

Response to An Bord Pleanála Opinion relating to Transportation & Drainage

Strategic Housing Development (Reg. Ref ABP-307260-20)

Proposed Residential Development at Fosterstown North SHD,
Swords, Co. Dublin

April 2022

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This document has been prepared and checked in accordance with
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Issue	Date	Prepared by	Checked by	Approved by
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Comments

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1. Introduction

A pre-planning application was submitted by J. Murphy (Developments) Limited for a Strategic Housing Development at Fosterstown, Swords, Co. Dublin to An Board Pleanala with reference number ABP-307260-20.

This report has been prepared in response to feedback from the ABP Opinion which was issued in December 2020 and which is directly related to engineering matters.

2. ABP Opinion

Item 1

“Further consideration and justification of the documents as they relate to the provision of vehicular access from the proposed development onto the R132 having regard to, inter alia, the policies and objectives of Final County Council as set out in Fosterstown Masterplan 2019 and the implications for the strategic function of the R132 in terms of Bus Connects and Metrolink crossings which are continuing to be advanced. The justification should include, inter alia, alternatives considered/deliverable if applicable Should the proposed entrance off the R132 be maintained at application stage then a full Traffic and Transport Impact Assessment should be submitted indicating, inter alia, impact assessment on existing and possible future; pedestrian infrastructure; cycle infrastructure; bus infrastructure; Metrolink station; and vehicular movement on, and in the vicinity of, the R132. In addition, proposals to provide an interim temporary access from the R132 may wish to be investigated/considered. Any such temporary entrance proposal should include proposals for the closure of the vehicular access and the provision of appropriate public realm works following completion of the Fosterstown Link Road and associated road infrastructure to service the site via the lands to the north as identified in the Fosterstown Masterplan (May 2019). It is advisable that any entrance proposal off the R132 be subject of detailed design consultation with Fingal County Council in conjunction with the NTA and TII.”

Response

It is noted that the current policy/objectives of Fingal County Council as set out in the Fosterstown Masterplan 2019 propose that access to the masterplan lands is provided from the proposed future Fosterstown Link Road to the North and from the existing Forest Road to the West. In this regard the current masterplan requires the subject lands to be accessed through third party lands, adjoining the subject site to the north of the Gaybrook Street (See Figure 1 below). The new Fosterstown Link Road and the access via the lands to the north are not yet delivered, and therefore the applicant’s lands would be effectively landlocked until the Proposed Fosterstown Link Road and access via the lands to the north is delivered, despite having over 250m of site frontage directly onto the R132.



Figure 1 – Extract from Current Masterplan with Subject Site outlined in Black

Whilst we are conscious of the current policy/objective we feel that it is unreasonable to prevent development on the subject site due to restricting vehicular access onto the public road that fronts the site. In particular, restricting the delivery of the development at such a location well served by existing and planned public transport would be contrary to Government policy which promotes increased densities at well served urban sites, and which actively seeks to foster stronger regions via the utilisation of existing residential zoned and serviced or serviceable lands such as the subject site.

Having regard to the above, and in response to Item 1 above, we have reconsidered the access to the site in the context of the current policy/objective whilst also taking account of the need to be able to develop the site without relying on third parties. In this regard, our pre-application submission to An Bord Pleanála had proposed a signalised junction to access the development which facilitated vehicular movements in all directions. It is now proposed to seek a temporary left in/left out junction to access from the R132, which can be closed off upon the provision of permanent vehicular access as part of development on the lands to the north of the Gaybrook Stream, set out in the Fosterstown Masterplan.

Details of the proposed left in left out junction are illustrated in Figure 2 below. (The existing road layout is shown in orange in the background) :-

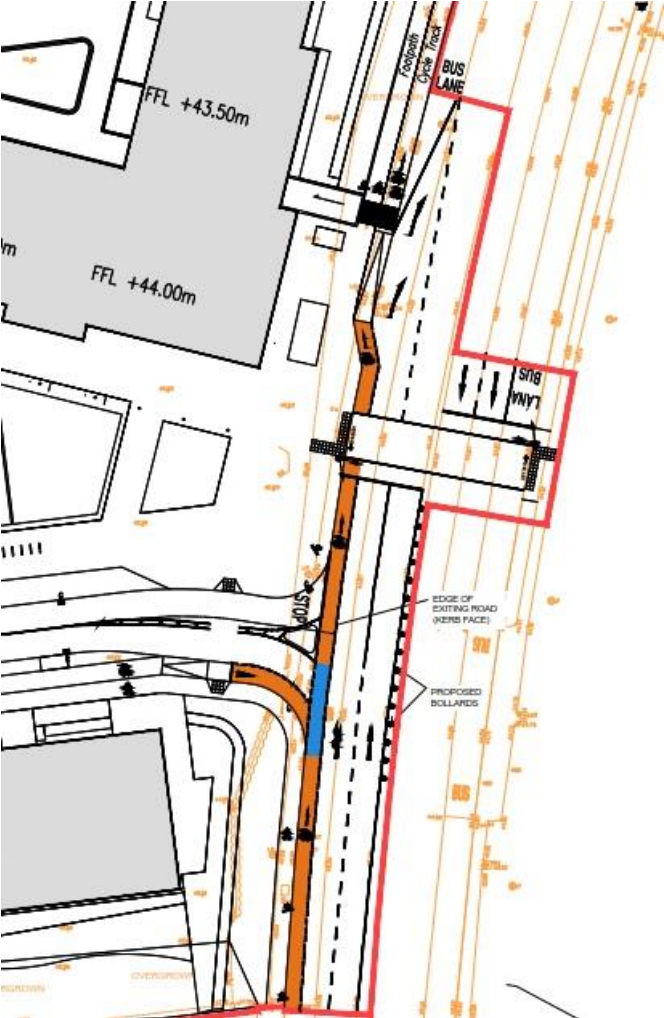


Figure 2 - Proposed Left In – Left Out Junction

We would note that the provision of a left in/left out access was previously considered appropriate by Fingal County Council when they published the Fosterstown Local Area Plan in September 2010. See Figure 3 below which is an extract from the Local Area Plan:-

10.0 Transportation Network

Roughan and O'Donovan, consulting engineers were commissioned by Fingal County Council to advise on the transport network requirements to serve development within the LAP lands.

10.1 Vehicular Access and Movement Strategy

It is an Objective of this LAP to provide for permeability for vehicles, pedestrians and cyclists within the subject lands and to ensure that good connections are provided to link the LAP lands with surrounding development.

The main road network and junctions are shown on the LAP map. The precise location of the main road network and junctions may alter marginally in the devising of the Urban Design/ Landscape Master Plan/s.

10.1.1 Road Hierarchy

Two distributor roads shall be provided within the LAP lands in a north-south and east-west direction. Four different vehicular access points to the site shall be provided, two onto the R132, at the northern and southern ends of the road frontage, and two onto Forrest Road, also at the northern and southern ends of the LAP lands' road frontage. The location of these accesses will spread the impact of the traffic from the development on the surrounding road network, rather than concentrating all of the traffic at one or two locations.

Pedestrian and cycle permeability to the site will be available at these points and at various other locations to provide for connectivity between external developments and the LAP lands [and Fosterstown Metro Stop].

In particular the following shall be complied with:

R132: The access onto the R132 is located approximately midway between the Pinnock Hill junction and the junction of the R132 with Boromihe Road. This junction is located approximately 120m south of the proposed footbridge to the Fosterstown Metro Stop, avoiding conflict with existing development to the south or the proposed Metro Stop and ancillary works (including footbridge) to the north.

This location also achieves good separation from the junctions to the south at Boromihe and to the north at Pinnock Hill, thereby providing sufficient weaving distance along the R132 for vehicles turning into and out of the site. The junction with the R132 shall cater for left-in / left-out access only.



Dual Carraigeway with Landscaped Central Median



Proposed Cross Section of R132

Figure 3 – Extract from LAP which provided for a Left in/Left Out Junction

The proposed left in left out junction will not have any implication for the strategic function of the R132 in terms of Bus Connects or Metro Link Crossings. In this regard the left in/left out junction will be an uncontrolled junction which will not allow right turning vehicles so it will not obstruct the flow of traffic.

Access to the proposed development will only be permitted from the Northbound lane of the R132. Vehicles travelling southbound will have to leave the R132 at the Pinnock Hill roundabout and travel around Airside to the R132 at Boromihe. Vehicles exiting the proposed development who wish to travel southbound towards Dublin will be able to turnaround at the Pinnock Hill Roundabout to access the southbound side of the R132. In the event that this junction is upgraded to a signal controlled junction (currently proposed by Fingal County Council) those wishing to travel southbound can turn right in to airside and travel through Airside to the R132 at Boromihe. Vehicles arriving from the north will turn left at Pinnock Hill roundabout and travel through Airside. Details of the routes are presented in Figure 4 below.



Figure 4 – Access Routes for Southbound Traffic Entering/Exiting the Development

In order to facilitate a left in/left out it is only necessary to provide a break in the bus lane and to install plastic bollards (to prevent right turning) along the existing central reservation. Details are presented on our enclosed drawing No. 17-062/P120.

Internally, the scheme has been designed so that the access can be closed off in the future when the vehicular access to the lands is made available from the lands to the north and a turning head can be installed as the internal road will become a cul-de-sac once the junction is closed off.

Details of the proposed cul-de-sac with turning head are presented on our enclosed drawing no. 17-062/P121.

For ease of reference, Figure 5 overleaf, shows the proposed left in/left out junction and how it will be closed off to facilitate a turning head in the future.

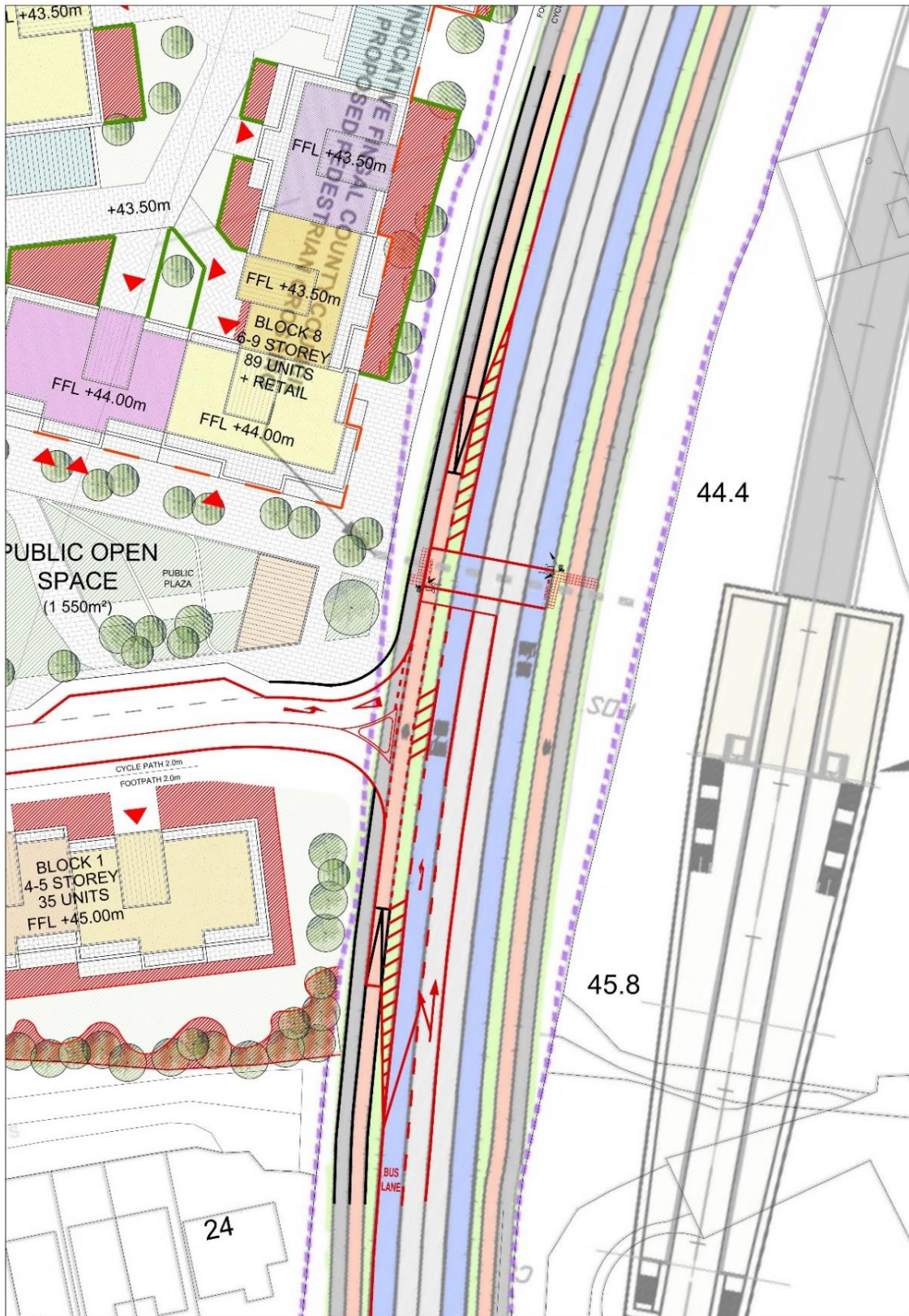


Figure 5 – Left in/Left Out – Temporary Arrangement (left hand image) and Future Permanent Arrangement (Right hand image)

Bus Connects

The current Bus Connects proposals were reviewed to determine if the proposed left in/left out junction would have any impact upon the delivery of the Bus Connects proposals. In this regard, we would consider that the current Bus Connects proposals are not impacted by the provision of the left in/left out access as the development of the left in/left out just requires a short break in the bus lane to allow vehicles to enter/exit the development.

In order to understand the impact of the proposed left in/left out junction we have taken the most recent available Bus Connects proposals for the R132 (from the November 2020 Preferred Route Option) as it passes the subject site and we have overlaid the left in/left out junction. Please refer to Figure 6 overleaf which shows the Bus Connects proposals with our proposed left in/left out junction overlaid.



PLAN VIEW - FUTURE LEFT IN LEFT OUT JUNCTION

Figure 6 – Left in/Left out Overlaid on Current bus Connects Proposals.

Metro Crossing

The current available proposals (preferred route option public consultation 2019) for crossing the R132 to access the Fosterstown Metro Station are contained in the Metro Link Public Consultation Documentation which was put on public display in 2018. These proposals indicate that a pedestrian/cycle bridge is to be provided to cross the R132. See Figure 7 below:-

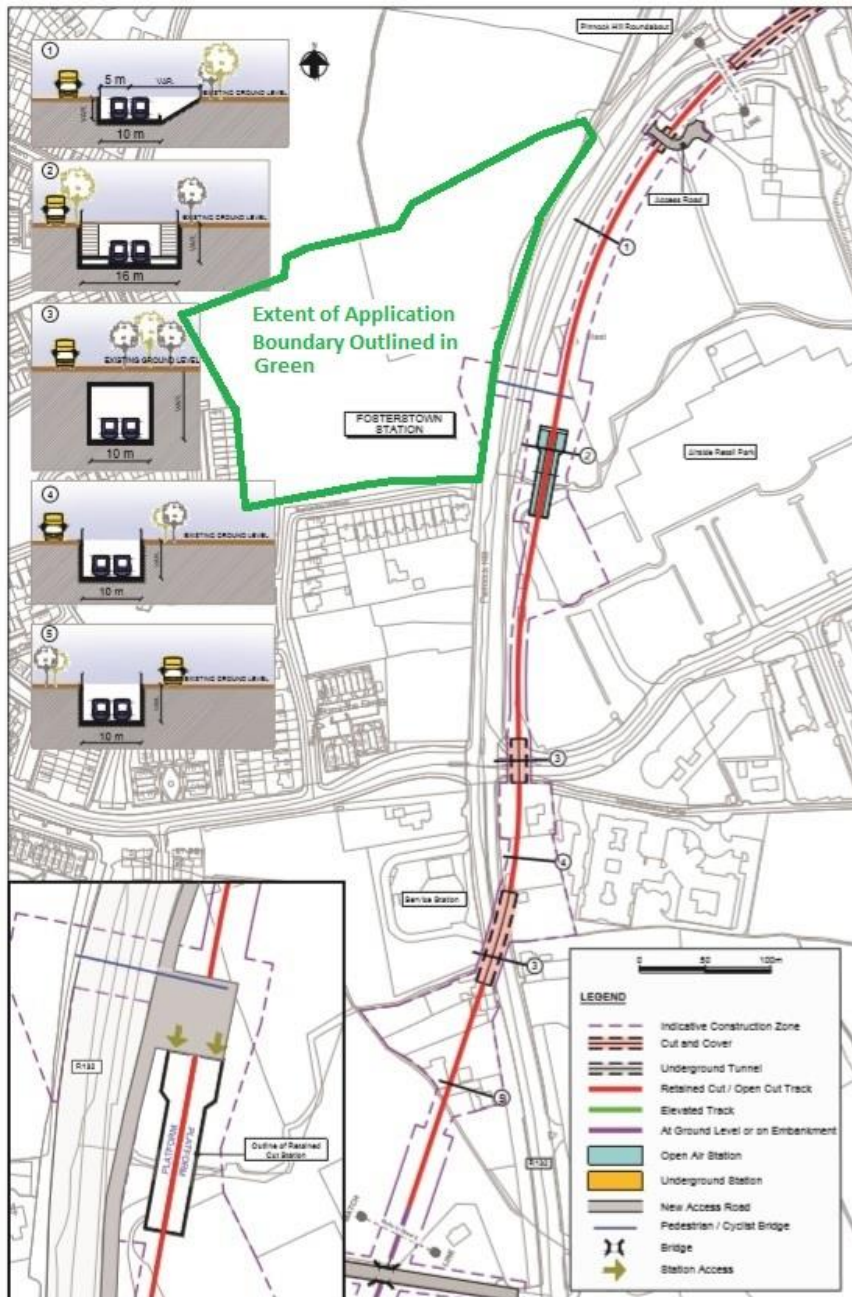


Figure 7 – Metro Proposals Showing Application Boundary and Pedestrian/Cycle Bridge

Furthermore the proposals for Bus Connects indicate the future Metro and also a future pedestrian crossing. See Figure 8 below which shows the current Bus Connects proposals and which highlights “Indicative Fingal County Council Proposed Pedestrian Crossing”. This can also be seen in Figure 6 above where we have located a signalised pedestrian crossing.

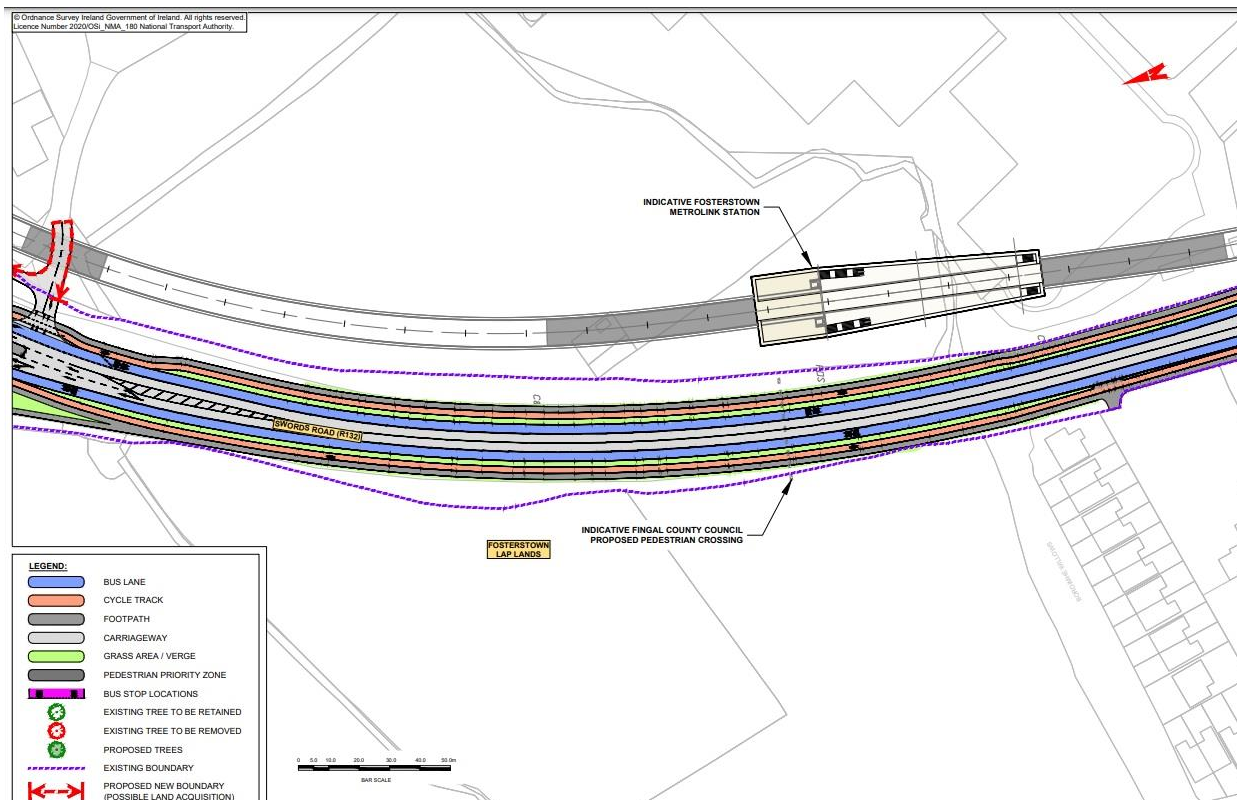


Figure 8 – Extract from Bus Connects Proposals with “Indicative Proposed Pedestrian Crossing”

The applicant is proposing to provide a signal controlled pedestrian crossing on the R132, which is included and forms part of this planning submission, in order to provide a safe pedestrian crossing at grade which is much more attractive than an elevated overbridge. This signalised crossing is positioned at the location indicated in Figure 8 above. The proposed development has been designed with a proposed plaza which is to be constructed within the Fosterstown North SHD development and which is located at the crossing point. This will provide linkage from the development to the future Metrolink station and will be an arrival destination for people alighting from the Metro link.

We do not consider that the proposals will undermine projects being progressed by FCC in conjunction with the NTA/TII at this location. In fact, we would feel that the proposed signalled controlled pedestrian crossing would provide a significant benefit to pedestrians by facilitating a street level road crossing which directly connects the Metro to the “Plaza”.

Furthermore, we would highlight that Fingal County Council are currently promoting the R132 Connectivity Project. This project proposes to upgrade the R132 from just north of the Pinnock Hill roundabout to just north of the Estuary Roundabout. The R132 Connectivity Project proposes to remove the Malahide Road Roundabout, The Seatown Roundabout and the Estuary Road Roundabout on the R132 and replace these with signal controlled junctions for the very purpose of improving access across the R132 for pedestrians and cyclists. This project also includes a pedestrian “Toucan” crossing on the R132 immediately North of the Pinnock Hill roundabout which is just a few hundred meters north of the subject site. See Figure 9 below:-

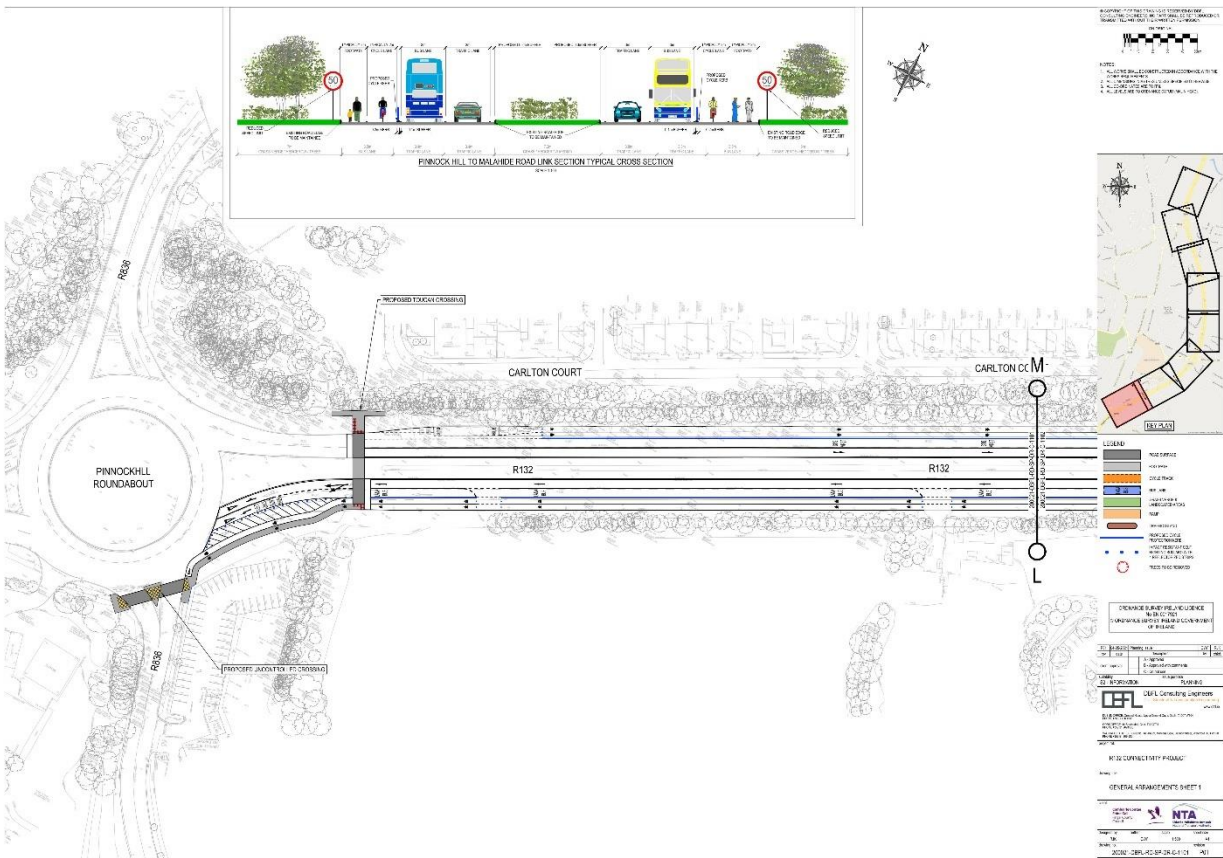


Figure 9 – Extract from Fingal County Council's R132 Connectivity Project

The Fingal County Council R132 Connectivity project was approved by An Bord Pleanála (ABP Ref.: 310145-21) on 20th January 2022 and includes for a total of 9 pedestrian crossing points along the R132. Six of these being at new signalised road junctions with a further three separate signalised pedestrian crossing points between the junctions. All of these works, similar to the proposed left in/left out junction and pedestrian crossing to serve the subject site can be incorporated into the Bus Connects proposals. The applicant proposals will have less impact on Bus Connects than the R132 Connectivity Project as we are now proposing a left in/left out and the R132 Connectivity Project is providing full signalised junctions, similar to our pre-application proposal which Fingal County Council were not supportive of.

In this regard the R132 Connectivity Project is supported by the NTA. As the applicants proposals are likely to have less impact than the full signalised junctions proposed by Fingal County Council we do not foresee how the left in/left out proposals can be viewed negatively.

A full Traffic Impact Assessment has been prepared to assess the impact of the proposed development on the R132, which has been undertaken by OCSC Consulting Engineers. A copy of this TIA is included under separate cover and shows that the proposed development will not give rise to any significant impact upon the operation of the R132.

The proposals contained in this application for the temporary left in/left out junction also provide for cycle and pedestrian connectivity across the junction. In this regard cyclists will have priority across the junction at street level. Pedestrians will be provided with a footpath and tactile paving to ensure that they can safely navigate across the junction. As demonstrated in Figure 6 above and the TIA prepared by OCSC,

the proposed left in/left out junction does not impact upon the future pedestrian, cycle or bus infrastructure proposed as part of the Bus Connects scheme. Similarly, it does not impact upon the future Metro Link Station or on vehicle movements on, and in the vicinity of, the R132.

Summary

In summary, the access alternatives for the proposed development considered were as follows:-

- a) Full Signalised junction - This was included at pre-application stage and following consultation with Fingal County Council and An Bord Pleanala it was no longer considered due to concerns expressed by Fingal County Council and An Bord Pleanala.

- b) Left in/Left out – This was considered to be the most appropriate junction as a short term temporary solution which would have minimum impact on the R132 or the future Bus Connects/Metro projects and is the proposed solution being adopted for the development of the subject site. This temporary access can be closed following the completion of the Fosterstown Link Road and associated road infrastructure to service the site via the lands to the north, as identified in the Fosterstown Masterplan (May 2019). The applicant has met with the landowner (MKN Properties Limited) for the adjoining lands, and a letter of support is provided confirming the proposed layout is in line with the indicative layout proposed in the Fosterstown Masterplan and that the proposed layout does not prejudice the future delivery of the future connectivity between the northern and southern portion of the masterplan area.

The proposals for the access to serve this proposed development are well considered. Their impact on the future Bus Connects and Metro projects are minimal and are less than those recently approved by An Bord Pleanala under the R132 Connectivity Project promoted by Fingal County Council. Furthermore they will avoid right turning vehicles so will remove any potential impacts arising from vehicles waiting to turn into the development. They will also provide connectivity across the junction for pedestrians and cyclists.

The proposals do include a signal-controlled pedestrian crossing to provide a safe at grade facility for pedestrians to cross the road to the future metro. However, if An Bord Pleanala do not consider the pedestrian crossing to be necessary at this time they can condition it out of any decision to grant planning permission and it can then be brought forward later when the Metro is being progressed. We do however feel that the proposed crossing is in line with all of the crossings proposed and now approved under the R132 Connectivity Project. The proposed crossing will, in the short term provide access to the Bus Stop on the opposite side of the R132. This stop provides direct high frequency services to the City Centre.

Prior to submission of the application, Waterman Moylan issued the revised temporary vehicular access for the left in left out junction to FCC and requested if the transportation department could facilitate a meeting the NTA / TII to discuss further. This followed the NTA/TII advising that any engagement would need to be arranged through the Planning Authority. Whilst a meeting was not facilitated, as demonstrated in the application documents, the design team are confident there are no issues in respect of the proposed temporary vehicular access and the strategic function of the R132 in terms of Bus Connects and Metrolink proposals.'

In conclusion, we are of the opinion that the left in/left out junction together with the signalised crossing is well justified to be included as part of this planning application and will have minimum impact on the function of the R132 or on the future proposals for cycle, pedestrian and bus improvements on the R132 (Bus Connects) or on the future Metro.

Item 3

“Further consideration of the documents as they relate to foul water drainage proposals to service the development. The documents should provide details of necessary upgrade works required to facilitate the development to include, inter alia: Plans and particulars, having regard to the significant wastewater network constraints raised by Irish Water in their report dated 3rd July 2020.

Clarity to be provided concerning who is to deliver the works; the status of any planning and other consents required to deliver the infrastructure; the timelines involved in the delivery of the required infrastructure in the context of the proposed strategic housing development.

Response

The Engineering Assessment Report sets out full details on the foul water drainage proposals. An extract from the Irish Water report dated 3rd July 2020 is set out below in Figure 10, which advised on their preliminary assessment at the time of the pre-application to An Bord Pleanála that significant upgrade works to the foul sewers were required but it was not well defined as to the location of these upgrades.

In respect of wastewater;

There are significant wastewater network constraints in the foul sewer in which this development proposes to connect. Currently Drainage Area Plan (DAP) with hydraulic modelling for the area is in progress which will determine the exact system deficiencies and outline specific required upgrades in the existing Irish Water infrastructure. Early results of this modelling analysis show that an upgrade of the existing DN300mm sewer on Swords by-pass to a DN450mm sewer for 860m is required to facilitate this development.

Figure 10 – Extract from Irish Water report dated 3rd July 2020

We have now obtained more precise details of the required upgrades from Irish Water. In this regard see Figure 11 below which is an extract from the most recent Confirmation of Feasibility received on 17 February 2021:-

SITE SPECIFIC COMMENTS	
Wastewater Connection	<p>Upgrades required for the connection:</p> <ul style="list-style-type: none">• Approximately 230m of network extension from the SO17469004 manhole (see figure below) to the Site and• Approximately 750m of the existing 300 mm ID gravity sewer upgrade to 450mm ID in R132 Road, from the SO17469004 manhole to the existing 600mm gravity sewer. The section is highlighted in yellow in the figure below. <p>Should you wish to progress with the connection, you have to fund the extension and upgrade works. At connection application stage the network upgrade will be reviewed, and the upgrade works fee will be calculated in the connection offer fee or in a separate upgrade project agreement.</p>

Figure 11 – Extract from Updated Confirmation of Feasibility received from Irish Water on 17 February 2022.

The actual pipes to be upgraded are highlighted yellow in Figure 12 below:-

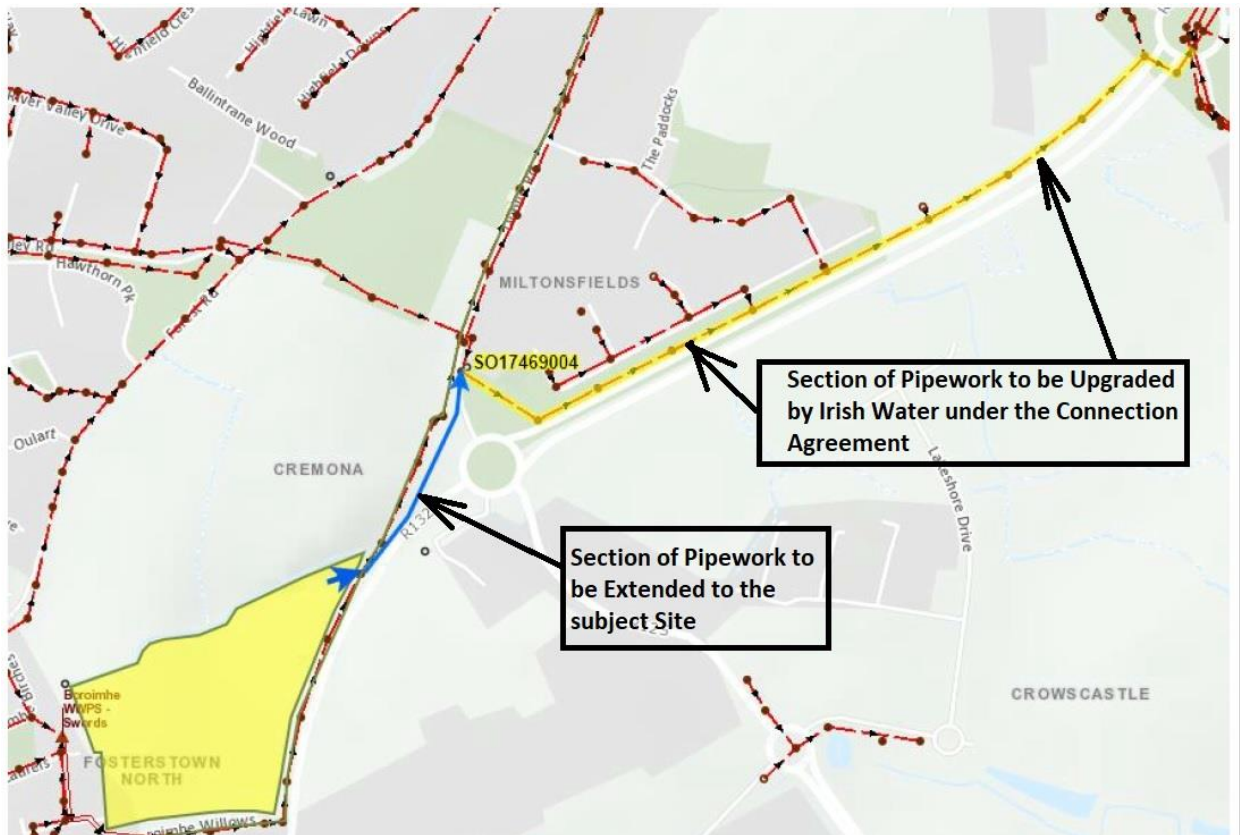


Figure 12 – Pipework to be Upgraded by Irish Water

The connection to the public sewer together with the upgrade of the existing pipework will be carried out by Irish Water under the Connection Agreement that will be entered into with Irish Water. In this regard the normal procedure is that works within the public roadways in respect of Irish Water infrastructure (proposed or existing) will be undertaken by Irish Water. The costs for the upgrade works or extension of the public sewers is calculated by Irish Water when the Connection Application is submitted to Irish Water and these costs are then added onto the Irish Water “Standard Charges” by Irish Water in the Connection offer. They would appear in the Connection Offer as “Quotable Charges”.

We would note that the extract included in Figure 11 specifically states that the applicant will have to fund the upgrade works and that these costs will be established by Irish Water in the Connection Offer Fee or in a separate Upgrade Project Agreement. In the case of this particular application the costs will be quite significant. As the works are being funded by the applicant through the connection application process, the timelines for the delivery of the upgrades are simply dependant upon the application being submitted, the costs being determined by Irish Water and then being paid by the applicant.

Planning permission is not required for Irish Water to carry out these upgrade works, which are all contained within public roads/verges.

In conclusion, Irish Water have confirmed that a foul water connection to serve the proposed development is feasible subject to upgrade works. The upgrade works will be carried out by Irish Water and will be paid for by the applicant. The upgrade works can be delivered in a timely manner as they do

not need planning permission. They just require Irish Water to confirm the cost and the applicant to pay, which is done as part of the Connection Application Process.

UK and Ireland Office Locations

