

# Fassaroe Planning Application

## Mobility Management Plan - Fassaroe Phase 1 Planning Application

An Bord Pleanála

Spring 2022



# Notice

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## Document history

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# 1. Introduction

## 1.1. Overview

This Mobility Management Plan (MMP) has been prepared on behalf of Cosgrave Property Group for the proposed Phase 1 development of the zoned lands at Fassaroe. The Fassaroe lands are zoned under the Bray Environs Local Area Plan 2009 – 2017 and are to be developed in accordance with the provisions of a Masterplan, which was adopted by Managers Order on 22nd October 2010.

The overall lands are zoned for residential, employment and mixed use development along with substantial areas of open space. The full build out of the zoned development lands at Fassaroe will potentially accommodate 4,000 residential units, employment development for 3,000 jobs, a neighbourhood centre, a primary and secondary school and significant open space provision.

The first step of the plan is to prepare a planning application for Phase 1 of the development.

A full description of the Phase 1 development is included in Chapter 2 of the EIS included within this application.

In summary, the proposed Phase 1 development comprises the following:

- Road link (2.4km) connecting N11 to Ballyman Road (with westerly connection to Ballyman Road already in place);
- Pedestrian / cycle route including bridge across the N11 to Dargle Road Upper;
- 15.3ha of District Park / Active Open Space;
- 650 no. residential units comprising 241 no. houses and 409 no. apartments;
- 3 No. pocket park areas comprising a total of 0.43ha;
- 733sq.m approx. crèche with capacity for approx. 138 no. childcare spaces;
- Retail unit / kiosk (108sq.m.) in district park;
- Neighbourhood Centre Phase 1 commercial and community uses (1,875sq.m. total, of which 1,035sq.m.retail, 360sq.m. café, and 480sq.m.community concierge);
- Demolition of an existing dwelling at Berryfield Lane;
- Rerouting and undergrounding of overhead ESB lines (110kV and 38kV lines) across site and into existing ESB Substation;
- Water supply, foul and surface water drainage proposals;
- Provisions for public bus services within the proposed layout; and
- Remediation of 5 no. historic landfill sites in line with Certificates of Authorisation issued to Wicklow County Council by the EPA in 2019.

This Outline MMP focuses on the residential element of the proposed Phase 1 development which is the subject of this application. It is considered that the Creche is not of a scale which would require its own plan. However, it should be noted that the Creche will facilitate staff car parking and set-down spaces of an order which will self-regulate travel demand. In terms of the neighbourhood centre uses proposed, the scale of the individual units would not require an MMP.

The MMP proposes a co-ordinated and area wide approach to managing travel demand within the proposed development and the surrounding area.

The following documentation has been referenced in the preparation of this MMP:

- Your Step By Step Guide To Travel Plans (NTA 2012);
- Achieving Effective Workplace Travel Plans (NTA 2011);
- Traffic and Transport Assessment Guidelines (TII 2014);
- Making Residential Travel Plans Work: Guidelines for New Development (UK DfT 2005);
- Traffic Management Guidelines (DoELG, 2003);
- Smarter Travel – A New Transport Policy of Ireland 2009 – 2020 (DoT 2009);
- Transport Strategy for the Greater Dublin Area 2016 – 2035 (NTA 2016);
- Draft Transport Strategy for the Greater Dublin Area 2022-2042 (NTA, 2021);
- Greater Dublin Area (GDA) Cycle Network Plan (NTA, 2021);

- Sustainable Urban Housing: Design Standards for New Apartments (DHPLG, Dec 2020);
- Wicklow County Development Plan 2016 – 2022;
- Draft Wicklow County Development Plan 2021-2027;
- Wicklow County Council - Bray Environs District Local Area Plan (LAP) 2018-2024;
- Wicklow County Council - Bray Environs Local Area Plan 2009-2017;
- National Transport Authority & TII, WCC & DLRCC - Bray Environs Transport Study (BETS) 2019; and
- Fassaroe Masterplan (adopted 2010).

## 1.2. What is a Mobility Management Plan?

An MMP is a robust package of measures aimed at encouraging a shift to sustainable travel modes such as walking, cycling and public transport. The plans are developed on a bespoke basis and include improvements to infrastructure as well as behavioural change measures, such as improved provision of information or promotional campaigns and events.

An MMP is therefore a strategic management tool, designed to accommodate a site's specific transportation needs. The MMP aims to inform and assist people regarding how, why and when they need to travel. It provides a forum to promote and support the use of alternative, active and sustainable transport modes such as walking, cycling, shared transport and mass transit such as bus and rail. Consequently, the MMP will also assist in reducing dependency on private cars and mitigate against traffic congestion and its inherent environmental (vehicles powered by internal combustion engines), social and economic impacts.

This Mobility Management Plan (MMP) has been developed with specific reference to the site location, site context and proposed site layout and sets out the self-regulating management of travel demand. As such this MMP will help reduce the amount of car travel to and from the proposed development site at Fassaroe and the wider site. Not only will this bring benefits to those future occupiers of the development but also to the wider local community and environment.

This MMP is not a fixed plan but a dynamic and evolving document that can be updated and adjusted to reflect changing site characteristics, availability of transport infrastructure and behavioural changes. The measures outlined in this MMP are focused on promoting access to the site by alternative, active and sustainable modes of transport and reducing single occupancy car travel. In general, the ultimate occupiers will be encouraged and facilitated to put these measures into practice themselves.

## 1.3. Accompanying Documents

Chapter 12 of the accompanying Environmental Impact Assessment Report (EIAR) identifies the potential transport impacts of the proposed development with respect to vehicular traffic and sets out the existing and proposed public transport, walking, and cycling infrastructure in the area.

The masterplanning of the site has been developed in a collaborative approach with other members of the Design Team and with external stakeholders such as Wicklow County Council (WCC), National Transport Authority (NTA) and Transport Infrastructure Ireland (TII) to maximise connectivity and permeability for pedestrian, cyclists and linkages to public transport infrastructure in order to maximise the potential for active and sustainable travel by all users to and from the development at Fassaroe.

The development includes pedestrian and cyclist only routes as well as a multi-modal street network. The multi-modal street network has been developed to be in accordance with Design Manual for Urban Roads and Streets (DMURS) that promotes walking and cycling through the design of low traffic low speed environments. Public transport services include the adjacent Luas Green line services and public transport bus services and a proposed private bus service link to be operated by the applicant.

This MMP should be read in conjunction with the EIAR and all planning, engineering and architectural reports and drawings.

## 2. Existing Conditions

Given the undeveloped nature of the zoned lands the existing transport infrastructure in the vicinity of the site, particularly for sustainable transport, is limited. The Fassaroe lands are planned to be developed on a phased basis that will incorporate appropriate transport interventions which will support the sustainable development of the lands in tandem with the introduction of transport infrastructure both within and adjacent to the development land and in the wider regional area. In this context, the development of the lands and the subsequent phases of development will be integrated with the delivery of transport infrastructure by the relevant authorities and agencies, as set out in the Transport Strategy for the Greater Dublin Area 2016-2035 and the Bray Environs Transport Study (BETS) 2019. The future transport provision that will accompany the development are set out in Section 3.

## 3. Future Transport Proposals

### 3.1.1. Introduction

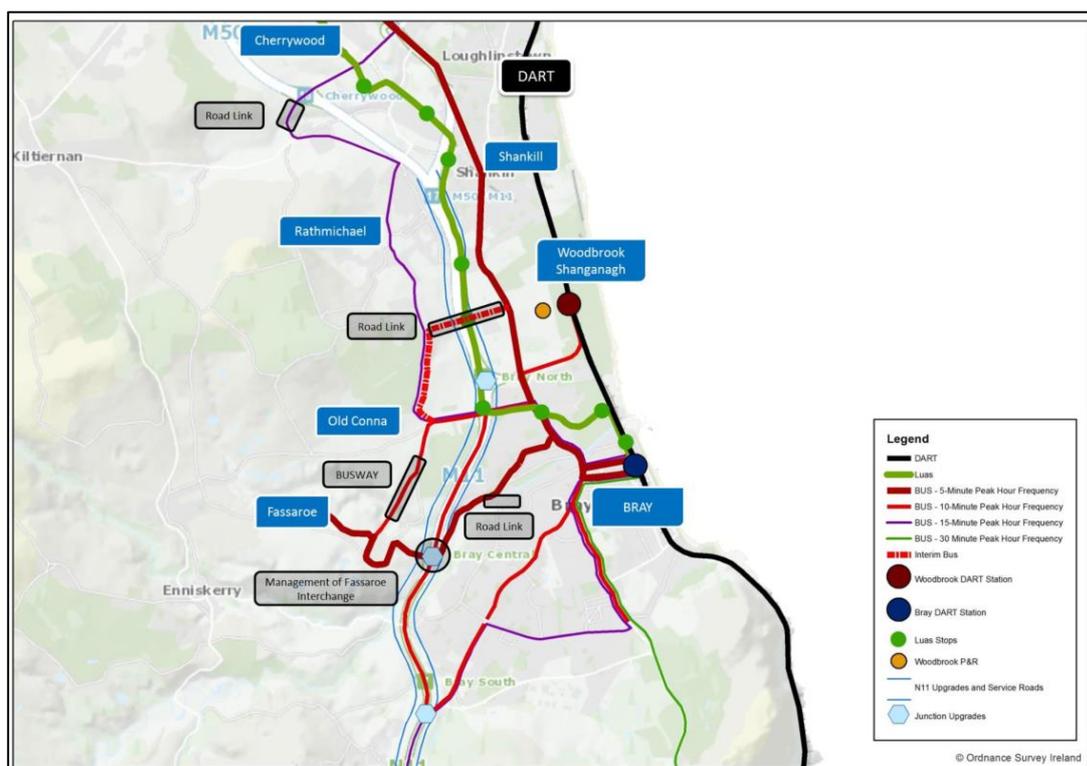
The lands at Fassaroe will be developed in the context of a plan – led integrated land use and transport strategy based on delivering the regional and county spatial and land use planning objectives integrated with a detailed transport strategy that is coordinated between the relevant agencies and authorities including the National Transport Authority (NTA), Transport Infrastructure Ireland (TII), Wicklow County Council (WCC) and Dun Laoghaire Rathdown County Council (DLRCC).

The transport requirements for the development of the zoned lands at Fassaroe are set out in the regional Transport Strategy for the Greater Dublin Area and are further elaborated and detailed in the Bray Environs Transport Study (BETS) developed in 2019. The latter contains specific transport infrastructure requirements that are required to facilitate both an initial phase of development and the full build out of the Fassaroe lands.

### 3.1.2. BETS

In overall terms BETS outlines a suite of transport infrastructure improvement measures, to be delivered by 2035, that will serve all key development sites in the Bray Environs including Fassaroe, Bray Golf Club, Woodbrook, Shanganagh Castle, Old Conna and Rathmichael. This preferred approach is illustrated in Figure 3-1.

**Figure 3-1 - Preferred BETS Transport Infrastructure 2035**



### 3.1.2.1. BETS Fassaroe Transport Infrastructure Requirement

The specific transport infrastructure requirements for the full development of the lands at Fassaroe are set out in Section 2.3.1 of the BETS. They are:

1. Fassaroe development roads;
2. N11 Cycle and Pedestrian Bridge;
3. N11/M11 Junction 4 to 14 Improvement Scheme;
4. Delivery of Wicklow County Part 8 N11 capacity and safety upgrades, as approved;
5. Busway from Fassaroe to Old Connaught over County Brook at Ballyman Glen;
6. Traffic Management Measures at Fassaroe Interchange to protect strategic function of the N11/M11; and
7. Commitment to a phased introduction of bus and enhanced rail services in line with increased demand.

Items 3 and 6 are effectively mutually exclusive. The traffic management measures at Fassaroe Interchange are shorter term requirements ahead of the N11 / M11 Improvement Scheme. Item 4 refers to already approved works at Junction 8 of the N11 at Kilmacanogue. These are safety works incorporating auxiliary lane provision that will also benefit mainline flow conditions.

The full build out of the zoned development lands at Fassaroe will potentially accommodate 4,000 residential units, employment development for 3,000 jobs, a neighbourhood centre, a primary and secondary school and significant open space provision.

This assessment is for the first phase of development which incorporates 650 residential units, approximately 16% of the ultimate overall residential provision, the majority of the neighbourhood centre and a significant proportion of the major open space provision. Thus, the first phase of development at Fassaroe will, in the context of the ultimate scale of build out of the lands, be a relatively small portion of development of the lands. However, as set out in more detail below, this first phase of development will deliver much of the transport infrastructure for the full build out.

This initial phase incorporates the Fassaroe development roads, including the road link to the Ballyman Road (Item 1), the N11 cycle and pedestrian bridge (Item 2), the N11 Part 8 works (Item 4), the traffic management measures at the Fassaroe Interchange (Item 6) and the initial phases of public transport services (Item 7). The N11 / M11 Junction 4 to 14 Improvement Scheme (Item 3) and Busway from Fassaroe to Old Conna (Item 5) will be required for later stages of the development of the lands.

### 3.1.2.2. Bray Environs Transport Study – Requirements for first phase of development at Fassaroe

Section 3.2 and Section 3.3 of the BETS provides more detailed guidance on the transport infrastructure required to deliver the lands at Fassaroe on a phased basis, incorporating **a first phase** of development of approximately 650 residential units and associated supporting community facilities. Table 3.1 of the BETS outlines required transport infrastructure and services along with proposed implementation mechanisms for this first phase of development which are as follows:

**Table 3-1 - BETS Requirements for Phase 1 development (650) at Fassaroe**

Infrastructure or Service	Delivery Process	Work Commenced	Completed to a Standard to be Taken in Charge
<b>Fassaroe Development Roads</b>	Part of Planning Application	Prior to Occupation of any dwellings	Prior to Occupation of any dwellings
<b>N11 Cycle and Pedestrian Bridge</b>	Part of Planning Application	Prior to Occupation of any dwellings	Prior to Occupation of any dwellings
<b>Traffic Management Measures at Fassaroe Interchange arising from the development</b>	Wicklow County Council Traffic Management System Framework to be agreed with TII within 2 months of the agreement of the Bray Study .	Prior to Occupation of any dwellings	Prior to Occupation of any dwellings
<b>New bus services in line with demand</b>	Part of Planning Application with agreement of NTA	Phased introduction as dwellings are completed	n/a
<b>Bus Priority on Upper Dargle Road including the approach to Sunnybank Junction</b>	In conjunction with Phase 1(a) development	Prior to occupation of any dwellings	n/a – WCC Scheme
<b>Bus priority on Dublin Road – Castle Street</b>	Prior to occupation of 50% of Development	Prior to occupation of 100% of Development	n/a – WCC / NTA Scheme

In addition to these requirements, Section 3.2 of the BETS states that, for development to proceed, the following must also be demonstrated:

- a) *That the proposed development provides fully for walking and cycling trips to all local services within Fassaroe;*
- b) *That the applicant will provide a bus service for Bray DART station in advance of demand justifying public investment as part of the expansion of the bus network under BusConnects;*
- c) *That the applicant has fully assessed a requirement for a bus service to Bride’s Glen or Cherrywood Luas and provides same if demand is deemed sufficient in advance of demand justifying public investment as part of the expansion of the bus network under BusConnects; and*
- d) *That the applicant demonstrates how demand for travel to school from Fassaroe can be accommodated without undue recourse to the private car.*

The BETS States that the delivery of the above measures would demonstrate that first phase of development ‘could be considered to be consistent with the Transport Strategy for the Greater Dublin Area and the DHPLG’s Spatial Planning and National Roads Guidelines for Planning Authorities’.

As stated in Section 3.3 of BETS, further phases of development in Fassaroe are recommended to be subject to an Implementation and Monitoring Plan to be developed by Wicklow County Council with input from the NTA and TII. The Study advises that where such a plan has been agreed, the full build out of Fassaroe can proceed on that basis. The Implementation Plan for the further phases will build on the substantive transport infrastructure provisions that will be delivered in tandem with this first phase of development and the clear requirements, set out in the BETS, for the overall transport infrastructure requirements to facilitate the full build out.

*Chapter 12 - Transportation and Chapter 2 - Description of Development* of the EIAR provides detail of the proposed measures that will be delivered in Phase 1 of the development that complies with and surpasses the BETS requirements of the development of the Phase 1 (650 unit) development.

### 3.1.3. Future Bus Services to and from the Site

In line with BETS requirements, the developer is proposing to provide bus services from for the site, from first occupation, that will increase with demand. These proposals are set out in detail in the Public Transport Access Strategy (PTAS) which has been prepared for Fassaroe by Atkins on behalf of the Developer in collaboration

with both WCC and the NTA through process of engagement. A summary of the measures is outlined below. The full PTAS document (ref 5186693DG0086) is submitted in support as part of this application.

This Public Transport Access Strategy incorporates the following elements:

- Provision of a new bus service from Enniskerry via Fassaroe to Bray, Bray DART, and Bray Interchange;
- Provision of a new bus service from Fassaroe to the Luas at Bride's Glen / Cherrywood;
- That the provision of the above PSO bus services would increase in frequency in line with demand;
- The provision of a dedicated primary school educational bus service from Fassaroe;
- Efficient and improved bus infrastructure including bus priority along the proposed routes to ensure ; and
- Ongoing Monitoring, Evaluation and Awareness to ensure the Strategy continues to meet demand.

The PTAS includes proposals for the first phase of development which is subject of this application but also sets out proposals for future phases of development of Cosgrave Property Group lands at Fassaroe. 4 no. phases of development in total are identified which are described in the Masterplan Phasing Strategy drawing by MCORM Architects submitted with this application.

The first phase of development will be serviced by direct bus services providing access to the existing Bray urban area, Bray DART, and bus services to Luas services at Brides Glen / Cherrywood to meet projected demand as shown in PTAS.

The new bus services to Bray have the advantage of providing residents with direct linkages to Bray town and Dart Station and Bray interchange that allows onward connections towards Dun Laoghaire, Docklands and Dublin City Centre.

While the new bus service to Luas provides connectivity along the Luas Green Line corridor including key trip end destinations such as Carrickmines, Sandyford, Dundrum, Stephens Green and Dublin City Centre.

In addition to the above, as an interim measure until a primary school on site becomes operational at the end of phase 2 / start of phase 3, the developer is proposing to provide a dedicated school bus services upon occupation of the development. This bus service, run by the applicant, would be similar in nature to the School Transport Scheme operated by Bus Éireann on behalf of the Department of Education.

This service would operate on a limited AM and PM basis to coincide with school opening and closing times to meet the anticipated demand of school based trips. The number of services in the AM and PM period will increase over time to reflect the increasing demand as shown in the PTAS.

The National Transport Authority has confirmed that the measures in the PTAS are acceptable and are in line with BETS requirements.

### 3.1.4. Park & Ride

As stated in Section 9.4 *Park and Ride and Interchanges*, of the Draft Greater Dublin Area Transport Strategy 2022-2042, published by the NTA in November 2021 “*appropriately located and designed Park and Ride facilities can enable people to access public transport and enhance their option to reach a wide range of destinations in a sustainable manner and increase the usage of public transport*”.

Measure INT3- Park & Ride states:

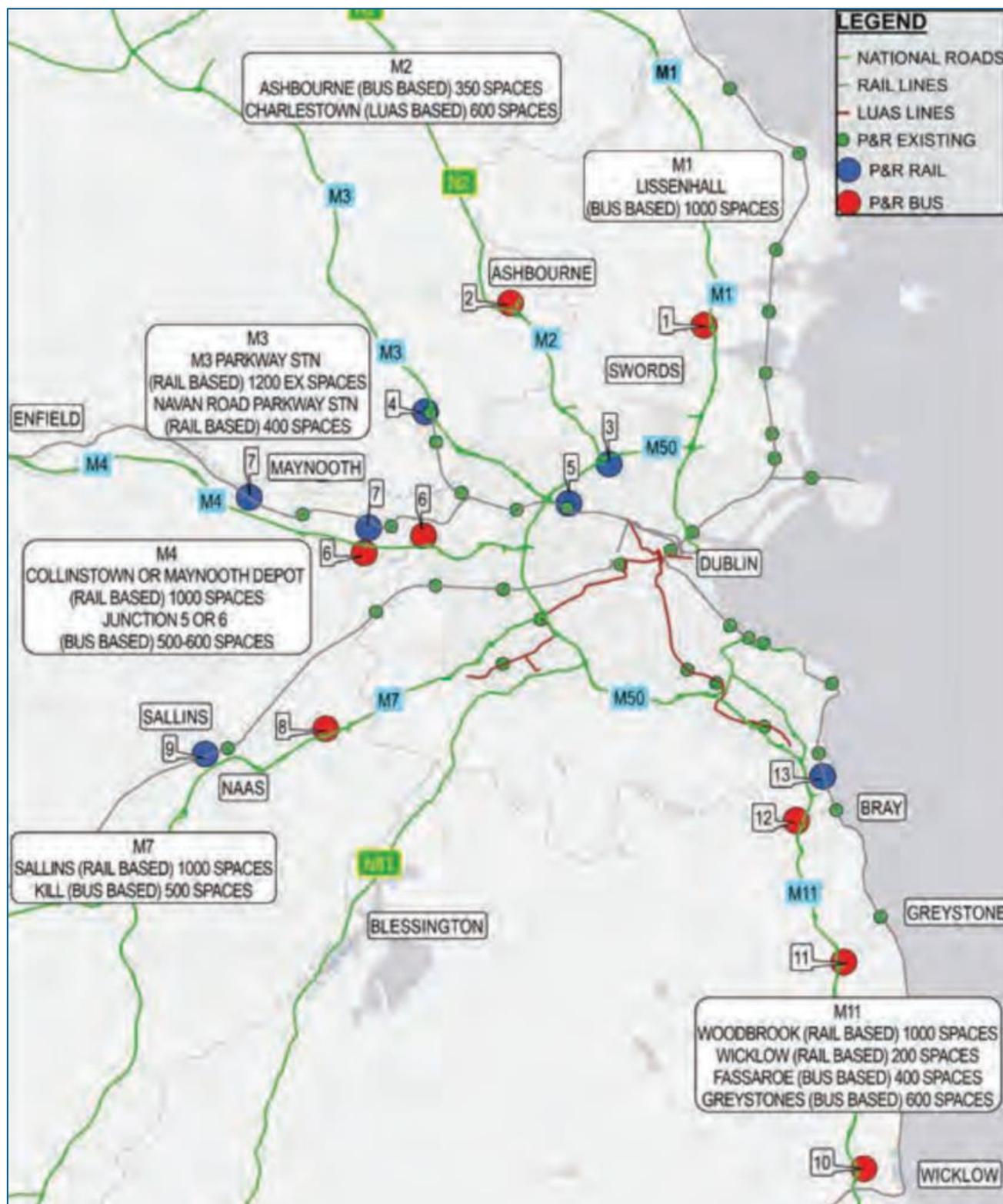
*“it is the intention of the NTA to secure the development of a network of regional level bus and rail based Park and Ride facilities in the GDA at appropriate locations where the national road network meets, or is in close proximity to, high capacity bus and rail services.”*

The draft strategy highlights a number of potential locations within the GDA where Park and Ride facilities will be developed during the lifetime of the Strategy to capture this demand. The potential Park & Ride locations identified in the draft Strategy are shown in Figure 9.1, an extract of which is shown in Figure 3-2.

One of the sites identified is at Fassaroe, site number 12. This facility will provide 400 No. spaces for a bus-based Park and Ride facility. As set out in the draft strategy, the implementation of park & ride at Fassaroe is anticipated to be one of the early measures delivered.

The provision of a Park & Ride facility at Fassaroe has the potential to provide significant additional bus services and connectivity for future residents to and from key destinations in the GDA metropolitan area include Dublin City Centre and other key trip end destinations.

Figure 3-2 – Draft GDA Transport Strategy 2022-2042 – Park & Ride locations



### 3.1.5. Future GDA Combined Rail Network

As set out in the Draft GDA Transport Strategy 2022-2042, there is provision for a significantly extended rail network for the Greater Dublin Area including new Luas lines, Dart+ and Metrolink that will provide an interconnected network of high capacity services to meet the travel demand of the metropolitan area. This future rail network is shown in Figure 3-3. The proposal includes the extension of the Luas from Bride Glen to Bray.

As set out later in this PTAS, the bus services proposed from Fassaroe to service the future residents of the development would be able to avail of this network via interchange at Bray Dart and Luas services at Cherrywood and Brides Glen. These services provide the users with greater connectivity and a wider range of destinations that in turn is likely to increase the public transport mode share for residents.

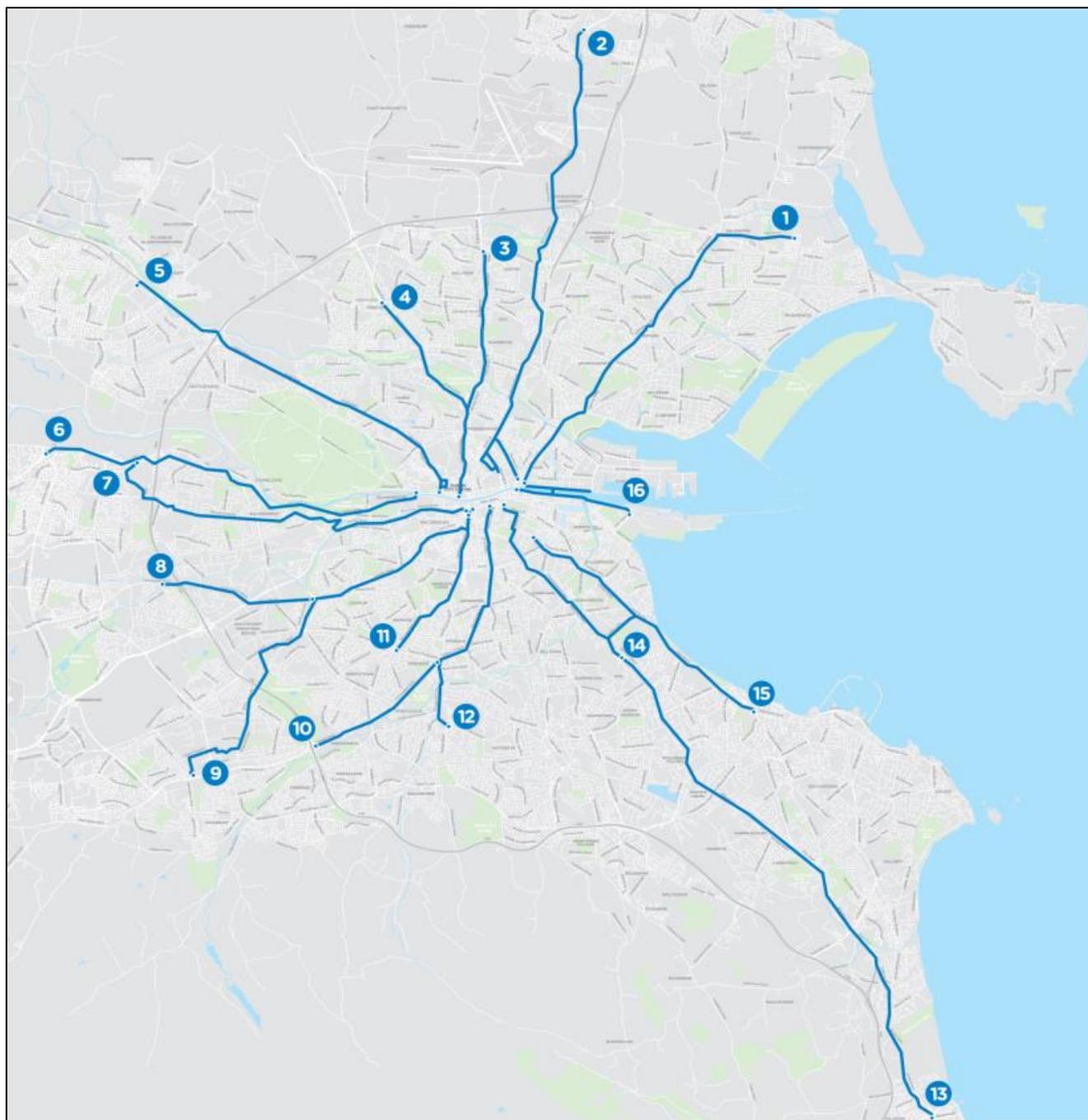
**Figure 3-3 - Draft GDA Transport Strategy 2022-2042 Rail Network**



### 3.1.6. BusConnects

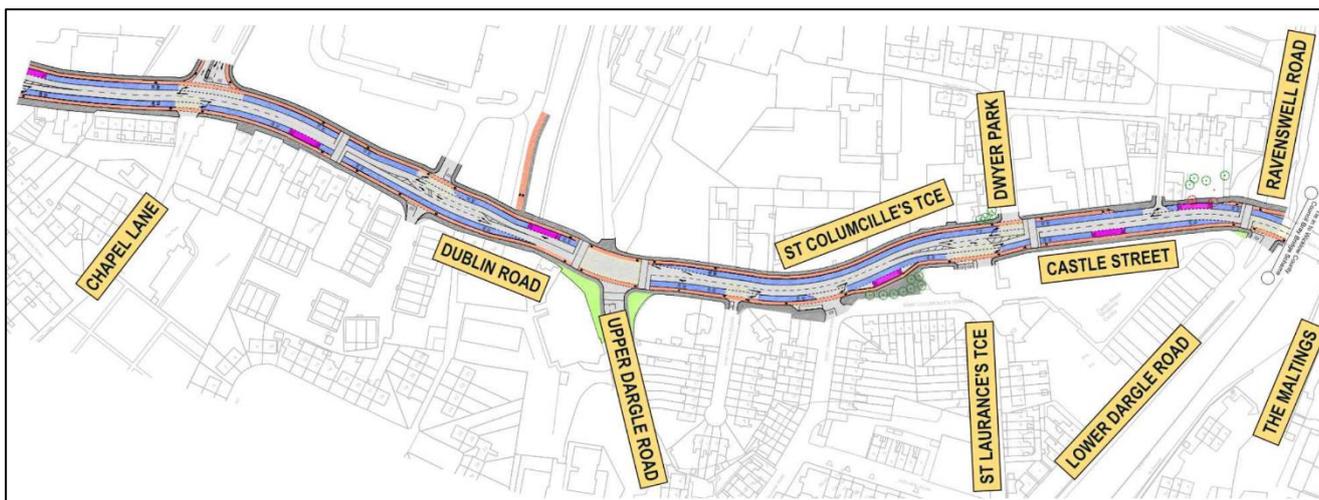
BusConnects is the NTA's programme to greatly enhance bus services in the Greater Dublin Area. It consists of two strands the Core Bus Corridor (CBC) and the Network Redesign. Dublin to Bray CBC route 13 forms one of the 16 radial routes as shown in Figure 3-4.

**Figure 3-4 - BusConnects Core Bus Corridors**



Bus priority measures will be introduced along these 16 radial routes that will reduce delays to bus journeys, making them more reliable and efficient which in turn should help to increase bus demand and bus patronage. In the Bray area, the bus priority measures include improvements on Castle Street, Dublin Road and the junction of Dublin Street / Castle Street / Upper Dargle Road. An extract of these emerging preferred route bus priority measures is shown in Figure 3-5. These include continuous bus lane provision southbound on Castle Street, across the River Dargle Bridge and continuous northbound bus lane provision along Castle Street to the junction with Upper Dargle Road.

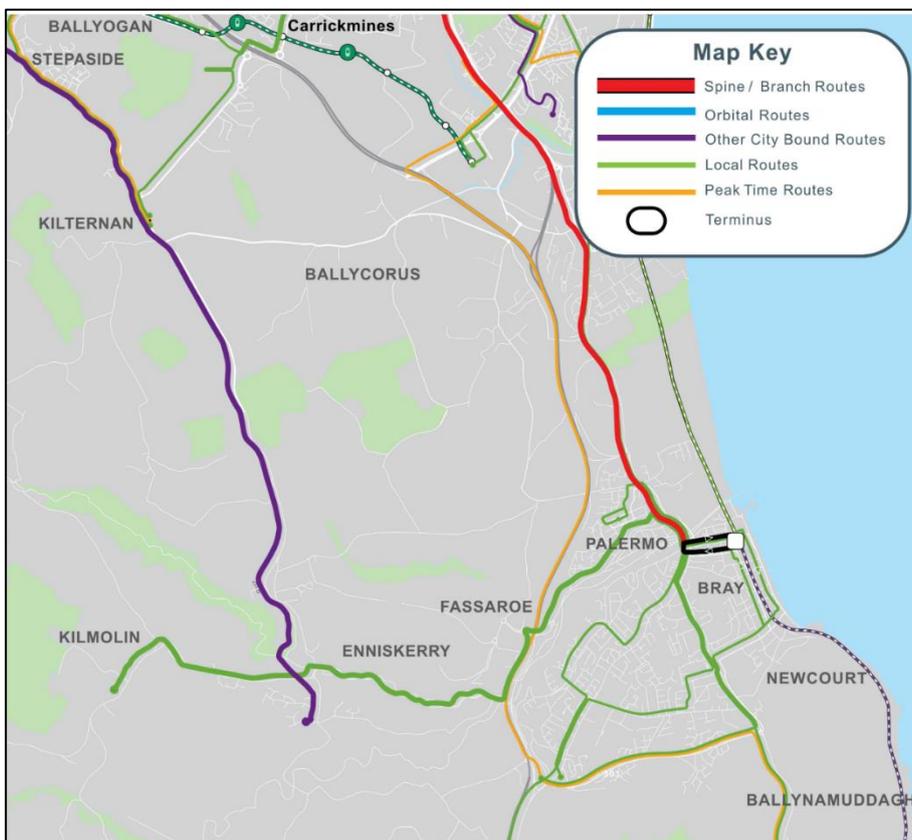
**Figure 3-5 - BusConnects - bus priority measures in Bray**



All the radial bus routes are currently at the third stage of public consultation by the NTA on their respective emerging preferred routes. Construction of the core bus corridor network will commence in 2022, to be completed by 2027. It is important to note that once permission is granted for BusConnects, it will be possible for sections in Bray area such as Castle Street to be implemented ahead of the delivery of the entire BusConnects Corridor No.13. These will be delivered in tandem with the delivery of the Upper Dargle Road and Bray Bridge bus priority measures.

The Bus Network Redesign element of BusConnects will see the existing bus network undergo a redesign to accommodate a more efficient bus service. The redesigned network for Bray is shown in Figure 3-6.

**Figure 3-6 - BusConnects Network Redesign Bray Area**



Upon completion, the bus network improvements, services and frequencies set out in Table 3-2 will be provided in the Bray area.

**Table 3-2 - BusConnects - bus services in Bray Area**

Route No.	Frequency of Service	Route
E1	Northwood – City Centre- Bray Main Street- Ballywaltrim	Peak hour 8m frequency All other times 10 minute
88	Enniskerry-Belarmine-Dundrum-Mountjoy Square	1 an hour
L1	Greystones - Newcastle Loop Clockwise - Bray	40 minute frequency
L2	Greystones – Newcastle Loop Anticlockwise	40 minute frequency
L11	Kilmacanogue – Bray – Dun Laoghaire	20 minute frequency
L12	Ballywaltrim- Bray Station	20 minute frequency
L14	Southern Cross Road – Bray Station	30 minute frequency
L15	Shop River – Enniskerry- Bray	60 minute frequency
X1	Kilcoole – Southern Cross – City Centre	Between 6am – 7am 2 services 7am to 8am - 4 services 4pm to 5pm - 1 services 5pm to 6pm - 6 services
X2	Newcastle – Kilcoole – Southern Cross – City Centre	Between 6am – 7am 1 service 7am to 8am - 2 services 4pm to 5pm - 1 services 5pm to 6pm - 2 services

As shown in Table 3-2, delivery of the BusConnects network redesign will result in an enhanced service provision in the Bray area. In the vicinity of Fassaroe, the peak frequency of express services operating on the N11 towards Dublin City, the X1 and X2, will replace the existing No.84X express service and will increase from the current level of 4 services per hour to 6 services per hour. The current No.185 service will be retained as the L15 service.

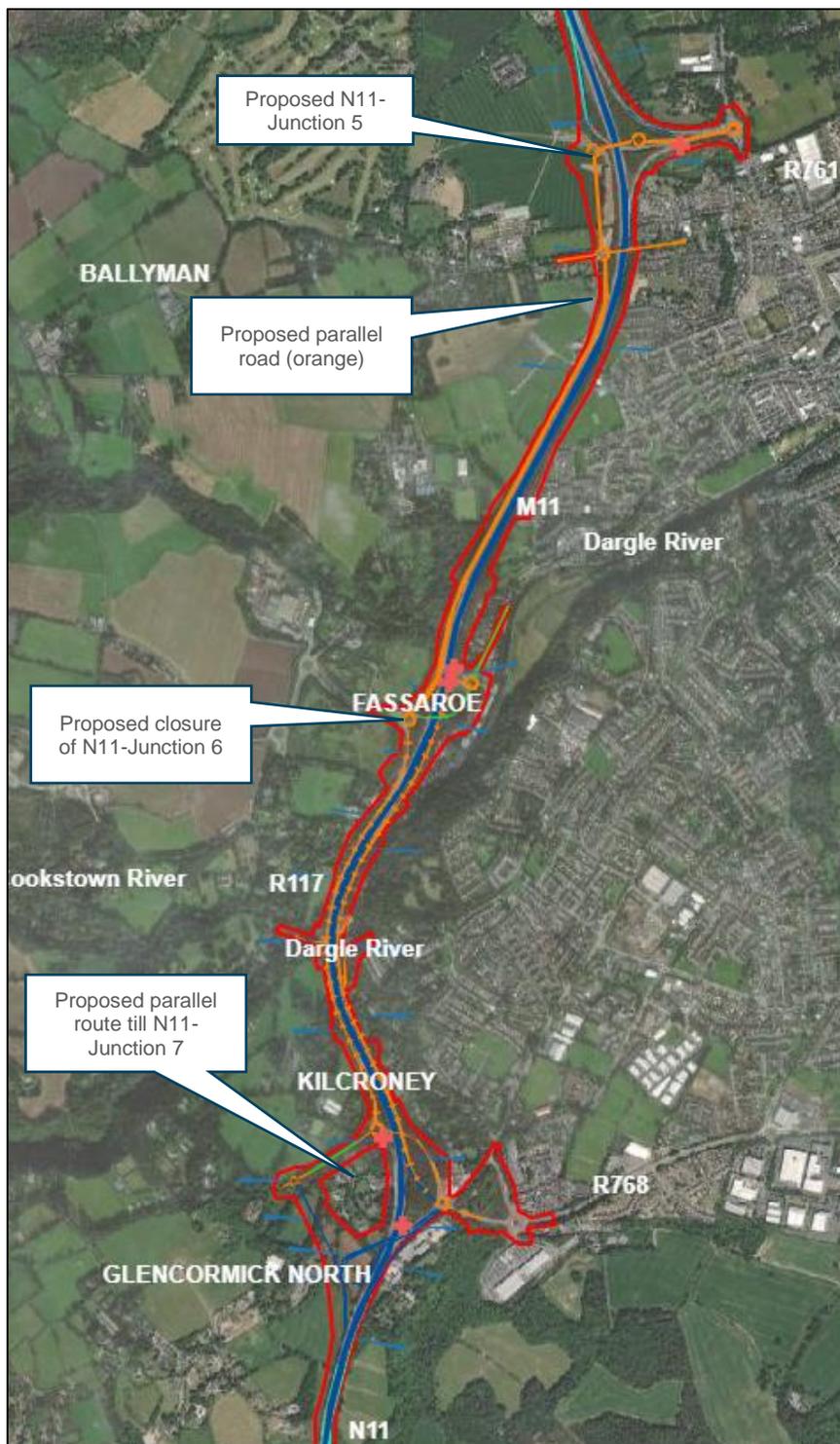
### 3.1.7. N11 Junction 4 to Junction 14 improvement scheme

The N11/M11 Junction 4 to Junction 14 Improvement Scheme (hereafter referred to as the N11/M11 Scheme) is a transportation project aimed at alleviating congestion, improving safety and optimising the efficiency and function of the N11/M11 as a transport corridor. The N11/M11 Scheme, is approximately 22km in length, extending from the existing M11/M50 junction west of Shankill, Co. Dublin, to the N11/M11 junction at Coyne’s Cross, Co. Wicklow.

The primary objective of Phase 1 is to develop and investigate, in detail, the feasibility of the project and to establish and implement a project management structure. In addition, the integration of the scheme with public transport and/or other transport modes was also assessed. Phase 1 was completed in October 2019 and was approved to progress to Phase 2.

Phase 2, Option Selection, undertook a systematic options assessment that resulted in a Preferred Option being identified. The Preferred Option was out for public consultation during Q3 2021. The preferred option involves the provision of new parallel roads adjacent to the N11/M11 mainline, together with improved junction layouts and the proposed closure of certain primary junctions to improve mainline flow and reduce congestion associated with on and off traffic movements at some interchanges. The preferred option identified the closure of N11-Junction 6 at Fassaroe and diverting all the traffic to/from north of the development to the parallel road which connects N11/M11 corridor at proposed N11-Junction 5 interchange. The vehicles from South of the development will also be diverted to the parallel road which connects to N11/M11 at N11-Junction 7. The Preferred Option alignment is shown in the Figure 3-7.

**Figure 3-7 – Preferred Option for N11-M11 improvement scheme**



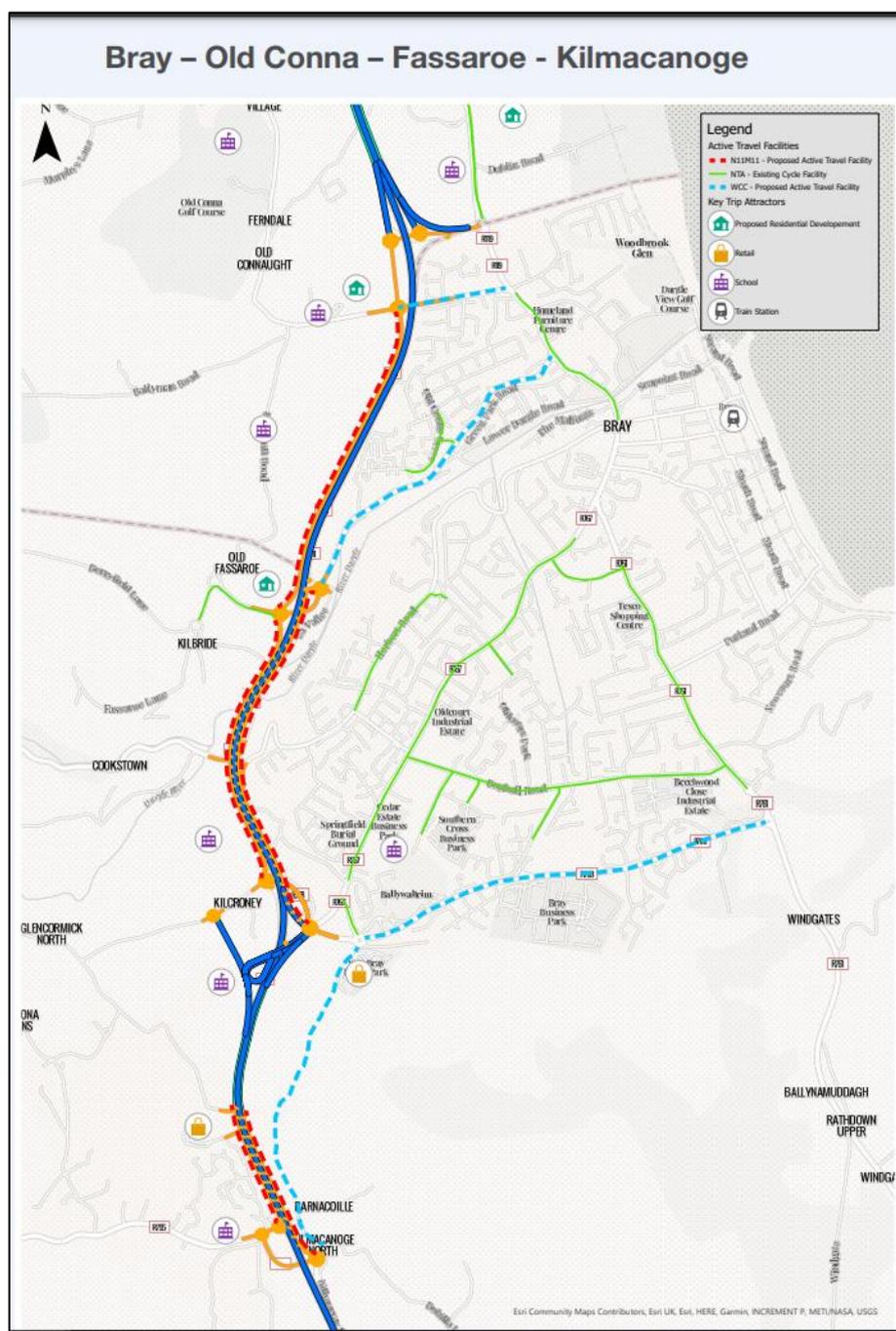
The preferred option also includes a major investment in the bus services within the N11/M11 study area – in addition to those already included in the BusConnects proposals. This will reduce the car demand on N11/M11 by encouraging mode switch to public transport alternatives. The scheme includes provision of local Bray environs services connecting Fassaroe to Dublin and Bray Dart station. This will facilitate development at Fassaroe.

The future Active Travel Strategy for the N11/M11 Corridor includes a number of integrated components, with the aim of delivering a credible alternative mode of travel which is safe, inclusive, connected and attractive. This Strategy includes the following elements:

- Active Travel Facilities identified within the NTA's Greater Dublin Area Cycle Plan;
- Active Travel Facilities identified within Local & Regional Plans; and
- Active Travel Facilities delivered as part of the N11/ M11 Scheme.

The preferred active travel measures related to Fassaroe are shown Figure 3-8.

**Figure 3-8 - Preferred Active Travel measures as part of N11/M11 improvement scheme**



As the N11/ M11 Scheme is still in development, the final measures have not been agreed and there are no definite timelines for implementation of any agreed measures. The agreed scheme will need to be cognisant of the zoned lands at Fassaroe and make appropriate considerations for connectivity.

### 3.1.8. Bray DART Public Interchange

WCC, in partnership with the NTA, are currently delivering improvements to the public realm in the immediate vicinity of Bray DART Station that will facilitate improved interchange for commuters between bus and rail services as well as creating a safer environment that prioritises walking and cycling.

### 3.1.9. Other WCC schemes

In addition to the above measures, WCC is currently undertaking a study to provide enhanced bus priority measures along the Upper Dargle Road to Castle Street. WCC are also undertaking a study to provide the Dargle River Greenway that will provide a segregated pedestrian and cycle route between La Valle and Bray Town Centre.

### 3.1.10. Summary – Future Transport Measures

Upon delivery of the above measures, in combination with the proposed measures that will be delivered by the applicant, future residents will be able to avail of a wider range of sustainable travel options for work, education and leisure based travel to and from site. It is therefore reasonable to assume that the delivery of this transport infrastructure will provide future users with a wide range of transport choices and will increase the sustainable mode share and make the development more sustainable.

## 4. Aims, Objectives and Targets

This MMP will form a framework for sustainable travel for the development of Phase 1, Fassaroe, that will change and adapt as future phases of the wider masterplan lands the surrounding neighbourhood and infrastructure continues to be developed. As the Phase 1 Neighbourhood Centre commercial uses is made up of a smaller number of units that fall below thresholds for an MMP, the focus of this MMP for Phase 1 will be for a residential user.

The objectives of the Mobility Management Plan are to:

- Achieve a high level of Community Awareness of and Participation in the MMP;
- Encourage the development of a healthy, sustainable and vibrant local community through promotion of travel by sustainable modes;
- Ensure a high level of Community Participation in the development of the travel surveys to indicate participation;
- Improve conditions for pedestrians and cyclists travelling to and from the site; and
- Develop on good urban design principles to enhance the connectivity of the site and maximise accessibility by sustainable modes.

Table 4-1 outlines tangible targets to be achieved in relation to the key objectives.

**Table 4-1 - Objectives and Targets**

<b>Objectives</b>	<b>Residential Travel Plan Targets</b>
Awareness	To provide information on sustainable travel to each resident upon occupation.
Participation	To develop a detailed residential and employment travel plan within 9 months of first occupation.
Accessibility	Build on existing and improved transport infrastructure to encourage walking, cycling, public transport and car sharing from first occupation.
Reduce Car Related Travel	To identify mode Share Targets to be agreed with Wicklow County Council following travel surveys.
Maximise the Potential for Sustainable Travel	To promote and encourage physical measures implemented as part of the site layout to encourage sustainable modes of travel from first occupation.

## 5. Strategy and Measures

### 5.1. Introduction

This section of the MMP sets out the Strategy and Measures proposed for the residential elements of the development at Fassaroe.

Clearly, as the users of the development are currently unknown at this stage, the MMP can only commit to promoting alternative modes of transport and providing the means for active and sustainable travel choices to be made.

The starting principle is that the design and layout of the development is based on DMURS principles that facilitates and encourages active and sustainable travel. This leads to the adoption of more sustainable modes for travel. The physical interventions will be supported, and active and sustainable modal shift encouraged through the development of 'softer' measures.

This section describes the services to be provided and the 'in built' infrastructure measures (as part of the layout and design of the development) which are intended to encourage use of active and sustainable travel modes and complement the strategic aspects of the MMP.

The complementary measures will address the objectives, as set out in Section 4. These are to be delivered through a co-ordinated strategy delivered by the Management Company and involving the distribution of Travel Information Packs.

### 5.2. Strategy

Travel Information Packs will form part of the marketing material for the site and will be distributed to all new residents within the development at point of sale. These will be distributed by the Management Company. The details of the Travel Information Packs would be provided to Wicklow County Council. The Travel Information Packs would ideally contain the following information:

- Information on recommended driving routes to key locations (avoidance of Berryfield Lane as a driving route);
- Information about public transport services and locations of bus stops;
- Information about walking and cycling routes;
- Information about interim school bus services as outlined in Section 3.1.3;
- Information about car parking management;
- Information on facilities available in the District Park, active open spaces and formal play areas;
- Information about local services and facilities that are within comfortable walking distance;
- Information on concierge services including package storage
- Information on active and sustainable transport measures facilitated by the development (bicycle parking, car sharing scheme, EV charging, etc.);
- Information on future public transport infrastructure; and
- Information on future walking and cycling infrastructure.

Through a monitoring and review process, the Management Company will also be responsible for ensuring that the measures proposed are implemented in the most effective way possible.

#### 5.2.1. Walking

There are many local, global, and personal benefits to walking, a few are listed following:

- W - Wake Up! - Studies have shown that individuals who walk to work, school or elsewhere are more awake and find it easier to concentrate;
- A - Always one step ahead - Walking makes people more aware of road safety issues and helps them develop stronger personal safety skills;
- L - Less congestion - If you leave the car at home and walk, there are fewer cars on the road which makes it safer for those who walk and cycle;
- K - Kinder to the environment - By leaving the car at home you are reducing the amount of CO2 produced and helping to reduce the effects of climate change and air pollution;

- I - Interpersonal skills - Walking can be a great way to meet other walkers, share the experience, and develop personal skills;
- N - New adventures - Walking is a great way to learn about your local environment and community. It's also a fun way to learn about the weather, landscape, and local ecosystems; and
- G - Get fit and stay active - Walking helps people incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind.

Walking has the capacity to replace car based journeys of up to 3.5km. A high proportion of walking journeys may form the start or end of larger journeys comprising of bus or rail links. As a result, an attractive walking experience can play a large part in encouraging public transport patronage. The site offers opportunities in terms of facilitating local trip making on foot, including access to Neighbourhood Centre, District park and public transport services.

### 5.2.2. Cycling

Research indicates that cycling is a viable mode of transport for residents wishing to undertake journeys of up to 10km. Some positive aspects of cycling are listed following:

- C - Cycling is a life skill - Cycling is a sustainable way of travelling but it's also a great recreational activity. Cycling is a skill that stays with you for life and it's a fantastic way to explore your local community;
- Y - You save time & money - cycling reduces the need to travel by car thus reducing fuel costs and freeing up road space for more cyclists;
- C - Confidence building - travelling as an independent cyclist can give people increased confidence proving beneficial in all aspects of life;
- L - Less congestion - If you leave the car at home and cycle, there are fewer cars on the road which makes it safer for other cyclists;
- I - Interpersonal skills - Cycling can be a great way to meet other cyclists and share the experience;
- N - New adventures - Cycling is a great way to learn about your local environment and community. It helps residents to understand where they live and how their actions affect their local environment; and
- G - Get fit and stay active - cycling helps people incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind.

The provision of cycle facilities at the site will play a role in promoting residents to cycle to work, school, or elsewhere.

The following initiatives and incentives will encourage cycling within the development and within the wider area:

- The development will provide high quality, secure and sheltered cycle parking which will be easily accessible to residents;
- The development will provide cycle parking for visitors and publicise these in welcome Travel Information Packs;
- Publicise the Government Bike to Work Scheme ([www.biketowork.ie](http://www.biketowork.ie)) in welcome travel packs;
- Provide information on walking and cycling distance, routes and journey times by bike or walking to key destinations in welcome travel packs for residents. This includes information regarding connection to and from the site to Bray Town Centre;
- Highlight the direct savings gained due to reduced use of private vehicles in welcome travel packs; and
- Publicise National Bike Week in welcome travel packs, see [www.bikeweek.ie](http://www.bikeweek.ie)

### 5.2.3. Public Transport

There are many benefits to taking public transport, some of which include:

- Personal Opportunities – Public transportation provides personal mobility and freedom;
- Saving fuel – Every full standard bus can take more than 50 cars off the road, resulting in fuel savings from reduced congestion;
- Reducing congestion – The more people who travel on public transport, especially during peak periods, the less people travelling by private car;

- Saving money – Taking public transport can work out to be cheaper than travelling by car and, in some instances, can save the cost of buying, maintaining and running a vehicle;
- Reducing fuel consumption – A full standard bus uses significantly less fuel per passenger than the average car;
- Reducing carbon footprint – Public transport is at least twice as energy efficient as private cars. Buses produce less than half the CO2 emissions per passenger kilometre compared to cars and a full bus produces 377 times less carbon monoxide than a full car;
- Get fit and stay active - Walking to and from public transport helps residents incorporate physical activity into their daily routines. Research shows that regular physical activity can benefit your body and mind; and
- Less stress – Using public transport can be less stressful than driving, allowing time to relax, read, or listen to music.

The following initiatives and incentives can be used to encourage residents to take public transport:

- Provide information within travel packs detailing the range of bus services and frequencies available to residents to and from the development as set out in Section 3.1.3;
- Highlight that all residents are located within 400m to 800m of a bus stop;
- Provide maps in welcome travel packs of local bus routes, the nearest bus stops, and the length of time it takes to walk to them;
- Encourage public transport use by publicising the benefits of smart travel cards to all residents in welcome Travel Information Packs;
- Publicise the availability of Real Time Information on the Bus Service Providers website and Bus Service Providers mobile app in welcome travel packs. Real Time Information shows when your bus is due to arrive at your bus stop so you can plan your journey more accurately;
- Publicise the availability of a National Journey Planner, which provides journey planning, timetable, and travel information from all licenced public transport providers across Ireland, in welcome travel packs. This Journey Planner is available on the Transport for Ireland website and as a mobile app;
- Provide maps in welcome travel packs of local bus routes, the nearest bus stops, and the length of time it takes to walk to them;
- Promote Tax Saver Commuter tickets, which offer significant savings to individuals in marginal tax rate and levies on the price of their ticket, in welcome travel packs;

#### 5.2.4. Car Sharing

There are many user benefits to access to a car sharing scheme over ownership of a private car, some of which include:

- One time sign up, no big investment; and
- Membership fee covers insurance, fuel, free parking in Dublin city Centre, maintenance, motor tax and NCT.

Benefits which the built environment can avail of include:

- Reduced emissions and pollution;
- Reduced traffic congestion;
- Reduced car parking requirements; and
- Complements and supports the uptake of all active and sustainable travel modes.

As part of the Developers initiative to provide alternative transport solutions, it is proposed to provide 1 no. car sharing (GoCar) spaces within the proposed Phase 1 development. Based on the uptake of the scheme, there is potential to provide additional car sharing spaces. In overall terms, car sharing spaces can replace up to 15 no. traditional car parking spaces.

### 5.2.5. Promotion of E-working

The suitability of e-working is something that will be very much dependant on the business models of the tenant companies and their policies. The overall Travel Plan co-ordinator will advise the tenant companies of the potential of e-working and encourage them to consider inclusion of such within their own Travel Plans and/or Travel Plan Statement.

## 6. Implementation, Monitoring and Review

The MMP **strategy and measures** outlined will be implemented over a period of time which will be continuously monitored to ensure the MMP continues to deliver on its **objectives and targets**.

A key aspect of the MMP is the provision of Travel Information Packs for residents of the mixed use development. This will be undertaken by the Management Company.

Monitoring of the MMP will be important in understanding the changing nature of staff and resident travel habits as well as the effectiveness of the MMP initiatives. The monitoring process, which will be carried out by the Management Company, will involve annual travel surveys. The surveys will commence one year from the initial post occupation travel surveys to assess changes to the mode share of trips to the development site over a three year period. This will have particular focus on the level of usage of the bicycle parking and the uptake the car sharing scheme to determine whether and when additional spaces are required.

An annual monitoring report would be produced for the site by the Management Company, setting out the results of the travel surveys and highlighting any issues arising from the review of the MMP initiatives. The report would set out appropriate changes to existing initiatives if required in order to meet the MMP objectives.

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