmore Shopping Centre, Kilbarrack Shopping Centre and Donaghmede Shopping Centre.

There are several leisure, sports facilities and parks in the area namely Darndale Park, The Link Road, Belmayne and Carrs Lane all within close proximity to the development.

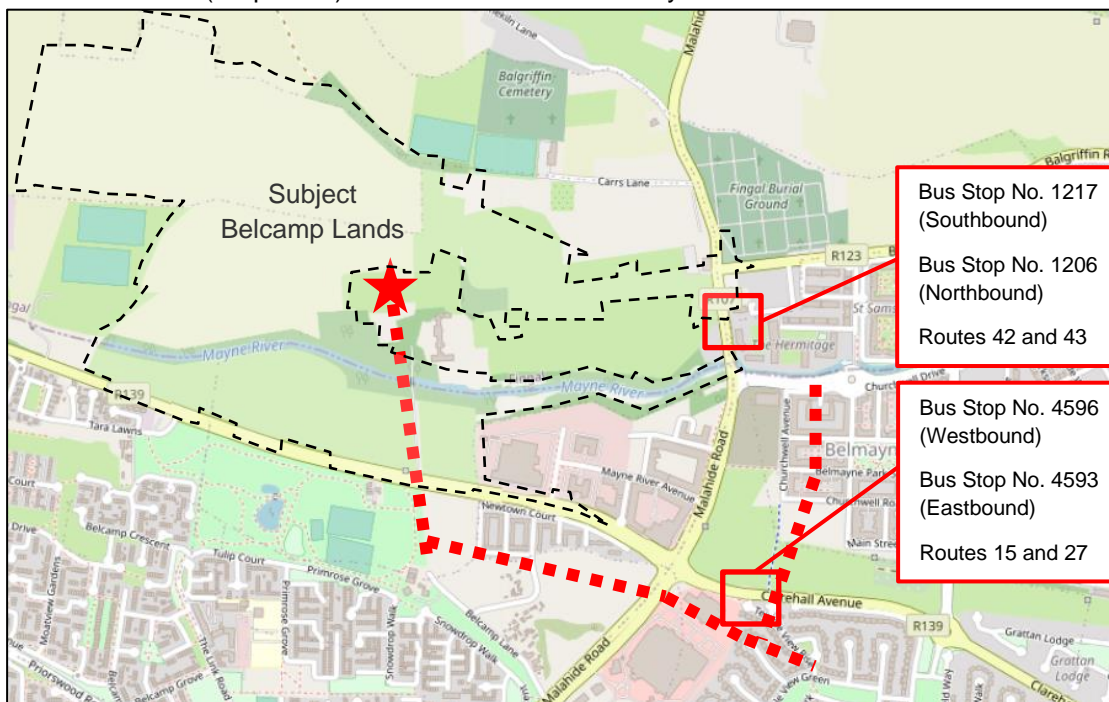
### 3.3 Bus

The subject Belcamp lands are served by public bus services to the east of the site. The closest bus stops are located on Malahide Road (R107), being Bus Stops No. 1217 (southbound) and No. 1206 (northbound). These stops are approximately 1.6km (19-minute walk) from the proposed development. The location of the subject bus stops in relation to subject Belcamp lands is illustrated in Figure 5. These bus stops are served by Dublin Bus Route 42 and Route 43.

- Route 42 operates between Talbot Street in Dublin city centre and Sand’s Hotel in Portmarnock.
- Route 43 operates between Talbot Street in Dublin city centre and Swords Business Park.

The surrounding area is also served by Dublin Bus Route 15 and Route 27 which stops at Bus Stop No. 4596 (Westbound) and Bus Stop No. 4593 (Eastbound). These stops are approximately 1.2km (14-minute walk) from the proposed development.

- Route 15 operates from Ballycullen Road (Stop 6282) in Ballycullen and ends in Clongriffin Station in Clongriffin (Stop 6317) via Dublin City Centre
- Route 27 operates from Fortunestown Road (Stop 2353) in Tallaght and ends in Templeviw Avenue (Stop 4595) in Edenmore via Dublin City Centre



**Figure 5 | Location of Closest Bus Stops Served by Dublin Bus (Source: Openstreet Map).**

The closest bus stops served by these routes are located on R139 southeast of the subject Belcamp lands. A summary of the frequency of these routes is presented in Table 4.

| Weekday Frequency |             |                |                |                |                |                |
|-------------------|-------------|----------------|----------------|----------------|----------------|----------------|
| Route No.         | Direction   | 00:00 to 07:00 | 07:00 to 09:00 | 09:00 to 17:00 | 17:00 to 19:00 | 19:00 to 00:00 |
| 42                | From Dublin | 1 service      | 6 services     | 17 services    | 6 services     | 9 services     |
|                   | To Dublin   | 4 services     | 6 services     | 17 services    | 6 services     | 9 services     |
| 43                | From Dublin | 2 services     | 6 services     | 13 services    | 4 services     | 4 services     |
|                   | To Dublin   | 3 services     | 7 services     | 13 services    | 4 services     | 4 services     |

| 15                        | From Dublin | 18 services    | 17 services    | Every 9-12min  | 13 services    | 20 services    |
|---------------------------|-------------|----------------|----------------|----------------|----------------|----------------|
|                           | To Dublin   | 18 services    | Every 8-12min  | Every 8-12min  | 13 services    | 20 services    |
| 27                        | From Dublin | 13 services    | Every 10min    | Every 10min    | Every 10min    | 12 services    |
|                           | To Dublin   | 11 services    | Every 10min    | Every 10min    | Every 10min    | 15 services    |
| <b>Saturday Frequency</b> |             |                |                |                |                |                |
| Route No.                 | Direction   | 00:00 to 07:00 | 07:00 to 09:00 | 09:00 to 17:00 | 17:00 to 19:00 | 19:00 to 00:00 |
| 42                        | From Dublin | -              | 3 services     | 21 services    | 6 services     | 10 services    |
|                           | To Dublin   | 1 service      | 4 services     | 21 services    | 5 services     | 10 services    |
| 43                        | From Dublin | 1 service      | 2 services     | 10 services    | 3 services     | 4 services     |
|                           | To Dublin   | 2 services     | 2 services     | 9 services     | 3 services     | 4 services     |
| 15                        | From Dublin | 16 services    | Every 15min    | Every 15min    | Every 15min    | Every 15min    |
|                           | To Dublin   | 16 services    | Every 15min    | Every 15min    | Every 15min    | Every 15min    |
| 27                        | From Dublin | 4 services     | 5 services     | Every 10min    | Every 10min    | 13 services    |
|                           | To Dublin   | 4 services     | 5 services     | Every 10min    | Every 10min    | 13 services    |
| <b>Sunday Frequency</b>   |             |                |                |                |                |                |
| Route No.                 | Direction   | 00:00 to 07:00 | 07:00 to 09:00 | 09:00 to 17:00 | 17:00 to 19:00 | 19:00 to 00:00 |
| 42                        | From Dublin | -              | -              | 13 services    | 5 services     | 6 services     |
|                           | To Dublin   | -              | 1 service      | 14 services    | 4 services     | 5 services     |
| 43                        | From Dublin | -              | -              | 10 services    | 3 services     | 4 services     |
|                           | To Dublin   | -              | 1 service      | 10 services    | 3 services     | 4 services     |
| 15                        | From Dublin | 14 services    | 4 services     | Every 15min    | Every 15min    | Every 15min    |
|                           | To Dublin   | 14 services    | 5 services     | Every 15min    | Every 15min    | Every 15min    |
| 27                        | From Dublin | -              | 3 services     | Every 15min    | Every 15min    | 13 services    |
|                           | To Dublin   | -              | 3 services     | Every 15min    | Every 15min    | 13 services    |

**Table 4 | Dublin Bus Routes 15, 27, 42 and 43 – Weekday and Weekends Frequency.**

Travel time from the subject bus stop on Malahide Road (R107) to Talbot Street in Dublin city centre is approximately 16 minutes. On the opposite direction, the travel time from the subject bus stop on Malahide Road (R107) to Malahide is approximately 16 minutes, and to Swords Business Park is approx. 20 minutes.

It is worth mentioning that the bus frequency data presented in Table 4 above was based on the time that buses leave the first bus stop. The information was obtained by consultation of Dublin Bus website.

In addition to the routes above, Dublin Bus also operates Route 27x from Clarehall towards UCD Belfield. It is a Monday to Friday service, with one bus leaving Clarehall at 07:35 towards UCD Belfield in the morning and one bus leaving UCD Belfield at 17:05 in the evening towards Clarehall.

At the time of writing, it is expected that a new Core Bus Corridor (CBC) service (D-Route) will be commencing along the Malahide Road (R107) running from the city centre to Clongriffin and is due to be in place for end of 2023. It is anticipated that the Orbital N8 route will commence by the end of 2024 and will connect Clongriffin Dart Station to Blanchardstown vi Belcamp and the airport

There is also a private shuttle bus service provided by Hilton Dublin Airport Hotel, which provides a direct link from the Hotel to the Airport.

### 3.4 Existing Rail

The subject Belcamp lands are not directly served by rail service. The closest train station is Clongriffin, located approximately 2.5km east of the subject site. Clongriffin is served by Commuter Rail and DART



services. The Commuter Rail service through Clongriffin Station serves all stations from Dundalk through Dublin City Centre to Gorey. The service operates at 3 – 4 services per hour in both direction on weekdays. The DART service through Clongriffin Station serves all station from Malahide through Dublin City Centre to Bray and Greystones. On weekdays, this service operates at a 20-minute frequency in both directions. Journey time from Clongriffin Station to Connolly Station is c. 20 minutes.

Dublin Bus Route 15, BusConnects D Route and N8 Orbital route provides a connection between the subject Belcamp Lands and Clongriffin Station.



Figure 6 | Location map of Clongriffin Train Station

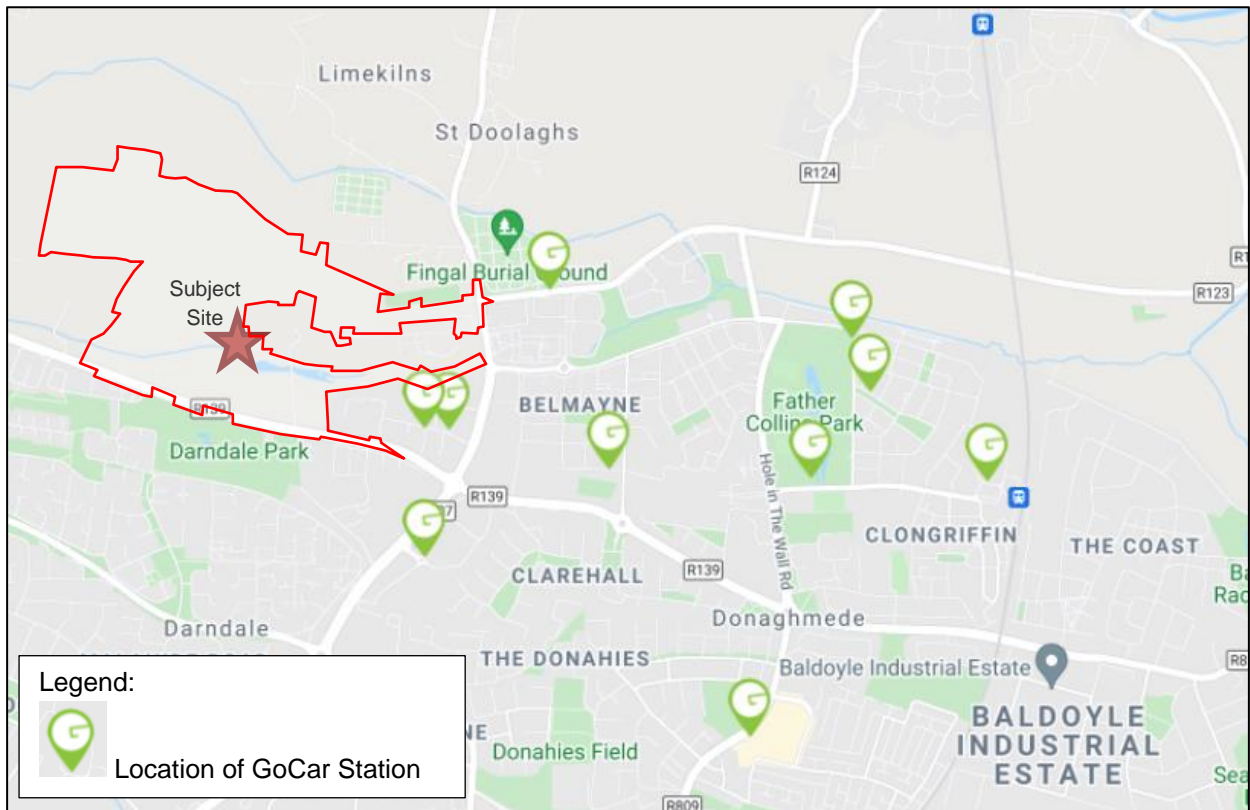
### 3.5 Go Car

To the east of the subject Belcamp lands, a number of GoCar stations are provided at Belmayne, Clarehall and Clongriffin. See Figure 7 below. Walking access to these stations is facilitate by the good-quality network of footpaths provided in the local area.

According to GoCar website, the key benefits associated with a GoCar include:

- Each GoCar replaces approximately 20 private cars.
- Carsharing reduces car ownership & car dependency, congestion, noise and air pollution.
- Planning Permission – the inclusion of a Car Club could increase the likelihood of gaining the most optimal planning permission for the project.
- Cut build costs and reduce construction time by reducing the parking requirements within a project.
- Helps increase walking, cycling and use of public transport.
- Allow individuals to have benefits of a private car without having the large costs and hassle associated with car ownership.

The closest GoCar station is approximately 1km away (12-minute walk) from the proposed development.



**Figure 7 | Location of Nearby GoCar Station.**

### 3.6 Existing Cycle Infrastructure

#### 3.6.1 Public Cycle Parking

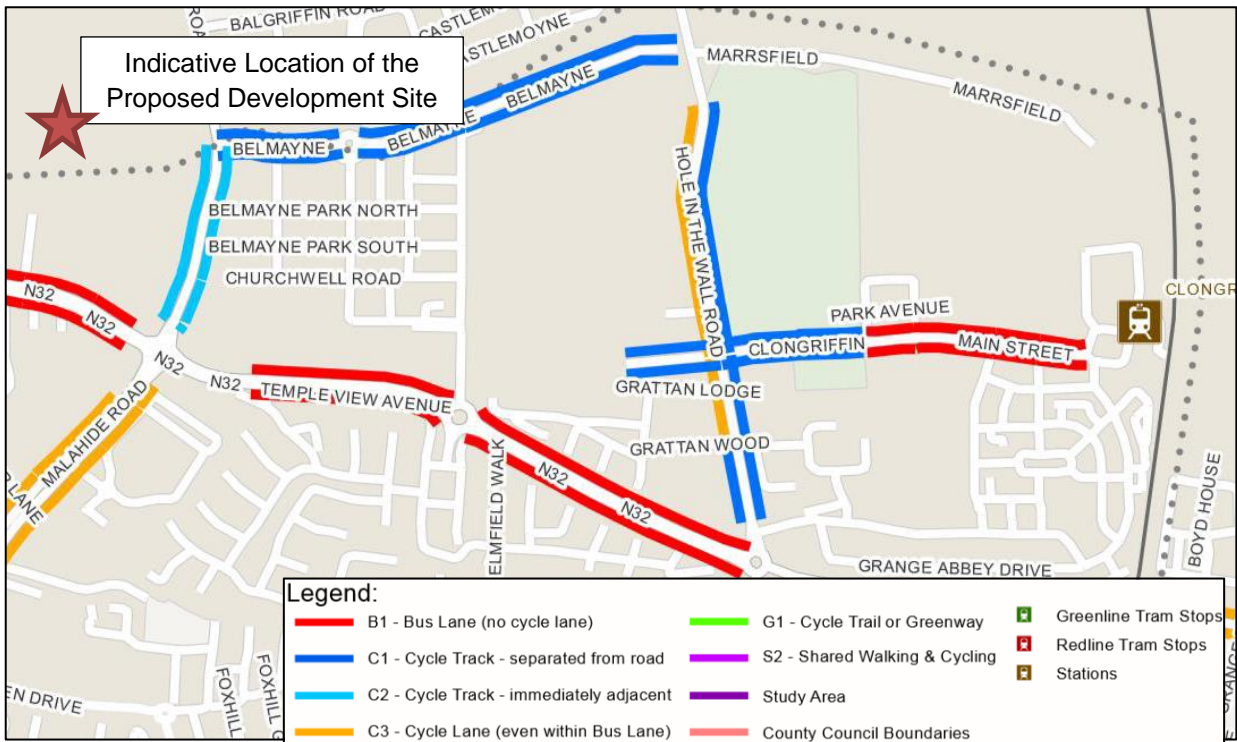
Covered public cycle parking with 112 stands is provided in Clongriffin at Station Square. This public cycle parking currently provides the opportunity for residents living in the surrounding area to commute to their final destination (place of work, school, college, etc.) by a cycle-train combined travel.

According to the Transport Assessment prepared by Waterman Moylan for a mixed-used development approved by DCC in March 2020 (Reg. Ref. 3894/19), 28 additional cycle parking stands will be provided at Station Square as part of the approved development to meet DCC requirements. This increase in the total number of parking stands at Station Square will facilitate and encourage existing and future residents in the local and surrounding area to shift towards cycle-train combined travels and away from private car usage.

**31** cycle parking stands are also provided in the Clarehall complex, 26 in front of the entrance to Tesco supermarket and 5 stands serving the Mr. Price and Dealz retail stores.

#### 3.6.2 Cycle Infrastructure

Cyclist can benefit from the provision of dedicated cycle lanes along both sides of the carriageway on Belmayne, Malahide Road (R107), Hole in The Wall Road and Main Street (Clongriffin). These cycle lanes currently facilitate access to Clongriffin train station, Malahide Road Industrial Park and Dublin city centre. Figure 8 is an extract of the Cycle Network Plan for the Greater Dublin Area which illustrates the existing cycling infrastructure within the surrounding area.



**Figure 8 | Existing Cycle Network – extracted from GDA Cycle Network Plan**

### 3.7 Existing Pedestrian Infrastructure

The Malahide Road (R107) located to the east of the subject Belcamp site and the R139 to the south, comprise footpaths along both sides of their carriageways. These footpaths, which join up at the Clarehall junction, are of good quality with consistent width throughout and offer walking connections to a number of facilities including bus stops, retail, educational and employment. Dedicated pedestrian crossings with dropped kerbs and tactile paving are provide at every road crossing point towards these facilities.

The existing pedestrian facilities in the surrounding area comprise an inter-connected network of footpaths linking the various neighbourhoods to each other, to the existing schools and commercial/retail, to the Clongriffin train station, to public parks and to the surrounding public network.

# 4. Transportation Improvements

## 4.1 Greater Dublin Area Cycle Network Plan

The National Transport Authority published proposals for the Greater Dublin Area Cycle Network Plan in December 2013. The plan sets out a vision and a strategy for the construction and/or designation of a comprehensive network of cycling routes throughout the Greater Dublin Area (Counties Dublin, Meath, Kildare and Wicklow). An extract from Sheet N3 (Proposed Cycle Network for Dublin North Central), where the subject Belcamp lands are located, is reproduced in Figure 9 below.

The subject site will be serviced by the primary route 1C with direct access from the proposed Belcamp Site. All proposed cycle routes are to the south of the Belcamp site towards the city centre and the majority of amenities. The Santry River Greenway is located to the south, connecting to primary route 1C and several feeder lanes. The Santry River Greenway from the back of Northside Shopping Centre to Northwood at Santry via a series of public parks and open spaces.

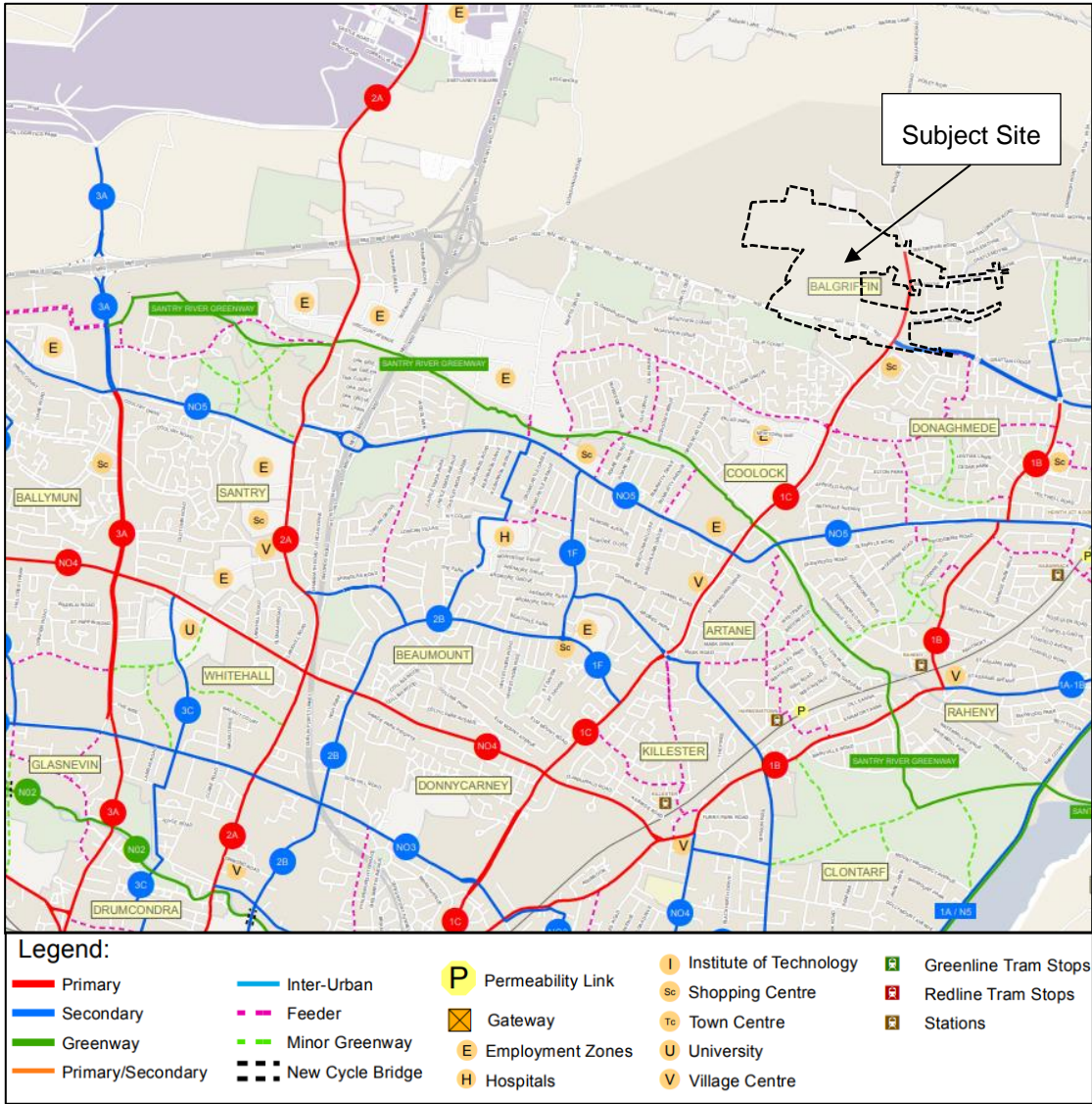


Figure 9 | GDA Proposed Cycle Network Plan: Sheet N3

A draft version of the updated GDA Cycle Network Maps 2021 is currently available and shown in Figure 10 below. The plan includes an additional Greenway through the site and further development of the secondary cycle pathways surrounding the subject site. This Greenway connects Belcamp to Clongirffin Dart Station and the coastal roads.

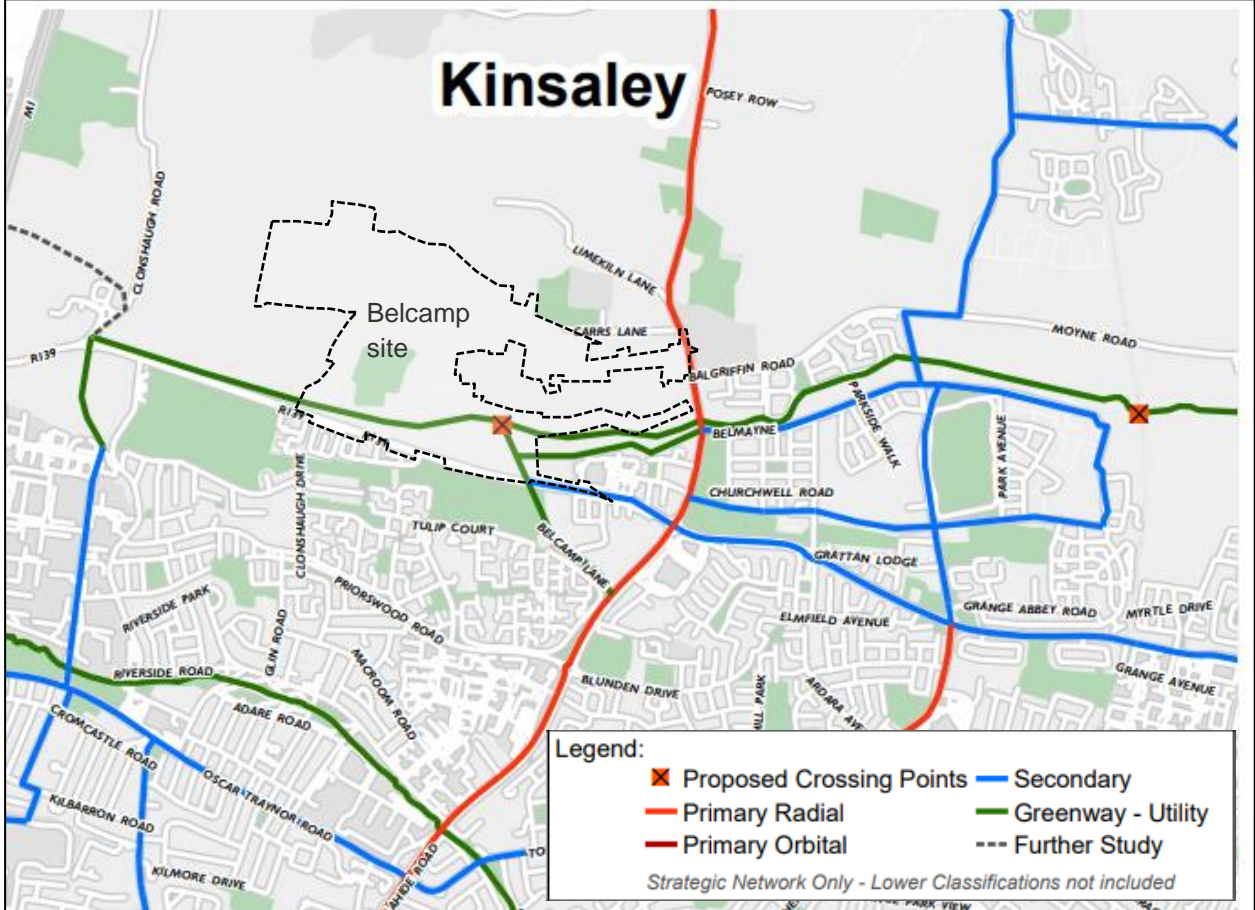


Figure 10 | GDA Cycle Network Plan – 2021 Proposed Cycle Network Upgrades.

#### 4.2 Bus Connects

The Bus Connects project currently being promoted by the National Transport Authority aims to deliver a much-enhanced bus service to the Greater Dublin Area. The bus services will be dominated by high frequency “Spine routes” that follow the main radial corridors in the city centre, and beyond. In tandem with these service re-designs, the bus route alignments will be upgraded to radically enhance bus priority measures. As of April 2022, Phase 1 and 2 of the Bus Connects project have been launched. Phase 1 included the launch of the H Spine bus route which is located near the Belcamp SHD site.

The subject site is located in close proximity to the proposed CBC Route 1 – Clongirffin to City Centre. Three “spine” routes and four “local/radial/orbital” routes are proposed to serve the subject Belcamp lands. These are: the Spine Routes D1, D2 and D3, the Radial Routes 20 and 21, the Orbital Route N8 and the Local Route L80 – See Figure 11 below. A summary of the frequency of these proposed routes is presented in Table 5.

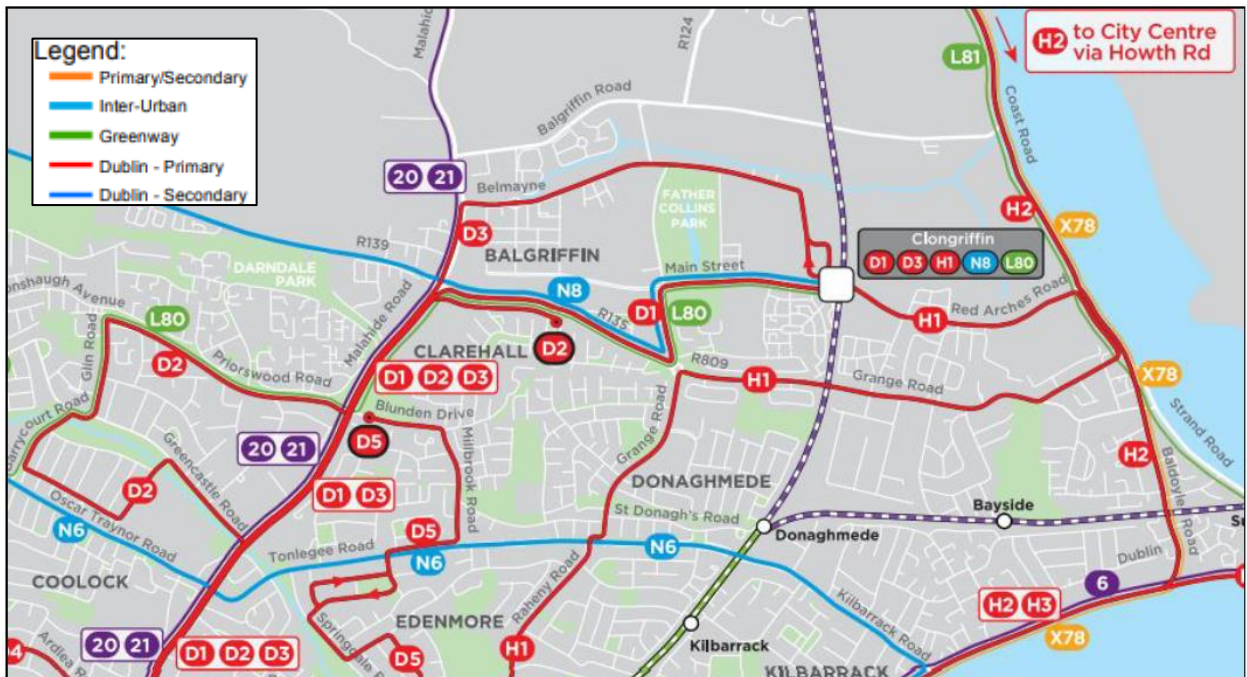


Figure 11 | Bus Connects Routes Map (Extracted from BusConnects Network Map).

| <b>Weekday Frequency</b>  |                     |                       |                       |                       |                    |
|---------------------------|---------------------|-----------------------|-----------------------|-----------------------|--------------------|
| <b>Route No.</b>          | <b>Before 07:00</b> | <b>07:00 to 09:00</b> | <b>09:00 to 15:00</b> | <b>15:00 to 18:00</b> | <b>After 18:00</b> |
| 20                        | 30 min              | 30 min                | 30 min                | 30 min                | 30 to 60 min       |
| 21                        | 30 min              | 30 min                | 30 min                | 30 min                | 30 to 60 min       |
| N8                        | 30 to 60 min        | 30 min                | 30 min                | 30 min                | 30 to 60 min       |
| D1                        | 15 to 30 min        | 15 min                | 15 min                | 15 min                | 15 to 30 min       |
| D2                        | 15 to 30 min        | 15 min                | 15 min                | 15 min                | 15 to 30 min       |
| D3                        | 15 to 30 min        | 15 min                | 15 min                | 15 min                | 15 to 30 min       |
| L80                       | 40 min              | 20 min                | 40 min                | 20 min                | 40 to 60 min       |
| <b>Saturday Frequency</b> |                     |                       |                       |                       |                    |
| <b>Route No.</b>          | <b>Before 07:00</b> | <b>07:00 to 09:00</b> | <b>09:00 to 15:00</b> | <b>15:00 to 18:00</b> | <b>After 18:00</b> |
| 20                        | 60 min              | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| 21                        | 60 min              | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| N8                        | 60 min              | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| D1                        | 20 min              | 20 min                | 15 min                | 15 min                | 15 to 30 min       |
| D2                        | 20 min              | 20 min                | 15 min                | 15 min                | 15 to 30 min       |
| D3                        | 20 min              | 20 min                | 15 min                | 15 min                | 15 to 30 min       |
| L80                       | 60 min              | 60 min                | 60 min                | 60 min                | 60 min             |
| <b>Sunday Frequency</b>   |                     |                       |                       |                       |                    |
| <b>Route No.</b>          | <b>Before 08:00</b> | <b>08:00 to 10:00</b> | <b>10:00 to 15:00</b> | <b>15:00 to 18:00</b> | <b>After 18:00</b> |
| 20                        | -                   | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| 21                        | -                   | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| N8                        | -                   | 60 min                | 30 min                | 30 min                | 30 to 60 min       |
| D1                        | -                   | 30 min                | 20 min                | 20 min                | 20 to 30 min       |
| D2                        | -                   | 30 min                | 20 min                | 20 min                | 20 to 30 min       |
| D3                        | -                   | 30 min                | 20 min                | 20 min                | 20 to 30 min       |
| L80                       | 60 min              | 60 min                | 60 min                | 60 min                | 60 min             |

**Table 5 | Summary of BusConnects Routes Frequency.**

The closest bus stops to be served by these proposed routes will be located on Malahide Road (R107) just east of the subject Belcamp lands, on R139 and on the extension of Belmayne Main Street to the southeast of the subject Belcamp lands -See Figure 12 below

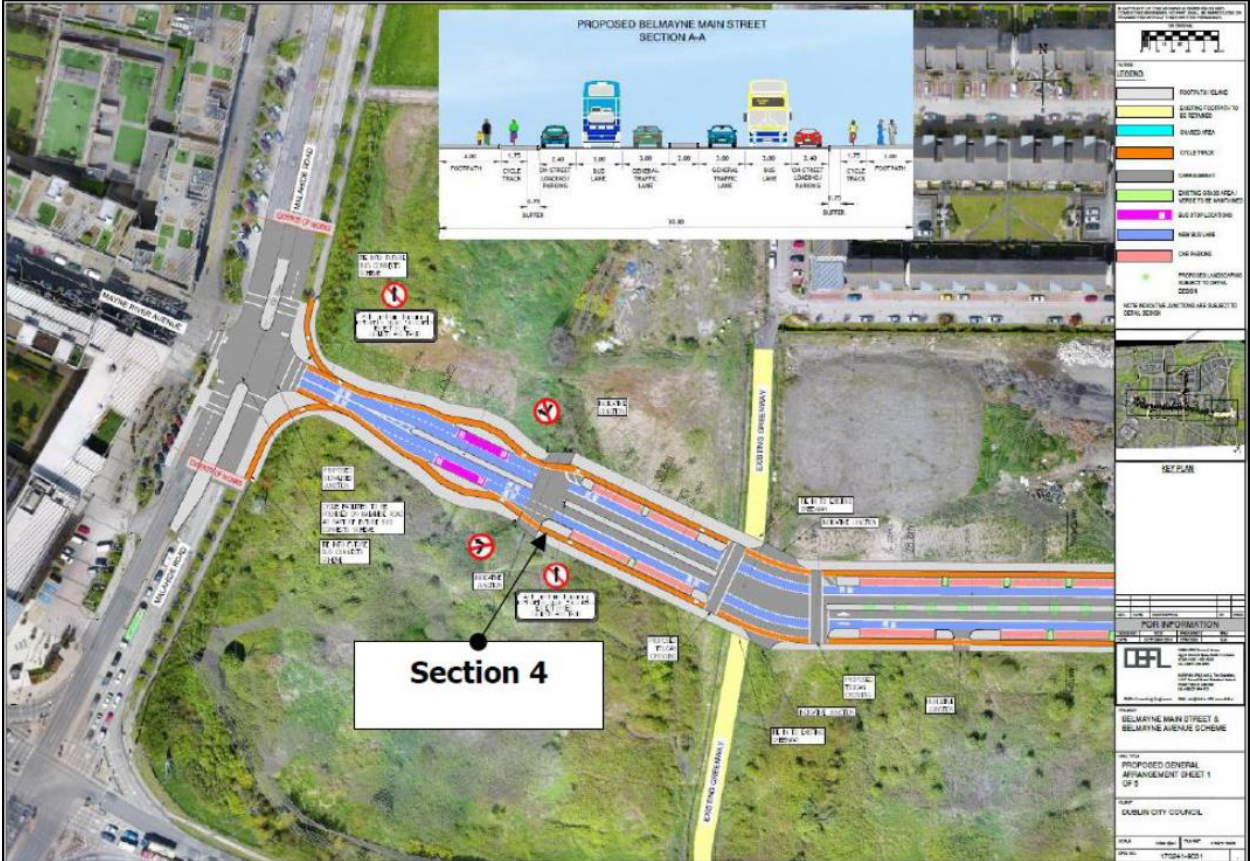


Figure 12 | Approved Scheme for Belmayne Main Street and New Bus-gate Link.

**4.3 Metrolink**

MetroLink is a proposed high-capacity, high-frequency rail line running from Swords through Dublin Airport and Dublin City Centre to Charlemont. MetroLink will carry up to 50 million passengers annually, cutting journey times from Swords to the city centre to 25 minutes. The preferred route for MetroLink is currently undergoing consultation and an application for planning approval for the MetroLink Scheme is expected to be made to An Bord Pleanala in 2021. Although initially forecast to be operational by 2027, the MetroLink scheme is currently assumed to be in place between 2030 and 2043.

**4.4 Pedestrians**

Additional pedestrian facilities, such as footpaths, dedicated pedestrian crossings and green routes connecting the public parks, will continue to be provided at Belcamp as the development progresses.

All footpaths for the proposed development will be provided in accordance with the DMURS which suggests that a minimum 1.8m footpath should be provided.

**4.5 South Fingal Transport Study (SFTS) - 2019**

By way of background, in about 2006 FCC/Atkins prepared a transportation study of the FCC/DCC Fringe area which formed the basis of a proposed road infrastructure strategy for the area. This resulted in the



Atkins Orange Route drawing which has been the basis of the transportation strategy in the area and of both FCC and DCC Development Plans (Figures 13 and 14, respectively). These plans include the East-West Distributor Road: Malahide Road (now called the East West Link Road) parallel to the R139 and the north south R107 Malahide Road Realignment, Balgriffin Bypass.

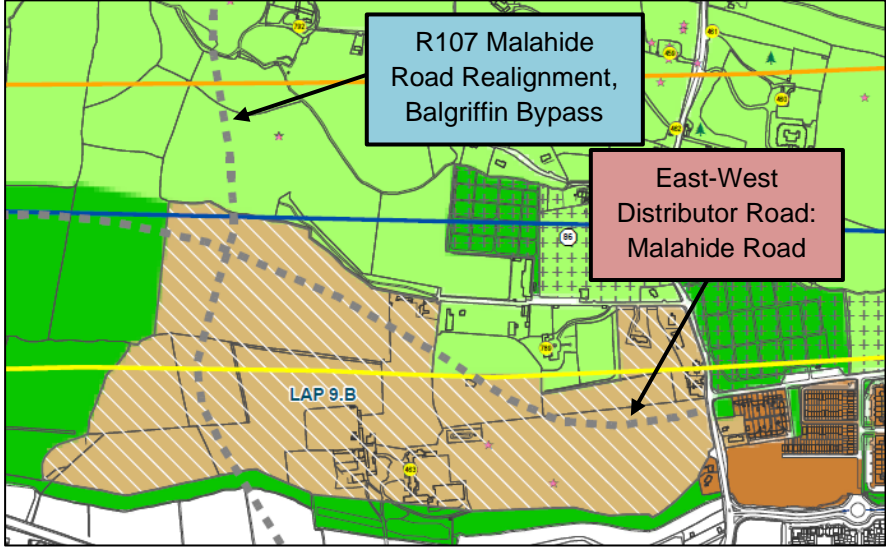


Figure 13 | Proposed Road Alignment – Extracted from FCC Development Plan 2017 – 2023.

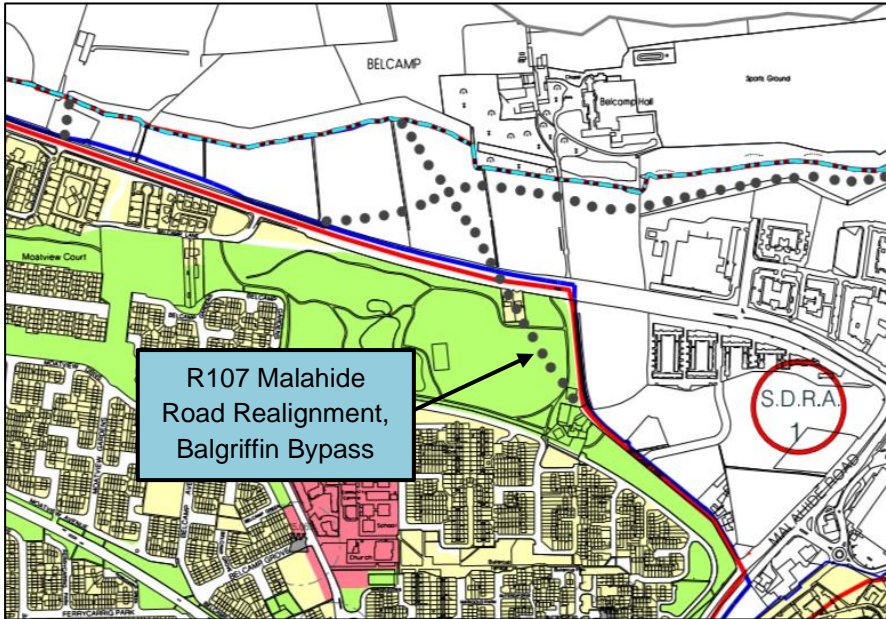
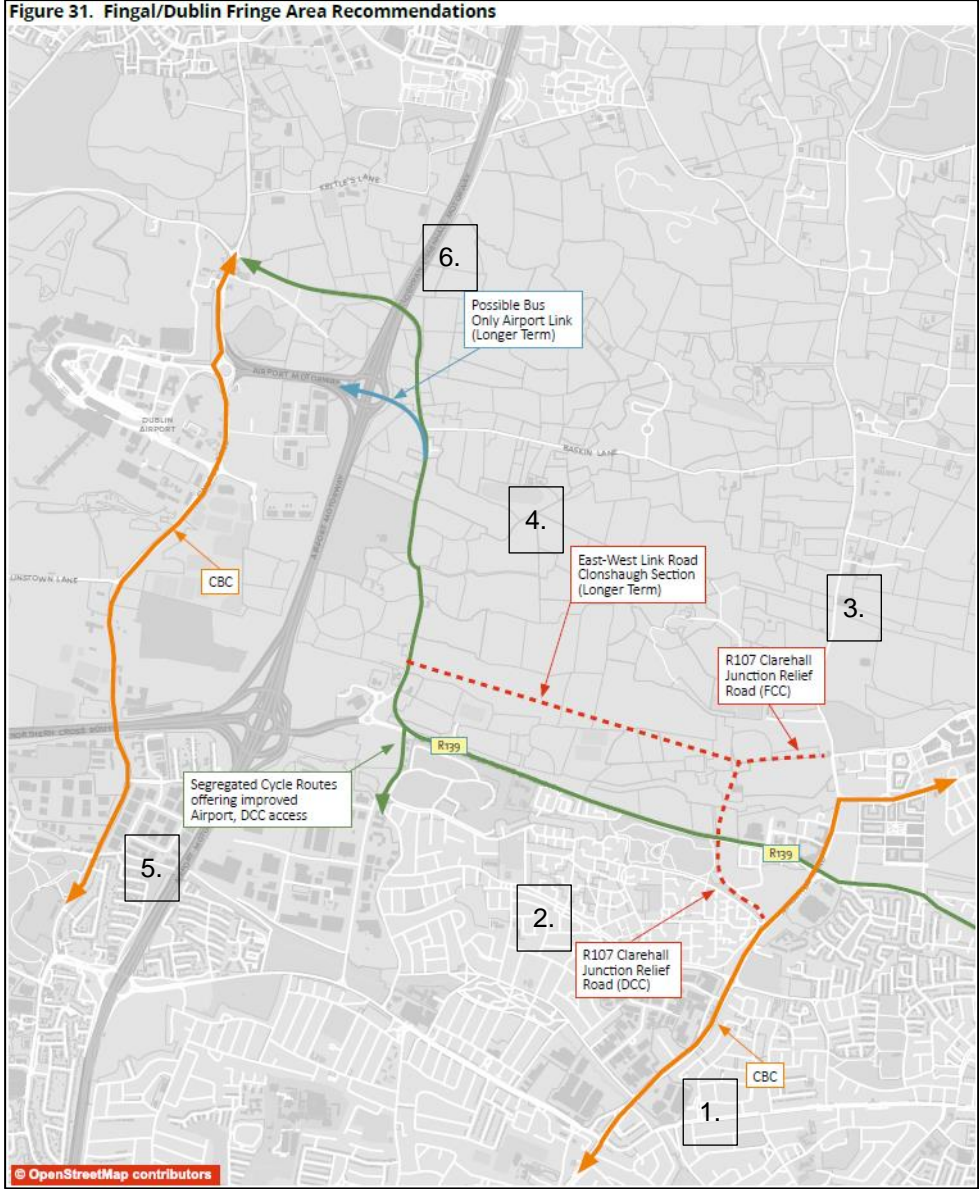


Figure 14 | Proposed Road Alignment – Extracted from DCC Development Plan 2016 – 2022.

DMURS was first published in 2013 and this has influenced significant changes in thinking in relation to the road infrastructure and transportation requirements. In addition, changes in densities, population data and public transport strategies, NTA Transport Strategy and transport modelling improvements have taken place since the Atkins study and these changes were required to be incorporated into future FCC/DCC strategy.

In this regard, in September 2017 FCC commissioned SYSTRA to carry out the South Fingal Transport Study (SFTS) to update the Atkins strategy. This study was published/completed in February 2019 and will

form the basis for the future transportation development to 2027 in both FCC and DCC fringe areas. The SFTS recommendations which apply to the Fingal/Dublin Fringe area are show in Figure 15 and summarised below.



**Figure 15 | SFTS Road Alignments Recommendations 2019.**

The major changes proposed by SFTS to the Atkins strategy are:

1. Eliminate the road bridge on the Clarehall bypass over the R139.
2. Eliminate the extension of the Malahide Road bypass north of the East-West Distributor Road (now called East West Link Road).
3. Eliminate the extension of the East-West Distributor Road west of Stockhole Lane over the M1 (part of FCC orbital route) for the foreseeable future.
4. Apply DMURS principles to the road design emphasising public transport, pedestrians and cyclist and urban style junctions.

The SFTS Recommendations which apply to the Fingal/Dublin Fringe area are SFTS Recommendations 21, 22, 23 and 24. These recommendations are presented below.

*“**SFTS Recommendation 21:** Additional means of traffic distribution and around the areas adjacent to Clarehall Junction, particularly to its north is recommended through construction of a small-scale bypass in the context of the need to reconfigure the existing Clarehall Junction to rebalance capacity towards public transport and/or pedestrians and cyclists. It is recommended that future junctions be limited in scale as far as possible to avoid creating a car dominated environment, instead designing in favour of pedestrians and cyclists.”*

According to SFTS Recommendation 21, the construction of the Clarehall Junction Relief Road (formerly identified as the R107 Malahide Road Realignment, Balgriffin Bypass) will provide additional traffic distribution at Clarehall Junction in a north south direction. In order to achieve this additional traffic distribution, this recommendation proposes the construction of a small-scale bypass of the Clarehall junction linking to the Malahide Road to the north via a section of the East West Link Road.

The recommended link consists of a new road within the DCC area from the Malahide Road (R107) opposite the Tesco shop, with an at grade junction with R139 (previous N32) connecting with the East West Link Road to divert traffic to the Malahide Road (R107) at the new junction with R123 Balgriffin Road. It should be noted that the road North of the R139 is now deemed a local road by Dublin City Council, therefore this is not undermining the SFTS.

The recommendation specifically suggests the junctions along the bypass to be scaled to a minimum to avoid a car dominated environment and to optimise pedestrian and cyclist links. The intention of this reflined road is to divert traffic from the South to the R139 and not directly into the subject site.

The entire of this bypass is within the Gannon Properties Belcamp landholding (the Applicant) except for the section of this road within DCC lands to the south of the R139 and the crossing of the R139.

The construction of the bypass involves:

- The delivery of a new intersection (T-junction on the Malahide Road (R107)) opposite Tesco.
- A new link within DCC to the R139.
- A signal-controlled crossroads on the R139.
- A link north through Belcamp lands to the proposed East West Link Road (EWLR) – at which is to be a new signal-controlled T-junction.
- A section of the EWLR linking to the Malahide Road (R107) at a signal-controlled junction the with Balgriffin Road (R123).

To implement the works related to this SFTS Recommendation 21 required the agreement of:

1. DCC to complete the design of the road from the Malahide Road across the R139 and the Mayne River.
2. FCC Roads Department to agree the nature and details of the road linking to the EWLR and back to the Malahide Road at Balgriffin. In this regard the nature of the link roads and the junction between the EWLR will need to be agreed. The extent of detail design and agreement with FCC should not be underestimated.
3. NTA to confirm that the facilities provided by this road infrastructure meets with public transport objectives for the region, in particular the bus routes between the DCC/FCC fringe area and Dublin Airport.

4. Agreement of the developer that the proposed road scheme optimises the development potential of the Belcamp lands to provide housing communities as required by FCC.

***“SFTS Recommendation 22: The R107/Balgriffin Road junction should be upgraded to include additional left turning capacity for the southbound movement (e.g. adding a left turn flare), while also providing a safe and attractive environment for pedestrians and cyclists.”***

According to SFTS Recommendation 22, the Malahide Road (R107)/Balgriffin Road junction should be upgraded to include additional left turning capacity for southbound movement.

This recommendation is outlined in the SFTS Fingal Dublin Fringe Sub Area Report Section 4.4.4.1 *Potential Local Network Issues* and is based on detail Studies 6, 7 and 12 as set out in that report. The extension of the Hole in The Wall to connect to Mayne Road (R123) and the R124 to the north will reduce the left turning movements predicted at the Malahide Road junction.

The provision of a left turn lane for southbound traffic is not considered feasible as the road reservation is restricted by the boundary to the Balgriffin cemetery.

It is therefore considered that SFTS Recommendation 22 cannot be implemented.

However, a right turning pocket lane for southbound traffic heading west towards the EWLR is feasible and would provide more capacity improvements at this junction when compared with a left turning lane. It is therefore suggested this right turning pocket lane to be provided. This junction has been designed in detail as part of Belcamp Phase 1B and has been discussed and agreed with FCC Transportation and has received a decision to grant from Fingal County Council under Reg. Ref. F15A/0609. However, as it has not received a final decision to grant at the time of issuing this SHD submission, this junction and section of the EWLR that has received a decision to grant by Fingal County Council under the Belcamp Phase 1B is included as part of this subject submission.

Details of the designed junction are shown in Figure 16 below.

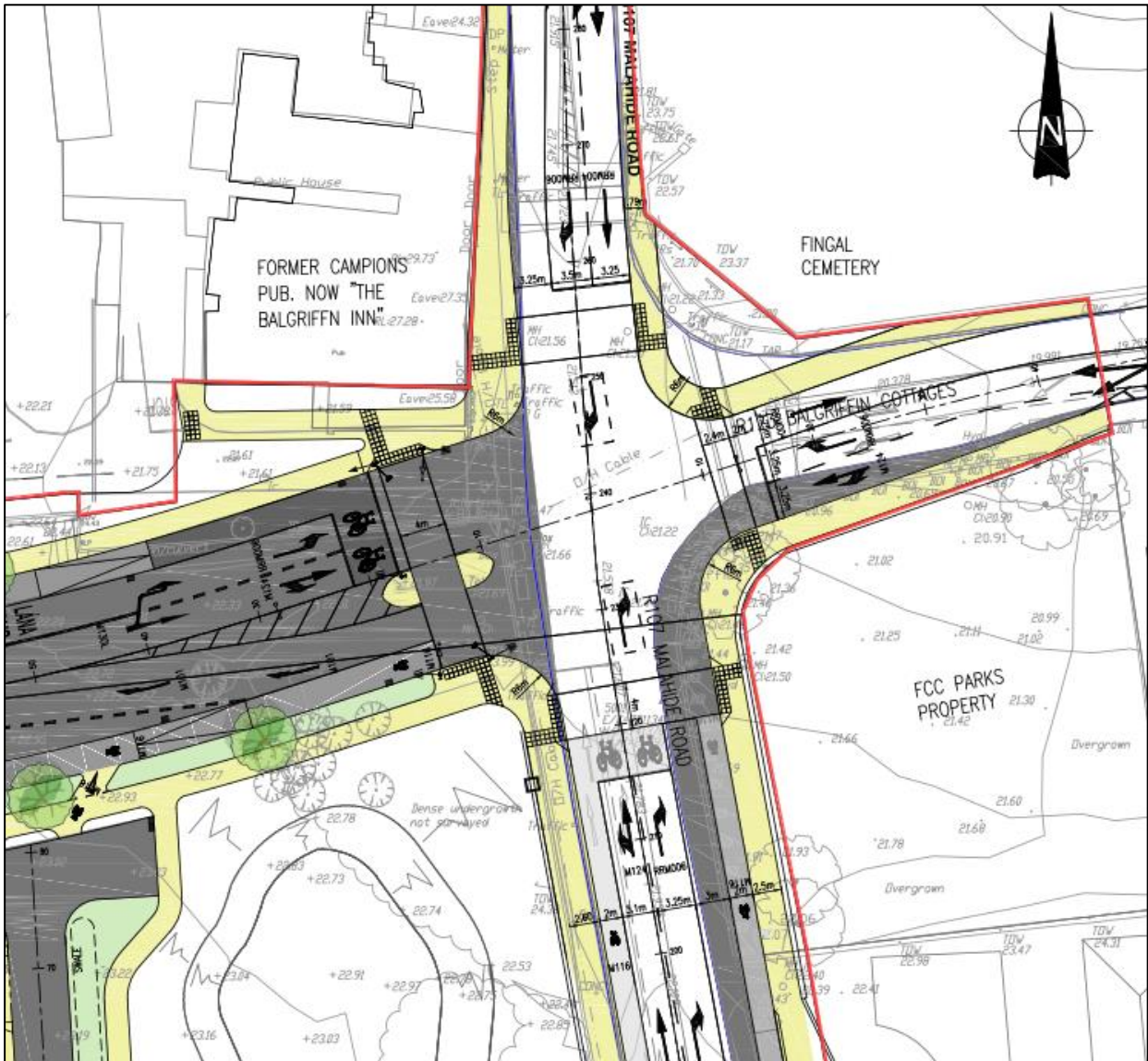


Figure 16 | Malahide Road (R107) / Balgriffin Road – New Layout (Phase 1B Application).

**SFTS Recommendation 23:** Developing a new link between the Clarehall Junction Relief Road and Stockhole Lane to improve options for vehicular traffic entering/leaving the overall Fingal/Dublin Fringe area is recommended. This link would potentially cater for an orbital bus service linking the employment zoned lands north of the R139 with Dublin Airport and Swords. In the longer term this link would also cater for high quality walking and cycling trips via a more direct and safer route to Dublin Airport and for interchange with the future Swords CBC.”

This recommendation is to develop a connection between the Clarehall Junction Relief Road and the Stockhole Lane (Figure 25). A section of this road between the Clarehall Junction Relief Road and the western link to the Stockhole Lane as proposed in the FCC Development Plan is within the Belcamp Lands.

According to SFTS report, in summary:

1. “Accessibility to Dublin Airport from the Fingal/Dublin Fringe is improved with the full EWLR.
2. Most of the traffic using the EWLR comes from Fingal/Dublin Fringe area.

3. *With the full EWLR, trips from Dublin Airport may encounter congestion at the EWLR/R132 Swords Road Intersection, resulting in some increase in southbound flow on the M1.*
4. *The EWLR Clonshaugh section reduces traffic at Clarehall Junction significantly and similarly to the full route.*
5. *Journey time along the R107 is reduced with EWLR (Clonshaugh section) but not with Full EWLR, due to additional inducted traffic.”*

**“SFTS Recommendation 24:** *To further consider the feasibility of a Fingal/Dublin Fringe – Dublin Airport – Swords Bus Route when Bus Connects and Metrolink are more advanced. The current phases of planning for these projects must give priority to those services already identified in the NTA GDA Strategy 2016-2035. However, a review of the NTA GDA Strategy is due to be undertaken by the end of 2022, at which point it would be timely to assess the potential inclusion of the proposed orbital bus service for delivery post 2027.”*

As part of the planning process, a meeting took place between Dublin City Council, Fingal County Council, National Transport Authority and the Applicant which review the provision of the N8 Orbital Route through the proposed Belcamp development and any other possible bus routes. This is further discussed in section 5.4 of the TTA.

While the SFTS suggests that this orbital bus service is recommended in the future (post 2027) it is noted that a public transport licence has been granted to Dublin Coach (John O’Sullivan) for a bus linking Clongriffin via Clarehall Junction to Dublin Airport. This bus route is currently not operational, and the granted licence is to expire on 30<sup>th</sup> August 2021.

Currently the service is to utilise the R139 route to the M1. However, the construction of the EWLR to Stockhole Lane will provide an additional route and would be expected to reduce journey times.

The suggested possible bus link from Stockhole Lane to the M1 Airport Roundabout (illustrated in Figure 25 – extracted from SFTS study) would significantly enhance the level of service that the current bus route will provide to the DCC FCC Fringe area. However, this link is not within the scope of the Belcamp development.

### **SFTS Requirements and Recommendation**

The SFTS recommends that the Clarehall Junction Relief Road (CJRR) and the East West Link Road to Stockhole Lane be constructed as a priority. It is suggested that the Clarehall Junction Relief Road combining the DCC and FCC sections (including the section of the EWLR to the east back to Malahide Road) is considered as a single priority project.

Section 6.4.6 of the SFTS states: *“The modelling undertaken indicates that there are clear benefits from the early implementation of the CJRR, and longer-term benefits from its implementation as a section of the East West Road...”*

*It is assumed that the EWLR would be aligned with, and essentially form a continuation of, the FCC section of the Clarehall Junction Relief Road, as described above. Traffic volumes are estimated at around 800 vehicle units in the peak hour, indicating a single traffic lane per direction is sufficient. The scheme should be developed to include additional continuous bus and segregated cycle priority.”*

In addition, the SFTS goes on to recommend that *“All new road schemes should be DMURS compliant and provide high quality cycle and pedestrian facilities between and through junctions.”*

Detail transport modelling carried out by FCC/SYSTRA is considered in Section 7 of this report.

## 4.6 Draft Belmayne & Belcamp Lane Masterplan (July 2020)

In July 2020, Dublin City Council published the '*Draft Belmayne & Belcamp Lane Masterplan*' to guide the development of lands at Belmayne and Belcamp Lane with the objective to secure the delivery of a new Town Centre and residential area focused on the Clarehall Junction (signalised junction between Malahide Road (R107) and R139).

In section '*B3 Access and Movement*' of the '*Draft Belmayne & Belcamp Lane Masterplan*' a number of key access and movement infrastructures have been identified and integrated to the existing network to facilitate the development of the Key District Centre (at Clarehall Junction) and enable a permeable and more friendly network for pedestrians and cyclists. The major key road infrastructures identified are listed below and showed in Figure 27 below - extracted from '*Figure B3 Streets Layout*' within the '*Draft Belmayne & Belcamp Lane Masterplan*'.

### **Key Infrastructure 2 & 7 – Completion/Upgrade of Belmayne Main Street & Bus Priority Measures:**

These key infrastructures are related to the Bus Gate described in Section 4.3 of the subject TTA. As presented in that section, the proposed Bus Gate requires the conversion of the existing three-armed priority-controlled junction between Malahide Road (R107)/Mayne River Street to a four-armed signal-controlled junction with the eastern arm forming the new Bus Gate. Only bus, cycle and taxi will be permitted to use the bus gate. This Bus Gate is being developed in accordance with the Clongriffin – Belmayne LAP and is proposed to be constructed by Dublin City Council under a Part VIII Scheme.

**Key Infrastructure 5 – Improved Crossings and Junction Access:** This key infrastructure relates to a number of upgrades to the network to enable pedestrian/cyclists movements by improving crossings at existing junctions, construction of new junctions at the Malahide Road (R107) and the R139, and alterations to the existing Clarehall junction layout to prioritise sustainable modes of transport and reduce the number of crossings pedestrians are currently required to make.

**Key Infrastructure 4 – Belcamp Parkway:** This key infrastructure relates to a new link between Malahide Road (R107) – to the south of the Clarehall junction and R139 to the west of Clarehall junction. This new link street is included in the current Dublin City Development Plan as a new road to be provided in the area and is identified in the '*South Fingal Transport Study (2019)*' - under '*SFTS Recommendation 21*', as part of the Clarehall Junction Relief Road (formerly identified as the R107 Malahide Road Realignment, Balgriffin Bypass). Belcamp Parkway is envisaged to reduce the volume of traffic through the Clarehall junction, relieving existing stress and facilitate the redesign of Clarehall junction to cater more efficiently for cyclists, pedestrians and public transport as proposed under Key Infrastructure 5 described above.

Although the '*Draft Belmayne & Belcamp Lane Masterplan*' and the '*South Fingal Transport Study (2019)*' recommend the Clarehall junction to be redesigned to prioritise cyclists, pedestrians and public transport, none of these documents provides a new altered layout for the junction.

However, under the Clongriffin to City Centre CBC scheme of BusConnects, a new layout for Clarehall junction is currently under development. For ease of reference this layout is reproduced in Figure 28 below – '*Map 6: Preferred Route*' of the Clongriffin to City Centre CBC Brochure. Note that, Figure 17 is rotated by 90 degrees in relation to Figure 18.

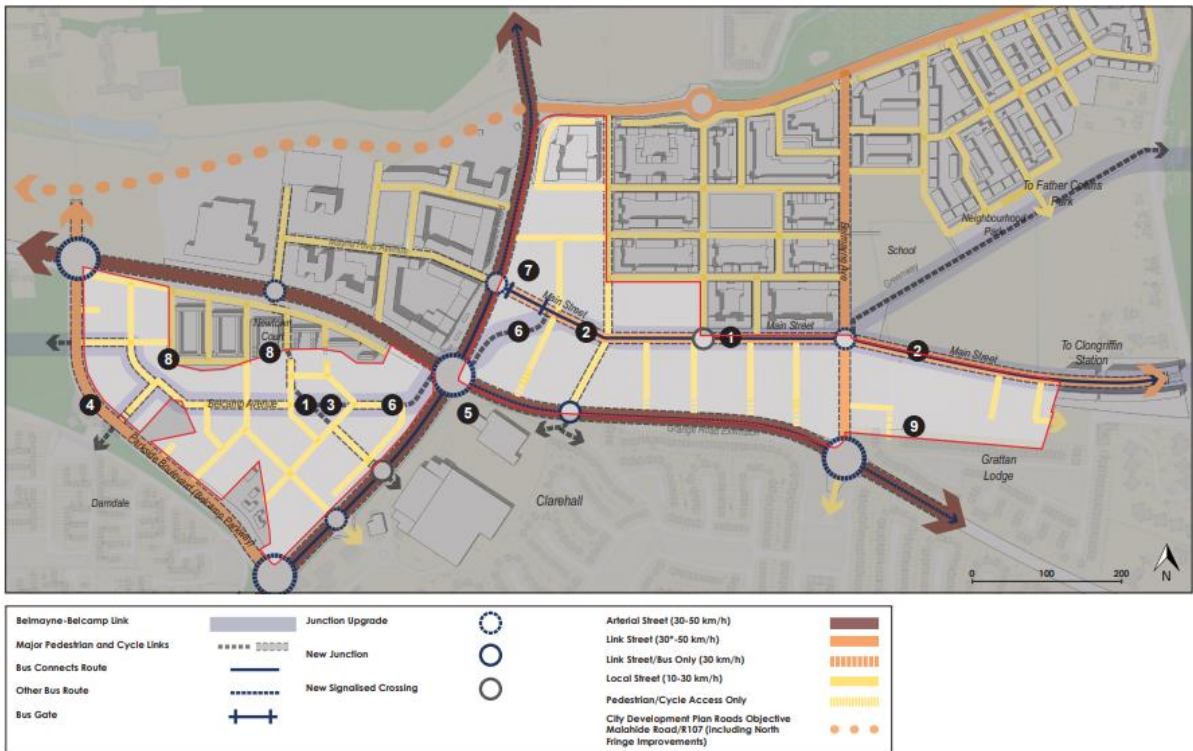


Figure 17 | Belmayne and Belcamp Lane Masterplan Streets Layout.

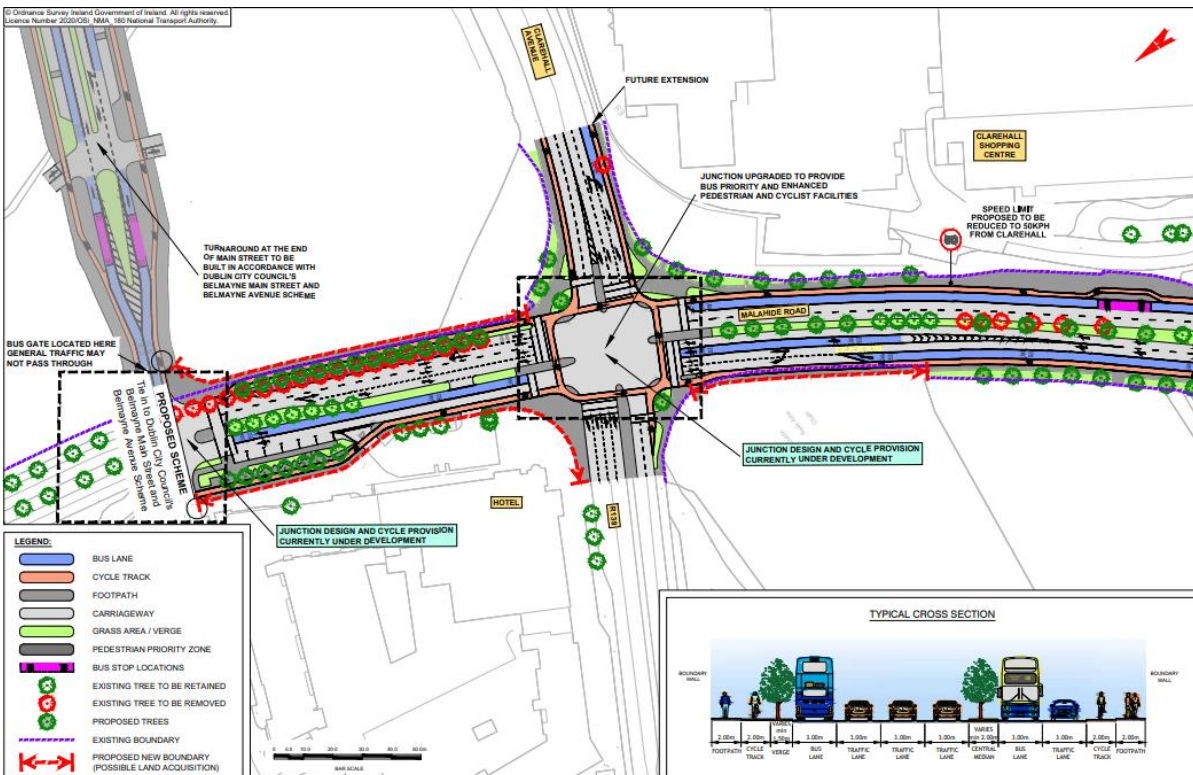


Figure 18 | BusConnects – Proposed Clarehall Junction Layout.



#### **4.7 Malahide Road (R107) / College Avenue – Junction Upgrade**

The overall proposal of the under-construction development of Belcamp Phase 1 (Reg. Ref. F15A/0609) includes the upgrade of the existing junction on Malahide Road (R107) to a signalised junction with the College Avenue forming the western arm of the junction. This junction is located between the Balgriffin Road (R123) to the north and the Belmayne Road to the south.

The approved scheme comprises of:

- Installation of a new traffic signal infrastructure.
- Construction of the College Avenue (Western approach) with one all-movements lane and one exit lane.
- Provision of dedicated signalised pedestrian crossings with dropped kerbs and tactile paving on the approved College Avenue (Western approach)
- Provision of toucan crossings on the existing eastern approach and on R107 Malahide Road (Southern approach).
- Reconfiguration of the R107 Malahide Road (Northern approach) to include a dedicated right-turning pocket lane.
- Reconfiguration of the R107 Malahide Road (Southern approach) to include a dedicated right-turning pocket lane.
- Reconfiguration of the R107 Malahide Road (Southern approach) to include an advanced stop line for cyclists.
- Provision of advanced stop lines for cyclists on College Avenue (Western approach) and on the eastern approach
- Provision of cycle lanes along both sides of the R107 Malahide Road. This is in line with the GDA Cycle Network Plan.

The approved layout of this junction is provided in in the figure below

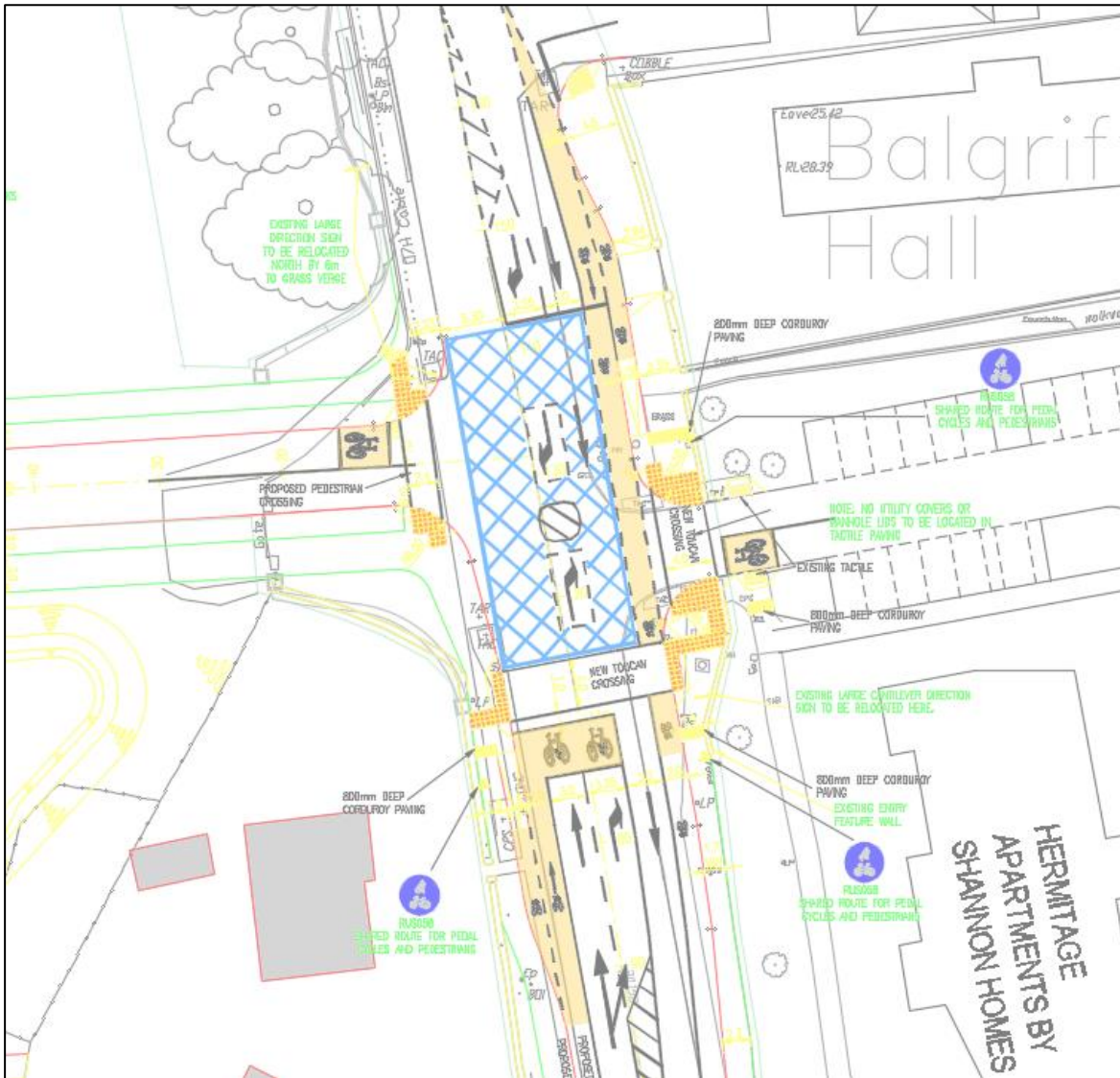


Figure 19 | Approved Junction - Malahide Road (R107) / College Avenue (Reg. Ref. F15A/0609)

## 5. Proposed Belcamp SHD

### 5.1 Development Description

The subject site is proposed to be delivered in a phased manner, with the initial phases proposed on the eastern portion of the lands (within FCC jurisdiction), immediately adjacent to Malahide Road (R107), north of Mayne River. Phase 1 of Belcamp received grant permission by Fingal County Council in June 2017 under Reg. Ref. F15A/0609 and is currently under construction. Access to Phase 1 will be provided via College Avenue, a new east-west street accessed via a new junction with the Malahide Road (R107). Future development is proposed on the remainder of the Belcamp lands subject to future planning approvals, which are expected to comprise of approximately 2,527 residential units, c. 1,230 apartments in DCC lands and c. 1,297 residential units (houses, duplex and apartments) in FCC, in addition to associated mixed-uses.

It is proposed to include the main internal transportation infrastructure as part of the first phase of development, including Belcamp Parkway and the East–West Link Road, to ensure there is adequate transportation provision in place before the development is occupied. It is proposed to provide a transport hub at Belcamp Town Square with bus stops, E-bike charging stations, bicycle racks, E-car charging points and multiple designated car-share fleet parking spaces.

It is also proposed to include the main pedestrian and cycle links from Belcamp Town Square to Belmayne Commercial Area and bus gate, via the River Mayne 4.5m wide path and along the new 5.0m wide pedestrian/cycle link along the R139. It is proposed to provide open space within Phase 1, which will again attract active modes of transport internally and minimise the number of external car trips. In addition to the transport infrastructure, it is proposed to provide commercial infrastructure within Phase 1 in both the DCC and FCC sides, to contribute towards a self-sufficient development from an early stage. This will assist with minimising the number of external trips by car from an early stage in the Belcamp Development.

Primary school education escort trips have been determined to significantly impact morning traffic and providing internal infrastructure to the school site in the first phase allows for the reserved school site to be developed by the Department of Education). The school will contribute to minimising new vehicular trip generation within the development.

The Figure below shows the proposed Phasing Plan. This Phasing Plan is also included as part of the accompanying A1 drawing package, for ease of reading at suitable scale.

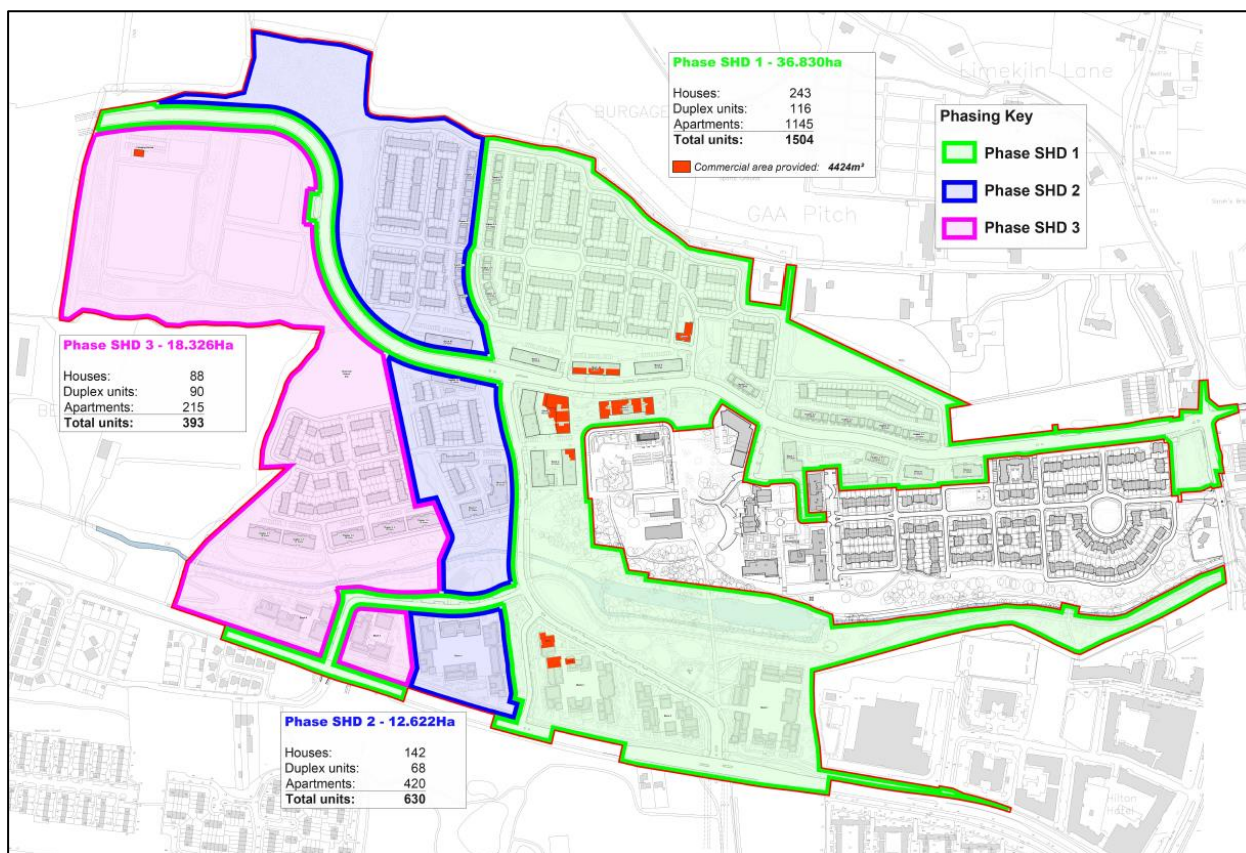


Figure 20 | Belcamp Phasing Plan

The schedule of accommodation for each phase, along with the proposed construction schedule, is set out in the Table below:

| Phase  | Description              | No. of Units |
|--|--------------------------|--------------|
| <b>Phase SHD 1</b><br>36.565Ha<br>Q1 2023 - Q3 2028<br>(Main road infrastructure by Q1 2025) | Houses                   | 243          |
|  | Duplex Units             | 116          |
|  | Apartments               | 1,145        |
|  | <b>Phase SHD 1 Total</b> | <b>1,504</b> |
| <b>Phase SHD 2</b><br>12.524Ha<br>Q3 2028 - Q3 2030  | Houses                   | 142          |
|  | Duplex Units             | 68           |
|  | Apartments               | 420          |
|  | <b>Phase SHD 2 Total</b> | <b>630</b>   |
| <b>Phase SHD 3</b><br>18.491Ha<br>Q3 2030 - Q4 2032  | Houses                   | 88           |
|  | Duplex Units             | 90           |
|  | Apartments               | 215          |
|  | <b>Phase SHD 3 Total</b> | <b>393</b>   |
| <b>TOTAL</b>   | -                        | <b>2,527</b> |

Table 6 | Development Phasing

## 5.2 Proposed Roads Through Belcamp

The proposed road hierarchy within the subject Belcamp SHD will comprise of two new arterial roads (the East-West Link Road and the Belcamp Parkway), several new link streets, and a series of new local access roads, including shared surface/homezones.

The Belcamp Parkway is a north-south arterial road and will form a new junction with the R139, in DCC, where there is currently a private gated access. A new link road will form a second new junction along the R139, adjacent to the existing Tara Lawns halting site access. A new Bus Gate is also proposed as part of the Belcamp Parkway Road in order to accommodate the proposed Bus Connects routes shown in Section 5.5 of this TTA.

The East-West Link Road (EWLR) traverses the portion of the Belcamp lands within FCC's jurisdiction, extending from Malahide Road (R107) at the east as far as the western boundary of the Applicant's lands. The road is designed to facilitate continuation west beyond Belcamp, in accordance with the Fingal Development Plan 2017 – 2023. This street has been designed to incorporate high quality public transport facilities including a dedicated bus lane in both directions and high-quality bus stops strategically located to serve the proposed development.

An emphasis has been placed on active modes of transport and links to the surrounding areas.

There is a high standard of pedestrian, cyclist and public transport facilities provided. This will give way to a clear, comprehensive and high-quality transport network for residents and visitors.

The design principles set out in the Design Manual for Urban Roads and Streets (DMURS) have been considered at the overall design stage and will be implemented during the detail design phase.

The four principles set out in DMURS have been considered in the design of the road network. These comprise:

- Design Principle 1: To support the creation of an integrated street networks which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
- Design Principle 2: The promotion of multi-functional. Place based streets that balance the needs of all users within a self-regulating environment.
- Design Principle 3: The quality of the street is measured by the quality of the pedestrian environment.
- Design Principle 4: Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design.

### 5.2.1 Alternative EWLR Alignment– Option B

The previously proposed road alignment, at consultation stage, provided a straighter alignment for the proposed East West Link Road (EWLR). However, alternative design options have since been explored by the design team in consultation with key stakeholders, including the IDA, who are landowners of the strategic employment lands adjoining the western boundary of the application lands. Following this consultation, it was considered that the previous alignment did not represent the optimal design solution for the Belcamp lands and the surrounding context, including the adjoining IDA High Technology employed zoned lands to the west of the site. At a strategic and spatial level, the discussions took place with representatives of the IDA and it is the position of the IDA that the IDA have taken the Development Plan alignment as the default position of the road for their future proposals for their landholding. In order to facilitate the potential of a large single user on the site and maintain their landbank as a strategic whole, the IDA is not in a position to agree on the east-west alignment that divides their lands and thus there is a

requirement for the EWLR to align as per the now preferred road design, i.e. to the north west of the Belcamp lands. In light of this, the applicant has brought forward this preferred route, which is submitted as part of this planning application and is the preferred route for the application.

At a site level, the previous consultation stage road layout segregated the proposed school reserved site from the playing pitches and meant that students would have to cross this EWLR to access the playing pitches, which represented a safety risk. The 'S' bend now proposed in the road will act as a speed reducing measure for vehicles travelling from the west as it approaches the Belcamp school site and Town Square at the heart of the scheme. It is important to note that the realignment of the road means that the open space and playing fields are now connected to the future reserved school site and ensures that the school can use these facilities without the need to directly cross the EWLR.

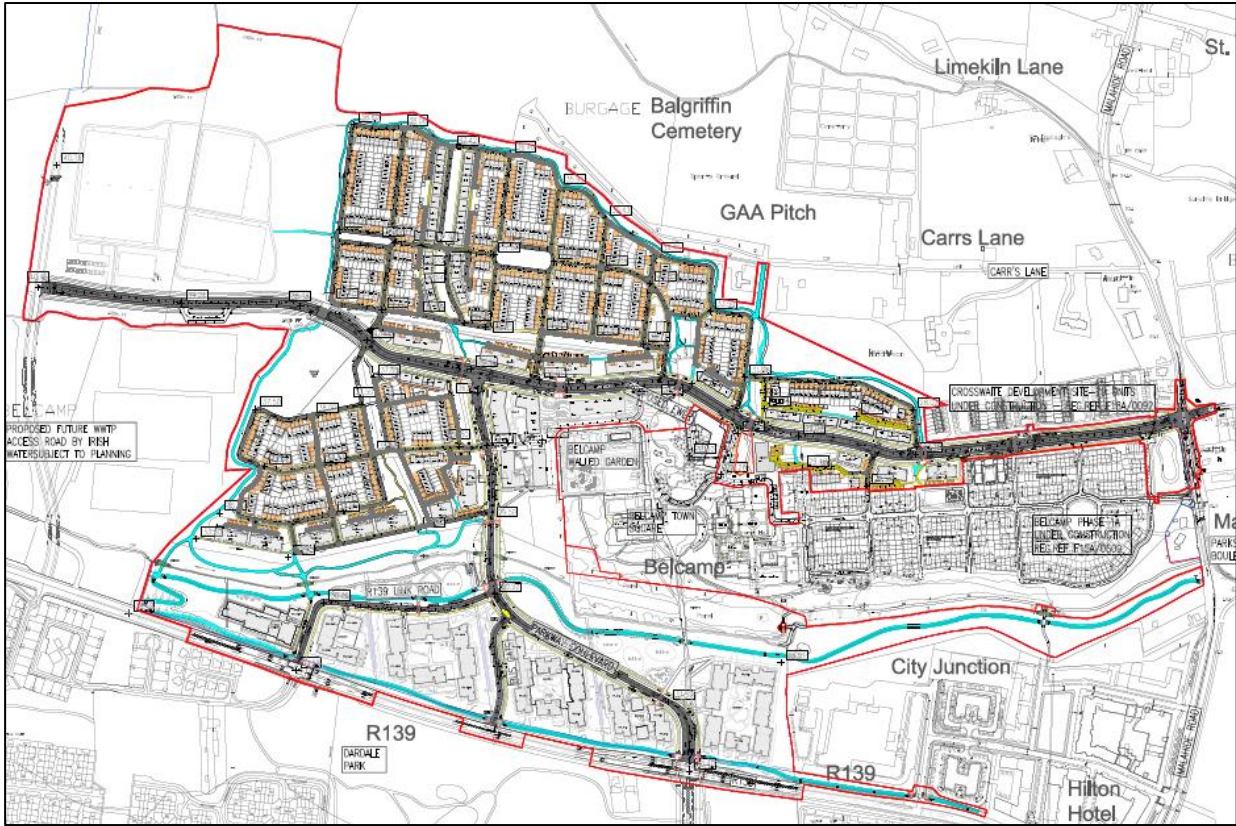
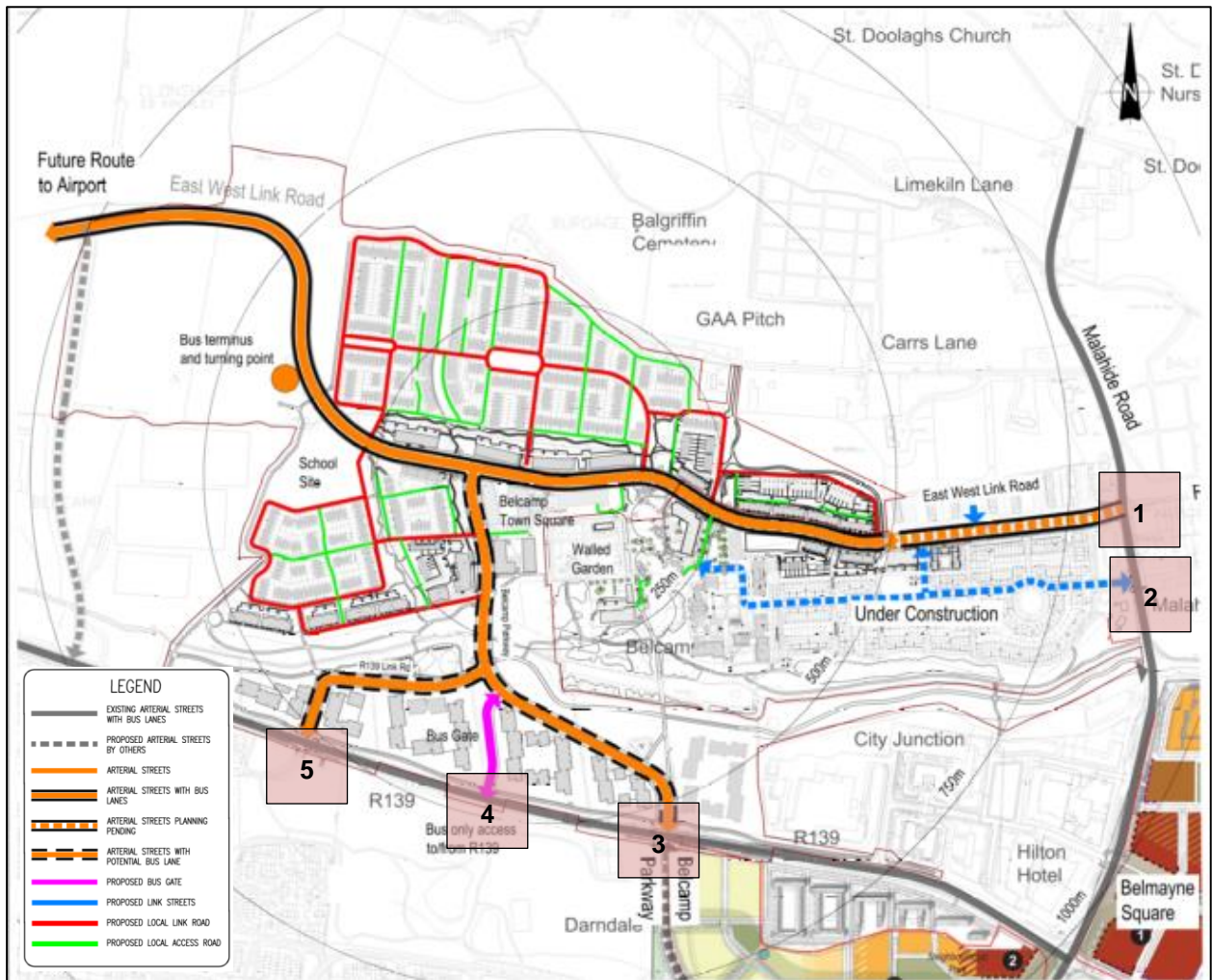


Figure 21 | Alternative EWLR Alignment - Option B

**5.3 Proposed Access to Belcamp**

The overall Belcamp SHD development will benefit from five approved, proposed and potential future junctions located on both Malahide Road (R107) to the east and R139 to the south – See Figure 22. These junctions are outlined below:



**Figure 22 | Proposed Development Roads and Junctions**

- **Junction 1:** is an existing signal-controlled T-junction which currently comprises an additional minor arm (western approach) that is not incorporated into the existing signal system and provides access to a single property only. The upgrade of this junction into a signalised crossroads is approved by FCC but is currently under appeal by a third party to An Bord Pleanála. The western approach will form the eastern section of the East-West Link Road and is also proposed under Phase 1B works.
- **Junction 2:** existing priority-controlled T-junction approved to be upgraded to a signalised crossroads with the western arm forming the new College Avenue approach approved under Belcamp Phase 1 (Reg. Ref. F15A/0609). This junction layout was also approved under Belcamp Phase 1
- **Junction 3:** existing priority-controlled T-junction which currently provides access to the subject Belcamp lands via an existing gated entrance (northern approach). This junction is proposed to be upgraded to a signalised crossroads between the R139 (east-west) and the proposed Belcamp Parkway (north-south).
- **Junction 4:** is a proposed signal-controlled T-junction to operate as a bus-gate for the proposed N8 orbital route.
- **Junction 5** existing priority-controlled T-junction which currently provides access to the existing Tara Lawns halting site to the south of R139. As part of the subject Belcamp SHD application, this junction is

proposed to be upgraded to a signalised crossroads with the new northern approach forming a link road between Belcamp Parkway and R139.

## **5.4 Proposed alternative BusConnects Routes**

### **5.4.1 N8 Orbital Route**

The EWLR is envisaged as a core bus route, providing east–west linkages to the fringe area and ultimately to the airport environs. Accordingly, this road is designed to comply with the principles of a Core Bus Corridor, including dedicated bus lanes and new bus stops, and to accommodate optimum cyclist and pedestrian facilities.

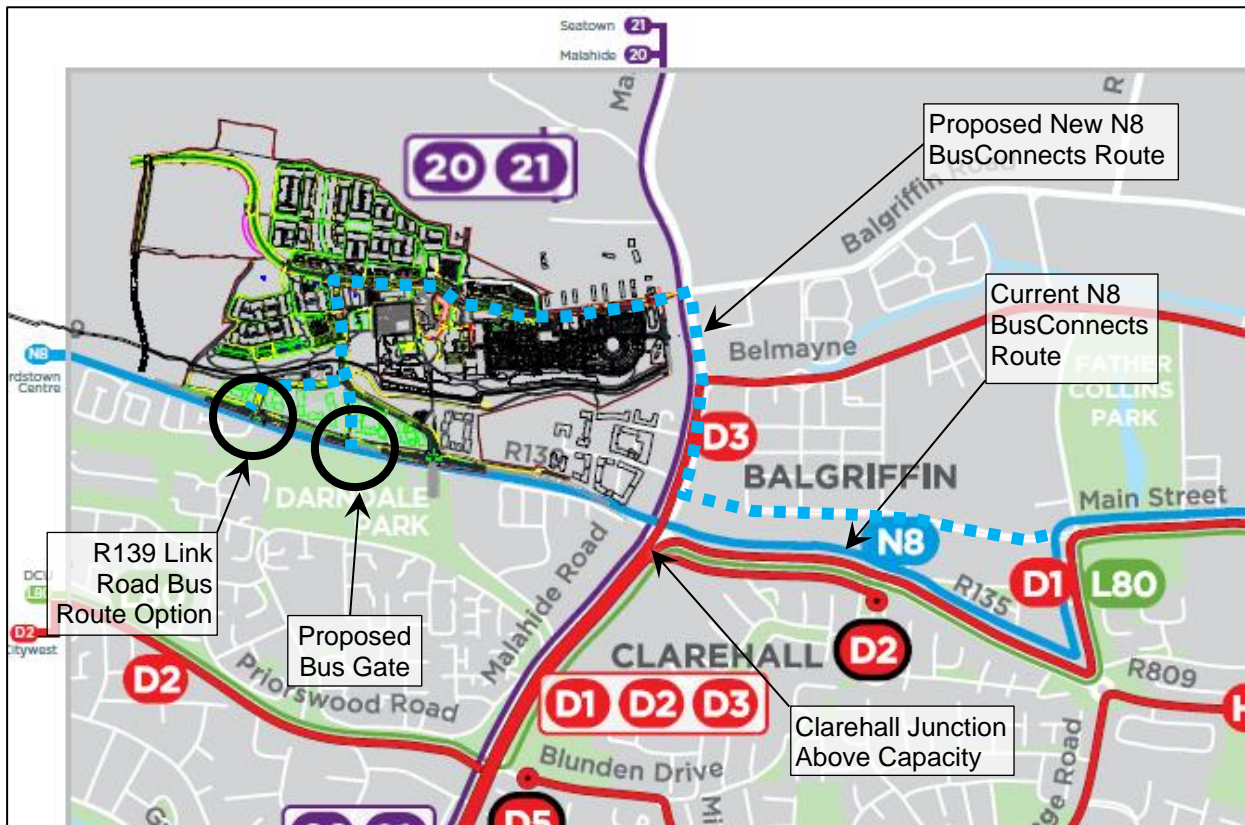
Waterman Moylan met with representatives from the NTA, FCC and DCC in March 2022 to discuss the transport requirements of the proposed Belcamp SHD development. The current N8 BusConnects route departs from Clongriffin train station, continuing along Main Street before turning south onto the Hole in the Wall Road and then continuing west along the R139. At the meeting, the NTA advised that they envisaged the N8 BusConnects Route being altered to run through the subject development along the East–West Link Road (EWLR) into Belcamp town square and then, preferably, directly south onto the R139.

The proposed road layout was amended following this meeting, to ensure that the requirements of the NTA are met. The amended proposal provides a bus gate linking directly southwards from the EWLR onto the R139. As noted above, the bus gate was introduced to give bus priority over cars and to provide a direct south link from the EWLR onto the R139, as discussed with the NTA in March 2022.

The revised N8 route will benefit from a newly proposed bus gate, indicated in the Figure below, providing a bus-only route onto the R139, with signal control on demand. During the meeting with the NTA, FCC and DCC, the NTA noted that they would welcome the use of bus gates to prioritise public transport ahead of cars and to ensure that buses do not get stuck in traffic.

Belcamp Parkway and the R139 Link Road have both also been designed to be bus capable and can accommodate bus routes with 3.25m wide lanes, locations for bus stops and signalised junctions that can provide bus priority. This provides a robust, flexible design with options for future bus routes. The removal of the bus gate and the use of the R139 link Road as N8 bus route can be accommodated without compromise to the proposed submission, if that is the NTA's preference for the N8 BusConnects route.





**Figure 23 | Bus Connects Proposed N8 Bus Route**

This proposed altered route would avoid the Clarehall junction between R107 and R139, which is currently above capacity and suffers from long queues and delays. The Bus Gate also avoids any traffic, given that it provides bus-only access, and on-demand signal controls will ensure efficient wait times before turning onto the R139.

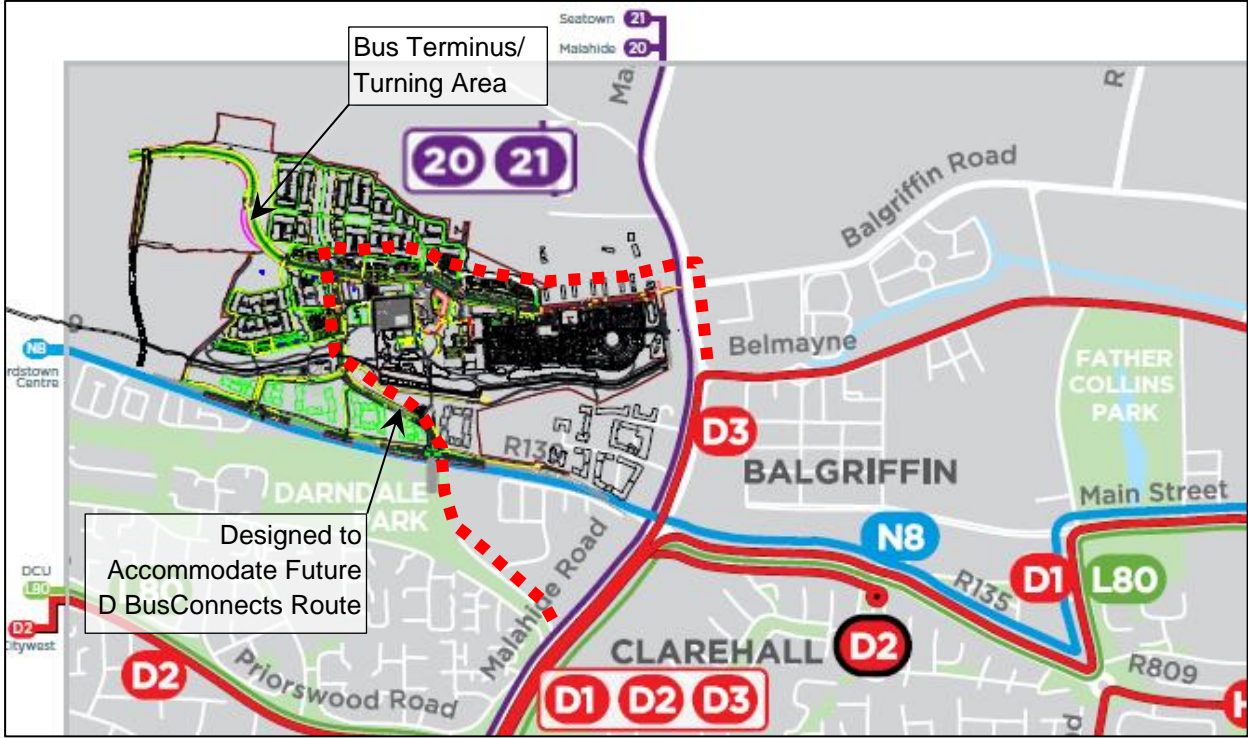
This proposed altered route provides several benefits:

- The new route would avoid the Clarehall junction between R107 and R139, which is currently above capacity and suffers from long queues and delays.
- The East–West Link Road is envisaged as a core bus route, and accordingly, this road is designed to comply with the principles of a Core Bus Corridor, including dedicated bus lanes, new bus stops, and segregated cycle lanes.
- The inclusion of a Bus Gate at the south of the site ensures that the bus route will follow a direct path and will avoid a meandering route through the site.
- The Bus Gate also avoids any traffic, given that it provides bus-only access, and on-demand signal controls will ensure efficient wait times before turning onto the R139.
- The new route will serve a large population in Belcamp.

### 5.4.2 D Spine Route

The NTA advised that there are currently no proposals to bring one of the D routes through the Belcamp development. However, BusConnects routes are subject to future change depending on demand and future development. As such, emphasis has been placed on providing a robust design that can facilitate various future bus routes through the site.

Belcamp Parkway has therefore been designed to accommodate a possible future route for one of the D routes and has been designed with a 3.25m wide verge that can facilitate future bus lanes. This route would divert buses from the Malahide Road onto Belcamp Lane through the DCC Masterplan lands, south of the R139, through a signalised junction on the R139. This D route would not use the proposed Bus Gate, which is part of the N8 route. This will ensure a straight-through crossing of the R139, as shown in the Figure below.



**Figure 24 | Possible Future D Route through Belcamp**

This proposed bus route through the subject lands can also facilitate possible future routes from DCC to the Airport, while avoiding the congested Clarehall junction. The Belcamp Parkway route from the R139 to the EWLR follows the alignment provided in FCC / DCC Development Plans, the Belcamp / Belmayne Masterplan and the South Fingal Transportation Study.

A bus terminus/turning area is provided along the EWLR, within the open space at the west of the proposed Belcamp Development. This again allows for a robust design of bus routes that can come into Belcamp, turn around and travel back along the same route alignment.

Proposed routes and associated junctions have been auto-tracked using the same bus type used for the N8 and D routes, as provided by the NTA – refer to drawing 19-114-P1135 for swept path analysis of each of these bus routes.

For further information on the proposed bus facilities, refer also to Section 2.2 of the DMURS Statement of Design consistency, which accompanies this submission under separate cover.

## 6. Car Parking

### 6.1 Fingal Development Plan 2017 - 2023

Table 7 below highlights the Standards for car parking in new developments are set out in Table 12.8 of the Fingal Development Plan 2017 - 2023.

| Description                                   | Car Parking Norm  | Norm or Max |
|---|---|-------------|
| House – Urban / Suburban (1 or 2 bedrooms)    | 1-2 spaces within the curtilage                         | Norm        |
| House – Urban / Suburban (3 or more bedrooms) | 2 spaces within the curtilage                           | Norm        |
| Apartment / Townhouse (1 bedroom)             | 1 Space per unit plus<br>1 visitor space per 5 units    | Norm        |
| Apartment / Townhouse (2 bedrooms)            | 1.5 spaces per unit plus<br>1 visitor space per 5 units | Norm        |
| Apartment / Townhouse (3 bedrooms)            | 2 spaces per unit plus<br>1 visitor space per 5 units   | Norm        |
| Pre-school facilities/crèche                  | 0.5 per classroom                                       | Max         |
| Restaurant/Pub/Café                           | 1 per 15m <sup>2</sup>                                  | Norm        |
| Takeaway                                      | 1 per 30m <sup>2</sup>                                  | Norm        |
| Convenience Store (<200m <sup>2</sup> )       | 1 per 30m <sup>2</sup>                                  | Max         |
| Retail  | 1 per 20m <sup>2</sup>                                  | Max         |

**Table 7 | Fingal Development Plan 2017–2023 - Car Parking Requirement.**

Table 8 below highlights the Standards for car parking in new developments are set out in the Draft Fingal Development Plan 2023 – 2029.

| Description                  | Car Parking Norm       | Norm or Max |
|------------------------------|------------------------|-------------|
| Residential (1–2 Bedrooms)   | 0.5 per unit           | Max         |
| Residential (3+ Bedrooms)    | 1.0 per unit           | Max         |
| Pre-school facilities/crèche | 0.5 per classroom      | Max         |
| Restaurant/Pub               | Not Specified          | -           |
| Takeaway                     | None                   | Norm        |
| Convenience Store            | 1 per 60m <sup>2</sup> | Max         |
| Retail                       | 1 per 20m <sup>2</sup> | Max         |

**Table 8 | Draft Fingal Development Plan 2023 - 2029 - Car Parking Requirement.**

## 6.2 Dublin City Development Plan 2016 - 2022

Standards for car parking in new developments are shown on Map J of the Dublin City Development Plan 2016-2022. The DCC area is divided into three areas for the purpose of parking control:

- 1) Parking Zone 1: is generally within an inner-city location where transport corridors intersect, or that has significant interchange potential.
- 2) Parking Zone 2: occurs alongside transport corridors
- 3) Parking Zone 3. Remainder of the city

Car parking provision in Zones 1 and 2 is restricted on account of the proximity of these locations to public transport. An increased density of development will be promoted in Zone 1 and those parts of Zone 2 where the development is in close proximity to good public transport links

Table 8 below are extracts related to new developments from Table 16.1 of the DCC Plan 2016 – 2022:

| Description                                   | Zone    | Car Spaces                            |
|---|---------|---------------------------------------|
| Residential (Houses, Apartments and Duplexes) | 1 and 2 | 1 per dwelling                        |
|   | 3       | 1.5 per dwelling                      |
| Pre-school facilities/crèche                  | 1       | None                                  |
|   | 2 and 3 | 1 per classroom                       |
| Restaurants, Cafés and Take-aways             | 1       | None                                  |
|   | 2 and 3 | 1 per 150 m <sup>2</sup> seating area |
| Retail  | 1       |                                       |
|   | 2 and 3 | 1 per 75 m <sup>2</sup> GFA           |

**Table 9 | Dublin City Development Plan 2016–2022 - Car Parking Requirement.**

### Residential Car Parking In Apartments:

Car parking standards are maximum in nature and may be reduced in specific, mainly inner-city locations where it is demonstrated that other modes of transport are sufficient for the needs of residents. In other locations, it is considered desirable that one car parking space (or as required by Table 16.1) be provided off-street within the curtilage of the development per residential unit, as car storage requirements cannot be met on-street for all residents. Each space shall be permanently assigned to and sold with each apartment and shall not be sublet or leased to non-residential owners or occupiers. Where sites are constrained, or provision of on-site car storage is not possible, alternative solutions will be considered such as residential car clubs or off-site storage. Apartment parking spaces are mainly to provide for car storage to support family-friendly living policies in the city and make apartments more attractive for all residents. It is not intended to promote the use of the car within the city. If the car space is not required in the short-term, it should be given over to other residential storage or utility uses

## 6.3 Design Standards for New Apartments – December 2020

In December 2020, a revised version of the document “Sustainable Urban Housing: Design Standard for New Apartments” was released. The parking standards set out in this document are considerably lower than those contained in the Fingal Development Plan 2017 – 2023 and Dublin City Development Plan 2016-2022 in respect to apartment developments.

Chapter 2 of the Design Standard for New Apartments sets out the following “types of location” which are defined by site’s accessibility and proximity to public transport and town/city centres:

“Central and/or Accessible Urban Locations

- Sites within walking distance (i.e up to 15 minutes or 1,000-1,500m), of principal city centres, or significant employment locations, that may include hospitals and third level institutions;
- Sites within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m) to/from high capacity urban public transport stops (such as DART or Luas); and
- Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) to/from high frequency (i.e. min 10 minute peak hour frequency) urban bus service.

Intermediate Urban Locations

- Sites within or close to i.e. within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m), of principal town or suburban centres or employment locations, that may include hospitals and third level institutions;
- Sites within walking distance (i.e. between 10-15 minutes or 1,000-1,500m) of high capacity urban public transport stops (such as DART, commuter rail or Luas) or within reasonable walking distance (i.e. between 5-10 minutes or up to 1,000m) of high frequency (i.e. min 10 minutes peak hour frequency) urban bus services or where such services can be provided;
- Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) of reasonably frequent (min 15 minute peak hour frequency) urban bus services.

Peripheral and/or Less Accessible Urban Locations

- Sites in suburban development areas that do not meet proximity or accessibility criteria;
- Sites in small towns or villages.”

The document also states that the range of locations is not exhaustive and will require further local assessment.

As per the Design Standards for New Apartments – Guidelines for Planning Authorities – December 2020 standards set out above and the location of the proposed development in relation to current and proposed public transport provision, subject development meets criteria for reasonable grounds to minimise car parking provisions.

## 6.4 Proposed Car Parking

The proposed car parking at the development is set out in the Table below:

|                     |            | Description         | No. of Units        | No. of Spaces | Location               | Ratio    |
|---------------------|------------|---------------------|---------------------|---------------|------------------------|----------|
| Dublin City Council | Apartments | Block 1             | 273                 | 128           | Under Podium           | 0.5      |
|                     |            | Block 2             | 160                 | 48            | On-Street/Under Podium | 0.3      |
|                     |            | Block 3             | 297                 | 76            | On-Street/Under Podium | 0.3      |
|                     |            | Block 4             | 285                 | 163           | On-Street/Under Podium | 0.6      |
|                     |            | Block 5             | 96                  | 52            | Under Podium/Basement  | 0.5      |
|                     |            | Block 6             | 119                 | 23            | Under Podium           | 0.2      |
|                     |            | Visitor Spaces      | N/A                 | 25            | On-Street              | -        |
|                     | Commercial | Crèche              | 6<br>Classrooms     | 3             | On-Street              | -        |
|                     |            | Block 3 Café/Retail | 393.4m <sup>2</sup> | 13            | Under Podium           | -        |
|                     |            |                     | <b>DCC Subtotal</b> | <b>1,230</b>  | <b>531</b>             | <b>-</b> |

|                       |                         |                     |              |                     |                                 |     |
|-----------------------|-------------------------|---------------------|--------------|---------------------|---------------------------------|-----|
| Fingal County Council | Houses                  | 2-Bed               | 16           | 16                  | On-curtilage                    | 1.0 |
|                       |                         | 3-Bed               | 385          | 770                 | On-curtilage                    | 2.0 |
|                       |                         | 4-Bed               | 72           | 144                 | On-curtilage                    | 2.0 |
|                       | Duplexes                | Block 1.1           | 18           | 18                  | Curtilage/Under-Croft           | 1.0 |
|                       |                         | Block 1.2           | 18           | 18                  | Curtilage/Under-Croft           | 1.0 |
|                       |                         | Block 1.3           | 18           | 18                  | Curtilage/Under-Croft           | 1.0 |
|                       |                         | Block 1.4           | 18           | 18                  | Curtilage/Under-Croft           | 1.0 |
|                       |                         | Block 1.5           | 18           | 18                  | Curtilage/Under-Croft           | 1.0 |
|                       |                         | Block 2.1           | 8            | 8                   | On-Street/Curtilage             | 1.0 |
|                       |                         | Block 2.2           | 16           | 16                  | On-curtilage                    | 1.0 |
|                       |                         | Block 2.3           | 16           | 16                  | On-curtilage                    | 1.0 |
|                       |                         | Block 2.4           | 8            | 8                   | On-curtilage                    | 1.0 |
|                       |                         | Block 2.5           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 2.6           | 16           | 16                  | On-Street/Curtilage             | 1.0 |
|                       |                         | Block 3.1           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.2           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.3           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.4           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.5           | 12           | 12                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.6           | 16           | 16                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.7           | 16           | 16                  | On-curtilage                    | 1.0 |
|                       |                         | Block 3.8           | 8            | 8                   | On-curtilage                    | 1.0 |
|                       |                         | Block 3.9           | 8            | 8                   | On-curtilage                    | 1.0 |
|                       | Apartments              | Block A             | 23           | 16                  | On-Street/Curtilage             | 0.7 |
|                       |                         | Block B             | 23           | 16                  | On-Street/Curtilage             | 0.7 |
|                       |                         | Block C             | 27           | 18                  | On-Street/Curtilage             | 0.7 |
|                       |                         | Block D             | 42           | 12                  | On-Street                       | 0.3 |
|                       |                         | Block F             | 103          | 91                  | Under Podium/Basement           | 0.9 |
|                       |                         | Block G             | 65           | 40                  | Under Podium                    | 0.6 |
|                       |                         | Block H             | 46           | 32                  | On-Street/Curtilage/Under-Croft | 0.7 |
|                       |                         | Block J             | 40           | 28                  | Curtilage/Under-Croft           | 0.7 |
|                       |                         | Block L             | 46           | 32                  | On-Street/Curtilage/Under-Croft | 0.7 |
|                       |                         | Block M             | 56           | 39                  | Curtilage/Under-Croft           | 0.7 |
| Blocks N & P          |                         | 79                  | 58           | On-Street/Curtilage | 0.7                             |     |
| Comm-<br>ercial       | Crèche                  | 6<br>Classrooms     | 7            | On-Street           | -                               |     |
|                       | Block F                 | 1,162m <sup>2</sup> | 26           | Under Podium        | -                               |     |
|                       | Town Square<br>Environs | 1,633m <sup>2</sup> | 35           | On-Street           | -                               |     |
|                       | Clubhouse               | 97m <sup>2</sup>    | 40           | On-Street           | -                               |     |
| <b>FCC Subtotal</b>   |                         | <b>1,297</b>        | <b>1,694</b> | <b>-</b>            | <b>1.2</b>                      |     |

|              |              |              |          |             |
|--------------|--------------|--------------|----------|-------------|
| <b>Total</b> | <b>2,527</b> | <b>2,225</b> | <b>-</b> | <b>0.88</b> |
|--------------|--------------|--------------|----------|-------------|

**Table 10 | Proposed Residential Car Parking**

All of the private residential parking spaces throughout the development are to be provided with Electric Vehicle (EV) charging points, with a minimum of 10% of the public/visitor parking spaces to be fitted with charging points from completion of the proposed development and with all ducting and services provided as part of the proposed development to facilitate non-disruptive retrofitting of EV charging points for all of the remaining parking spaces.

## 7. Cycle Parking

### 7.1 Fingal Development Plan 2017 – 2023

Standards for bicycle parking in new developments are set out in Table 12.9 of the Fingal Development Plan 2017 – 2023. Based on that, Table 11 below sets out the cycle parking requirements applicable to the subject proposed development of Belcamp

| Land Use  | FDP Standard                                | Norm or Max |
|-----------|---|-------------|
| Apartment | 1 per unit +<br>1 visitor space per 5 units | Norm        |
| Creche    | 0.5 space per classroom                     | Norm        |

**Table 11 | Fingal Development Plan 2017 – 2023 – Cycle Parking Standards.**

### 7.2 Dublin City Development Plan 2016 – 2022

Standards for bicycle parking in new developments are set out in Table 16.2 of the Dublin City Development Plan 2016 – 2022. Based on that, Table 12 below sets out the cycle parking requirements applicable to the subject proposed development of Belcamp.

| Description                           | Zone      | Cycle Spaces  |
|---------------------------------------|-----------|---|
| Residential<br>(House and apartments) | All zones | 1 per unit (Additional requirements for larger units and visitor parking will be decided on a case-by-case basis) |
| Public Houses                         | 1 and 2   | 1 per 150 sq.m  |
|                                       | 3         | 1 per 200 sq.m  |

**Table 12 | Dublin City Development Plan 2016 – 2022 – Cycle Parking Standards.**

### 7.3 Design Standard for New Apartments – March 2018

The following extracts from the “Design Standards for New Apartments – March 2018” summarise the guidelines for cycle parking:

*“A general minimum standard of 1 cycle storage space per bedroom shall be applied. For studio units, at least 1 cycle storage space shall be provided. Visitor cycle parking shall also be provided at a standard of 1 space per 2 residential units. Any deviation from these standards shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/enlargement, etc.”*



## 7.4 Proposed Cycle Parking

The proposed development will include dedicated cycle facilities, including an off-road cycle track along the East-West Link Road and along the R139, separated from the vehicular carriageway by a verge. The proposed junction upgrade at the site entrance from Malahide Road includes new cycle stopping areas and new cycle lanes along the Malahide Road.

High quality cycle linkages will be provided to connect to Malahide Road (R107), the Mayne River, City Junction and to the R139 linking the development the existing Clarehall Junction shopping and commercial area and to the future Belmayne Square.

Particular attention will be paid at detail design stage to the quality of the cycle routes and to the facilities at cycle destinations. These destinations include the Belcamp Town Square, the Walled Garden, Belcamp Square, local school and crèche facilities, connections to the public bus network, the green route along the Mayne River and the route along the R139 to Clarehall Junction. E-Bike charging stations and bicycle racks are to be provided at the transport hub, to encourage active travel to the town square.

The Department of Housing, Local Government and Heritage document “*Sustainable Urban Housing: Design Standards for New Apartments*” states that in order to apply and justify the use of a reduced car parking ratio, new developments must be comprehensively equipped with high quality cycle parking and storage facilities for residents and visitors. This document recommends a general minimum standard of 1 cycle storage space per bedroom with a visitor parking standard of 1 space per 2 residential units – refer also to the accompanying Car Parking Strategy report.

The required bicycle parking and the proposed bicycle parking are set out in the Table below:

| Description           |                     | No. of Units       | No. of Bedspaces | Total Requirement | No. of Bicycle Spaces Proposed |            |              |     |
|-----------------------|---------------------|--------------------|------------------|-------------------|--------------------------------|------------|--------------|-----|
|                       |                     |                    |                  |                   | Residential                    | Visitor    | Total        |     |
| Dublin City Council   | Apartments          | Block 1            | 273              | 492               | 629                            | 618        | 26           | 644 |
|                       |                     | Block 2            | 160              | 265               | 345                            | 345        | 14           | 359 |
|                       |                     | Block 3            | 297              | 523               | 672                            | 640        | 42           | 682 |
|                       |                     | Block 4            | 285              | 537               | 680                            | 752        | 46           | 798 |
|                       |                     | Block 5            | 96               | 163               | 211                            | 240        | 24           | 264 |
|                       |                     | Block 6            | 119              | 239               | 299                            | 290        | 20           | 310 |
|                       |                     | Additional Visitor | -                | -                 | -                              | -          | 5            | 5   |
|                       |                     | Crèche             | 6 Classrooms     | -                 | -                              | -          | 3            | 3   |
|                       | Block 3 Café/Retail | 418m <sup>2</sup>  | -                | -                 | -                              | 19         | 19           |     |
| <b>DCC Subtotal</b>   |                     | <b>1,230</b>       | <b>2,219</b>     | <b>2,834</b>      | <b>2,885</b>                   | <b>199</b> | <b>3,084</b> |     |
| Fingal County Council | Duplexes            | Block 1.1          | 18               | 38                | 47                             | 38         | 10           | 48  |
|                       |                     | Block 1.2          | 18               | 38                | 47                             | 38         | 10           | 48  |
|                       |                     | Block 1.3          | 18               | 38                | 47                             | 38         | 10           | 48  |
|                       |                     | Block 1.4          | 18               | 38                | 47                             | 38         | 10           | 48  |
|                       |                     | Block 1.5          | 18               | 38                | 47                             | 38         | 10           | 48  |

|                              |                         |              |              |              |              |            |              |
|------------------------------|-------------------------|--------------|--------------|--------------|--------------|------------|--------------|
|                              | Block 2.1               | 8            | 24           | 28           | 24           | 8          | 32           |
|                              | Block 2.2               | 16           | 48           | 56           | 48           | 16         | 64           |
|                              | Block 2.3               | 16           | 48           | 56           | 48           | 16         | 64           |
|                              | Block 2.4               | 8            | 24           | 28           | 24           | 8          | 32           |
|                              | Block 2.5               | 12           | 36           | 42           | 36           | 12         | 48           |
|                              | Block 2.6               | 16           | 48           | 56           | 48           | 16         | 64           |
|                              | Block 3.1               | 12           | 36           | 42           | 36           | 12         | 48           |
|                              | Block 3.2               | 12           | 36           | 42           | 36           | 12         | 48           |
|                              | Block 3.3               | 12           | 32           | 38           | 40           | 12         | 52           |
|                              | Block 3.4               | 12           | 32           | 38           | 32           | 12         | 44           |
|                              | Block 3.5               | 12           | 36           | 42           | 36           | 12         | 48           |
|                              | Block 3.6               | 16           | 48           | 56           | 48           | 16         | 64           |
|                              | Block 3.7               | 16           | 48           | 56           | 48           | 16         | 64           |
|                              | Block 3.8               | 8            | 24           | 28           | 24           | 8          | 32           |
|                              | Block 3.9               | 8            | 24           | 28           | 24           | 8          | 32           |
| Apartments                   | Block A                 | 23           | 38           | 50           | 38           | 12         | 50           |
|                              | Block B                 | 23           | 38           | 50           | 38           | 12         | 50           |
|                              | Block C                 | 27           | 47           | 61           | 47           | 14         | 61           |
|                              | Block D                 | 42           | 67           | 88           | 71           | 22         | 93           |
|                              | Block F                 | 103          | 165          | 217          | 165          | 52         | 217          |
|                              | Block G                 | 65           | 101          | 134          | 102          | 36         | 138          |
|                              | Block H                 | 46           | 72           | 95           | 88           | 24         | 112          |
|                              | Block J                 | 40           | 64           | 84           | 84           | 24         | 108          |
|                              | Block L                 | 46           | 72           | 95           | 88           | 24         | 112          |
|                              | Block M                 | 56           | 88           | 116          | 88           | 28         | 116          |
|                              | Block N                 | 56           | 91           | 119          | 96           | 34         | 130          |
|                              | Block P                 | 23           | 41           | 53           | 41           | 12         | 53           |
|                              | Town Square<br>Environs | -            | -            | -            | -            | 24         | 24           |
| Public Racks at<br>Block F/G | -                       | -            | -            | -            | 20           | 20         |              |
| Clubhouse                    | -                       | -            | -            | -            | 50           | 50         |              |
|                              | <b>FCC Subtotal</b>     | <b>824</b>   | <b>1,618</b> | <b>2,030</b> | <b>1,688</b> | <b>622</b> | <b>2,310</b> |
| <b>Total</b>                 |                         | <b>2,054</b> | <b>3,837</b> | <b>4,864</b> | <b>4,573</b> | <b>821</b> | <b>5,394</b> |

**Table 13 | Cycle Parking Standards & Proposed Cycle Parking**

At Blocks 1 to 6, visitor parking is provided under podium/basement as well as on the street. At each block entrance, it is proposed to introduce 10 no. visitor cycle parking spaces in the form of Sheffield-style stands. These will provide convenient parking for short-stay visitors.

As set out in the Table above, it is proposed to provide ample cycle parking over and above the requirements set out in the Design Standards for New Apartments.

## 8. Modal Choice Targets

### 8.1 Strategy

The strategy for this Travel Plan is based on the movement of people not vehicles.

The objectives of the Plan are:

- (a) To endeavour to reduce the use of the car by single occupants;
- (b) To endeavour to reduce the use of the car for the journey from Belcamp to work, especially during network peak periods;
- (c) To encourage the development of more sustainable transport modes for trips to and from Clongriffin
- (d) To increase the percentage of persons choosing to walk, cycle or travel by public transport to and from Clongriffin instead of driving;
- (e) To create an alliance with Fingal County Council and Dublin City Council, providers of public transport and tenants/owners of other major developments to promote a sustainable transport network in the Belcamp area.

In pursuance of achieving these objectives, targets for residents have been set for the future year of 2027.

These targets are based on data presently available from the South Fingal Transport Study carried out by SYSTRA in 2019 on behalf of FCC and will be measured to monitor progress.

Further targets will be developed during the implementation of this Plan as development and infrastructure progresses and new data becomes available.

The promoters of Belcamp are aware of the importance of maximising opportunities to make non-car trips for the journey to/from the development. To this end, the provision of close facilities helps in reducing the car use for other purposes (i.e. schools, employment, shopping, etc.).

### 8.2 Existing and Target Modal Split – Swords North West Sector

The Swords Sub Area Report, prepared by SYSTRA in 2019 as part of the overall South Fingal Transport Study, places emphasis on the NTA Statement of Strategy (2018 – 2022) which includes as a priority the promotion of more sustainable modes of transport (e.g. public transport and active modes of travel).

According to Section 2.3.1 of the Swords Sub Area Report, the proposed development of Oldtown 05 – and the overall Oldtown-Mooretown LAP lands, falls within the ‘North West Sector’ of Swords. See Figure 25 – extracted from ‘*Figure 2.2 Swords Sectors*’ of the Swords Sub Area Report.

Section 4.2.2.1 of the Swords Sub Area Report provides a comparison between three distinct scenarios (DoMin 2016, DoMin2027 and GDA Strategy No Metro 2027) to identify potential future changes in modal choice for the ‘Swords North West Sector’ for the future year of 2027 with no intervention (DoMin 2027) and with the implementation of the GDA Strategy (2027 GDA Strategy No Metro). The GDA Strategy consists of NTA GDA Strategy improvements to the bus network and cycle facilities without the implementation of the MetroLink. Bus Connects Project is included as part of the NTA GDA Strategy.

The chart below – extracted from ‘*Figure 4.3 Trip Generation by Mode, Swords North West*’ within Swords Sub Area Report of the *South Fingal Transport Study*, indicates that during Census 2016, the modal split in the Swords North West sector was 52% by Car, 27% by Public Transport, 18% by Walk and 2% by Cycle. The chart also shows that for the 2027 DoMin, with the recognised housing in place (including the overall Oldtown-Mooretown LAP) without any intervention to the transportation network, the Swords North West

area will face a large increase in the use of cars (to 62%), followed by a decrease in the use of Public Transport to 16%, 20% On Foot and the remaining 2% Cycle.

In the GDA Strategy scenario, with the recognised housing in place and an enhanced bus and cycle network (including Bus Connects), the results indicate that car trips will reduce considerably when compared to the 2027 DoMin, whilst public transport will increase. However, the absolute level of car trips in this scenario, with no further interventions, will remain higher than the current levels (DoMin 2016), and the identified modal split is predicted as the same recorded during Census 2016 – 52% by Car (8,528 trips), 27% by Public Transport (4,386 trips), 18% by Walk (2,958 trips) and 3% by Cycle (372 trips). This indicates that improvements to the bus/cycle network, will avoid a percentage increase in the Car usage in Swords North West sector, however the total number of car trips will still be higher than the current values (DoMin 2016), which demonstrates the importance of targeting and promoting the use of sustainable modes of transport on an ongoing basis to avoid additional traffic pressure to be added to the local and surrounding road network.

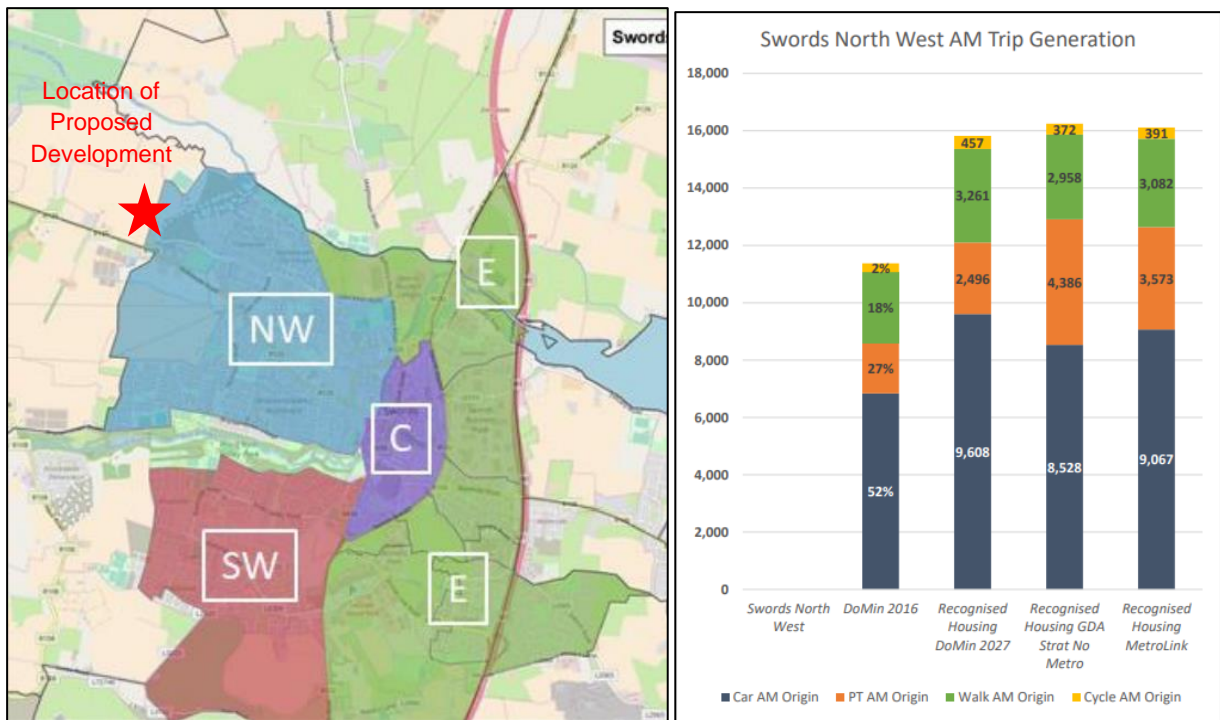


Figure 25 | South Fingal Transport Study – Existing and Target Modal Split.

## 9. Travel Plan

### 9.1 Introduction

The Dublin Transportation Office in its Advice Note on Mobility Management Plans (July 2002) describes Mobility Management as *“a transport demand management mechanism that seeks to provide for the transportation needs of people and goods. The aim is to reduce demand for and use of cars by increasing the attractiveness and practicality of other modes of transport.”*

A Travel Plan will be implemented and developed on an ongoing basis with the triple objectives of promoting sustainability, enhancing public transport and reducing dependency on the use of the private car. It is important to strike an appropriate balance between promoting new development and preventing excessive car parking provision that can undermine cycling, walking and public transport use.

The Travel Plan is intended to deal with the typical day-to-day operating conditions at the site.

### 9.2 Action Plan

#### 9.2.1 Walking

It is known that there are many local, global and personal benefits to walking to/from work every day. The proposed development is not situated close to any business/retail parks. Residents will be encouraged to walk to the nearest bus stops in the locality and use this facility to commute to their place of work, school or college. A communication tool will be developed to encourage residents to meet and walk together and create a sense of community between them.

Furthermore, children enrolled to the nearby schools will be encouraged to, together with their parents, walk to the school campus every day and avoid doing so by private cars.

#### 9.2.2 Cycling

Cycling is a great way to travel short distances. It helps to promote independence and helps the environment. This way of transport would be a great option for residents to travel to work from the proposed development. An effort will put into target an increase in residents who cycle to work. The good and new cycle infrastructure around the development will facilitate this task. For those residents wishing to commute to work by this mode, the proposed development will provide a total of 4571 No. secure bicycle parking spaces on site for the apartment units and within the curtilage for the houses with 647 No. parking spaces for visitors. The number of bicycle spaces is considered appropriate for the development, however, can be increased if demand arises. Residents will also be advised by government's Cycle to Work Scheme that might be available by their employers.

#### 9.2.3 Public Transport

There are many benefits to taking public transport every day to/from work, such as helping the environment by reducing carbon emission, reducing congestion, saving money and allowing you to relax and read. In this regard some initiatives will be used to encourage residents to take public transport to work such as, information about tax incentives for public transport users, provision of up to date public transport timetables and routes and advise the new residents about local bus routes and the nearest bus stops, and the travel time to/from Dublin City Centre, Clongriffin and key cities.

### 9.2.4 Car Sharing as an alternative to owning a car

There are many benefits of car sharing to/from work every day, such as reducing carbon emissions, reducing fuel costs and parking fees, reducing congestions and journey times due to fewer cars being on the road and increasing the pleasure of the journey due to less congestion and to having company.

A car sharing scheme will be incentivised to encourage the future residents to commute together and to minimise the number of people traveling to and from work alone.

## 9.3 Strategy for Travel

The strategy of this Travel Plan will be to encourage residents to reduce dependency on the private car and instead encouraging travel by green modes of transport.

The methodology to be employed to implement the strategy will include:

- The provision of an extensive information service for public transport routes at locations within the development;
  - The ongoing update of public transport information provided in the area surrounding the development;
  - Advising residents of tax incentives for public transport and bike to work schemes which may be available from their employer;
  - Lobbying the public transport operators to ensure the ongoing provision of a high level of service on the public transport routes serving the development;
  - The provision of secure cycle parking;
  - The provision of good footpaths and pedestrian crossings in the area of the development;
- The provision of information regarding car sharing scheme;

## 9.4 Specific Measures

### 9.4.1 Transport Co-ordinator

A management company will be appointed by the developer to manage the development. A senior member of staff from the management company who supports the philosophy of the Plan will be appointed as the Co-ordinator. The Co-ordinator should be appointed within 2 months of the Site being occupied. A dedicated commuter space will be provided within the tenant amenity area where travel information, timetables, access to the internet and notice boards will be provided.

The Co-ordinator's roles in the development, implementation and management of the Plan shall include:

- Promotion of the Travel Plan to residents;
- Implementation and maintenance of the Plan;
- Monitoring progress of the Plan;
- Liaison with public transport operators and officers of the Planning and Highway Authorities;
- Production of information reports for the Developer, the Occupier(s) and the Planning and Highway Authorities; and
- Ongoing assessment of the objectives of the Plan.

Within the first 4 months of being appointed, the Co-ordinator shall arrange for a resident's travel survey to be carried out. This can be achieved by means of self-completion questionnaires, which will help to identify travel requirements and set targets and needs.

The information requested in the questionnaire should include:

- Personal details;
- Primary mode of transport;
- Current travel patterns including the time taken to travel to work and the place of work;
- Views on alternative modes to the car (i.e. what would encourage them to switch to other modes); and
- Usage of car sharing scheme;

Traditionally, response rates to such questionnaires are relatively low and it may be necessary to encourage recipients to complete and return them.

The information obtained from the survey should be entered onto a database and used to formulate and monitor the implementation of the Plan and to set and review targets. These targets are to be agreed with the Planning and Highway Authorities or their agents within 6 months of the survey being carried out.

### 9.4.2 Public Transport

Up to date local bus timetables will be maintained within the tenant amenity area and other fixed points within the facilities on the site. Residents will be advised of their location. In addition, online access to travel information will be provided. The developer will provide all new residents with a travel pack showing alternative modes of travel to the development. Where possible, the developer will advise visitors to the site of alternative modes of travel to that of the car.

### 9.4.3 Provision for Cyclists

Secure bicycle parking facilities will be provided for residents at designated areas within the apartment blocks and on the curtilage of each house. For visitors, retail and Crèche users, a number of bicycle parking will be provided through the site at the surface level. Local cycle route information will be provided in the tenant amenity area and at other fixed points within the development, and residents will be advised of their location. Details of the cycle parking proposed is included in Section 7.

### 9.4.4 Car Parking

The co-ordinator will be responsible for the management of inappropriate parking within the development.

## 9.5 Monitoring of the Travel Plan

The monitoring and review of the Plan will be the responsibility of the Co-ordinator. The travel survey will establish the initial modal split of travel by residents.

The Co-ordinator, in consultation with the Developer, the Occupiers, and the Local Authority or its agents, will agree annual targets, following completion and analysis of the travel survey, for increasing the percentage of non-car modes.

The Co-ordinator will:

- Meet with officers of the Local Authorities or its agents within a period of 6 months following occupation of the building(s) and thereafter every 12 months to assess and review progress of the Plan and agree objectives for the next 12 months, and
- Prepare and submit to senior management of the Developer, the Occupier(s) and the Local Authorities or its agents, an annual Monitoring Report.

## **9.6 Marketing and Implementation**

As part of the implementation of this Plan, the Management Company will provide all new residents at the site with a Travel Pack. The pack will include:

- The Travel Plan;
- Public Transport information such as Bus and Rail routes and frequencies ;
- Benefits of the Travel Plan for residents and visitors;
- Details of tax incentives available, such as Bike to Work Scheme, Tax Saver Scheme for public transport tickets, etc.
- Travel Survey Form;
- Details of pedestrian facilities;
- Details of cycle facilities; and
- Details of car sharing scheme.



## 10. Conclusion

This Travel Plan has been prepared in support of a planning application for a residential development proposed in Belcamp lands, Dublin 17. This document focused on how residents could be encouraged to use sustainable means of transport to and from the site and to minimise the number of residents who will drive to work, school or college.

The implementation of the strategy proposed in this document, such as the provision of secure cycle parking spaces; up-to-date information of public transport routes and bus stop locations; information about Cycle to Work scheme to all residents; is likely to encourage residents to reduce dependency of private car and increase awareness of the benefits of traveling by green modes of transport. These measures will not only benefit the residents but will also prevent any transport impacts that can be provoked by the operational phase of the proposed development.

# UK and Ireland Office Locations

