An Bord Pleanála

Inspector's Report ABP-313182-22

Development	BusConnects Clongriffin to City Centre Core Bus Corridor Scheme
Location	Mayne River Avenue to – R107 Malahide Road junction to the junction with Marino Mart – Fairview
Planning Authority	Dublin City Council
Applicant(s)	National Transport Authority
Type of Application	Application under Section 51 (2) of the Roads Act 1993 as amended
Observer(s)	Refer to Appendix 1.
Prescribed Bodies	Refer to Appendix 2
Date of Site Inspection	12th August 2022, 12th January 2023, 27th June 2023 & 7th August, 2023.
Inspector	Sarah Lynch

Contents

1.0 **Introduction**

1.1. The National Transport Authority has submitted an application to the Board under Section 51 (2) of the Roads Act 1993 as amended. This report sets out an assessment of the application submitted by the National Transport Authority for the development of a sustainable transport scheme which provides for both cycle and bus priority measures over a distance of 5.7km along the Malahide Road (R107) from Mayne River Avenue to the R107 junction with Marino Mart. Works to a number of additional residential roads are included in the proposal and are detailed below.

1.2. The proposed scheme is 1 of 12 no. bus corridor schemes within the Dublin area under the Bus Connects programme and is accompanied by a Compulsory Purchase Order reference ABP 313279-22. The objectives of the schemes are to:

- Enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality.
- Enhance the potential for cycling by providing safe infrastructure, segregated from general traffic wherever practicable.
- Support the delivery of an efficient, low carbon and climate resilient public transport service, supporting the achievement of Ireland's emission reduction targets.
- Enable compact growth, regeneration opportunities and more effective use of land in Dublin.
- Improve accessibility to jobs, education, and other social and economic opportunities; and
- Ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible.

1.3. Pre-application discussions were undertaken by the applicant with the Board in accordance with Section 51A of the Roads Act 1993 as amended, which provides for consultations with An Bord Pleanála before making an application under Section 51. Four Consultation Meetings were held on 21st April, 2021, 20th May, 2021, 10th June, 2021, and 29th June, 2021. A determination in relation to whether the project is

strategic infrastructure or not is not required under this Act. The pre application discussions were closed on the 12th August 2021.

1.4. The Application is accompanied by and EIAR and a NIS. No Oral Hearing was held in relation to the application as per the Boards Direction dated 18th May 2022.

2.0 Site Location and Description

2.1. The proposed scheme submitted under this application will comprise the construction of the Clongriffin to City Centre Bus Corridor which has an overall length of approximately 5.7km and is routed along the R107 Malahide Road from Mayne River Avenue to – R107 Malahide Road junction, to the junction with Marino Mart – Fairview and also routed for cyclists via the junction with Malahide Road – Brian Road along Carleton Road, St. Aidan's Park, Haverty Road and Marglann Marion, all in County Dublin within Dublin City Council administrative area.

2.2. From here the Proposed Scheme ties into a separate project, the Clontarf to City Centre Cycle & Bus Priority Project, currently being developed by DCC. The Clontarf to City Centre Cycle & Bus Priority Project will provide segregated cycling facilities and bus priority infrastructure along a 2.7km route that extends from Clontarf Road at the junction with Alfie Byrne Road, to Amiens Street at the junction with Talbot Street in the City Centre. The start of the scheme ties into a separate project being developed by DCC namely, The Belmayne Main Street and Belmayne Avenue Scheme, which provides bus and cycle linkages to Clongriffin Dart Station.

2.3. Works are currently progressing for the development of the Clontarf to City Centre Bus Priority project at the start of the proposed scheme and traffic lanes at this location area mix of bus lanes, general traffic lanes and advisory cycle lanes all of varying lengths and combinations. From the junction with the R107 and the Clontarf Road the R105 the existing route comprises an inbound and outbound general traffic lane an outbound advisory cycle lane and an inbound bus lane and combined cycle lane.

2.4. From Brian Road the existing route widens to accommodate both single lane general traffic and an inbound and outbound bus lane with advisory cycle lanes on both sides.

2.5. From the Junction with Griffith Avenue the road continues with two lanes on either side of a grassed central reservation, with the road periodically widening to provide a right

turning lane. This format continues to Donnycarney Road at which point the central reservation ceases and the lanes continue as described as far as the Donnycarney Church a brief reintroduction of a central reservation occurs south of the church and ceases at the southern side of the junction at this location. Cycle lanes are included in the bus lanes from this point northwards. The route continues with dedicated bus lanes both inbound and outbound and a general traffic lane in both directions. Cyclists share road space with buses.

2.6. Overall, to this point the route is flanked by low density, generally two storey, residential development interspersed with small areas of commercial properties. North of the Griffith Avenue junction the route is bounded by the Ard Scoil Ris Sports Ground and further on the opposite side the Clontarf Golf Club and reverts to residential properties northwards, as before, interspersed by small commercial areas which form parade like shopping areas. It is of note that most properties have front gardens/driveways and houses are set back from the road until the road meets the Artane Cottages which directly abut the footpath.

2.7. North of the Artane cottages the outbound bus lane merges with general traffic and there is only a dedicated inbound bus lane which also accommodates a cyclists. This layout continues to Danieli Road whereby the road widens, and a dedicated inbound and outbound bus lane recommences.

2.8. Northwards of the existing Circle K filling station, the road widens and there are stretches of on street parking on both sides of the road serving residential properties and commercial. From the roundabout at Ardlea road and the Malahide Road, the central reservation is reintroduced. The road becomes a dual carriageway with a single traffic lane and a dedicated bus lane which includes advisory cycle lanes. Residential properties are set back from the carriageway by parallel local access roads and grass verges on both sides from this point northwards. This layout continues through the Coolock area through the Oscar Traynor Road junction. At this point the existing development changes for a short section from residential to commercial and industrial as the route passes the turn for the Cadbury Site and the Coolock Leisure Plex development towards Newtown Cottages.

2.9. Once past Newtown Cottages the surrounding development returns to commercial as the route passes Northside Retail Park and the dual carriageway with central reservation layout remains.

2.10. On the approach to Clarehall the surrounding development is set back from the road significantly to the northwest of the carriageway but to the south east of the carriageway it changes to high rise modern development which closer to the road. This continues as does the road layout through the Clarehall junction past the Hilton Hotel to Mayne River Avenue where the proposed scheme ends.

2.11. The major junctions along the route are as follows:

- Malahide Road/R139 Clarehall Avenue;
- Malahide Road/Entrance to Clarehall Shopping Centre;
- Malahide Road/Blunden Drive/ Priorswood Road;
- Malahide Road/Tonlegee Road/ Brookville Crescent; and
- Malahide Road/Gracefield Road.
- Malahide Road/Collins Avenue;
- Malahide Road/Copeland Avenue/Griffith Avenue; and
- Malahide Road/Marino Mart/ Fairview/Clontarf Road (linking in to the Clontarf to City Centre Cycle & Bus Priority Project at this junction)

3.0 **Proposed Development**

3.1. The proposed development is essentially an upgrade to the existing bus priority, cycle facilities and pedestrian infrastructure associated with the Malahide Road Quality Bus Corridor (QBC), which has been in place since 1999.

3.2. Key improvements include:

- The number of pedestrian signal crossings will increase by 45% from 36 to 52 as a result of the Proposed Scheme;
- The proportion of segregated cycle facilities will increase from 4% on the existing corridor to 100% on the Proposed Scheme;

- The proportion of the route having bus priority measures will increase from 74% on the existing corridor to 100% on the Proposed Scheme.

3.3. Specific works proposed within the development include the following:

- 5.7 km (two-way) of bus priority infrastructure and traffic management
- 11.9km (total both directions) of cycling infrastructure and facilities.
- Provision of new / refurbished pedestrian facilities and footpaths along the scheme and associated ancillary works.
- Provision of 15 junction upgrades including conversion of two existing large roundabouts to signalised junctions and associated ancillary works.
- Provision of 31 new / refurbished raised table side entry facilities.
- Reconfiguration of existing bus stops resulting in 30 number new bus stop facilities.
- Public Realm works including landscaping, planting, street furniture, street lighting, retaining walls, boundary walls, and sustainable urban drainage measures,
- Roads associated earthworks including excavation of unacceptable material, importation of material, temporary storage of materials.
- Provision of road pavement, signing, lining and ancillary works.
- Provision of gates, fencing and boundary treatment works.
- Construction of accommodation works including boundary treatment and ancillary grading and landscaping works together with all ancillary and consequential works associated there with.

Specific details relating to all aspects of the development are outlined within the 'Project Design' section of this report within the assessment section hereunder.

The applicant lodged the application to the Board on the 1st April 2022. The application was accompanied by the following documents:

- Environmental Impact Assessment
- Natura Impact Assessment
- Relevant plans and particulars
- Supplementary Information including – Planning report, Consultation Report 2018-2022

- Relevant Public Notices and Prescribed Body Notices.
- Preferred Route Option Report.

4.0 Submissions

4.1. Prescribed Bodies

4.2. Submissions have been received from 6 no. prescribed bodies which are summarised hereunder. Submissions are generally in support of the proposed development and do not raise any significant issues in relation to the EIAR or NIS submitted. General comments are made in relation to works relating to the removal of vegetation, protection of Recorded Structures and Monuments and watercourses during construction works:

1. **Dublin City Council**

- In terms of planning policy, it is stated that the proposed development is in compliance with the RSES and is recognised as a development which will support regional growth for the Eastern and Midlands Region and the Dublin MASP. High quality bus corridors will enable and support the delivery of both residential and economic development opportunities.
- The proposal has been considered in relation to the core strategy of the Dublin City Council Development Plan.
- The Council will not comment on the acceptability of the EIAR.
- The NIS is acceptable, no concerns are raised in relation to the conclusion of the NIS.
- The development is largely on road and footpaths whereby there is no specific zoning objectives, the development does pass through a small section of the conservation areas at the junction of the Malahide Road and Greencastle Road given the nature of the development it is stated that the proposal is unlikely to have any impact on the character of the conservation area.
- The council is satisfied that the proposed development which falls within the administrative boundary of the Council will not have any excessive or undue impact on the amenities of the area.
- Temporary traffic disruption is acknowledged but long-term impacts are considered to provide for enhanced amenities.

- The scheme is fundamental to achieving the objectives of compact and sustainable growth; sustainable mobility and permeability and place making, while signficantly contributing towards climate action.
- It is submitted that the proposed development must not impede the development of Belcamp Lane lands as outline in the new DCC Development Plan.

Environment and Transportation Comments

- Overall strong support for proposed scheme.
- Scheme will remove bicycles from bus lane and therefore improve speed of bus service.
- DCC links to bus information in relation to traffic flow management will be upgraded to improve this service and ensure free flow for buses. This digital improvement is necessary to ensure the scheme operates to its full potential.
- Scheme should seek to maintain existing footpath where possible and seek to improve pedestrian connectivity to bus stops.
- Where cycle lanes move behind bus stops and car parking areas, measures should be put in place to slow cyclist down.
- NTA should undertake a substantial awareness campaign and behavioural change programme.
- Changes to parking at commercial units is proposed, adequate set down for deliveries should be provided at these premises and changes to parking and road markings should be agreed with DCC.
- Where residential properties are to lose space adequate dimensions of 3mx5m should be retained to facilitate parking and adequate manoeuvring in these gardens.
- Greener and softer approach to the management of surface water drainage should be used.
- Clongriffin CBC outfalls to a number of protected waterbodies that are identified as Priority Areas for Action under the Water Framework Directive's 2nd and 3rd River Basin Management Plans. The proposal should not impact the Councils efforts to obtain a 'good' water status for waterbodies that the proposal is contiguous with downstream.
- Council have initiated Santry Restoration and Greenway Project which is contiguous with the proposed Clongriffin CXBC Scheme, NTA should engage

with the LA in this regard in order to ensure the achievement of this environmental project's objectives.

Archaeology

- Project runs through the Zone of Archaeological Constraint for two Recorded Monument listed on the Record of Monuments and Places –
  - ❖ Malahide road runs through the Zone of Archaeological Constraint for the Recorded Monument DU018-006 Bridge – Donnycarney Bridge,
  - ❖ At south end of Malahide Road, site runs through the Zone of Archaeological Constraint for the Recorded Monument D018-067 9 burial site) where human remains were unearthed during construction of the Georgian houses at Marino Crescent.
  - ❖ The scheme runs immediately adjacent to Zone of Archaeological Constraint for the Recorded Monument DU015-074 (mound). Proposal will not affect the setting of the recorded monument and is well screened from the route in its immediate setting within the Cadbury Factory Grounds.
  - ❖ Two bridges on the Malahide road are listed on the Dublin Industrial Heritage Record - 15_13_009 Coolock Bridge and 18_04_010 Donnycarney Bridge.
  - ❖ The archaeology department of the Council concurs with the broad methodology of the EIAR in relation to archaeology and monitoring.

Conservation Department

- The proposed works were possible avoid loss of the city architectural heritage.
- A List of Protected structures adjacent to the route are listed in the Council's response. No impacts are expected however the front boundaries of two protected structures – RPS 4852 & 4853 are to be altered. It is stated by the Council that these are later replacement boundaries.
- Buildings and other non protected structures included in the National Inventory of Architectural Heritage are also listed in the response. An improved bus stop is proposed at the front of Church of our Lady Consolation (NIAH 50130252), it is recommended that this is kept in its existing location.
- Terrace of 9 houses 20-36 Malahide Road – boundaries to be altered – some properties retain historic railings which are important contributor to special character of these structures.

- Three post boxes on Malahide road require protection from works.
- Former electricity substation at junction between Malahide Road and Clontarf Road will require protection.
- Bus shelter at Marino Health Centre will be screened by grass verge and trees.
- Structures within the route of the development listed on the Dublin City Industrial Heritage Record Survey:
    - Coolock Bridge – only west elevation of bridge survives and some may remain under the road surface. Surviving parapet will need repair work.
    - Donnycarney Bridge – West parapet is only surviving element of the bridge and is to be protected during construction.
- ACAs – Route runs along part of Marino ACA, no historic buildings or features near.
- Z2 lands which seek to protect/improve amenities of residential conservation areas, run along Haverty road, Carleton Road and St. Aidan's Park Road.
- The following protected structures are impacted by the proposed works:
- 78 properties will be impacted by the proposed widening, details of changes are not specific as there is reference to a temporary land take. The variety of boundaries along Malahide Road provides commentary on the evolution of the city's residential areas.
- There is a potential impact to historic kerbing, paving, street furniture and lamp standards –
    - Historic kerbing at Mount Temple School – should be protected.
    - Kerbing/cobbles at entrance to Clontarf Golf club – provenance to be ascertained prior to works.
    - Historic lampposts on Haverty Road, Carleton Road, and St. Aidans Park – should be protected.
    - Cast Iron bollard along boundary of Clontarf Golf Club – Should be retained and protected.
    - Post box on Malahide Road to north of Collins Ave, to be relocated as part of works – recording in original position to be carried out.

<u>Tree Removal-</u>

- Loss of trees will have a significant impact on RPS 4852 & 4853.
- Loss of trees along boundary of Clontarf Golf Club would have impact on the setting of Mount Temple Lodge.

- All measures to retain and protect historic paving, setts, kerbing and Associated features should be carried out.

Boundary treatments

- All boundary treatments the contribute to the special character of Protected Structures and their settings, ACAs and areas zoned Z2 in the City Development Plan should be retained where possible or where relocated are replaced on a like for like basis.
- All works should be supervised by an expert in architectural conservation.
- Relocation of boundaries should respond to the parent structure.
- Photomontages suggest that detailing and design of replacement boundary walls will not be done on a like for like basis and which will reflect an erosion of character in these areas particularly around early 20th Century housing schemes. These relate to View no. 1-4

General comments

- Street Furniture should be retained or sensitively relocated.
- Open spaces and gardens provide important function and should be retained where practicable.
- Loss of on street parking will place pressure on the need to alter front gardens.
- Measures to mitigate visual impact of bus stops/shelters should be used.
- Signage to be kept to minimal
- Red tarmac for cycle lanes may have impact on historic areas, an alternative colour will be required in these areas.
- Scheme will enhance a modal shift.
- Overlay of survey drawings at a larger scale over proposed drawings would have assisted in assessment.
- Scale of drawings too small, clarity in relation to quantity of compensatory street planting along route.
- Arborist and landscape architect should be appointed for duration of works to ensure trees indicated for retention are retained.
- List of recommended conditions are provided in the Appendix of the submission.

2. **Dun Laoghaire Rathdown County Council**

- Whilst the development falls outside of the Council's jurisdiction, support is given to the development from the Council and the Bus Connects Scheme is also supported within the Dun Laoghaire Rathdown Development Plan.

3. **Transport Infrastructure Ireland**

No observations to make.

4. **Department of Housing, Local Government and Heritage - DAU**

- No removal of trees/hedgerow during breeding season.

5. **Inland Fisheries**

- Mayne River – non salmonoid
- Santry River – Non salmonoid, river restoration is underway with greenway project, brown trout were recorded in lower reaches.
- Tolka – linkage for migrating salmon, sea trout and eels.
- Adequate protections are required during construction through environmental construction management planning.
- Any dewatering of excavations must be treated by overland infiltration or attenuation area.
- Guidelines on protection of fisheries during construction should be consulted.

6. **Irish Water**

- No objection in principle
- Applicant has engaged with IW
- Detailed design drawings are required.
- Designs will have to be in accordance with IW standard details and codes of practice, all specifications for design details are outlined in submission.

4.3. NTA Response to Prescribed Bodies

1. <u>Response to DAU</u>

- Vegetation will not be removed during breeding season, in the event that this is required then areas shall be inspected by a suitably qualified ecologist as

engaged by the appointed contractor for the presence of breeding birds prior to clearance.

2. Response to Inland Fisheries

- The EIAR examines the potential water impacts arising from the development and the relevant mitigation measures proposed to prevent any such impacts.
- Mitigation for the Operational Phase has been built into the design of the Proposed Scheme, which is outlined in Section 13.4.1.1. No additional mitigation is required.

3. Response to Irish Water

The NTA have been engaged since early 2020 in dialogue with Irish Water regarding the Proposed Scheme.

4. Response to Dublin City Council

- In response to Belcamp Lane it is stated that the NTA can confirm that the Proposed Scheme does not preclude" the future permeability intervention, or the development of the Belcamp Lane lands". This is assessed in the context of the Clongriffin-Belmayne Local Area Plan (CBLAP) and Clongriffin – Belmayne Masterplan.
- The transport modelling undertaken for the assessment of the Proposed Scheme, includes for the planned population growth in the area.
- The likely effect of the inclusion of the Belcamp Parkway link road would be to reduce congestion at the Clarehall Junction, by facilitating movements to/from the South and West. This would have the effect of reducing the Volume over Capacity ratio at the Clarehall junction and potentially reducing trip redistribution further in the area.
- Applicant restates the Councils statements regarding EIAR and NIS and that no impacts will arise in this regard.
- The NTA notes the Council's comments in relation to the lack of impact to amenities and the positive effect the development will have in the surrounding area.

- In response to traffic comments from DCC the NTA states the Department acknowledges that the modelling work, which was carried out on the corridor of the real-life operation of a full corridor management system using an adaptive traffic control system, allows for a firm basis for how the corridor can be evaluated and to determine its benefits.
- Through the very positive and constructive liaison with the DCC Bus Connects Liaison Office throughout the design and planning process DCC's Traffic Department is confirming that DCC will utilise its adaptive traffic control system SCATS to undertake the required traffic management on the corridor to enable the public transport corridor to perform as per the requirements.
- The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Traffic Division additional comments provided in the Appendix as these matters were the subject of extensive liaison throughout the design development process including consideration of the traffic management equipment that is necessary for the safe and efficient operation of this Public Transport corridor, and including all traffic signal equipment, and the relevant DCC specification. NTA is aware of, and acknowledges, the important role of the relevant DCC maintenance contractor, and their continued role on both the existing and new traffic signals.
- Movement Hierarchy - NTA is satisfied that the Proposed Scheme pedestrian-movement initiatives are following best-practice and are enhancing the facilities for pedestrians/ users with disabilities. A multifaceted approach has been undertaken to assess the people movement throughout the Proposed Scheme and footway for pedestrians will increase by 26% inbound and 14% outbound.
- Scheme includes measures to protect vulnerable users by directing cycle traffic behind the bus stop, this section of the cycle lane is purposefully narrowed to reduce speed.
- Similarly, a 1 in 1.5 typical cycle track deflection is implemented on the approach to the island to reduce speeds for cyclists on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area. At these locations a 'nested

Pelican' sequence similar to what has been provided on the Grand Canal Cycle Route will be introduced so that visually impaired or partially sighted pedestrians may call for a fixed green signal when necessary and the cycle signal will change to red.

- Suitable tactile paving is also provided at the crossing point in addition to a series of LED warning studs provided at the crossing location which are actuated by bus detector loops in the bus lane. The exit taper for the bus stop has been nominated at 1 in 3 to provide for a gradual transition to the cycle track.
- The provision of an awareness program is outside of the scope of a singular project. The upgrade of sustainable travel is happening all over the country.
- The NTA notes DCC's comments in relation to Impact on Loading and Servicing and the challenge to balance a wide range of competing demands with public transport, pedestrians, cyclists, the private car and the functional and servicing needs of the city economy whilst ensuring the city remains a vibrant, attractive and accessible area for all.
- The assessment of impacts on loading and parking for the Proposed Scheme is set out in the EIAR Chapter 6 Traffic and Transport, Appendix A6 Traffic Impact Assessment Report and summarized in Chapter 4 Proposed Scheme Description and Chapter 10 Population.
- There is sufficient parking available within 100m of the scheme and it is proposed to increase disabled parking along the scheme.
- Customer bases to shops are expected to increase rather than decrease.
- The NTA is satisfied that the Proposed Scheme as submitted to An Bord Pleanála has been planned and assessed taking on board the DCC Roads Department inputs regarding Pay and Display parking and associated infrastructure for set down/loading for potentially impacted commercial units as these matters were the subject of extensive liaison throughout the design development process.
- Majority of spaces lost along scheme relate to informal parking.
- **No notable change is proposed to front gardens and parking or manoeuvrability.**

- Lighting design has been developed in conjunction with DCC.
- The scheme has been designed in accordance with SUDS.
- The scheme has been designed to ensure no deterioration of the status of any waterbody contiguous to the scheme.
- Overall it is stated that the NTA have consulted with DCC and all the relevant departments within it, the NTA states that they have taken all comments on board and designed the scheme accordingly. Each section within DCC is referred to individually within the response.
- In particular response to the conservation issue raised it is stated within paragraph 2.4.10 of the response that the current boundary of RPS 4852-3 houses at 62 and 64 Malahide Road are not the original and the railings, gates and capping stones have been previously replaced with good quality replicas and vehicular entrances have been added. Overall impacts to protected structures are considered to be insignificant.
- In regard to the 20-36 Malahide Road (NIAH 50120095) NTA recognises the importance of retaining the character of the streetscape along the Proposed Scheme. As set out in Chapter 17 Landscape (Townscape) & Visual, Section 17.4.4.1.11 the impacted properties at the terrace of 9 houses at 20-36 (even nos.) Malahide Road have been listed and noted that there would be no notable change to the key characteristics of these properties.
- In terms of archaeology, it is stated that the NTA will procure the services of a suitably qualified archaeologist.
- With regard to trees the proposed scheme has been designed to retain mature trees and replant in appropriate areas along the route. Historic paving and boundary treatments will not be signficantly affected visually.
- Carparking in Protected Structures and ACA's is noted within the response, and it is stated that no consequential modifications or alterations of front gardens have been identified as part of the Proposed Scheme works to accommodate losses of on-street parking. Any future proposals or requests to convert gardens for parking purposes would require planning permission from DCC.
- The rationalisation of signage across the scheme is acknowledged.

- In relation to red asphalt for the cycle lane it is stated that colouring is another important safety feature for establishing a contrast between other surfaces to promote a more legible segregation of modes.
- In relation to landscape the magnitude of change is stated to be medium in that the visual perception of the area will remain relatively unchanged. All open space changes have been designed in consultation with DCC.

5. Response to Dun Laoghaire Rathdown County Council
   Noted
6. Response to TII
   Noted

4.4. **Third Party Observations**

4.5. 89 no. third party submissions have been received and are summarised within Appendix 1 of this report, 49 of which have requested an Oral Hearing. In relation to the content of the submissions it is of note that many issues raised are common to all of the submissions. For example, 64 submissions raise concerns in relation to the proposed new pedestrian/ cyclist link from Ayrfield Drive to Malahide Road, 6 no. are concerned with the closure of Haverty road to through traffic, 4 relate to bus stop at Artane road and others relate to individual properties or other elements of the scheme. All submissions have been summarised within Appendix 1 of this report. In the interest of conciseness, I refer the board to this appendix should they wish to examine individual submissions.

4.6. In addition to the foregoing the major issues raised in the various third-party submissions to the Board are summarised under broad headings below:

- General concerns with regard to the overall design and layout of the scheme in particular junction design, the design of cycling infrastructure, footpaths alterations, relocation of bus stops and changes to the alignment of the current road layout.
- Concerns regarding the transportation modelling in relation to junctions in particular.
- Compatibility of the design with best practice design for cyclists.

- Potential for increase in crime/ antisocial behavior/ security/ child safety issues
- Loss of on street and clarity required in terms of loss of off street parking.
- Loss of green space and removal of planting in front gardens.
- Lack of public consultation and inadequate site notices
- Noise and air pollution issues
- Traffic Safety and access and egress arrangements from individual entrances on to the re designed R107.
- Visual impact / loss of privacy.
- Impact on property values

4.7. More specific concerns raised by individual groups along the proposed alignment included the following:

- Changes to the location of bus stops, parking and loading arrangements as well as the impact on architectural heritage associated with Artane Cottages
- Concerns regarding speed limits St. furniture and public realm issues around Donnycarney.
- Concerns regarding the new pedestrian and cycling form Aryfield Drive onto the Malahide Road.
- The closure of Havery Road to through traffic.

4.8. It is important to note at this juncture that third parties were invited to respond to the applicant's response to their submissions. A total of 58 responses were received. 49 of which refer to the proposed link at Ayrfield Drive, 2 refer to Artane Cottages and the remainder are related to individual properties and the accessibility of entrances or removal of vegetation. The only new issues to arise relates to the use of the 2016 Census data for the assessment of travel patterns. It is considered that this is out of date.

4.9. It is important to note that all issues raised as considered in detail under the specific headings within my report hereunder.

4.10. NTA Response to submissions

The NTA submitted a response to the submissions raised which can be summarised hereunder. It is of note that as outlined above a significant number of submissions are similar in nature and are concerned with the same issues, such as the 64 no. submissions relating to the creation of a pedestrian entrance at Ayrfield Drive, in the interest of conciseness rather than list every submission and repeat the same response I will summarise the response based on topic and where there are standalone issues raised I will refer to the particular submission and summarise the response accordingly.

Proposed link to Ayrfield Drive

- There is a section of wall to be removed along the eastern section of the Malahide Road approximately 400m south of the Priorswood Road Malahide Road Roundabout to facilitate a pedestrian and cyclist access via an existing green area between 45 and 47 Ayrfield Drive.
- Existing travel data outlined in chapter 10 of the EIAR demonstrates work travel patterns, it is of note that Ayrfield has the highest car usage along the route and exceeds the average mode share for County Dublin as a whole.
- This new link will connect directly Ayrfield Drive with the Malahide Road adjacent to proposed bus stops serving each direction including a new toucan crossing for safe access and provide a much shorter route for residents and visitors to access high-frequency reliable public transport services, safe segregated cycling facilities and pedestrian facilities. The new link will also provide a connection between the retail and residential areas.
- It is noted that no submission from the reputed owner of this site has been received.
- Of the 64 submissions, 58 were from residents of the Ayrfield estate and 6 were from elected representatives supporting the residents. It is noted that submission 17 included a petition, which is stated to include signatures from 619 households but it is noted that the submission relates to 544 property addresses.

- In response to the contentions that the need for the new link was not investigated fully the NTA state that CSO data show that Ayrfield has the highest car mode share for travel to work trips at 62%. In addition, this mode share exceeds the average mode share for County Dublin as a whole. There is a continuous boundary wall along the Malahide Road at this estate. Data suggests that areas of higher permeability have higher bus usage. It is considered that the boundary wall acts as a deterrent to achieving the required mode shift away from private car use.
- The proposal for the new pedestrian and cyclist link supports elements of, international policy, European Union (EU) law and policy, national policy, regional policy and local policy. At all policy levels, there are clear objectives to increase active travel and accessibility to public transport, such policies are listed within the submission.
- Development will also seek to achieve the goals particularly no.3 & 7 of the National Sustainable Mobility Policy. The proposed link at Ayrfield Drive provides enhanced permeability to the residential area and as noted in Section 6.4.6.1.2.1 of EIAR Chapter 6 Traffic and Transport states that 'All proposed facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities.
- It is stated within the response that 'The significant improvement to the walking, cycling and bus facilities included within the Proposed Scheme will encourage sustainable modes of transport, therefore reducing the demand for private vehicles / parking along the Proposed Scheme.
- Improved accessibility is also expected to increase social cohesion within the local community.
- The new link to Ayrfield Drive will allow the community to be better linked to the wider public transport, cycle network and walking routed in the area and will encourage increased active travel and public transport patronage at this location.

- The proposed changes are directly linked to the provision of the new link, signalised crossing and new bus stops on the Malahide Road at this location.
- Networks analysis demonstrated that Ayrfield estate is outside of both the 400m and 800m catchments for walking bands relating to 5 and 10 minute walks to bus stops.
- The proposal will bring a total of 619 properties within 400 -800m catchment to bus stops, if the link were omitted the scheme would only add 35 units to this catchment.
- With regard to references to the existing bus stop at Blunden Drive, it is stated that future bus network must be considered in this regard. While parts of the northern and eastern sections of the Ayrfield estate are within the catchment of the D5 route which gives residents a choice of service, the overall existing bus patronage of the area is relatively low. The proposed new pedestrian link to the Malahide Road provides residents of the Ayrfield estate wishing to travel towards the city centre, or towards Clongriffin, with improved accessibility to the higher frequency and more direct D1 and D3 services along the Proposed Scheme.
- It is further noted that the N6 service running along Tonlegee Road will mean that patrons will have to change at the Malahide Road if they wish to travel to the city centre or towards Clongiffen.
- It is highlighted within the EIAR that to limit the growth in car traffic, and to ensure that this demand growth is catered for predominantly by sustainable modes, a number of measures will be required, that include improved sustainable infrastructure and priority measures delivered as part of the NDP/GDA Strategy.
- The proposed link to Ayrfield Drive supports the improvements in people movement by sustainable modes at this location and the importance of, and the need for, the proposed link will become more pressing in the future as demand management measures will play a role in limiting the growth in transport demand predominantly to sustainable modes only.

- The submission refers to the NTA document Permeability in Existing Urban Areas Best Practice Guide 2015 which is referenced in the Dublin City Development Plan in which it is stated that increased permeability is achieved by increases in linkages and Ayrfield is a good example of this.

Public Consultation

A number of submissions raised concerns in relation to the quality of consultation and communication with residents. Three rounds of consultation were undertaken with a number of methods used including:

- Dedicated website,
- Brochure for the development,
- Public information events – in person for 1st and 2nd round and virtual for 3rd.
- Community forum events with representatives of the community – in persons for 1st and 2nd and virtual for 3rd, average attendance for these was 24.
- Social media coverage,
- Papers,
- Press and radio
- Outdoor advertising,
- Presentations and infographics

- First non-statutory round of public consultation took part from 14th November 2018 to the 29th March 2019. The first Community Forum meeting for the Clongriffin to City Centre Core Bus Corridor took place on 11th December 2018 at the Hilton Hotel, Malahide Road with approximately 20 representatives in attendance. A Public Information Event was held at the Hilton Hotel, Malahide Road on the 10thJanuary 2019.
- Second non-statutory round of public consultation held at the Hilton Hotel, Malahide Road on the 11thSeptember 2019, with approximately 15 in attendance.

- In March 2020, the Draft Preferred Route Option (PRO) was published and a second non-statutory round of public consultation commenced on 4 March 2020 and ran until 17 April 2020. The consultation was announced via press release and a media press release and included a Public Information Event at the Bonnington Hotel in Whitehall on the 11th March 2020 from 9:30am to 7:30pm.
- Due to the COVID-19 pandemic, all events scheduled after 12 March 2020 were cancelled. In deference to the submissions the NTA had already received, the decision was made not to cancel the consultation. Consequently, there were just 30 submissions received relating to the Clongriffin to City Centre Core Bus Corridor, none of which related to the potential new link to Ayrfield Drive.
- The third round of non-statutory public consultation took place from 4th November 2020 until 16th December 2020 on the updated Draft Preferred Route Option for the Proposed Scheme. A briefing session was organized via Zoom to take place on 4 November 2020.
- The applicant utilised a primary virtual interactive tool during the final third phase of public consultation which was the use of virtual consultation rooms available through the BusConnects website. Theses rooms were online for a six week period (24hrs x 7 days a week) and included the following:
    - all Scheme materials available for perusal, such as the brochure, maps and all associated support documentation;
    - an audio description of the brochure information; and
    - a call back facility within the virtual rooms for any stakeholder to book a phone call back from a member of the BusConnects Infrastructure team for additional information or more detailed queries.

Over the seven weeks of the consultation, 363 unique users visited the virtual information room for Clongriffin to City Centre Core Bus Corridor. In addition, a third, virtual, Community Forum meeting took place on 18th November 2020 with approximately 15 representatives in attendance. At this meeting a question was asked by an elected representative about the proposed link to Ayrfield Drive, citing concerns about rat-running by vehicular traffic. The NTA team attending clarified that the proposal was to allow access for pedestrians and cyclists only and vehicular traffic would not be permitted.

- There were 150 submissions relating to the Proposed Scheme during this round of non-statutory public consultation.
- Statutory round of public consultation as part of the statutory public consultation in addition to the notices required by statute to be published in the newspaper, public notices were also placed at 25 locations along the route of the Proposed Scheme, details of locations is provided.

Potential for increase in crime / anti-social behaviour / security / child safety and protection for increase in crime / loss of security Planning History

- The new infrastructure improvements should have a direct and immediate impact on crime along the corridors. It will provide better, safer and more visible bus stops whilst also improving the wider public realm infrastructure through investments such as improved street lighting. This will act as a direct deterrent to criminal activity and result in a reduction in crime. This in turn has been shown to encourage people onto the streets into the evening which will also support the night time economy in community centres.
- Good infrastructure has also been shown to have a positive impact on levels of crime, particularly low level crimes such as theft and vandalism. There is evidence from a wide range of studies that redesigned public realm, especially those which are better lit and more visible, see significant reductions in the level of crime.
- A study from Los Angeles in the late 1990s discovered that the location and visibility of bus stops can have an impact on crime. Where bus stops were clearly visible, offered shelter to the user and were on streets with high levels of vehicle traffic, criminal activity was less common.
- A higher number of pedestrians and cyclists in housing estates and neighbourhood centres also changes the perception of a place in terms of safety. Passive supervision, the mere presence of more people, makes the place safer. By maintaining or creating links for pedestrians and cyclists, this enhanced safety can be provided.
- Case study from Dargle Wood, Knocklyon is referenced – concerns were raised in relation to antisocial behaviour at this location, residents' fears and concerns of a worsening antisocial behaviour situation has not materialised to date and

the amended project carried out has so far brought improvements that can be built upon. The case study demonstrates that improved pedestrian and cycling links, such as the proposed pedestrian and cyclist link between Ayrfield Drive and the Malahide Road will have a positive impact on residential amenity, rather than leading to an increase in crime and anti-social behaviour.

Loss of Green space

- The green space is to be retained with a slight alteration in relation to the provision of a footpath and cycle path.

Risk of traffic accidents and hazards from increased traffic parking in the estate to access the Core Bus Corridor

- It is considered that the journey time associated with driving by car into the Ayrfield estate to park and access the new bus stops via the proposed link would be highly unattractive to potential bus passengers and will not lead to any significant increase in vehicular traffic within the estate.

Increased air and noise pollution

- Removal of wall will not result in significant construction dust generation.
- With regard to air pollution relating to the operational stage of the development, it is predicted that the majority of modelled receptors are estimated to experience a negligible impact due to the Proposed Scheme in terms of the annual mean NO2 concentration;
    - the Proposed Scheme will be overall neutral in terms of annual mean PM10 concentrations, with all receptors experiencing a negligible impact
    - the Proposed Scheme will be overall neutral in terms of the annual mean PM2.5 concentration with all receptors experiencing a negligible impact; and
    - In accordance with the EPA Guidelines (EPA 2017) the impacts associated with the Operational Phase traffic emissions pre-mitigation are overall neutral and long-term.

With regard to noise, assessments have accounted for areas where changes are proposed such as the boundary changes proposed at Ayrfield Drive. Noise changes are considered to be neutral to slight as outlined in the EIAR.

Visual impact / loss of privacy

- In response to concerns relating no. 45 & 47 Ayrfield Drive – no change to existing situation for these properties in terms of overlooking or visual impact. Walls are retained as are trees adjacent. In relation to no. 60 additional trees will be planted to provide additional screening to the front of this property from the proposed pedestrian area.

Loss of property value

- The conclusion reached is that in overall terms the public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors, with evidence showing that investing in public realm creates improved spaces that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.

Haverty Road

- Support is noted for the proposed works along this route and in response to the one objection it is stated that consultation was undertaken appropriately in accordance with statutory requirements, an additional three rounds of non-statutory consultation was also undertaken.
- In response to a request from residents to close Haverty road to through traffic after the first non-statutory consultation, the route along Brian Road, Carleton Road and Haverty Road was reviewed. It was agreed that this proposal could be accommodated and would support the Quiet Street initiative.
- These changes were described within the subsequent consultations and residents made clear to the NTA that they were thankful that their suggestion was adopted.
- The closure of Haverty Road is an essential component of the Quiet Street treatment for the alternative cycle route along Carleton Road, St Aidan's Park, Haverty Road and Marglann Marino. Provision is made to allow emergency

vehicles use this junction. This proposal will also help to further reduce traffic on Brian Road, Carleton Road and Haverty Road, thus supporting the Quiet Street treatment.

- Drivers will still be able to access Marglann Marino from the existing junction with the Malahide Road, which will include access to Haverty Road, Marino Park Avenue and the wider Marino estate. Haverty Road is proposed to be closed to through traffic at its junction with St Aidan's Park only, thus preventing through traffic accessing Carleton Road.
- To determine the impact that the Proposed Scheme has in terms of an increase in general traffic flows on the direct and indirect study areas, a robust assessment has been undertaken. The results of this assessment show that there are no links in the Marino estate that experience traffic flow changes above the threshold level (2-way flow change of 100 passenger car units or more). This indicates that no roads in the Marino estate will experience a flow change of greater than approximately 1 vehicle per minute as a result of the Proposed Scheme.

Artane Cottages Lower

- An overview of the design evolution of the junction at this location (Kilmore Road/R107 Malahide Road) is provided in Appendix A6.3 - Junction Design Report of Volume 4 of the EIAR. Images of the junction layout from Concept Design to Emerging Preferred Route, draft Preferred Route (2nd non-statutory public consultation), updated draft Preferred Route (3rd non-statutory public consultation, including the new bus stops) and final preliminary design are shown here also.

The response notes that 3 key issues were raised in relation to Artane Cottages:

i. Bus stop location and impact on the environment.

ii. Residual Footpath and parking/loading arrangements; and

iii. Clarification

- In response to the bus stop concerns, the method for assessing and refining the locations for the bus stops along the Proposed Scheme is outlined and refers to a standalone document (Bus Stop Review Methodology) which has

been developed to assist in this process and is included as an appendix (Appendix H) to the Preliminary Design Report.

- Feedback from each of the non-statutory consultations was also considered in reviewing the bus stop locations as part of the design of the scheme. This includes feedback raised at Community Forum meetings, e document submitted with the application 'Bus Stop Review Methodology'.
- At such meetings concerns were raised in relation to the footpath width remaining with the proposed bus stop to be sited adjacent to 5 & 6 Artane Cottages. In particular, following feedback from the second round of non-statutory public consultation in March 2020, a review was undertaken of all the bus stops along the route using the methodology and criteria referred to above.
- The relocation of the bus stop at 1219/Danieli was informed by the future implementation of the Dublin Network Redesign. In particular, it was noted that the existing bus service 104 would no longer be routed via Kilmore Road/Malahide Road under the future bus network routing proposals for the area. Instead, it would be routed along Ardlea Road, thereby leaving the southern end of Kilmore Road without a bus service and no bus stops close by on Malahide Road.
- The Proposed Scheme takes account of the proposed network routing adjustment and provides a bus stop at the junction of Malahide Road and Kilmore Road to cater for the Kilmore Road catchment that are currently served by the 104 service.
- The three scenario suggestions in relation to the relocation of bus stops were taken into account in the response to the submissions. These scenarios are considered in detail, and it is stated that they do not perform as well as the proposed scheme in terms of catchment areas, location in relation to outbound stops, junction interaction in relation to adaptive bus signalling measures and physical spaces for location of stops between driveways.
- It is stated that bus stop designs have been designed with vulnerable users in mind and in consultation with representative mobility groups, accessibility audits and road safety audits.

- Island Bus Stop, these types are the preferred bus stop option to be used as standard on the CBC project where space constraints allow. Where space constraints do not allow for an island bus stop, as is the case at Artane Cottages Lower, Shared Bus Stop Landing Zone provides an option consisting of a shared bus stop landing zone that may be considered. This proposed arrangement will remove the conflict between cyclists and stopping buses by ramping cyclists up to the footpath level where they continue through the stop.
- Response to the contravention of the Preliminary Design Guidance Booklet (PDGB) of the National Cycle Manual. The PDGB was developed to outline relevant design principles and to ensure consistency of design.
- In terms of footpath widths, various acceptable widths under differing circumstances are outlined within the response.

Architectural Heritage Assessment

- Artane Cottages which are located in the vicinity of the Malahide Road / Kylemore Road Junction, directly opposite the 'The Goblet' Public House, are not protected structures or in an Architectural Conservation Area.
- However, the cottages are acknowledged to be of architectural heritage interest. Historic maps indicate that the cottages never had gardens to the front but have always fronted directly onto the Malahide Road.
- No significant changes are proposed to the alignment of the existing footpath in front of Artane Cottages Lower, however the inclusion of a cycle track under the Proposed Scheme will mean that the cottages will be set further back from the vehicular traffic using the Bus Lane and road carriageway than they are at present.
- The design of the Proposed Scheme has purposefully only included a bus stop pole and RTPI (real time passenger information) sign and avoided the placement of a bus shelter at this location, which will minimise impacts on the setting of Artane Cottages Lower.
- The architectural heritage impact of the bus stop at this location is deemed to have a Negative, Slight and Long-term impact.
- The predicted impacts are neutral and long-term in relation to community and the residual operational phase impacts from the air dispersion modelling

assessment is set out in Section 7.6.2 which identifies a neutral impact for the study area.

- In relation to noise disturbance to these cottages it is stated that by the year of opening 2028, the NTA forecast for 94% of the city bus fleet to be electric vehicles or hybrid electric vehicles for the design year 2043 the city bus fleet is forecast to be 100% electric. The operation of hybrid or electric buses eliminates noise from buses accelerating, decelerating and idling at bus stops which is the dominant noise source.

In response to concerns relating to residual footpath and parking / loading arrangements –

- As part of this consultation process the design was altered following this request that also resulted in moving the proposed Cycle track and Footpath on the opposite side of the road into the green area adjacent to St. David's Wood. Insofar as is reasonably practicable, the full width of the existing footpath has been maintained apart from isolated locations where it was not practicable to keep the existing approximate 3.5m wide footpath. The two key locations where this occurs is for the waiting area for right turning cyclists at the Kilmore Junction outside 9 Artane Cottages Lower and outside 5 & 6 Artane Cottages Lower where a new bus stop is proposed. It should be noted that at both these locations the majority of the waiting area and bus stop will be at the same level as the footpath, thus the kerb lines within this section will largely be in the same location as the current situation.
- It is noted that as a consequence of seeking to maintain the footpath widths, the cycle track widths have been reduced from 2m to 1.5m typically along this section. The running traffic lane will also be set back approximately 1.5m further away from the properties than under the current scenario. The footpath width at the location of the cycle waiting area for right turning cyclists reduces locally to a minimum of 1.8m to accommodate this waiting area. This width is the absolute minimum required in accordance with DMURS, as set out in the PDGB Appendix A4.1 of EIAR Chapter 4 Proposed Scheme Description.

- A communications plans will be put in place for the construction phase of the development.
- In relation to the relocation of gate post the works will facilitate the re-erection of the existing gates to accommodate the works
- In relation to the rising damp issues raised - Given the existing footpath widths are largely maintained at this location, the proposed works will not adversely impact the legacy issues and challenges associated with drainage, rising damp and sound transfer for these buildings, notwithstanding pre-construction and post construction surveys will be undertaken.
- In response to issues pertaining to the existing southern access – it is the intention under the Proposed Scheme will be to retain the existing access to the driveway at this location and thus not adversely impact these existing arrangements.

<u>In response to Donnycarney West Community Association</u>

- 50km/h speed limit to remain.
- The design and modelling of junctions has been an iterative process to optimise the number of people (rather than vehicles) that can pass through each junction, with priority given to pedestrian, cycle, and bus movements.
- In response to relocation of bus stop the location was assessed against a number of performance criteria.
- In relation to footway at 109-115 Malahide Road, it is the intention that the footway is brought to the front of the shops.
- Eir advertising board is to be retained and will not cause obstruction.
- Flower basket poles, public seating and planting as well as the Donneycarney clock are to be retained.
- Low walls will provide informal seating at front of church.
- Casino Marino is outside of the extent of the development.

<u>In response to Tesco</u>

- Kerbed corner islands are provided forcing turning vehicles into a wide turn and removing the risk of vehicles cutting into the cycle route at the junction corner.

- The existing lane arrangement on the entrance to the shopping centre will remain unaltered by the Proposed Scheme.
- The right-hand lane is designated for “Goods In” and HGV traffic will turn in to this lane. This will increase the separation between the HGVs and cyclists further.
- Swept Path analysis is provided showing that HGV can access the site adequately.
- Junctions have been adequately modelled and will preform in a safe manner.

In response to Denise Mitchell & others

- Concerns raised in relation to Ayrfield Drive are dealt with above.
- Concerns in relation to Buttercup Park – Temporary construction compound location has been chosen due to amount of available space. This landforms part of the temporary acquisition and will be turned into community greenspace enclosed with hedge planting and woodland walkways. A new pedestrian footpath has been incorporated into the design to allow for access.

Responses to submissions relating to the overall scheme

Consultations - Brendan Heneghan

- Non statutory consultations were carried out prior to the lodgement of the application to An Bord Pleanála, the applicants have also complied with the statutory consultation process which satisfies the requirements of the Aarhus Convention which is the current stage of the project.
- It is of note that the Kazakhstan Advice does not apply to the non-statutory public consultation.
- In relation to the changes in the scheme from the initial non statutory consultation time, it is stated that previously proposed elements along Belmayne Main Street and Belmayne Avenue are now being undertaken as a separate project being developed by DCC namely, The Belmayne Main Street and Belmayne Avenue Scheme, which provides bus and cycle linkages to Clongriffin Dart Station.
- In relation to concerns about the clarity of the development, it is stated that the different chapters of the EIAR provides a list of works to be carried out.

- This identifies potential decreases as well as increases in traffic flows on some road links in the study area as a result of the Proposed Scheme, due to the reallocation and rebalancing of road space in favour of sustainable modes (Walking, Cycling and Public Transport).
- Junctions are operating within all assessed scenarios the effects at each junction are predominantly deemed to be Imperceptible to Not Significant and Long-term. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no additional mitigation measures, beyond what is included already in the design, have been considered.
- Across the study area as a whole, it is determined that there will be an overall Negative, Slight and Long-term effect from the redistribution of general traffic as a result of the Proposed Scheme.
- Cumulative impacts have been considered within chapter 21 of the EIAR.
- Site notices were erected at 25 locations along the proposed route.
- Fees are outlined in the statutory notices.
- With regard to the removal of roundabouts it is stated that proposed changes are necessary in order to achieve the objectives of the scheme which relate to improved more reliable and faster public and sustainable travel modes.
- Current guidance advises against the use of large roundabouts in urban settings and recommends the replacement with signalised junctions.
- Removal of left turning slips will lead to improved pedestrian, cyclist and bus priority infrastructure.
- Section 7.2.3 of the same report then sets out the rationale for the inclusion of the off road cycle routes, noting that the inclusion of cycle tracks on this section of the Malahide Road would result in significant additional impacts on private properties. Therefore, it was determined that the preferred route was to provide an alternative cycle route through a parallel, less trafficked route along Brian Road, Carleton Road and Haverty Road.
- The closure of Haverty Road to through traffic will reduce the level of traffic on Brian Road, Carleton Road and Haverty Road, which will provide a more attractive and safer route for cyclists.

- EIAR Volume 4 Part 2 Chapter 17 provides the Arboricultural Impact Assessment Report, which includes detailed drawings showing all trees that are to be removed.
- A single tree is to be removed at the location mentioned in order to allow the inclusion of a short length of two-way cycle track which is necessary to connect to the start of the Quiet Street treatment on Brian Road.
- No significant additional impacts are expected due to its construction concurrent with other Core bus Corridor Schemes over and above those predicted for the stand-alone scheme.
- An assessment of the Emerging Preferred Route along Belmayne Main Street and Belmayne Avenue in terms of journey times is no longer part of the Proposed Scheme since DCC.
- Routes and associated journey times presented in the November 2020 Brochure are now different to those applied for as part of this application and therefore journey times differ. Parts of these routes are being developed separately by the relevant local authorities.
- Extents of land acquisition is shown on the General arrangement drawings.

<u>Response to Dublin Commuter Coalition.</u>

- Additional lanes near to the north of Priorswood Road are required as the Malahide Road acts as an additional route to Dublin Port when the port tunnel is closed. This can result in higher HGV movements which has impacted the design of the proposed scheme.
- Population and employment within the area of the route are to increase, for the purpose of modelling 2028 and 2043 were selected. The proposed development is expected to increase the use of sustainable modes of transport by 11.4% by 2028 and 34.4% by 2043.
- NTA is considering measures to prevent the unlawful use of bus lanes. Enforcement is a matter for An Garda Siochana.
- No two junctions are the same, junctions have broadly been categorised into 4 types of junctions.
- A Preliminary Design Guidance Booklet (PDGB) has been developed for the proposed scheme setting out the design principles for the proposal. These

principles complement existing documents and standards such as the National Cycle Manual and DMURS.

- The PDGB was developed to outline the agreed design principles and to enable consistency of design.
- The PDGB, like all guidance documents, was developed to be cognisant of the everchanging nature of society, including commuting patterns and behaviours. To acknowledge the expected increase in cycling numbers and to set about achieving the necessary 'step change' to cater for this increase, international best practice from countries which have already experienced this transition successfully was consulted. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.
- Justification for the junction design is provided on page 91 of the response and refers to protections of cyclist and pedestrians, improve sight visibility for vehicles and removal of cyclists – vehicle conflict.
- The NTA notes the coalitions preference for the Dutch style junction design and has had regard to this design but due to a number of constraints, these junctions were not suited to the scheme, however consideration of the Dutch design in the context of the constraints and other considerations have led to the proposed junction designs as presented within the scheme.
- Dutch design does allow for potential un-signalised conflict between pedestrians and cyclists. After consultation with Irish disability groups this design was not considered to be suitable for the visually or mobility impaired. The four junction types within the PDGB have specifically been set out to mitigate these potential conflicts insofar is reasonably practicable.
- Dutch design requires multi movement for pedestrians with the requirement of a large pedestrian holding area between the cycle lane and the carriageway which requires significant space. The proposed junctions consolidate the holding area on the footpath with direct crossing areas which require less space and provide more legibility for users.

- The concept of allowing both cyclists and general traffic to proceed together in the same direction is not uncommon and the same traffic signals arrangement also caters for left-turning traffic.
- The Dutch style junctions are not all the same and a number of different scenarios are catered for within these designs. It is of note that Proposed Scheme provides measures such as kerb segregation, advanced position cycle stop lines and early starts for cyclists which will further segregate and reduce the number of interactions between cyclists and vehicles. All these elements form the basis of a typical junction design and operation, thus no one element of a junction design should be considered in isolation.
- Driver awareness campaigns will be rolled out with rules regarding junction turning and overtaking of cyclists.
- In response to concerns relating to pedestrian crossings - The Proposed Scheme will increase the number of controlled pedestrian crossings from 36 in the existing to 52 in the Proposed Scheme, equating to a 70% increase. Additionally, there will be an increase in the number of raised table crossings on side roads from 9 in the existing to 31 in the Proposed Scheme, equating to a 244% increase.
- Two stage crossing are used where crossing distances are too far.
- Junction not included in southern arm of Malahide Road/Griffith Avenue Junction because there is no desire line, distance is excessive which would compromise overall people movement capacity within the junction due to lengthy inter green periods (periods holding traffic stopped) and the proposed design seeks to segregate interaction with the two-way cycle track.

<u>Response to Dublin Cycling Campaign</u>

- The NTA recognises the groups categorising of cyclists into four categories, but the scheme has not set out to target any particular cohort of cyclist. The Proposed Scheme will provide a safe, sustainable transport corridor that can provide a sustainable alternative mode of transport for all ages and abilities.
- Comments raised in relation to the recently published National Sustainable Mobility Policy are noted and the Proposed Scheme aim and objectives as set

out in Section 1.2 of Chapter 1 in the EIAR have a direct alignment to the objectives that underpin this policy.

- Current levels of service for cycle infrastructure are rated as C, this is raised to A/A+ after the implementation of the scheme.
- The Proposed Scheme will provide narrower traffic lanes and tighter junction radii in line with DMURS principles which is accompanied with a speed limit reduction to 50km/hr on the outer dual carriageway section.
- In relation to junction design – no two junctions are the same within the scheme. Junctions have been broadly categorised into 4 types within the scheme as set out in the PDGB.
- These junction types directly align to the schemes core aim which his to enhance cycling by providing safe infrastructure which his segregated from traffic were possible.
- The scale of the bus connects will be transformative. The NTA are developing design principles for the scheme which complement existing documents and standards such as the National Cycle Manual and DMURS.
- The PDGB was developed to be cognisant of the everchanging nature of society, including commuting patterns and behaviours.
- The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians.
- As world leaders in cycling and cycle infrastructure in holland, the Dutch cycle guidance was taken into account when developing the PDGB.
- Introduction of kerbs and junctions to protect cyclists will force traffic to slow as turning.
- This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes, for example, where access to a dedicated left-turn lane would previously have necessitated a vehicle to cross the cycle lane.

- For right turning cyclists traffic Signal arrangement removes any uncontrolled pedestrian-cyclist conflict, other benefits are outlined within the response.
- In relation to pedestrian cyclist conflicts and cyclist safety in relation to junctions and the left hook potential, it is of note that these issues have been addressed within the preceding response and will not therefore be repeated hereunder.
- With regard to use of international standard junctions, as mentioned in previous responses no one junction is the same in the scheme and therefore designs are developed in response to the individual circumstances of a particular junction with the principles of segregation where possible and cycle safety in all cases.
- Pedestrian crossings have been altered in a number of ways providing for a safer environment, examples of this is within the response in relation to the western arm of the R139/ Malahide Road (Northern Cross) junction whereby the crossing was 44 metres long multistage crossing and is now 25 m with directness improvements, a single direct crossing is not appropriate in this instance.
- For a number of reasons green buffer spaces may not be suitable at all locations.
- Mid-block crossings have been provided in a number of locations as part of the Proposed Scheme to facilitate access to destinations and to cater for pedestrian and cyclist movements across the main corridor. It is likely that a range of movements will be required at these crossings. A toucan crossing will facilitate each of the specified movements adequately and safely for all road users and is preferred to provide a balanced solution to cater for pedestrian and cycle users. Location of Toucan crossings are outlined in the response.
- In response to concerns raised about the width of the cycle lane it is stated that one of the main outcomes of the Proposed Scheme is safe, segregated cycling facilities which are accessible to all along the corridor. The desirable width is 2metres which will allow for overtaking. This is not practicable in all locations and widths have had to be reduced to 1.8 and 1.5 in response to the constraints of a particular area.

Response to Noel Regazzoli

- This submission raises similar concerns as others in relation to access, noise & air quality and increases in traffic, however an additional issue raised within this submission relates to wheelchair access and is concerned that vehicles picking up and dropping off at his property will now not be able to stop. The NTA states that as per S.I. No. 182/1997 - Road Traffic (Traffic and Parking) Regulations, 1997 section 39 Parking in Bus Lanes is allowed for taxies or a wheelchair accessible taxis which are stopped while picking up or setting down passengers. As such the Proposed Scheme will not significantly impact the current arrangements in this regard.

Response to Bernadette & Maria Clarke

Bernadette and Maria Clarke raised common issues as outlined above but also referred specifically to concerns related to access to wastewater and sewerage. The NTA responded as follows:

- The Proposed Scheme will not impact on the existing public wastewater and sewerage systems serving the property. The existing public foul sewer is located within the existing Malahide Road corridor.

Response to the Blarney Stone Public House

- Condition relating to 1989 permission is no longer applicable.
- The proposed scheme will not impact the opening of the premise doors outwards and there is sufficient separation distance between the cycle track and the premise. As per the normal operating procedures, of careful opening of the doors outwards, it is not anticipated that there will be any additional risk incurred by the opening of the doors as a result of the Proposed Scheme.
- Bus passengers are provided with a standard bus shelter will have ample space to wait for the bus on the Island between the bus stop and the cycle track, with no incentive to wait elsewhere.
- The impact of the loss of this seating will be reviewed as part of the landowners claim for compensation.
- Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable.

Responses to common issues raised in other individual submissions:

Access & Egress across cycle lane and onto road

A number of submissions refer to concerns regarding accessibility of their properties and the potential to conflict with cyclists. The NTA has responded as follows:

- Presently accessing / egressing the properties requires crossing the bus lane and the footpath; with the Proposed Scheme it will also involve crossing the new cycle track. The existing width of the footpath is approximately 2.3m wide. The width of the proposed footpath is 2.0m and the cycle track is 1.75m in front of the properties, with the increase in width crossed 1.45m. The principle of how residents can access/ egress their properties is unchanged by the scheme proposals.

Increased Proximity of properties to traffic

A number of submissions refer to their properties being closer to traffic and raise concerns about noise. The NTA have responded as follows:

- The overall direct impact is determined to be positive, imperceptible to slight and short to medium term.

Parking

A number of submissions raise concerns about losing car parking within their driveways, the NTA have responded to the third parties and have stated that whilst some driveways will be shortened, residents will still have sufficient space to park within their driveways.

Loss of property value

- The conclusion reached is that in overall terms the public realm improvements planned by the NTA may lead to an increase in value of both residential and retail property prices, especially in the community centres along the corridors, with evidence showing that investing in public realm creates nicer places that are more desirable for people and business to locate in, thereby increasing the value of properties in the area.
- If the CPO is confirmed by An Bord Pleanála, a Notice to Treat will be served on the landowner whose land is being acquired. Following service of the Notice to Treat, the landowner will be required to submit a claim for compensation and as part of this process, the NTA will pay the reasonable costs (as part of

the claim) for the landowner to engage your its agent / valuer in preparing, negotiating and advising on compensation.

Loss of planting within front gardens to be acquired.

Many submissions raised concerns in this regard. The NTA states the following:

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

4.11. **Planning History**

4.12. There are a significant number of planning applications along the route which include large residential, domestic residential such as alterations to existing houses, commercial development and telecommunication infrastructure etc, a full list is provided by the applicant within appendix 2 of the Planning Report document submitted with the application. Of relevance to this scheme and including a number referred to by Dublin City Council within their submission to the application is the following:

- ABP 307887 - An application for a Strategic Housing Development application at Site 2, Mayne River Avenue, Northern Cross, Malahide Road, Dublin 17 was granted in 2020, and comprised of 191 no. apartments and associated site works.
- ABP 305943 - An application for a Strategic Housing Development application at Newtown, Malahide Road, Dublin 17 granted in 2020 and comprised of 331 no. build to rent apartments, childcare facility and associated site works.
- ABP-304196-19 An application for a Strategic Housing Development application at Clarehall was granted in 2019, for 132 no. Build to Rent apartments and associated site works.
- ABP- 306696-20, Permission was granted for the construction of a new predominantly 3 storey 1000 pupil Post Primary School at Mount Temple Comprehensive School, Malahide Road, Clontarf. Dublin 3

- ABP 245738 - An application for an Aviation Fuel Pipeline from Dublin Port to Dublin Airport (granted in 2016; and
- DCC 4214/18 - An application for Street Refurbishments along Belmayne Main Street and Belmayne Avenue.

Dublin City Council refer to an additional two developments as outlined below.

- ABP-304346-19. A Strategic Housing Development at the Former Chivers Factory Site, Coolock granted in 2020 and comprised of 495 no. Build to Rent apartments, creche, cafe, gym and associated site works.
- ABP304838 Permission was granted for the construction of 347 no. Build to Rent apartments, creche and associated site works.
- A Strategic Housing Development at Clarehall, Malahide Road, Dublin 17 (SHD0007/19) granted in 2019,

(Both of the above developments are outside of the immediate scheme extents)

5.0 Policy Context

5.1. European

5.2. Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)

The Smart and Mobility Strategy is part of the EU Green Deal and aims to reduce transport emissions by 90% until 2050. The Commission intends to adopt a comprehensive strategy to meet this target and ensure that the EU transport sector is fit for a clean, digital and modern economy. Objectives include:

- increasing the uptake of zero-emission vehicles
- making sustainable alternative solutions available to the public & businesses
- supporting digitalisation & automation
- improving connectivity & access.

5.3. European Green Deal (EDG) 2019

The European Commission has adopted a set of proposals such as making transport sustainable for all, to make the EU's climate, energy, transport and taxation **policies**

fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

5.4. **Towards a fair and sustainable Europe 2050: Social and Economic choices in sustainability transitions, 2023.**

This foresight study looks at sustainability from a holistic perspective but emphasises the changes that European economic and social systems should make to address sustainability transitions. The EU has committed to sustainability and sustainable development, covering the three dimensions (environmental, social and economic) of sustainability. Transport is identified as an area of opportunity to increase the speed of a cultural shift towards sustainably. The provision of well planned, affordable or free public transport system and bicycle lanes are encouraged.

5.5. **National**

5.6. **National Sustainable Mobility Policy, 2022**

The purpose of this document is to set out a strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade.

A key objective of the document is to expand the bus capacity and services through the BusConnects Programmes in the five cities of Cork, Dublin, Galway, Limerick and Waterford; improved town bus services; and the Connecting Ireland programme in rural areas.

5.7. **National Sustainable Mobility Policy Action Plan 2022-2025**

BusConnects is identified as a key project to be delivered within 2025.

5.8. **Permeability in Existing Urban Areas Best Practice Guide 2015**

Among the priorities of the National Transport Authority (NTA) are to encourage the use of more sustainable modes of transport and to ensure that transport considerations are fully addressed as part of land use planning. This guidance demonstrates how best to facilitate demand for walking and cycling in existing built-up areas.

5.9. **Department of Transport National Sustainable Mobility Policy on 7th April 2022.**

The plan, prepared by the Department of Transport, includes actions to improve and expand sustainable mobility options across the country by providing safe, green, accessible and efficient alternatives to car journeys.

- United Nations 2030 Agenda

5.10. **Smarter Travel – A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020**

This is a government document that was prepared in the context of unsustainable transport and travel trends in Ireland. The overall vision set out in this policy document is to achieve a sustainable transport system in Ireland by 2020.

To achieve this the government set out 5 key goals

- (i) to reduce overall travel demand,
- (ii) to maximise the efficiency of the transport network,
- (iii) to reduce reliance on fossil fuels,
- (iv) to reduce transport emissions and
- (v) to improve accessibility to transport.

To achieve these goals and to ensure that we have sustainable travel and transport by 2020, the Government sets targets, which include the following:

- 500,000 more people will take alternative means to commute to work to the extent that the total share of car commuting will drop from 65% to 45%
- Alternatives such as walking, cycling and public transport will be supported and provided to the extent that these will rise to 55% of total commuter journeys to work.

5.11. National Planning Framework Project Ireland 2040

The National Policy Position establishes the fundamental national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050,

Managing the challenges of future growth is critical to regional development. A more balanced and sustainable pattern of development, with a greater focus on addressing employment creation, local infrastructure needs and addressing the legacy of rapid growth, must be prioritised. This means that housing development should be primarily based on employment growth, accessibility by sustainable transport modes and quality of life, rather than unsustainable commuting patterns.

National Strategic Outcome 4

- NSO 4 - Dublin and other cities and major urban areas are too heavily dependent on road and private, mainly car based, transport with the result that our roads are becoming more and more congested. The National Development Plan makes provision for investment in public transport and sustainable mobility solutions to progressively put in place a more sustainable alternative. For example, major electric rail public transport infrastructure identified in the Transport Strategy for the Greater Dublin Area to 2035, such as the Metro Link and DART Expansion projects as well as the BusConnects investment programme, will keep our capital and other key urban areas competitive.
- Deliver the key public transport objectives of the Transport Strategy for the Greater Dublin Area 2016-2035 by investing in projects such as New Metro Link, DART Expansion Programme, BusConnects in Dublin and key bus-based projects in the other cities and towns.

5.12. National Development Plan 2021-2030

The NDP Review contains a range of investments and measures which will be implemented over the coming years to facilitate the transition to sustainable mobility. These measures include significant expansions to public transport options, including capacity enhancements on current assets and the creation of new public transport links through programmes such as Metrolink.

The NDP recognises Busconnects as one of the Major Regional Investments for the Eastern and Midland Region and this scheme is identified as a Strategic Investment Priority within all five cities.

Over the next 10 years approximately €360 million per annum will be invested in walking and cycling infrastructure in cities, towns and villages across the country.

Transformed active travel and bus infrastructure and services in all five of Ireland's major cities is fundamental to achieving the overarching target of 500,000 additional active travel and public transport journeys by 2030. BusConnects will overhaul the current bus system in all five cities by implementing a network of 'next generation' bus corridors including segregated cycling facilities on the busiest routes to make journeys faster, predictable and reliable.

Over the lifetime of this NDP, there will be significant progress made on delivering BusConnects with the construction of Core Bus Corridors expected to be substantially complete in all five cities by 2030.

5.13. **National Investment Framework for Transport in Ireland, 2021**

One of the key challenges identified within this document relates to transport and the ability to maintain existing transport infrastructure whilst ensuring resilience of the most strategically important parts of the network. Population projections are expected to increase into the future and a consistent issued identified within the five cities of Ireland is congestion. Given space constraints, urban congestion will primarily have to be addressed by encouraging modal shift to sustainable modes.

Within the cities, frequent and reliable public transport of sufficient capacity and high-quality active travel infrastructure can incentivise people to travel using sustainable modes rather than by car.

Bus Connects is identified as a project which will alleviate congestion and inefficiencies in the bus service. The revised NDP 2021- 2030 sets out details of a new National Active Travel Programme with funding of €360 million annually for the period from 2021 to 2025. A new National Cycling Strategy is to be developed by the end of 2022, and will map existing cycling infrastructure in both urban and rural areas to inform future planning and project delivery decisions in relation to active travel.

5.14. **Design Manual for Urban Roads and Streets, 2019**

This Manual provides guidance on how to approach the design of urban streets in a more balanced way. To encourage more sustainable travel patterns and safer streets, the Manual states that designers must place the pedestrian at the top of the user hierarchy, followed by cyclists and public transport, with the private car at the bottom of the hierarchy. The following key design principles are set out to guide a more place-based/ integrated approach to road and street design.

- To support the creation of integrated street networks which primate higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
- The promotion of multi functional, placed based streets that balance the needs of all users within a self regulating environment.
- The quality of the street is measured by the quality of the pedestrian environment.
- Greater communication and communication and cooperation between design professionals through the promotion of a plan-led multidisciplinary approach to design.

The manual recommends that bus services should be directed along arterial and link streets and that selective bus detection technology should be considered that prioritises buses. It is noted that under used or unnecessary lanes can serve only to increase the width of carriageways (encouraging greater speeds) and can consume space that could otherwise be dedicated to placemaking /traffic calming measures.

5.15. **Climate Action Plan 2023**

- The Climate Action Plan (CAP23) sets out a roadmap to halve emissions by 2030 and reach net zero by 2050. CAP23 will also be the first to implement carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings were approved by Government in July 2028 for the electricity, transport, built environment – residential, built environment – commercial, industry, agricultural and other (F-gases, waste & petroleum refining) sectors. Finalisation of the emissions ceiling for the Land Use, Land Use

Change and Forestry (LULUCF) sector has been deferred for up to18 months from July 2022.

- Citizen engagement and a strengthened social contract between the Government and the Irish people will be required around climate action. Some sectors and communities will be impacted more than others. A just transition is embedded in CAP23 to equip people with the skills to benefit from change and to acknowledge that costs need to be shared. Large investment will be necessary through public and private sectors to meet CAP23 targets and objectives.
- The electricity sector will help to decarbonise the transport, heating and industry sectors and will face a huge challenge to meet requirements under its own sectoral emissions ceiling. CAP23 reframes the previous pathway outlined in CAP21 under the Avoid-Shift-Improve Framework to achieve a net zero decarbonisation pathway for transport. This is a hierarchical framework which prioritises actions to reduce or **avoid** the need to travel; **shift** to more environmentally friendly modes; and **improve** the energy efficiency of vehicle technology.
- Road space reallocation is a measure outlined under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. It is recognised that road space reallocation can redirect valuable space from on-street car-parking and public urban roadways to public transport and active travel infrastructure (such as efficient bus lanes, and more spacious footpaths and segregated cycle-lanes), whilst also leading to significant and wide-scale improvements in our urban environments. A National Demand Management Strategy will be developed in 2023 with the aim of reducing travel demand and improving sustainable mobility alternatives.
- The major public transport infrastructure programme set out in the NDP rebalances the share of capital expenditure in favour of new public transport schemes over road projects. BusConnects in each of our 5 cities, the DART+ Programme and Metrolink will continue to be progressed through public consultations and the planning systems. BusConnects is a key action under

the major public transport infrastructure programme to deliver abatement in transport emissions, as outlined in CAP23 for the period 2023-2025.

5.16. **Regional**

5.17. **Regional Spatial Economic Strategy for the Eastern and Midlands Region**

- Chapter 5 Dublin Metropolitan Area Strategic Plan (MASP)
    - The MASP is an integrated land use and transportation strategy for the Dublin Metropolitan Area that sets out a vision for the future growth of the metropolitan area and key growth enablers.
    - Section 5.3 Guiding Principles for the growth of the Dublin Metropolitan Area - Integrated Transport and Land use which seeks to focus growth along existing and proposed high quality public transport corridors and nodes on the expanding public transport network and to support the delivery and integration of **'BusConnects'**, DART expansion and LUAS extension programmes, and Metro Link, while maintaining the capacity and safety of strategic transport networks.
    - MASP Sustainable Transport RPO 5.2: Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned.
    - RPO 5.3: Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists.
    - Section 5.6 Integrated Land use and Transportation-
        - Key transport infrastructure investments in the metropolitan area as set out in national policy include:
        - Within the Dublin Metropolitan Area, investment in bus based public transport will be delivered through BusConnects, which

aims to overhaul the current bus system in the Dublin metropolitan area, including the introduction of Bus Rapid Transit.

- Chapter 8 Connectivity
    - Section 8.4 Transport Investment Priorities:
        - Within the Dublin Metropolitan Area, investment in bus infrastructure and services will be delivered through BusConnects.
    - Section 8.5 International Connectivity:
        - RPO 8.18: Improved access to Dublin Airport is supported, including Metrolink and improved bus services as part of BusConnects, connections from the road network from the west and north. Improve cycle access to Dublin Airport and surrounding employment locations. Support appropriate levels of car parking and car hire parking.

5.18. **Local**

Dublin City Development Plan 2022-2028

- Chapter 8 Sustainable Movement and Transport
    - Table 8.1 Current and target mode share outlines that cycling is expected to increase by 7% by 2028 and bus by 3% in the same timeline.
    - It is stated that the modest increase in public transport mode share anticipates the construction of major public transport infrastructure that is proposed to occur over the lifetime of the plan. The impact of public transport infrastructure projects on mode share is more likely to come into fruition during the lifespan of the following plan.
    - Dublin City Council recognises and welcomes the opportunities for developing public realm around the city and in the urban villages where new public transport proposals are being developed such as Metrolink, BusConnects and the Luas expansion and DART+ project.
    - Key strategic transport projects such as the proposed Metrolink, DART+, BusConnects programme and further Luas Line and rail

construction and extension will continue the expansion of an integrated public transport system for the Dublin region and have the potential for a transformative impact on travel modes over the coming years. Dublin City Council actively supports all measures being implemented or proposed by other transport agencies to enhance capacity on existing lines/services and provide new infrastructure.

- SMT22 - Key Sustainable Transport Projects To support the expeditious delivery of key sustainable transport projects so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region and to support the integration of existing public transport infrastructure with other transport modes. In particular the following projects subject to environmental requirements and appropriate planning consents being obtained: • DART + • Metrolink from Charlemount to Swords • BusConnects Core Bus Corridor projects • Delivery of Luas to Finglas • Progress and delivery of Luas to Poolbeg and Lucan
- SMTO21 - To seek improvements to Cross Guns Bridge for pedestrian and cycle users, taking into consideration the BusConnects and Metrolink projects.
- It is acknowledged that new street/road infrastructure and improvements to existing streets/roads will be required over the period of the plan. In some instances, the development of new areas is predicated on the delivery of new street/road connections such as the new networks in Belmayne, Ballymun, and Cherry Orchard

The Proposed Scheme, for the most part, will comprise lands within the existing public road and pedestrian pavement area where there is no specific zoning objective.

Zoning objectives that are affected by the proposed scheme:

- Zone Z1 – Sustainable Residential Neighbourhoods To protect, provide and improve residential amenities.

- Zone Z2 – Residential Neighbourhoods (Conservation Areas) To protect and/or improve the amenities of residential conservation areas.
- Zone Z3 – Neighbourhood Centres To provide for and improve neighbourhood facilities.
- Zone Z4 – District Centres To provide for and improve mixed-services facilities.
- Zone Z6 – Employment / Enterprise To provide for the creation and protection of enterprise and facilitate opportunities for employment creation.
- Zone Z9 – Recreational amenity and open space To preserve, provide and improve recreational amenity and open space and green networks
- Zone Z15 – Institutional and Community To protect and provide for institutional and community uses.

5.19. **Greater Dublin Area Transport Strategy – 2022-2042**

This strategy replaces the previous GDA Transport Strategy 2016-2035. Busconnects is identified as a major project which is provided for within this strategy. The NTA has invested heavily in the renewal of the bus infrastructure, including bus stopping facilities, Real Time Passenger Information and fleet improvements and has commenced the largest ever investment programme in our bus network under BusConnects Dublin.

The Strategy recognises the government's commitment to sustainable mobility as outlined in NSO 4 of the National Development Plan 2021-2030.

Busconnects is identified as an essential to protecting access to Dublin Airport, ensuring that the Airport will operate in a sustainable fashion in terms of landside transport.

- Measure INT2 – International Gateways

  It is the intention of the NTA, in conjunction with public transport operators, TII, and the local authorities, to serve the international gateways with the landside transport infrastructure and services which will facilitate their sustainable operation. Throughout the lifetime of the strategy, the NTA will continue to work with Dublin Port Company, other port and harbour operators and DAA in respect of Dublin Airport, in monitoring, assessing and delivering these transport requirements.

Major transport interchanges are recognised as an integral part of the bus connects project.

- Measure INT5 – Major Interchanges and Mobility Hubs

  It is the intention of the NTA, in conjunction with TII, Irish Rail, local authorities, and landowners to deliver high quality major interchange facilities or Mobility Hubs at appropriate locations served by high capacity public transport services. These will be designed to be as seamless as possible and will incorporate a wide range of facilities as appropriate such as cycle parking, seating, shelter, kiosks selling refreshments plus the provision of travel information in printed and digital formats.

The NTA recognises that the construction of major projects including bus connects will cause disruption and it will seek to minimise such impacts through up-to-date travel information.

- Section 11.4 Cycle Infrastructure Provision and Management
- Section 12.2 Bus
- Measure BUS1 – Core Bus Corridor Programme

  Subject to receipt of statutory consents, it is the intention of the NTA to implement the 12 Core Bus Corridors as set out in the BusConnects Dublin programme

- Measure BUS2 – Additional Radial Core Bus Corridors

  It is the intention of the NTA to evaluate the need for, and deliver, additional priority on radial corridors.

- Measure BUS3 – Orbital and Local Bus Routes

  It is the intention of the NTA to provide significant improvements to orbital and local bus services in the following ways: 1. Increased frequencies on the BusConnects orbital and local services; and 2. Providing bus priority measures at locations on the routes where delays to services are identified

- Section 12.2.4 Zero Emissions Buses

The transition to a zero emissions urban bus fleet for the State operated bus services has begun under BusConnects. Under the BusConnects Dublin programme, the full

Dublin Area urban bus fleet will have transitioned to zero or low emission vehicles by 2030 and will have been converted to a full zero emission bus fleet by 2035.

- Measure BUS6 – Higher Capacity Bus Fleet

  In the later phases of the Transport Strategy period, it is the intention of the NTA to introduce higher capacity bus vehicles onto select appropriate BusConnects corridors in order to increase passenger carrying capabilities in line with forecast demand.

- 12.2.8 New Bus Stops and Shelters

  Bus shelter provision will be significantly expanded as part of the BusConnects Dublin programme and Connecting Ireland (section 12.2.7).

- 13.8 Road space Reallocation

  In line with transport policies and objectives to reduce car dependency and to favour sustainable modes over the private car, and as a means of achieving reductions in carbon emissions, it is the intention to reallocate roadspace from its current use for general traffic to the exclusive use by walking, cycling and public transport. This approach is applicable generally across the GDA, and in addition to the reallocation proposed under BusConnects.

- Measure Road 13 – Roadspace Reallocation

  The local authorities and the NTA will implement a programme of roadspace reallocation from use by general traffic or as parking to exclusive use by sustainable modes as appropriate, as a means of achieving the following: y Providing sufficient capacity for sustainable modes; y Improving safety for pedestrians and cyclists; and y Encouraging mode shift from the private car and reducing emissions.

5.20. **Dublin City Biodiversity Action Plan 2021-2025.**

The Dublin City Biodiversity Action Plan 2021-2025 (DCC Biodiversity Plan) recognises that in addition to legally designated sites there are numerous habitats across the city that have conservation value for biodiversity, including public parks and open spaces, rivers, canals, and embankments. The DCC Biodiversity Plan sets out five themes supported by objectives and actions, these themes are set out below:

- Maintaining Nature in the City.

- Restoring Nature in the City.
- Building for Biodiversity.
- Understanding Biodiversity in the City
- Partnering for Biodiversity.

The objectives of the DCC Biodiversity Plan include:

- Objective 4 – Monitor and conserve legally-protected species within Dublin City, particularly those listed in the annexes of the EU Birds and Habitats Directive,
- Objective 11 – Ensure that measures for biodiversity and nature-based solutions are incorporated into new building projects, retrofit and maintenance works, and
- Objective 12 which promotes net biodiversity gain.

5.21. **Legislative Context**

5.22. Under Section 51(2) of the Roads Act, 1993 (as amended by Section 9(1)(e)(i) of the Roads Act, 2007), a road authority shall apply to the Board for the approval of a proposed road development and shall submit to the Board an Environmental Impact Assessment Report (EIAR) in respect of the development. The proposed road development shall not be carried out unless the Board has approved it or approved it with modifications. The Board shall ensure that it has, or have access as necessary to, sufficient expertise to examine the EIAR.

5.23. Before approval of the proposed road development, consideration must be given to the EIAR, any additional information, any submissions made in relation to the likely effects on the environment of the proposed road development, and the report and any recommendation of the person conducting any inquiry. Taking into account the preceding, the Board shall reach a reasoned conclusion on the significant effects of the proposed road development on the environment.

5.24. **Heritage Designations and EIA**

5.25. **Natural Heritage Designations**

5.26. The following Special Areas of Conservation and Special Protection Areas are contained within the zone of Influence for the proposed development:

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Baldoyle Bay SAC,
- Howth Head SAC,
- Rockabill to Dalkey Island SAC,
- Lambay Island SAC,
- Howth Head Coast SPA,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Baldoyle Bay SPA,
- Dalkey Islands SPA,
- Malahide Estuary SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Rockabill SPA,
- Ireland's Eye SPA,
- Lambay Island SPA and,
- The Murrough SPA..
- North West Irish Sea cSPA

5.27. A Natura Impact Statement (NIS) has been prepared with regard to the foregoing European Sites and has been submitted to the Board in respect of the proposed road

development under Part XAB of the Planning and Development Act 2000 (as amended).

5.28. **EIA Screening**

5.29. The NTA has submitted to the Board the Environmental Impact Assessment Report (EIAR) prepared in accordance with section 50 of the Roads Act 1993 (as amended) and Directive 2011/92/EU of the European Parliament and Council, 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 in respect of the proposed road development.

6.0 Assessment

6.1. The proposed development as outlined above is essentially an upgrade to the existing bus priority and cycle facilities associated with the Malahide Road Quality Bus Corridor (QBC), which has been in place since 1999. The Proposed Scheme includes a substantial increase in the level of bus priority provided along the Malahide QBC, including the provision of additional lengths of bus lane, particularly in the outbound direction between the City Centre and Malahide resulting in improved journey time reliability.

6.2. Throughout the Proposed Scheme cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signalling for cyclists provided at junctions. Where space for a segregated cycle track is not available on the main corridor, an alternative cycle route via quiet roads is proposed such as between the junction with Malahide Road-Brian Road along Carleton Road, St Aidan's Park, Haverty Road and Marglann Marino.

6.3. Pedestrian facilities will also be upgraded, and additional signalised crossings are to be provided. In addition, public realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrian's experience.

6.4. This application is accompanied by a separate Compulsory Purchase Order ref: ABP-313279-22 in which it is sought to acquire various sections of lands along the route.

The majority of lands to be acquired relate to the setting back of the front boundaries of residential properties.

6.5. Given the variety of issues raised within the submissions received, I will consider the issues raised on a themed basis within the relevant sections of the report hereunder. All submissions are summarised within appendix 1 below for ease of reference.

6.6. I have read the entire contents of the file including the EIAR, Planning Report and supporting documentation and the NIS all submitted with the application. I have visited the subject site and its surroundings. I have read in full the observations submitted in respect of the application including the third-party observations, the observations from the Planning Authority and the observations from prescribed bodies. I consider the critical issues in determining the current application and appeal before the Board are as follows:

- Principle of development, need and justification.
- Adequacy of Consultation
- Project Design
- Visual Impact & Public Realm including cultural heritage.
- Residential Amenity
- Other issues raised in submissions.

6.7. **Principle of development, need and justification.**

6.8. The proposed development is being developed in response to the need for a sustainable, reliable form of public transport along the main radial routes from the City Centre. Sustainable transport infrastructure is known to assist in creating more sustainable communities and healthier places to live and work while also stimulating our economic development and also contributes to enhanced health and well-being when delivered effectively.

6.9. According to the National Planning Framework, 2018, the population of the Greater Dublin Area is forecast to increase by 25% by 2040 and this growth will have associated travel demands, placing added pressure on the transport system. Significant congestion already occurs throughout the GDA from private car

dependence and intervention is therefore required to optimise road space and prioritise the movement of people over the movement of vehicles.

6.10. At present, the reliability and effectiveness of existing bus and cycle infrastructure on key radial traffic routes into and out of Dublin city centre is compromised by a lack of bus lanes and segregated cycle tracks. Furthermore, existing bus lanes are often shared with parking and cyclists and are not always operational on a 24 hour basis.

6.11. As noted above, the overriding motivation for BusConnects is to reduce CO_2 emissions and this is critical from a global climatic perspective. The proposed scheme is specifically identified and supported within the Climate Action Plan 2023 and is seen as a key action under the major public transport infrastructure programme to deliver abatement in transport emissions. The scheme is also identified within the National Sustainable Mobility Policy document and the accompanying action plan as a key piece of infrastructure to be delivered to achieve reductions in emissions and provide for more efficient cities in terms of accessibility for all. The scheme is also seen as an economic driver within the cities which currently experience significant congestion and impediments to movement and accessibility.

6.12. At the local and shorter-term level, the issue of congestion is more obvious, and both congestion and CO_2 emissions are continuing to rise. Any further increases in traffic levels will see an exacerbation of congestion, CO_2 emissions and of all of the associated issues highlighted above. Private car dependence will worsen unless there is intervention to optimise road space and prioritise the movement of people over the movement of vehicles.

6.13. When examining the functionality and capacity of road space to facilitate the movement of people it is important to consider the capacity of the space and how to optimise it. The applicant within the documentation submitted raises the following:

> ‘It is estimated that approximately 80% of road/ street space is dedicated to the car. A car travelling at 50kph requires 70 times more space than a pedestrian or cyclist. A double-deck bus takes up the equivalent spatial area of three cars but typically carries 50-100 times the number of passengers’.

6.14. The prioritisation of buses over cars and the creation of more space for pedestrians and cyclists will therefore allow for increased people movement capacity along the core bus corridor. This is vital given the existing congestion and the forecasted growth

in population, jobs and goods vehicle numbers by 2040. The proposed scheme is expected to see a 30% reduction in car use along the route and an increase in cycling and walking of 93%, in addition to a 24% increase in bus use.

6.15. Having regard to the above, the proposed scheme is of critical importance to the transport network in Dublin to facilitate the actual movement of people and this can only be achieved through a realistic modal shift from the private car to sustainable modes. The proposed scheme allows for increased people moving capacity and the best chance to avoid gridlock in future years as the population grows and the demand for travel increases. The proposed scheme also has the potential to reduce Ireland's greenhouse gas emissions signficantly. The proposed scheme will therefore make a significant contribution to carbon reduction, the easing of congestion and the creation of more sustainable travel patterns for the growing population.

6.16. BusConnects is identified as a component of a Strategic Investment Priority which has been determined as central to the delivery of the National Planning Framework. The proposed scheme is also consistent will all levels national, regional and local policy relating to climate action and sustainable transport provision.

6.17. In terms of local transport need it is outlined by the applicant that bus priority infrastructure is currently provided along approximately 68% (outbound) and 79% (citybound), cumulatively equating to 74% of the length of the route. The Proposed Scheme will facilitate 100% bus priority and complement the rollout of the Dublin Area Bus Network Redesign to deliver improved bus services on the route. This will improve journey times for bus, enhance its reliability and provide resilience to congestion.

6.18. One of the key objectives of the Proposed Scheme is to enhance interchange between the various modes of public transport operating in the city and wider metropolitan area. The CBC Infrastructure Works, including the Proposed Scheme, are developed to provide improved existing or new interchange opportunities with other existing and planned transport services, including:

- DART stations;
- Existing Dublin Bus and other bus services;
- The Greater Dublin Area (GDA) Cycle Network Plan;

- Future public transport proposals such as the DART+ Programme and MetroLink; and
- Supporting the Dublin Bus Network Re-design

6.19. With regard to cycling it is stated that non-segregated cycling facilities are currently provided along approximately 73% (outbound) and 61% (citybound) of the route of the Proposed Scheme. The remaining extents have no dedicated cycle provision or cyclists must cycle on the bus lanes where provided. This cumulatively equates to only 4% segregated cycle track infrastructure currently on the route. Cycle facilities in the Proposed Scheme will increase to 100% in both directions with the majority, approximately 87%, being segregated and the remainder using quiet streets. The improvements to cycle infrastructure will vastly improve the current offer to cyclists and by doing so will signficantly increase the modal share.

6.20. It is important to note that the Clongriffin Corridor serves some of the busiest bus routes in Dublin. Demand for travel by bus is anticipated to continue to grow in this corridor into the future, in line with population growth. I draw the Board's attention to the list of SHD applications within the planning history section of this report above and also to the Belcamp/Belcamp Master Plan area which proposes the redevelopment of 24ha of lands for a new town centre residential and mixed use development. These lands are located to the north and west of Clarehall and will accommodate significant population growth in this area.

6.21. The proposed scheme therefore, will deliver the physical infrastructure necessary to sustain the projected population growth along and within the area of the route. It will also provide a more accessible public transport facility to the most vulnerable in society in a safe, well-lit and protected environment.

6.22. In overall conclusion it is clear that there is an obvious need and justification for the proposed scheme which has been clearly demonstrated from a population growth and congestion perspective and in the interests of land use and transport planning integration. It is also clear from the abundance of policy documents and plans at both an EU, national and local level that the proposed scheme is supported throughout all levels of government policy and therefore is justified and acceptable in principle.

Adequacy of Consultation

6.23. It is important to consider the adequacy of the consultation undertaken by the NTA in relation to the proposed development. I note that a number of concerns are raised within the third-party submissions received in relation to the type and frequency of consultation carried out. Concerns are raised in relation to the timing of the consultation given that it occurred during the COVID pandemic and associated lock downs. There are concerns that the public were not made fully aware of the details of the proposed scheme and were prohibited from engaging with the NTA in relation to the design process. Further concerns are raised in relation to the virtual format utilised by the NTA to undertake consultations as a result of the pandemic and some believe that many people were unable to access the online forum and therefore did not have an opportunity to consider or make representations to the scheme.

6.24. Reference is also made within a submission to the compliance with the Aarhus convention and the Kazakhstan Advice.

6.25. I refer the Board to the NTA's response to concerns raised in relation to the consultation process above and consider it important to reiterate at this juncture the key points that have been made. It is stated by the applicant that three rounds of consultation were undertaken with a number of methods used including, a dedicated website, brochures social media coverage, advertising and public information events, whereby the first 2 sessions were held in person and the 3rd virtually due to COVID restrictions. Details of the public meeting events are outlined within the NTA's response summarised above within the third-party section of my report. I refer the Board to this section for details of same. I note that the final round of non-statutory consultation was open for 6 weeks and whilst virtual, a call back facility was added.

6.26. In relation to the statutory process, I note the applicant has erected 25 site notices along the proposed route, advertised the scheme within the relevant newspapers as required and engaged with third parties who have engaged with the process through their submissions to the Board. I am therefore satisfied that the applicant has complied with the requirements of the Aarhus Convention in its relevance to the statutory process and note that such requirements are not relative to any non-statutory consultation which is carried out at the discretion of the applicant.

6.27. It is of further note that the Kazakhstan Advice is also not relevant to any non-statutory public consultation and relates to the holding of public hearings in relation to the statutory process. Such hearings provided for under the Planning and Development Act 2000, as amended are a discretionary function of the Board.

6.28. It is also clear that the residents of Ayrfield Drive and Artane Cottages and others along the route have been made fully aware of the scheme details and as a result have participated actively in the application process through the many submissions received by the Board which is welcomed.

6.29. Concerns have also been raised in relation to the level of clarity provided within the documents in relation to the description of the proposed works. I have reviewed the documentation, plans and particulars submitted with the application in detail and note that the documents provided leave no ambiguity to the specifics of the proposed scheme extents in terms of its route, design, implementation and all mitigation measures proposed.

6.30. Thus, having regard to the documentation submitted in terms of public notices, advertisement and details of non-statutory consultations and engagement with third parties, I am satisfied that the applicant has clearly engaged with the community and all third parties and has amended the scheme accordingly where it has been feasible to do so in response to the concerns raised.

Project Design

6.31. The overall objective of the scheme design is to provide improved, attractive and safe sustainable transport infrastructure from the city along the R107 for a length of 5.7km. It is important to note at the outset that whilst the applicant refers to the Design Manual for Urban Roads and Streets , 2019. The applicant also refers to a design document, called the Preliminary Design Guidance Booklet (PDGB) which has been developed as a tool for the design of the BusConnects scheme across the city. Whilst this is useful reference for the design justification of the proposed route, I note that the design of the proposed route largely complies with the requirements of DMURS. Any non compliance with DMURS in terms of lane widths or design will be examined in detail under the relevant heading below.

6.32. For the purpose detailing the features of the proposed scheme, the applicant has firstly divided the scheme into two sections. Common features are described individually thereafter.

6.33. Mayne River Avenue to Gracefield Road – Malahide Road

Junctions present –

- Malahide Road/R139 Clarehall Avenue;
- Malahide Road/Entrance to Clarehall Shopping Centre;
- Malahide Road/Blunden Drive/ Priorswood Road;
- Malahide Road/Tonlegee Road/ Brookville Crescent; and
- Malahide Road/Gracefield Road.

6.34. Junctions will be redesigned to improve facilities and reduce conflict between users.

6.35. General Improvements include:

- On the northbound approach on the Malahide Road, it is proposed to extend the bus lane to the stop line towards the Northern Cross Junction.
- Reduce speed limit from 60kmph to 50kmph from Clarehall Avenue inbound towards the City Centre.
- Single bus lane and two general traffic lanes will be maintained between Clarehall Avenue and Blunden Drive.
- Temporary land acquisition is required for the Construction Compound between Buttercup Park and Malahide Road. New footpath to be inserted into this reinstated area.
- Land acquisition is required 250m west of the Priorswood Road junction to provide a bus turnaround facility.
- New footpath & cycle link at Ayrfield Drive and toucan crossing at new access.
- Retain the single bus and general traffic lane in each direction between Tonlegee Road junction and Gracefield Road junction.
- Outbound segregated cycle track will be provided between Malahide Road and Brookville Park.

- Inbound cyclists will be redirected on to the adjoining quiet street, St. Brendan's Avenue.
- Of the 15 bus stops, 14 no. will be island bus stops. (Locations shown in BCIDA-ACM-GEO_GA-0001_XX_00-DR-CR-9001) in Volume 3 of this EIAR)
- Improved and additional pedestrian crossings

6.36. Landscaping at junctions will be carried out and works will include overall improvements to public realm by the provision of landscaping, replacement trees and vegetation and planting of wildflower sections.

6.37. Gracefield Road to Marino Mart / Fairview – Malahide Road

Junctions present –

- Malahide Road/Collins Avenue;
- Malahide Road/Copeland Avenue/Griffith Avenue; and
- Malahide Road/Marino Mart/ Fairview/Clontarf Road (linking in to the Clontarf to City Centre Cycle & Bus Priority Project at this junction)

6.38. Junctions will be redesigned to improve facilities and reduce conflict between users.

6.39. General Improvements include:

- Between Gracefield Road Junction and Killester Avenue Junction, provision of a continuous bus lane with a single general traffic lane in each direction. The provision of dedicated cycle tracks and footpath facilities also through this section, including a section of new footpath between Kilmore Road and St. David's Wood.
- Between Killester Avenue Junction and Collins Avenue Junction, a continuous bus lane with a single general traffic lane in each direction. Dedicated cycle tracks and footpath facilities also. Widening between these junctions to accommodate the desired lane widths and bus stop facilities. Existing footpath within Maypark to be realigned to allow for the provision of the road works. Between Maypark and Collins Avenue land take is required from private properties on inbound side of Malahide Road. The indicative extents of this land take are shown on the General Arrangement drawings (BCIDA-ACMGEO_GA-0001_XX_00-DR-CR-9001)

- Between Collins Avenue Junction and Griffith Avenue Junction it is intended to provide a continuous bus lane with a single general traffic lane in each direction. In addition, to facilitate continuous dedicated cycle tracks in each direction on this section of the Malahide Road, road widening will be required and therefore will involve land take on properties between Donnycarney Church and Clancarthy Road on the inbound side of Malahide Road. See (BCIDA-ACM-GEO_GA-0001_XX_00-DR-CR-9001) within Volume 3 of the EIAR.
- Between Griffith Avenue Junction and Clontarf Road Junction, it is proposed to continue the bus and general traffic lanes in both directions. There are currently only three traffic lanes on this section of road. To facilitate the new four lane arrangement, land acquisition is required from adjacent properties at the following locations:
    - Between Charlemont Road and Crescent Place (inbound side); and
    - Between Crescent Place and Clontarf Road (outbound side)
- An alternative cycle route through a parallel, less trafficked quiet route along Carleton Road, St Aidans Park, Haverty Road and Marglann Marino will be provided in this section. Cyclists will then re-join at Marino Mart and tie-in with the separate Clontarf to City Centre Cycle & Bus Priority Project.
- Close Haverty Road for vehicular traffic at the St Aidan's Park end of the street. Local traffic access will be from the Marino Park Avenue end of the street.
- Full bus priority is proposed along the entire length of the scheme.
- 9 no. share landing bus stops, 5 no. island bus stops, 1 no. layby bus stop.
- Improved and additional pedestrian crossings.

6.40. Landscaping at junctions will be carried out and works will include overall improvements to public realm by the provision of landscaping, replacement trees and vegetation and planting of wildflower sections. The junction at Collins Avenue is notable for the stepped entrance to Donnycarney Church. This location has been identified as presenting significant opportunity for public realm treatment. The design includes stone paving to the front of the church with mature trees.

Provision for Buses

6.41. Prior to the examination of the merits of the proposed scheme in terms of bus infrastructure provision. I considered it necessary for the benefit of the Board, to clearly describe the features and bus infrastructure proposed.

6.42. Three types of bus stop are proposed along the route as follows:

- **Island Bus Stops** – bus stops whereby cycle lanes pass behind the bus stop separating the bus stop area from the footpath. To prevent conflict with pedestrians, pedestrian priority crossings accompanied by on-call signals will be provided, with narrowing of the cycle track from 2.0m to 1.5m to prevent cyclists overtaking through the bus stop. (see image 4.11 Chapter 4 of the EIAR)
- **Shared Bus Stop Landing Zone** - Where space constraints do not allow for an island bus stop, an option consisting of a shared bus stop landing zone is proposed. It is designed to reduce conflict between cyclists and stopping buses by ramping cyclists up to footpath level where they continue through the stop. The cycle track will also be narrowed when level to the footpath and tactile paving provided to prevent pedestrian/cyclist conflict. (See image 4.12 as above).
- **Layby Bus Stop –** Bus stops which are indented off the bus lane allowing other buses to pass. These are used for buses with longer dwell times**.** A Layby bus stop is proposed at one location on the Proposed Scheme, at Marino Crescent. This will allow for unimpeded traffic flow at this location. (see image 4.13 as above).

6.43. **Bus priority measures** can be achieved by – dedicated lanes, bringing bus lane to junction stop and this means in some circumstances that left-turning traffic cannot use the bus lane at junctions and instead will be provided with a dedicated left-turn traffic signal phase for the turn movement off the general traffic lane or will be provided with a separate left-turning lane.

6.44. **Signal Controlled Priority** - An alternative measure for achieving bus priority at locations where the provision of bus lanes is not possible is the use of Signal Control Priority (SCP). SCP facilitates bus priority by using traffic signals to give buses priority ahead of general traffic on sections of a route with significant physical constraints or

pinch-points impacting on the provision of a bus lane. It works through the use of traffic signal controls (typically at junctions) where the bus lane and general traffic lane must merge ahead and share the road space for a short distance until the bus lane recommences downstream. The general traffic will be stopped at the signal to allow the bus pass through the narrow section first.(see image 4.10)

6.45. It is of note that there are no bus gates proposed as part of this scheme and bus lanes are compliant with the requirements of DMURS i.e. 3-3.25 metres.

6.46. In terms of the scheme functionality, it is of note that the number and location of bus stops has been examined and criteria outlined within section 4.6.4.5 of the EIAR has been used to determine the most appropriate location for the stops. Based on this assessment it is proposed to locate bus stops approximately 400m apart on typical suburban sections of route, dropping to approximately 250m in urban centres. All stops are located close to pedestrian crossings as an important safety measure.

Concerns regarding the location of bus stops.

6.47. Concerns in relation to the design of bus stops has been raised within the third-party submissions received. Concerns relate to the location of bus stops such as that proposed adjacent to the Artane Cottages and the Blarney Stone Pub as well as the design of the bus stops and the accessibility of bus stops for the mobility impaired.

6.48. In relation to the accessibility of bus stops for the mobility impaired I note that the applicant states that bus stops have been designed in an accessible manner for the mobility impaired. The applicant contends within the EIAR that A Disability Audit of the existing environment and proposed draft preliminary design for the corridor was undertaken.

6.49. The Audit provided a description of the key accessibility features and potential barriers to disabled people based on the Universal Design standards of good practice. Examples of design solutions for the mobility impaired is the use of 60mm set down kerbs which identify a change in pavement use and is legible to guide dogs. The use of bus islands and including signal call button for crossing of cycle tracks will manage interactions with cyclists and pedestrians.

6.50. Bus islands are considered to reduce the potential for conflict between pedestrians, cyclists and stopping buses by deflecting cyclists behind the bus stop, thus creating an island area for boarding and alighting passengers. On approach to the bus stop

island the applicant states that the cycle track is intentionally narrowed with yellow bar markings also used to promote a low-speed single file cycling arrangement on approach to the bus stop.

Issues regarding pedestrian and cycle conflict

6.51. Similarly, a 1 in 1.5 typical cycle track deflection is implemented on the approach to the island to reduce speeds for cyclists on approach to the controlled pedestrian crossing point on the island. To address the potential pedestrian/cyclist conflict, a pedestrian priority crossing point is provided for pedestrians accessing the bus stop island area. At these locations a 'nested Pelican' sequence similar to what has been provided on the Grand Canal Cycle Route will be introduced so that visually impaired or partially sighted pedestrians may call for a fixed green signal when necessary and the cycle signal will change to red.

6.52. In addition to the foregoing a 1:20 ramp is provided on the cycle track to raise the cycle track to the level of the footpath/island area onto a wide crossing. Suitable tactile paving is also provided at the crossing point in addition to a series of LED warning studs provided at the crossing location which are actuated by bus detector loops in the bus lane.

6.53. Having reviewed the detailed design of the proposed island bus stop and the concerns raised within the submissions, I am satisfied that the applicant has had due regard to the requirements of the mobility impaired and has designed this infrastructure accordingly to meet the needs of not only the mobility impaired but also the visually impaired.

6.54. I note that there are no submissions from representative groups for either the visually impaired or mobility impaired to the scheme, and I further note that extensive consultations with such groups has formed part of the design process for the scheme.

6.55. With regard to the location of a bus stop adjacent to the Blarney Stone Public House, I note that the owner of this premise raises a number of concerns. With regard to the proposed bus stop he is concerned that people will loiter outside his premises, and he will lose his outdoor seating area. He is also concerned that the proposed bus stop will impede sight visibility to his car park.

6.56. The applicant has responded to these concerns and states that the bus stop is an island bus stop with a shelter and provides ample space for people to wait for the bus,

thus they will have no need to loiter at his premises. The loss of the outdoor seating area will be dealt with by way of the CPO process if confirmed by the Board. In relation to the car park, it is acknowledged that during construction there is a potential for temporary disruption, however local arrangements will be made to ensure access is provided. In addition, it is clarified that sight visibility will not be impeded and the proposed arrangement complies with the requirements of DMURS.

6.57. Dublin City Council within their submission also refer to the potential conflict between cyclists and pedestrians at bus stops and suggest that the scheme includes measures to slow cyclists down. Measures in this regard in relation to island bus stops has been adequately dealt with above. In relation to other bus stop types such as Shared Bus Stop Landing Zone, I note that the applicant proposes to narrow cycle lanes to 1 metre and to raise the cycle lane by a 1:20 gradient to the same level as the footpath on approach to the stop. Tactile paving will be used at these locations to differentiate between uses. There will be 10 no. such stops along the proposed route.

6.58. DCC also refer to the location of an improved bus stop at the front of Church of our Lady Consolation Church (NIAH 50130252), it is recommended that this is kept in its existing location. I acknowledge the Council's comments in this regard and note that this bus stop will remain in its current location.

6.59. Donnycarney West Community Association in their submission raise concerns about the relocation of bus stop 672 to Casino Park/Cherry Mount stating it is less convenient. The applicant contends in this regard that the new bus stop is located adjacent to a controlled pedestrian crossing at the Casino Park junction and is therefore a more appropriate location in terms of safety. It is also stated that the existing bus stop to be removed would be too close to existing Donnycarney Church stop as well as the proposed new stop. The provision of a safer and convenient bus services is the objective of the proposed scheme, and I am satisfied that the applicant has adequately justified the need for the relocation of this stop.

Proposed bus works adjacent to Artane Cottages

6.60. The current layout at this location, south of the R808 Gracefield Road, is a single carriageway with two lanes in each direction, one standard lane and one bus lane, along with footpaths and advisory cycle lanes, up to the junction with Donnycarney Road. It is noted that in the vicinity of Artane Cottages, the northbound bus lane is

curtailed (between Kilmore Road and no 4 Artane Cottages Lower). At the junction of Kilmore Road, footpaths are also provided along with an outbound advisory cycle track.

6.61. Between Gracefield Road Junction and Killester Avenue Junction, it is intended to provide a continuous bus lane with a single general traffic lane in each direction. Dedicated cycle tracks and footpaths will also be provided through this section, including a section of realigned footpath, outbound, between Kilmore Road and St. David's Wood. It is also proposed to place a new bus stop at approximate chainage A6575 outside 5 Artane Cottages Lower and 6 Artane Cottages Lower for inbound passengers. At this location it is proposed to provide a bus stop pole and a RTPI sign.

6.62. The junction at Kilmore Road also includes an additional pedestrian crossing with protection island for the cycling crossing lanes. A waiting area for cyclists turning right from Malahide Road on to Kilmore Road has been included outside 9 Artane Cottages Lower.

6.63. A small land acquisition is required from a shared laneway to the north of Artane Cottages Lower to facilitate relocation of a gate post.

6.64. A number of submissions have raised concerns in relation to the location of the proposed bus stop adjacent to Artane Cottages. It is contended within the submissions made that the proposed stop is substandard and could be provided elsewhere nearby. The submissions provide an alternative suggestion for siting two bus stops, one at 25a-g Malahide Road and one at 276-302 Malahide Road, for consideration.

6.65. In response to concerns about the suitability of the proposed location of the new bus stop the applicant refers to criteria utilised to determine the most appropriate locations. This criterion is listed within section 2.3 of the NTA response to submission document and includes:

- Driver waiting and passengers are clearly visible to each other.
- Located close to key facilities.
- Located close to main junctions without affecting road safety or junction operation.
- Located to minimise walking distance between interchange stops.

- Where there is space for a bus shelter; • Located in pairs, ‘tail to tail’ on opposite sides of the road;
- Close to (and on exit side of) pedestrian crossings.
- Away from sites likely to be obstructed; and
- Adequate footway width.

6.66. The applicant contends that the relocation of the proposed bus stop was considered following community consultation, however when examined in the context of serving the surrounding catchment, the proposed location was the optimum. The relocation of this stop was also considered in the context of the future implementation of the Dublin Network Redesign. It is stated that the existing bus service 104 would no longer be routed via Kilmore Road/Malahide Road under the future bus network routing proposals for the area. Instead, it would be routed along Ardlea Road, thereby leaving the southern end of Kilmore Road without a bus service and no bus stops close by on Malahide Road.

6.67. The Proposed Scheme takes account of the proposed network routing adjustment and provides a bus stop at the junction of Malahide Road and Kilmore Road to cater for the Kilmore Road catchment that are currently served by the 104 service.

6.68. The NTA has considered the proposed alternatives in relation to this bus stop, however these scenarios did not perform as well as the stop proposed in relation to serving the catchment. In addition, the third scenario proposed within the submissions resulted in the alternative stop being too close to the Kilmore Road junction. The relocation of this stop would require a pedestrian crossing and a modification to the outbound stop. Addition issues with relocating this stop to 302/300 Malahide Road as suggested within the submissions would mean the bus stop would be between two entrances and would impact vehicular access to these properties. The current location does not interfere with any accesses and serves the catchment appropriately.

6.69. The bus stop design at this location is a shared bus stop landing zone due to constraints with footpath. I am satisfied, based on the foregoing that given the constraints in relation to this particular bus stop that the applicant has considered all reasonable alternatives robustly and is clearly left with no other option but to locate the bus stop adjacent to Artane Cottages. Additional issues in relation to this particular bus

stop relate to pedestrian facilities and impacts to residential amenity which will be considered below.

Provision for cyclists

6.70. One of the objectives for the Proposed Scheme is to enhance the potential for cycling by providing safe infrastructure, segregated from general traffic wherever practicable. The proposed scheme will provide 10km (inbound and outbound) of segregated cycle tracks compared with 0.4km of segregated track and 7.7km unsegregated cycle lanes which currently exists along the Malahide Road.

6.71. Segregated cycle tracks have been provided in each direction on the Malahide Road (R107), from Mayne River Avenue to Brian Road, with the exception of a 500m section in the inbound direction where cyclists will use an existing 'quiet street', St Brendan's Avenue. From Brian Road, an alternative cycle route through a parallel, less trafficked route is provided along Carleton Road, St. Aidans Park, Haverty Road and Marglann Marino.

6.72. For the benefit of the Board Quiet Streets are called so due to the low volume of only local general traffic users travelling at low speed and are deemed suitable and safe for cyclists sharing the roadway with the general traffic without the need to construct segregated cycle tracks or painted cycle lanes. The Quiet Street Treatment would involve appropriate advisory signage for both the general road users and cyclists.

6.73. In relation to the design of the proposed cycle lanes, I note that it is proposed to provide lane widths of 2 metres for the majority of the proposed scheme. I note from the National Cycle Manual that a lane width of 2 metres allows for overtaking within cycle lanes and is the most appropriate minimum width for commuter routes. Concerns are raised within the submissions regarding the width of cycle lanes. It is suggested that all lanes should be 2/2.25 metres in width and that green buffers should be provided between the bus lane and the cycle track.

6.74. Whilst it is proposed to provide cycle lanes of 2 metres wide for the majority of the scheme. However, the applicant contends that the proposed scheme is being delivered in a constrained urban environment and the delivery of a 2.0m+ wide cycle track may not always be practicable. As such, the cycle track widths have been reduced to typically 1.8m or 1.5m wide where the provision of 2.0m wide cycle tracks is not practicable. Cycle land widths will also be reduced on approach to bus stops in

order to reduce cyclist speeds at these locations. At such locations cycle lanes will reduce to 1.5 metres on approach to Island Bus Stops and 1 metre at Shared Landing zone bus stops.

6.75. 1 metre is the minimum width achievable for a single cyclist. Such reductions are necessary to adequately reduce cycle speeds in order to protect pedestrians particularly those with mobility or visibility impairments. I am satisfied based on the foregoing that the applicant has adequately demonstrated a justified need for the reductions in widths proposed and note that the overall scheme provisions are a significant improvement in cycle infrastructure.

6.76. With regard to the provision of green buffers I note the applicant's response in which it is stated that the proposed scheme provides additional measures including continuous kerb segregated cycle tracks, traffic calming measures and lower speed limits will be reduced to 50km/hr throughout the Proposed Scheme on the Malahide Road. Notwithstanding, the NTA recognises the benefits green buffers can bring and have introduced these elements at various sections in the Proposed Scheme where reasonably practicable to do so.

6.77. Given the nature of the scheme and the location and traffic speeds I consider the provision of a segregated cycle way as described will be a significant improvement over the current situation whereby the majority of cycle lanes are advisory or painted within the carriageway. The proposed development will provide a safe facility for cyclists of all abilities to utilise and will undoubtedly increase the modal share in favour of cycling.

Junction Design for cyclist

6.78. Concerns are also raised within the submissions received in relation to the various junction designs proposed by the applicant. It is suggested within the submissions received that the Dutch style junction would be a preferable design to be implemented within the proposed scheme. The third parties are concerned that junction designs as proposed have the potential to create conflict with cyclists and lead to collisions with both pedestrians and vehicles.

6.79. As mentioned above the applicants have prepared a Junction Design Report which is contained in Appendix A6.3 in which each design approach is outlined, in addition typical junction designs are also fully outlined and described within the project

guidance document referred to as the PDGB. The applicant contends that due to the inherently complex nature of mixed mode movements at junctions, the provision for cyclists at junctions is a critical factor in managing conflict and providing safe junctions for all road users.

6.80. It is important to note at the outset that the applicant clearly states that both the Dutch Design Guide 'Ontwerpwijzer Fietsverkeer' and the National Cycle Manual have been considered and have informed the design principles for the junctions proposed.

6.81. Given that no two junctions are the same within the proposed scheme the applicant contends that while layouts differ in terms of lanes, signals and crossings, the principles of safety and functionality contained within the NCM and DMURS are integral to each junction layout.

6.82. Four main junction layout designs are outlined within the PDGB. Each layout responds to constraints in terms of space, volume of turning vehicle traffic etc. For the benefit of the Board, and in the interest of clarity I will describe each of the proposed junction types hereunder.

Junction Type 1

6.83. These junctions have dedicated bus lane, vehicle lane and cycle lane, no left turning lane is provided for general traffic. (see section 7.4.1 of PDGB for illustration)

6.84. To be used when volume of left-turning vehicles is greater than 100 PCUs (Passenger Car Unit) per hour, in an urban setting where no space is available for a dedicated left-turning lane/pocket. In this scenario the mainline cyclists proceed with the bus phases. The bus lane then gets red, allowing the general traffic lane to proceed. Cyclists can continue with general traffic if volumes are between 100-150PCUs, with left turners controlled by a flashing amber. If volumes are in excess of 150 PUCs per hour then the cyclists are also held on red whilst the general traffic proceeds on green. Cyclists are separated from traffic at corners of junctions by kerbs. This will ensure long vehicle take a wide turn and not collide with left turning cyclists. These junctions will be dominant in urban locations.

6.85. This junction is proposed at the following locations:

- Junction with Kilmore Road and Malahide Road.

Junction Type 2

6.86. These junctions will have a yellow box which crosses the bus lane approximately 30 metres from the stop line to allow left turning vehicles to enter a separate left turning lane. In this instance left turning cyclists are held and mainline cyclists proceed at the same time as buses. If volumes are less than 150PCUs mainline cyclists can proceed in tandem with left turning cyclists. Left turning cyclists will also be permitted to continue whilst side road traffic is moving but mainline cyclists will be held on red during these movements.

6.87. As with Junction type 1 cyclists from side road can proceed with mainline traffic and left turning cyclists will see a flashing amber light and get an early start to general traffic turning in the same direction. In the event that turning traffic from the side arms exceeds 150PCUs per hour the cyclist phase can be separated from the traffic phase.

6.88. This junction is proposed at the following locations:

- Junction with Tonlegee Road, Malahide Road and Brookville Crescent.
- Junction with Gracefield Road, Ardlea Road and Malahide Road.
- Southerly direction at entrance to Clarehall Shopping centre from Malahide Road.

Junction Type 3

6.89. These junctions terminate the bus lanes a short distance from the junction (15-20 metres) to allow left turning general traffic move into the bus lane to turn left. Bus lanes commence directly after the junction on the opposite side. In this scenario mainline traffic including left turning traffic and buses proceed together but before they do mainline cyclists are given an ‘early start’ of approximately 5 seconds (minimum of 3 seconds) to minimise any conflict with left turners. When this early start is complete, the mainline cyclists can still proceed, assuming turning volumes are less than 150 PCUs per hour. Left-turners from the left-turn pocket are given a flashing amber arrow.

6.90. Bus lanes will be physically protected on the approach to Junction Type 3 which will ensure the performance of the bus lane isn’t compromised by the left turners. Such protection measures will not impede residential entrances.

6.91. As with Junction Type 1 and 2, cyclists from the side roads can proceed with general traffic from the same arms, and the left turners from the side arms will be controlled by

a flashing amber arrow and cyclists should receive an early start. As with the mainline, there may be circumstances where turning traffic from the side arms exceeds 150 PCUs per hour, in which case the cyclist phase from the side arm can be separated from the turning traffic phase.

6.92. This junction is proposed at the following locations:

- Junction with Malahide Road junction with Greencastle Road.
- Junction with Malahide Road, Collins Avenue East and Collins Avenue.

Junction Type 4

6.93. The main difference with this junction is that the pedestrian crossing has two signalised crossings, one to cross the cycle lane and one to cross the junction. Similar to junction 3 the bus lanes are terminated just short of the junction to allow left turners to turn left from a short left-turn pocket in front of the bus lane. Buses can continue straight ahead from this pocket where a receiving bus lane is proposed.

6.94. In this instance, mainline buses and left turners from the mainline proceed together. Depending on the prevailing site conditions, mainline cyclists can proceed with left-turners from the mainline (who are controlled with a flashing amber arrow) or cyclists can be held on red until it's time to share a full pedestrian 'wrap around' stage where all vehicular traffic is held and the green man is activated across all arms of the junction.

6.95. Left turning cyclists can bypass the junction while giving way to pedestrians crossing as well as cyclists already on the orbital cycle track.

6.96. This junction type is proposed at the following junctions:

- Junction of R139 with R107 Malahide Road at Clarehall
- Blunden Drive with Priorswood road and Malahide junction

Toucan Crossing

6.97. A toucan crossing is a signalised crossing whereby cyclists and pedestrians can cross together. Access to Toucan crossings will be necessary in certain circumstances from the main cycle track, for example where protected junctions cannot be provided (due to spatial constraints) or at mid-block Toucan crossings. providing a waiting area for cyclists waiting to use the Toucan crossing which is out of the way of straight-ahead

cyclists. Where minimum footpath widths don't allow for a separate waiting area to be provided.

This is provided at the following locations:

- Entrance to Clarehall Shopping centre from Malahide Road.
- Junction with Killester Avenue, St. Davids Wood and Malahide Road.
- Junction with Malahide Road and Elm Mount Road.
- Junction with Malahide Road and Casino Park.
- Ard Scoil Ris Sports Grounds entrance and the Malahide Road.

6.98. Overall, the proposed junction designs will ensure that pedestrian and cyclists safety is a priority whilst ensuring the free flow of buses and traffic along the route.

6.99. Whilst the majority of junctions conform with one of the designs outlined above. I note that the junction with Griffith Avenue, Copeland Avenue and the Malahide Road is particularly complicated. It appears that elements on the south bound route comply with the junction type three and the north bound layout is more akin to junction type 2. I note that cyclists are not protected by kerbs at all arms of this junction. However, this is a particularly wide junction with a number of desire lines in multiple directions. The provision of a diagonal route across the junction will prevent noncompliance with signals at this junction and will tie in with existing cycle infrastructure on the surrounding road network and allows a safe crossing from the contra flow cycle lane that is proposed from Brian Road to this junction. The proposed alteration at this location is a vast improvement over the currently perilous arrangement and ensures that cyclist are permitted to cross this wide junction separately to the main traffic flow.

6.100. As mentioned above a number of submissions raised concerns in relation to the junction design approach proposed by the NTA. It is queried as to why an international standard such as the Dutch style junction or the Cyclops junction has not been adopted. The applicant has responded to this issue and contends that no two junctions are the same along the route. The proposed junction designs achieve the core aim of the project which is to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.

6.101. It is stated by the applicant that given the scale of the proposed scheme across the Greater Dublin Area a consistent design approach was required which led to the development of the PDGB. The ambition of the PDGB was to take the benefits of the traditional junction layout from the National Cycle Manual and supplement this with a range of measures aimed at increasing protection for cyclists and reducing uncontrolled conflict with pedestrians. The Dutch Cycle Design Guide has informed the design development process for the proposed scheme.

6.102. The proposed junction design includes deflection of the cycle track at junctions to provide a protection kerb which aims to prevent collisions with general traffic. This kerb also provides for a tighter turning movement for left turning vehicles and forces them to slow down before making the turn. This design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, avoiding any cyclist-vehicle conflict at weaving and merging lanes. The proposed junction design will also prevent cyclists from crossing the centre of a junction to turn right, cyclists will be required to cross at the crossing points and therefore improve their safety at such locations.

6.103. In comparison to the Dutch style junction, I note that the proposed junction layouts of the scheme include measures to mitigate pedestrian-cyclist conflict. The applicant states in their response to the submissions that the 'Dutch-style' junction described in the submission is typical of many junctions in the Netherlands and it allows for a potential un-signalised conflict between pedestrians and cyclists, which depends on a level of courtesy to ensure that collisions are avoided. Following discussions with Irish disability groups, the issue of this potential conflict was raised as a significant concern along the core bus corridors for the visually impaired and for the mobility impaired, based on their members' experiences. Pedestrians are the most vulnerable of road users, and the addition of disability exacerbates this vulnerability. The four junction types within the PDGB have specifically been set out to mitigate these potential conflicts insofar is reasonably practicable.

6.104. It is further contended that the 'Dutch Style' junctions can result in a reduced level of service for pedestrians, requiring multimovement in multi directional, non-continuous crossings for pedestrians. The intermediate landing zones of such junctions can require substantial sized holding area for pedestrians to wait before crossing the road, this can require a significant space for urban locations. In contrast junctions 1-3

consolidate this waiting area with the footpath which a more legible and functional use of the available space for all users with direct crossing facilities that align to the principles of DMURS. It is the applicant's contention that it is for the reasons outlined above that the 'Dutch style' junctions have not been adopted. It is also noted by the applicant that the Dutch Design Guide also contains multiple solutions for junctions and does not prescribe the same design for all locations.

6.105. I am satisfied that the applicant has adequately justified the design approach and it is clear from the layout of the different types of junctions that there will be a significant improvement in terms of safety and accessibility for both cyclists and pedestrians. In addition, having a consistent design approach throughout the city will provide legibility within the streetscape for all users that is currently absent. A clear consistent approach to street and junction layouts will encourage people to interact with the landscape in the manner which is intended by the scheme. A recognisable junction layout removes uncertainty for users and can only improve safety in the longer term.

6.106. Having regard to the foregoing, I am satisfied that the proposed junction designs conform with the key sentiments of the National Cycle Manual and the requirements of DMURS in that the user hierarchy is pivotal to the design with pedestrians being served at the outset and cyclists followed by public transport.

6.107. In addition to the foregoing, I note that Tesco raised concerns in relation to the functionality of the junction and access into Clarehall shopping centre. The applicants in their response to the submissions carried out a swept path analysis and confirmed that the proposed scheme would not impede access to their store at this location for deliveries and other such large vehicles. It is of note that Tesco have stated their satisfaction to this response.

Provision for Pedestrians

6.108. The proposed scheme provides segregated footpaths and upgraded or new signalised or Toucan Crossings along the scheme. It is stated within the documentation submitted that the proposed scheme will provide an average increase in footway area for pedestrians of 26% inbound and 14% outbound across the corridor compared to the existing scenario. The Proposed Scheme will increase the number of controlled pedestrian crossings from 36 in the existing to 52 in the Proposed Scheme, equating to a 70% increase. Additionally, there will be an increase in the number of raised table

crossings on side roads from 9 in the existing to 31 in the Proposed Scheme, equating to a 244% increase.

6.109. I note the improvements proposed and in the assessment of same I note the requirements of DMURS in relation to footpath widths and crossing design.

6.110. For the benefit of the Board the desired footpath width outlined in DMURS is 2 metres with a minimum of 1.8 metres. At specific pinch points Building for Everyone: A Universal Design Approach, defines acceptable minimum footpath widths as being 1.2m wide over a 2m length of path.

6.111. Pedestrian crossings are recommended to be provided to allow for a single, direct movement. To facilitate road users who cannot cross in a reasonable time, the desirable maximum crossing length without providing a refuge island is 19m. It is also recommended within DMURS that Build-outs should be used on approaches to junctions and pedestrian crossings in order to tighten corner radii, reinforce visibility splays and reduce crossing distances, this specification has been included within the junction designs outlined above, however it is acknowledged by the applicant that in some instances there is insufficient space to accommodate such build outs. This is rare within the proposed scheme.

Concerns regarding pedestrian crossings

6.112. Third party submissions raise concerns in relation to pedestrian crossings design. A rationale is sought by third parties in this regard. Concerns are also raised in relation to the provision of two stage crossings on the Malahide Road at junctions with Clarehall Avenue, Priorswood Road, Greencastle Road, Tonlegee Road, St. Brendan's Drive, Ardlea Road, Griffith Avenue and near Belcamp Lane.

6.113. In response to the foregoing the applicant states that single movement crossings were explored however, at these locations two stage crossings are the preferred design as a straight-across would result in a crossing distance of greater than 19m. which would reduce the performance and people movement which is not desirable at these locations.

6.114. In relation to the Clarehall shopping centre it is proposed to provide a toucan crossing on the northern arm, which enables pedestrians and cyclists to cross one arm only, providing a more direct alignment into the shopping centre.

6.115. In relation to the Malahide Road/Griffith Avenue Junction a pedestrian crossing is not proposed on the southern arm for a number of reasons such as there is no immediate desire line identified, the proposed design seeks to segregate interaction with the two-way cycle track and a direct crossing distance at this location would be in excess of 19m which would compromise overall people movement capacity within the junction due to lengthy inter green periods (periods at which traffic lights stop traffic and cyclists to permit pedestrian movement).

6.116. In relation to concerns raised by third parties about the pedestrian crossing lengths, I note that the applicant states that The Western arm of the R139/ Malahide Road (Northern Cross) junction has approximately 44m long multistage crossing arrangement in the existing arrangement. The Proposed Scheme will reduce the overall crossing distance to 25m whilst also improving the directness of the pedestrian crossings in line with the principles of DMURS. Other crossing lengths may be extended due to new infrastructure, but the environment and safety of crossings will be significantly improved for pedestrians.

6.117. Other submissions that relate to pedestrian access include reference to the provision of a footpath outside of 109-115 Malahide Road whereby an area of grass and trees is indicated on the plans. The applicant has confirmed that the footpath will extend in front of these commercial properties.

6.118. Having regard to the foregoing I am satisfied that the proposed development provides adequate and improved pedestrian infrastructure which is in accordance with the requirements of DMURS.

Parking

6.119. A number of submissions raised concerns about the impact of the proposed scheme on both off street and on street parking. It is important to clarify that whilst there will be a significant number of front boundaries to residential properties acquired to implement the scheme, such acquisitions will not impact upon current off-street parking at these properties. Parking has been examined within the EIAR section of this report and this

section of the report should therefore be read in conjunction with the EIAR section below.

6.120. Changes to on street parking and loading areas are outlined in Section 4.6.11 of Chapter 4 as follows:

- In the Northern Cross area, existing access locations to car parks of businesses will be modified by the new scheme;
- In the Coolock area, the Proposed Scheme designates residential parking which is expected to reduce the amount of informal parking that obstructs pedestrians and cyclists;
- In the Artane area customer parking will be reduced from 7 adjacent parking spaces, 1 disabled parking space and 10 informal parking spaces across the road to 5 parking spaces and 1 disabled parking space in a designated parking area adjacent to the commercial units;
- In the Donnycarney area, 11 informal residential and commercial parking spaces will be replaced with 6 designated parking spaces; and
- 14 designated paid parking spaces will be removed along the Malahide Road at the junction to Marino Mart which serves business along the road.

6.121. It is contended by the applicant that the proposed scheme formalises the parking arrangements to improve the environment, particularly for pedestrians and cyclists. Given the availability of equivalent types of parking along adjacent streets within 200m of these locations (and typically within under 100m), the applicant considers the overall impact of this loss of parking not to be significant.

6.122. It is clear from site inspection that there is an element of haphazard parking on footpaths and on wider hard standing areas along the scheme. Parking on footpaths in some instances leaves no room for pedestrians to pass who are then forced onto the carriageway to pass. This is not acceptable and poses a significant safety issue for all pedestrians in particular wheelchair users and those with mobility and visibility impairments. The proposal to formalise parking is therefore welcomed. In addition, having regard to the plans submitted and the concerns raised within the submissions regarding off street parking, I am satisfied that off street residential parking will not be

impact or prevented by the proposed scheme and the overall functionality of impacted properties will remain the same and currently permitted.

6.123. I note the concerns of residents in relation to the movement of cars into and out of driveways, concerns are raised in relation to the reversing movement out of driveways and the potential conflict with traffic. Current accessibility manoeuvres will not be altered as a result of the proposed scheme. In addition, it is stated by the applicant in response to concerns regarding the legality of reversing onto the carriageway that there are no legal impediments which restrict residents from reversing onto the carriageway as they current do as a result of the scheme. Based on the foregoing I am satisfied that residents with current off street parking will not be impacted in the long term by the proposed scheme and that temporary accommodations will be made as stated by the applicant if necessary during construction. This is particularly important in the case of wheelchair users where access must be maintained.

6.124. I note concerns raised by the residents of the Artane Cottages in relation to the narrowing of the existing 3.5 metre footpath outside of these properties. I note in this regard that informal parking occurs on the footpath outside of these properties which impedes pedestrian movement and may force pedestrians onto the carriageway.

6.125. The applicant has responded to the third-party requests and has maintained the full width of the existing footpath apart from isolated locations where it was not practicable to keep the existing approximate 3.5m wide footpath. The two key locations where this occurs is for the waiting area for right turning cyclists at the Kilmore Junction outside 9 Artane Cottages Lower and outside 5 & 6 Artane Cottages Lower where a new bus stop is proposed. It should be noted that at both these locations the majority of the waiting area and bus stop will be at the same level as the footpath, thus the kerb lines within this section will largely be in the same location as the current situation. Cycle lanes have been reduced to 1.5 m wide along this section to accommodate the footpath width. I am satisfied that the applicant has adequately addressed the concerns raise by the residents of Artane Cottages in this regard.

6.126. Access to parking at rear of these cottages is to be maintained and unaffected by the proposed scheme.

6.127. I consider it appropriate to mentioned at this juncture that the residents of Ayrfield Drive are concerned that the permeability works at their estate will entice non residents to

park in their estate and create congestion. It is the contention of the applicant that such matters will not arise as the location of the estate is not considered to be of convenience to commuters.

6.128. I am satisfied given the location of the estate within a densely developed part of the city that commuters would not consider it beneficial to enter peak traffic only to travel a section of the distance and park within the estate and continue from this location when there are other public transport options from further out of the city.

6.129. Overall, I am satisfied that the proposed development will not signficantly impact parking along the route. Private driveways with off street parking will be retained and whist shortened minimally will retain current parking arrangements. Whilst some on street parking will be removed at certain locations, a reduced number of spaces will be provided to accommodate commercial properties and where on street parking is removed in front of residential properties these properties have off street parking also. In addition the applicant has adequately demonstrated that ample parking is available within surrounding residential streets if required.

6.130. On balance the inconvenience associated with the removal of parking to facilitate a high quality sustainable and active travel corridor is not considered to be significant and I am satisfied that the removal of parking is adequately justified for this reason.

Residential Amenity

6.131. It is important to note at the outset that concerns relating to residential amenity are outlined within the majority of submissions received and whilst many submissions relate to a particular section of the proposed scheme, such as the proposed bus stop at Artane Cottages or the opening up of the access at Ayrfield Drive, it is important to clarify that the impact to residents and consideration of same is central to the entirety of this assessment and is one of the key considerations of the EIAR section below. It is therefore not my intention to repeat all of the concerns raised in relation to residential amenity but to examine it on a themed basis and outline particular locations whereby significant issues have been raised such as Artane Cottages and Ayrfield Drive.

6.132. It is of note that many submissions raise concerns about noise and air quality arising from the proposed scheme and in some instances due to the removal of existing vegetated boundaries, I would refer the Board to the EIAR section of this report in which such impacts are robustly examined and whereby it is concluded that no

significant impacts in relation to either factor is expected to arise. The proposed scheme is expected to have a long-term positive impact on noise and air quality as the introduction of a fully electric fleet and the overall reduction of vehicular traffic travelling along the route will signficantly improve the current situation in terms of these emissions.

6.133. I am satisfied therefore that no significant long-term impacts are expected in in relation to noise and air quality along the proposed scheme that would impact residential amenity to such a degree as to warrant a refusal.

Loss of privacy

6.134. Third parties have raised concerns in relation to the removal of mature vegetated front boundaries which provide a privacy screen and buffer between these properties and the Malahide Road. Concerns are also raised that traffic lanes will be closer to these properties than at present and this further increases the perceived loss of privacy.

6.135. Whilst I acknowledge these concerns, the removal of boundaries and vegetation is unavoidable and whilst the applicant will replace walls and railings it is difficult to replace mature vegetation. As such these vegetated buffers will be lost.

6.136. I acknowledge that in some instances, residents will not wish to have the boundary vegetation replaced and as such, I recommend, should the Board be minded to approve the scheme that a condition is imposed to replace such vegetation with similar species of semi maturity only in instances whereby the owner of the property requires.

6.137. Notwithstanding the loss of vegetated buffers, these dwellings are located in an urban area which is heavily trafficked by pedestrians and vehicles and as such front garden areas are not by the nature of the surrounding environment ‘private’ open spaces. There is always some degree of view from the public road. Whilst I acknowledge that vegetation can provide a sense of enclosure, I am satisfied that individual properties along the route will remain adequately set back from the public footpath so as not to signficantly impact on the privacy of residents beyond what would be considered acceptable in such an urban environment.

6.138. I am therefore satisfied that the proposed works including the reallocation of road space would not impact the privacy of residents to such a level as to warrant a refusal of the proposed scheme.

Proposed new Link to Ayrfield Drive

6.139. Ayrfield Drive is part of the wider Ayrfield residential estate located to the east of the Malahide Road, adjacent to the route of the Proposed Scheme. There is a continuous boundary wall between the estate and the Malahide Road, which prevents any direct access/egress other than at the existing access points on Blunden Drive and Tonlagee Road. It is proposed to remove 32 metres of this wall in order to provide direct access onto the Malahide Road at this location. The majority of the green area will be retained as amenity space and will be bolstered with new planting and landscaping with a separate pedestrian walkway and cycle track inserted through the centre linking the Malahide Road to this large estate.

6.140. Significant concerns have been raised by residents of the Ayrfield Drive estate in relation to the provision of a pedestrian and cycle link through this green area. 64 submissions were received in total. Concerns are raises in relation to antisocial behaviour, child safety in terms of having direct access onto the Malahide Road, loss of a play space for children, an increase in crime in the estate, increased air and noise pollution, increased parking in estate and a loss of property value.

6.141. Overall, the submissions consider that the proposed route has not been investigated properly. Following the NTA's response to the submissions, which I will consider hereunder, an additional 49 submissions were received from residents in relation to this element of the proposed scheme. Submissions generally reiterate the original concerns made and also raise concerns in relation to the use of the 2016 census data for the assessment of need for the proposed connection.

6.142. As mentioned above, the applicant responded to the concerns raised within the submissions and states that the purpose of this link is to provide this catchment with direct access to the bus stops and cycle infrastructure on the Malahide Road. It is outlined that this estate currently preforms poorly in terms of public transport use, having the highest car use for travelling to work in the study area which, at the time of analysis, account for 62% of residents. This share exceeds the average mode share for County Dublin as a whole.

6.143. The improvement of permeability and access to sustainable modes of transport and increasing active travel, particularly in urban areas such as Ayrfield is supported at all policy levels and is recognised as international best practice. It is a key goal of the

European Nations 2030 Agenda to build resilient infrastructure, promote inclusion and sustainable industrialisation and foster innovation and to make cities and human settlements inclusive, safe, resilient, and sustainable. Similarly, the Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020), seeks to increase the modal shares of collective transport, walking and cycling, as well as automated, connected and multimodal mobility which will significantly lower pollution and congestion from transport, especially in cities and improve the health and well-being of people. This document contends that cities are and should therefore remain at the forefront of the transition towards greater sustainability.

6.144. As aforementioned in the section above the proposed scheme and the principles of providing greater access to a multi modal sustainable transport network are also supported at both a national and local level, through the various plans including the NPF, NDP, CAP 23, Dubin City County Development Plan and others listed within the policy section above. The applicant has, within the documentation submitted, established the acceptability of this element of the proposed scheme in principle.

6.145. In relation to concerns raised regarding the census data I am satisfied that irrespective of this data the principle of providing a direct connection from a large catchment such as Ayrfield to both active and public transport networks is acceptable and this improvement in permeability aligns with international best practice.

6.146. I note that submissions refer to the existing pedestrian links to Blunden Drive, via St Paul's Church, and to Tonlegee Road at the southern end of Ayrfield Drive provide adequate routes to bus services on those roads. It is stated by the applicant that future bus services have been taken into account during the design process and buses along the Malahide Road provides residents of the Ayrfield estate wishing to travel towards the city centre, or towards Clongriffin, with improved accessibility to the higher frequency and more direct services along the Proposed Scheme. Other services will not cater sufficiently for the residents of the Ayrfield area.

6.147. The submissions also raise concerns in relation to the consultation process of the proposed scheme, the applicants response in this regard is detailed above within the submissions section of this report and the issues of consultation as a theme is addressed hereunder and as such will not be repeated here, except to state that the applicant entered into extensive consultation with the general public and I am satisfied

that based on the information provided that adequate consultation has been permitted both as part of the statutory consultation process and the non-statutory process undertaken.

6.148. In relation to safety concerns, I note that the applicants state that the areas is utilised by small children and there may therefore be a need to provide a planted low-level boundary to prevent conflict with cyclists and children using the area. Such low-level planting could also be provided along the Malahide roadside to prevent children from running out of the green area onto the pavement.

6.149. Concerns are raised in relation to the potential for the proposed development to give rise to increases in crime in the area by providing criminals and people engaged in antisocial behaviour a direct access through the Ayrfield estate. I note at the outset that there are no submissions from An Garda Siochana in this regard. I also note the applicant's response to this issue in which it is contended that the improvements to public realm infrastructure encourages people onto streets in the evening times and increased activity has a direct impact on reductions in crime. Interestingly, it is stated that a higher number of pedestrians and cyclists in housing estates and neighbourhood centres also changes the perception of a place in terms of safety. Passive supervision, the mere presence of more people, makes the place safer. By maintaining or creating links for pedestrians and cyclists, this enhanced safety can be provided.

6.150. In addition to the foregoing, it an improved lighting scheme is proposed by the applicant which will introduce lighting in areas previously unlit and improve areas where lighting is present but poor. Lighting improvements and the introduction of passive surveillance is common practice in the design of schemes and is known to be an effective tool in the reduction of antisocial behaviour. I am satisfied therefore that the proposed scheme will have a positive impact on residential amenity and will not exacerbate antisocial behaviour at this location.

6.151. Concerns relating to air quality and noise have already been addressed above and will not be repeated.

6.152. In relation to concerns regarding loss of privacy to properties adjacent to the green area I note that properties on either side of the green area are bounded by 1.8-2 metre walls which will be retained. I am satisfied that no impacts to privacy will arise as a result of the opening up of this space.

6.153. The submissions refer the loss of open space on which children play, it is of note that there is a similarly large open space area opposite the area in question. In addition, as mentioned above the green space will be retained and merely opened up onto the Malahide Road. Buffer planting as mentioned above can be conditioned, should the board be minded to grant permission, in order provide a defined boundary with the Malahide Road.

6.154. In term of loss of property values, the proposed development is providing access to a high-quality bus corridor with significant public realm improvements and will not impact the functionality, appearance or boundaries of properties within Ayrfield. Third parties have not provided any evidence to substantiate such claims and therefore given that interventions will positively impact the overall setting and appearance of the area there appears to be no basis for such concerns.

6.155. Overall, I am satisfied that there is a justifiable need for the connection route at Ayrfield Drive based on the level of car dependency within the area, the size of the catchment that is currently separated from the Malahide Road services by the existing estate boundaries and the future changes to bus services I the area. I am also satisfied that the proposal would not impact residents in any negative manner and is compliant with international best practice and in line with all government policies in terms of connecting populations to high quality active travel and public transport corridors.

Haverty Road

6.156. Haverty Road is a residential street to the south of Marino Park and north but parallel to the Malahide Road. This road is currently closed to through traffic at the southwestern end and is accessed via St. Aidan's Park Road at the opposite end of the road. It is proposed to reverse the closed access point on this road and utilise this 'Quiet Road' as a diverted route for cyclists.

6.157. Inbound cyclists will join the quiet road at Brian Road and proceed along Carleton Road, across St Aidans Park, and onto Haverty Road joining Marglann Marino at the end of Haverty Road. Cyclists will then re-join at Marino Mart and tie-in with the separate Clontarf to City Centre Cycle & Bus Priority Project, which is being advanced by DCC.

6.158. Given the width restrictions on the Malahide Road at this section of the route, the proposed diversion is the only reasonable option available to provide safe and segregated cycle facilities.

6.159. Concerns have been raised in relation to access for emergency vehicles and the creation of rat runs. I note that provisions are made to allow emergency vehicles use this junction and that the proposed works will reduce traffic on Brian Road and Carleton Road, further enhancing the 'Quiet Road' environment.

6.160. In relation to the proposed works it is proposed to carry out some minor utility diversions and / or protections along this section of the road. On Brian Road, Carleton Road and Haverty Road, which is the alternative cycle route, planning and resurfacing of the existing road, along with application of additional road markings, will be undertaken. The expected construction duration will be approximately three months.

6.161. Overall, the impacts to residents will be largely connected to the construction works which will be temporary in nature. The use of the street is not considered to give rise to significant impacts to residents and as mentioned above given the reduction in traffic on this route I am satisfied that the proposed development will improve the overall environment for residents.

Artane Cottages

6.162. As mentioned above it is proposed to locate a new bus stop outside of no. 5&6 Artane Cottages for inbound passengers. At this location it is proposed to provide a bus stop pole and a RTPI sign and no bus shelter. It is argued by the residents of Artane Cottages that the proposed scheme would impact the enjoyment of their properties by virtue of the proposed bus stop location. Third parties have submitted photographs of people sitting on windowsills at the front of their dwellings whilst waiting on the street. It is also argued that the proposed development will increase noise at this location and deteriorate air quality.

6.163. Noise and air quality impacts are examined in detail within the EIAR section of this report hereunder, I refer the Board to the EIAR in this regard. It is clear from the EIAR assessment that no significant impacts are expected to arise in relation to either noise or air quality. Positive benefits are expected due to the introduction of electric buses and the reduction in vehicular traffic along the route. Based on the foregoing I am

therefore satisfied that no significant impacts will arise in relation to noise and air that would impact residents in any significant manner.

6.164. The residents of Artane Cottages suggest the relocation of the proposed bus stop to 300/302 Malahide Road whereby the footpath widens. The justification for the location of the bus stop has been outlined above and will not be repeated.

6.165. The issue for consideration at this juncture is the impact to residents in terms of any loss of privacy or perceived intrusion into their privacy. I note that concerns were raised during the non-statutory consultations in relation to the footpath width at this location which were to be narrowed. The NTA resolved to retain the footpath width following consultation with the exception of a 1.5 metres pinch point as detailed above. The situation in terms of pedestrians will therefore remain as is currently. Whilst I acknowledge the residents' concerns about people sitting on their windowsills, this is not a matter that the NTA can resolve as part of the proposed scheme.

6.166. The introduction of a bus stop pole will undoubtedly give rise to people congregating at this location and may give rise to additional people movement at the front of these properties, however the cottages are located in an urban area that is heavily trafficked and the benefits of providing a high quality sustainable and active travel network within this part of the city will provide significant benefits that outweigh the congregation of passengers for short periods of time at this location.

6.167. Thus, whilst I acknowledge the potential annoyance of having a bus stop adjacent to these properties the impact to the residents of the Artane Cottages is not of such significance to warrant refusal of this significant piece of infrastructure which would benefit all residents along and within the area of the Malahide Road as a whole. I am satisfied that the applicant has investigated all reasonable alternatives and has made appropriate accommodations to protect the residential amenity of the Artane Cottages.

6.168. It is of note to the Board that a small area of lands at the existing gate to the rear of these cottages is to be acquired and the gate set back. No impacts to the functionality of this gate will arise.

Visual Impact

6.169. As outlined above the proposed scheme is effectively the reallocation of road space with dedicated bus lanes and segregated cycle lanes for the full length. Works will include public realm upgrades in relation to footpath surface and alignment,

supplementary planting and the realignment of and planting of central reservation areas along the route.

6.170. Upgraded junctions will provide for legible crossings for all modes and will be softened at all corners by the planting of trees, wild flowers or various grasses. The design of the overall scheme will provide a palate of consistent materials and finishes and a flow of green space along the full length of the route.

6.171. Currently, the route contains pockets of green spaces and large sections of the central reservations are planted, however the overall landscape, particularly at junctions is dominated by hard landscaping and results in an uninviting harsh street appearance. I draw the Board's attention to Volume 3 – Figures of the EIAR in which the Landscaping general arrangement drawings are contained. Proposed landscaping along the route is clearly shown on these maps as are the trees etc to be removed.

6.172. It is evident that the landscaping and public realm proposals intend to soft the existing hard landscape with the use of edge planting, additional trees, pocket gardens and green pockets at junctions. Overall the proposals provide for a more inviting space designed to cater for an improved pedestrian flow and environment.

6.173. Having regard to the plans submitted, I am satisfied that the proposal will have a positive impact to the landscape and to people's experience of the street. The softening of landscaping enhances the pedestrian and cyclist experience and has a positive impact on the perception of an area overall.

6.174. I note the Donnycarney community submission refers to a number of issues in relation to public realm. At the outset I note that the green area in front of 109 Malahide Road is intended to include a footpath as stated by the applicant and consider it reasonable to impose a condition requiring same should the Board be minded to approve the scheme. I further note that it is intended to retain the flower poles mentioned and the green area and seating provided by the community.

6.175. However the applicant states that the Eir advertising box will be retained but there is ample footpath space available around it.

6.176. Public realm works are proposed at the Donnycarney Church which will provide a green area and seating. It is the intention that the bus stop at this location will be retained and there are no objections in this regard. The proposed improvements at this

location will significantly improve and soft the existing hard landscape and provide a sense of place at this location for local residents and parishioners alike.

6.177. In relation to the visual impact and setting of Protected Structures and other historical structures, including street furniture, lamp stands and post boxes etc. and ACAs, such matters have been examined within the Cultural Heritage Section of the EIAR below and this section should therefore be read in conjunction with the relevant sections of the EIAR.

6.178. It is important to note at the outset that the front boundary at 62/64 Malahide Road are not original and the railings, gates and capping stones have been previously replaced with good quality replicas and vehicular entrances have been added. The permanent land take from these properties is c. 0.5 metres and the boundary treatment will be replaced exactly as it was only minimally closer to the property. Overall, there would be a relatively small loss of private / garden area which will result in a partial loss of landscape amenity space, but there would be no notable change to the key characteristics of these properties. I am satisfied based on the nature of the proposed works that there will be no discernible impact to the visual amenities or setting of these protected structures or the wider area at this location.

6.179. The removal and setting back of boundaries along the route will not alter the overall character of the area or the overall appearance of any of the existing dwelling to such a degree as to warrant a refusal of the proposed scheme.

6.180. I note DCC's concerns in relation to the colour of the proposed cycle track at locations adjacent to ACAs, however the intention of the proposed scheme is to provide a continuous palate of materials which provide clear legibility to all users. To alter finishes would introduce confusion for users and potentially led to conflicts with different modes. Having carried out a detailed site inspection I am satisfied that the proposed cycle track finish will not impact signficantly upon the character of the adjacent ACAs in the area.

6.181. Overall, I am satisfied that the proposed development will make a positive contribution to the visual amenity of the area, whilst there will be some noticeable changes for individual dwellings along the route the overall scheme will provide a much-improved environment for residents, pedestrians, cyclist and motorists traversing and living in the area.

Other Issues raised in Submissions.

Modelling for scheme

6.182. A number of issues have been raised in relation to the modelling on which the proposed scheme is predicated on. Issues are raised by Tesco in their submission regarding the junction at Clarehall into their store, other issues are raised by Brendan Heneghan in relation to the removal of roundabouts and left slip turns.

6.183. Its is important to note at the outset that traffic impacts are examined within the EIAR section of this report hereunder and as such this section should be read in conjunction with the relevant section of the EIAR. I note that the applicants responded to the concerns raised by Tesco and in turn Tesco have responded stating that they were satisfied with the response which relates to the modelling of the junction at their Clarehall store.

6.184. I draw the Board's attention to Appendix A6.2 Transport Modelling in which the applicant's approach to transport modelling for the proposed route is outlined. I note that four models were developed to work together to develop the proposed scheme. The Models used are also used at a national and regional level and are a known in terms of their reliability. The applicant utilised Local area data for the local model and also utilised micro simulation models to assist in the operational validation of the scheme designs and to provide visualisation of scheme operability along with its impacts and benefits.

6.185. The design of the scheme was an iterative process and responded to constraints and requirements that were added to the models overtime. Models were calibrated to account for the difference between modelled and observed traffic flows which improved the accuracy of the outcomes of the proposed route.

6.186. The proposed route was modelled for vehicle type, speed changes, junction layouts and crossing facilities etc, all results were refined and altered to produce the preferred route and associated junctions and signalling.

6.187. It is clear from the information provided that the applicant has carried out a robust and detailed modelling of the entire route. This has been coupled with the requirements of DMURS and the National Cycle Manual to create the most suitable route within the constraints that exist along it.

6.188. It is of note that concerns were raised in relation to a difference between the information provided during the development of the scheme including journey time information. The scheme has been assessed in relation to the scheme proposed and does not take into account prior iterations of the scheme or journey time information. I am satisfied that the proposed scheme will provide an improved service in all aspects of the public bus service along it.

6.189. I am therefore satisfied that the applicants have utilised a detailed, robust and multi-faceted modelling approach to develop the proposed scheme.

Removal of Roundabouts

6.190. Other concerns relating to the design of the scheme relate to the removal of roundabouts and left turn slips. I note that the applicant has responded to this issue within the response to submissions and refers to the requirements of DMURS in relation to the removal of left turn slips. It is stated that in order to meet the objectives of Smarter Travel and DMURS. Specifically, DMURS states that designers should, inter alia, "Omit left turn slips, which generally provide little extra effective vehicular capacity but are highly disruptive for pedestrians and cyclists. Where demand warrants, they may be replaced with left tuning lanes with tighter corner radii".

6.191. The removal of these slips is stated within the NTA's GDA Transport Strategy (GDATS) 2022 – 2042 which proposes to remove 85 slip lanes at appropriate locations, together with consideration of junction signalling changes to better balance the use of the junction between motorised and vulnerable modes. It is clear therefore that the retention of the left turn slip lanes would be contrary to the requirements of DMURS.

6.192. The applicant therefore states that in relation to achieving the scheme objectives the removal of left turn slip lanes is essential to achieving the necessary enhanced pedestrian, cyclist and bus priority infrastructure.

6.193. Having regard to the requirements of DMURS and the intention of the GDA Transport Strategy I am satisfied that the removal of left turning slips are in accordance with the overriding government policy and are therefore an acceptable part of the proposed scheme.

6.194. In relation to the removal of roundabouts, it is important to consider the objective of the proposed scheme which is to provide improved active travel and public transport infrastructure and to improve the speed and reliability of these modes to encourage a

modal shift. Roundabouts do not prioritise in a hierarchical manner pedestrians, cyclist or public transport movement or safety over general traffic.

6.195. DMURS advocates this hierarchy of road user model to encourage more sustainable travel patterns and sets out the principles, approaches and standards to be applied to the design of all urban roads and streets in Ireland, defined as those with a speed limit of 60 km/h or less. DMURS within section 4.4.3 acknowledges that 'large roundabouts are generally not appropriate in urban areas. They require a greater land take and are difficult for pedestrians and cyclists to navigate, particularly where controlled crossings/cycle facilities are not provided, and as such, vehicles have continuous right of way.' DMURS goes on to state that: "Where large roundabouts currently exist, road authorities are encouraged, as part of any major upgrade works, to replace them with signalised junctions or retrofit them so that are more compact and/or pedestrian and cycle friendly, as is appropriate."

6.196. DMURS recognises that signalised junctions can provide a wide range of capabilities for sustainable modes and are a better option in such urban locations. The removal of roundabouts if therefore in accordance with the overriding government guidance in this regard and as such having regard to the foregoing, I am satisfied that the applicant has adequately addressed the concerns raised by third parties in this regard.

6.197. Concerns are also raised in relation to the potential for impacts to arise in the case of the proposed scheme being constructed at the same time as other routes. This issue has been dealt with within the cumulative section of the EIAR, however it is important to state at this juncture that the there are no limitations on the timing of the construction of the Clongriffin to City Centre Core Bus Corridor Scheme as no significant additional impacts are expected due to its construction concurrent with other Core bus Corridor Schemes.

Traffic calming

6.198. There are a number of traffic calming measures that have been implemented in the Proposed Scheme that will reduce speeds including improved junction layouts with reduced corner radii, narrow carriageway lane widths, raised table crossings on side roads, proposed speed limit reduction at the outer dual carriageway portion of the Proposed Scheme from 60kmph to 50kmph and speed humps on side streets (e.g. St Brendan's Avenue). The additional landscaping and enhanced pedestrian/ cyclist

priority measures along the Proposed Scheme will also lend themselves to the principles of self-regulating streets as set out in DMURS to encourage lower driving speeds. I am satisfied that the applicant has adequately illustrated the type and location of all such measures and consider the proposed measure necessary to the success of the proposed scheme.

6.199. Overall, it is clear that the proposed scheme has been designed in a manner that is compliant with the overriding government policy, guidelines and the Dublin City Development Plan 2022-2028 in relation to such infrastructure and the applicant has been mindful to provide detailed analysis of all aspects of the proposed scheme and appropriate justifications for the approaches taken. I am satisfied that the proposed scheme will provide a high quality, reliable, safe and aesthetically pleasing multimodal transport corridor and will encourage a significant modal shift in favour of active and sustainable travel modes into and out of the city. Whilst I acknowledge all of the concerns raised by third parties I am satisfied that the applicant has provided clear, robust and detailed information in relation to the design and layout of the proposed scheme and has provided clear detailed and robust justifications for all aspects of the scheme and has clearly outlined how this scheme can contribute to the achievement of a low carbon society and economy through the sustainable movement of people into and out of the city. I am therefore satisfied that the proposed development is in accordance with the proper planning and sustainable development of the area.

7.0 Appropriate Assessment

7.1. Consideration of the Likely Significant Effects on a European Site

Article 6(3) of the Habitats Directive

7.2. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB are considered fully in this section. The areas addressed in this section are as follows:

- The Natura Impact Statement
- Screening for appropriate assessment
- Appropriate assessment of implications of the proposed development on the integrity of each European site.

The Natura Impact Statement and Supplemental Information

7.3. The application is accompanied by an AA Screening report and an NIS (2020) which describes the proposed development, the project area and the surrounding area. The construction management plan is also a key document in terms of the implementation of mitigation measures.

7.4. All Ecology and Appropriate assessment related documents have been prepared by staff ecologists from Scott Cawley and informed by desk study including reference material from the NPWS website and data base and by field surveys.

7.5. A description of all baseline surveys is outlined within section 4.6 of the NIS. The following is a list of surveys undertaken:

7.6. Habitats, Flora and Fauna surveys (which included Otter), – June and August 2018, August 2020.

7.7. The desk study identified three sites along or adjacent to the Proposed Scheme with potential for wintering birds referred to as CBC0001WB001, Buttercup Park, immediately west of the Malahide Road, referred to as CBC0001WB002, and Maypark, immediately east of the Malahide Road, referred to as CBC0001WB003.

7.8. A field survey was carried out to confirm the suitability or presence of wintering birds at CBC0001WB001. The survey found the lands to be unsuitable feeding and/or roosting sites for wintering birds. As such, it was not necessary to carry out further wintering bird surveys.

7.9. CBC0001WB002 and CBC0001WB003 are suitable for wintering birds and were surveyed twice a month, between the months November 2020 and March 2021. The results of the desk study and field surveys have informed the assessment of potential impacts on wintering bird species arising from the Proposed Scheme.

7.10. In general, the approach was a ‘look-see’ methodology (based on Gilbert et al. 1998). All birds present within a site were identified with reference to Collins Bird Guide (Svensson, 2009) to confirm identification (where necessary), and were recorded using the British Trust for Ornithology (BTO) species codes. The total flock size of birds present, their general location within the site and any activity exhibited were also recorded. Evidence of bird droppings were recorded at pre-defined transect lines. The

length of the transect line varied per site. Transect lines were only completed at sites where no bird species were present, to avoid any potential disturbance.

7.11. The receiving environment is described in line with standard methodology (Fossitt 2000) and results of the field surveys are presented in NIS Section 5 and considered further in my assessment below.

7.12. There were no areas of non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 identified along or adjacent to the Proposed Scheme during field surveys. However, the desk study (Appendix IV) returned records of four species listed on the Third Schedule within 1km of the Proposed Scheme. These records include giant hogweed Heracleum mantegazzianum along the Santry_020 at Edenmore in 2009, Canadian waterweed Elodea canadensis along the Santry_020 at Cadburys in 2009, Japanese knotweed Reynoutria japonica at Philipsburgh Avenue Marino in 2018 and three-cornered garlic Allium triquetrum at Mount Temple in 2016. These species were not present within the footprint of the Proposed Scheme.

7.13. No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.

7.14. No signs of otter, an Annex II species, were recorded during surveys within the footprint of the Proposed Scheme.

7.15. A total of nine wintering bird surveys were carried out for the Proposed Scheme at sites CBC0001WB002 and CBC0001WB003 between November 2020 and March 2021 on a fortnightly basis (see Figure 5 at the back of the NIS report). Species identified included Black headed gull, herring gull, common gull, and light bellied brent geese. Wintering bird activity was low across all visits with the exception of black-headed gull at Maypark (CBC0001WB003).

7.16. The Proposed Scheme crosses two watercourses, the Santry_020, and the Wad River, both discharging into the Tolka Estuary, North Bull Island transitional water body, and Dublin Bay. Surface waters will also drain to Dublin Bay via existing drainage across the Proposed Scheme. Dublin Bay contains nine European sites: (one of which has been added as a candidate SPA after the submission of this application, namely the North West Irish Sea cSPA. This site will be assessed in conjunction with the other eight referred to within the NIS submitted) the : North West Irish Sea cSPA, North

Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Island SPA. In the northern section, the Proposed Scheme terminates at Mayne River Avenue, approximately 300m south of the River Mayne. The Proposed Scheme is hydrologically connected to the Mayne_010 via existing surface water drainage and ultimately discharges into the Mayne Estuary containing Baldoyle Bay SAC and Baldoyle Bay SPA.

7.17. Details on the water quality of each watercourse, as sourced from the Environmental Protection Agency (EPA), and the distances from the proposed crossing point to downstream waterbodies are also provided in Table 6.

7.18. **It is important to note at this juncture that the proposed scheme does not overlap with any European site. The nearest European Site to the Proposed Scheme is South Dublin Bay and Tolka Estuary SPA, located 0.5km east of the Proposed Scheme.**

7.19. The scientific assessment to inform AA is presented in sections 5 -7 of the NIS and in the documentation submitted to the Board as part of the application. The conservation objectives of the various qualifying interest features and special conservation interest species are listed. Impact pathways are identified and the assessment of likely significant effects which could give rise to adverse effects on site integrity presented in Tables 2-8.

7.20. Mitigation measures are presented from section 7.1.4 of the NIS onwards under each site heading and detailed in full in the Construction Management Plan (CMP) and Invasive Species Management plan. An assessment of potential in-combination effects is presented in Section 9 of the NIS.

7.21. **The NIS together with supplemental information concludes that, following an examination, analysis and evaluation of the relevant information, including the nature of the predicted effects from the proposed development, and mitigation measures to avoid such effects, that the proposed development will not adversely affect the integrity of any European site, either alone or in combination with other plans and projects.**

Adequacy of information submitted by the applicant.

7.22. Having reviewed the NIS and supplemental information that accompanies the application, I am satisfied that there is adequate information to undertake Screening and Appropriate Assessment of the proposed development on lands from the R107 Malahide Road from Mayne River Avenue to R107 Malahide Road junction to the junction with Marino Mart – Fairview and also from the junction with Malahide Road – Brian Road along Carleton Road, St. Aidan's Park, Haverty Road and Marglann Marion, all in County Dublin within Dublin City Council administrative area.

7.23. I am satisfied that all possible European Sites that could in anyway be affected have been considered by the Applicant.

7.24. I am satisfied that all ecological survey work and reporting has been undertaken and prepared by competent experts in line with best practice and scientific methods. Information on the competencies and professional memberships of the Ecological team are provided in the NIS. I am also satisfied that all potential impact mechanisms have been considered and appropriately assessed within the NIS document.

Screening for Appropriate Assessment

7.25. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site, in which case the development is 'screened in' for further detailed assessment- appropriate assessment (stage 2).

7.26. The screening assessment undertaken on behalf of the applicant concluded that the potential for significant effects could not be ruled out for **18 no. European Sites** within the Dublin area in view of the conservation objectives of those sites and thus the proposed development must proceed to (stage 2) Appropriate Assessment, and an NIS prepared to inform this stage. Given the location of the new candidate SPA mentioned above adjacent to these 18 sites I have included this site within my screening for Appropriate Assessment.

7.27. I note that in determining the potential significant effects of the proposed development, the applicant took account of the potential for ex-situ effects for foraging birds and mammals such as Otter. It is of note that a precautionary approach has been taken in including SAC and SPA sites in the wider area in the screening exercise. Given that bird species can travel up to 20km from designated sites the applicant has included sites at some remove from the proposed development site.

7.28. Similarly, a precautionary approach has been taken in relation to SCIs associated with SACs in the wider area. Potential impacts and effects considered are presented in table 1.

Table 1. Summary of European Sites for which the likelihood of significant effects cannot be ruled out (Applicant).

Potential impacts and zone of influence of effects	European sites within Zone of Influence
Habitat loss and Fragmentation No European sites are at risk of direct habitat loss impacts. There is potential for loss of ex situ inland feeding sites used by SCI bird species.	**Yes** There are European sites at risk of ex-situ habitat losses: South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA; The Murrough SPA Ireland's Eye SPA; Lambay Island SPA; Skerries Islands SPA Baldoyle Bay SPA; Malahide Estuary SPA; Rogerstown Estuary SPA; North West Irish Sea cSPA
Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts: Habitats and species downstream of the Proposed Scheme and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants	**Yes** There are European sites at risk of hydrological effects associated with the Proposed Scheme: Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA,

	Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, Rockabill to Dalkey Island SAC and Lambay Island SAC North West Irish Sea cSPA
Habitat degradation as a result of hydrogeological impacts: Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.	**No** There are no European sites at risk of hydrogeological effects associated with the Proposed Scheme
Habitat degradation as a result of introducing/spreading non-native invasive species: Habitat areas within, adjacent to, and potentially downstream Sof the Proposed Scheme	**Yes** Although no non-native invasive species were recorded during field surveys, there are records of non-native invasive species present within or adjacent to the Proposed Scheme and, therefore, a risk associated with the Proposed Scheme to downstream European sites from the spread/introduction of non-native invasive species to: North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA.
Air quality impacts Potentially up to 200m from the Proposed Scheme boundary: Potentially up to 200m from the Proposed Scheme boundary. Indirect impact via a significant change in AADT (Annual Average Daily Traffic) flows is predicted to occur on Clontarf Road where cars will be redirected once the Proposed Scheme is in operation..	**Yes** Although no European sites lie within 200m of the Proposed Scheme, South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf Road at risk of increased traffic flows.
Disturbance and displacement impacts: Potentially up to several hundred metres from the Proposed Scheme, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the	Yes, There are no European sites within the potential zone of influence of disturbance effects

Proposed Scheme, taking into account the sensitivity of the qualifying interest species to disturbance effects	associated with the construction or operation of the Proposed Scheme. However, there are ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, North West Irish Sea cSPA and The Murrough SPA

Screening Determination (recommendation)

7.29. Having regard to the information presented in the AA Screening Report, NIS, submissions, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, I concur with the applicant's screening determination that there is potential for significant effects on the

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Baldoyle Bay SAC,
- Howth Head SAC,
- Rockabill to Dalkey Island SAC,
- Lambay Island SAC,
- Howth Head Coast SPA,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,

- Baldoyle Bay SPA,
- Dalkey Islands SPA,
- Malahide Estuary SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Rockabill SPA,
- Ireland's Eye SPA,
- North West Irish Sea cSPA,
- Lambay Island SPA and,
- The Murrough SPA..

7.30. Given the hydrological connections and proximity of the proposed works to ex-situ feeding sites associated with the Qualifying Interests of the European sites listed above and the proximity of the Clontarf Road to the South Dublin Bay and River Tolka Estuary SPA, and the potential relationship with all European sites within the zone of influence, and their conservation objectives, it is reasonable to conclude that there is a potential for impacts to arise in relation to a number of issues which relate to habitat degradation, disturbance and displacement and habitat loss and fragmentation. As screening is considered a pre-assessment stage, further analysis is required to determine the significance of such impacts and to apply any mitigation measures to exclude adverse effects. Therefore, North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA, North West Irish Sea cSPA and,The Murrough SPA are brought forward for inclusion in the Stage 2 AA.

Appropriate Assessment (recommendation)

7.31. The following is an objective assessment of the implications of the proposal on the relevant conservation objectives of the European sites based on the scientific information provided by the applicant and taking into account expert opinion and

submissions on nature conservation. It is based on an examination of all relevant documentation and submissions, analysis and evaluation of potential impacts, findings conclusions. A final determination will be made by the Board.

7.32. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects on site integrity are examined and evaluated for effectiveness. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service. Dublin
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites. Methodological guidance on Article 6(3) and 6(4) of the Habitats Directive 92/43/EC.

Relevant European sites:

7.33. In the absence of mitigation or further detailed analysis, the potential for significant effects could not be excluded for:

- North Dublin Bay SAC,
- South Dublin Bay SAC,
- Baldoyle Bay SAC,
- Howth Head SAC,
- Rockabill to Dalkey Island SAC,
- Lambay Island SAC,
- Howth Head Coast SPA,
- North Bull Island SPA,
- South Dublin Bay and River Tolka Estuary SPA,
- Baldoyle Bay SPA,
- Dalkey Islands SPA,
- Malahide Estuary SPA,
- Rogerstown Estuary SPA,

- Skerries Islands SPA,
- Rockabill SPA,
- Ireland's Eye SPA,
- North West Irish Sea cSPA,
- Lambay Island SPA and,
- The Murrough SPA.

7.34. A description of the sites and their Conservation Objectives and Qualifying Interests/Special Conservation Interests, including relevant attributes and targets for these sites, are set out in the NIS section 7- Assessment of Potential Effects.

7.35. I have also examined the Conservation Objectives Supporting Documents for these sites, available through the NPWS website (www.npws.ie).

7.36. Tables 2-8 below summarise the information considered for the Appropriate Assessment and site integrity test. I have taken this information from that provided by the applicant within the NIS. I expand on certain issues further in my report.

Table 2: AA summary matrix for North Dublin Bay SAC

North Dublin Bay SAC [000206] **Detailed Conservation Objectives available:** ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Special Conservation Interest (SCI)	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Mudflats and sandflats not covered by seawater at low tide	To maintain the favourable conservation condition in relation to habitat, community -extent/vegetation structure/distribution including fine sand to sandy mud with Pygospio elegans and Crangon crangon community complex; Fine sand with Spio martinensis community complex.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to:

Annual vegetation of drift lines	Restore the favourable conservation condition in relation to habitat - extent/structure/distribution/ composition. Maintain presence of sea rocket (Cakile maritima), sea sandwort (Honckenya peploides), prickly saltwort (Salsola kali) and oraches (Atriplex spp.)	alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support.	the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.
Salicornia and other annuals colonising mud and sand	Restore the favourable conservation condition in relation to habitat - extent/vegetation structure/distribution/ Composition/variation and no significant expansion of common cordgrass.		
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	To maintain the favourable conservation condition in relation to habitat, community - extent/vegetation structure of habitat & physical structure /distribution		
Mediterranean salt meadows (Juncetalia maritimi)			
Embryonic shifting dunes	To restore the favourable conservation condition in relation to habitat – area/distribution/physical structure/vegetation structure and composition.		
Shifting dunes along the shoreline with Ammophila arenaria (white dunes)			
Fixed coastal dunes with herbaceous vegetation (grey dunes)			
Humid dune slacks			
Petalophyllum ralfsii (Petalwort)	To maintain the favourable conservation condition in relation to distribution/ population size/ habitat / hydrological conditions/ vegetation structure.	The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of	See the mitigation measures described in Section 7.1.4.2 to prevent the introduction

		existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat	and/or spread of invasive species which includes the carrying out of preconstruction surveys and the implementation of an Invasive Species management plan.

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for North Dublin Bay SAC. No wetland habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.

The spread of invasive species can also be controlled via mitigation measures, pre confirmatory surveys will be carried out in order to avoid or adequately treat or remove invasive plants prior to construction being carried out in accordance with the Invasive Species Management Plan appended to the NIS.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the North Dublin Bay SAC.

Table 3: AA summary matrix for South Dublin Bay SAC

South Dublin Bay SAC [000210]

Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)

Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
	Maintain favourable conservation condition	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but
Mudflats and sandflats not covered by seawater at low tide	Maintain favourable conservation condition in relation to habitat area, community extent/vegetation structure/distribution including Zostera dominated community and		

	fine sands with Angulus tenuis	alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support.	are not limited to the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.
Annual vegetation of drift lines	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition		
Salicornia and other annuals colonising mud and sand	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition		
Embryonic shifting dunes	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition		

		Spread of invasive could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	See the mitigation measures described in Section 7.1.4.2 to prevent the introduction and/or spread of invasive species which includes the carrying out of preconstructio n surveys and the implementatio n of an Invasive Species management plan.

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for South Dublin Bay SAC. No wetland habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality. The spread of invasive species can also be controlled via mitigation measures, pre confirmatory surveys will be carried out in order to avoid or adequately treat or remove invasive plants prior to construction being carried out in accordance with the Invasive Species Management Plan appended to the NIS.

Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the South Dublin Bay SAC.

Table 4: AA summary matrix for Howth Head SAC

Howth Head SAC [000202] **Detailed Conservation Objectives available:** ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Special Conservation Interest (SCI)	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Vegetated sea cliffs of the Atlantic and Baltic coasts	Maintain favourable conservation condition in relation to habitat length/distribution/structure and hydrological regime, vegetation structure: zonation transitional zones, natural processes etc,	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but

	vegetation height/composition – negative indicator species to be below 5% and bracken less than 10% etc. Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay	accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.
European dry heaths	Maintain favourable conservation condition in relation to habitat length/distribution/Ecosystem – maintain soil nutrient status/community diversity/vegetation composition-number of	None, the proposed development is not connected to this SCI	None required.

	positive indicator species at monitoring stop at least 2. Vegetation percentage cover per species in line with that outlined in Objective.		

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Howth Head SAC. No habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.
Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Howth Head SAC

Table 5: AA summary matrix for Rockabill to Dalkey Island SAC

Rockabill to Dalkey Island SAC [003000] **Detailed Conservation Objectives available:** ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
Reefs	Maintain favourable conservation condition in relation to habitat area, distribution and community structure.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to
Harbour porpoise *Phocoena phocoena*	Maintain favourable conservation condition in relation to access to suitable habitat and prevention of disturbance by human activity.	Pollution event could potentially affect the quality of the intertidal /marine habitats which support harbour porpoise and fish prey species.	

			be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation measures the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Rockabill to Dalkey Island SAC. No habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.
Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Rockabill to Dalkey Island SAC.

Table 6 AA Summary matrix for Lambay Island

Lambay Island SAC [000204] **Detailed Conservation Objectives available:** ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes (summary- inserted)**	**Potential adverse effects**	**Mitigation measures**
	Maintain favourable conservation condition		
Reefs	Maintain favourable conservation condition in relation to habitat area/distribution/community complex and subtidal reef community complex in natural condition.	No pathway for impacts to occur on any habitats associated with this SAC as it is located a significant distance from the proposed scheme on the far side of the Howth peninsula and separated by a large marine waterbody.	None required
Vegetated sea cliffs of the Atlantic and Baltic coast	Maintain favourable conservation condition in relation to habitat length; no decline in habitat distribution; no alteration to natural functioning of geomorphological and hydrological processes; maintain range of sea cliff habitat zonations; maintain structural variation within sward; maintain range of Irish Sea Cliff Survey species; negative indicator species less than 5%; and cover of bracken and woody species on grassland/heath less than 10% and 20% respectively	As Above	
Halichoerus grypus (Grey Seal)	No restriction of species range by artificial barriers to site use; breeding and moult and resting haul-out sites maintained in natural condition; and human activities should occur at levels that do not adversely affect the species at the site.	Pollution event could potentially affect the quality of the intertidal /marine habitats which support grey seal and harbour seal.	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but

Phoca vitulina (Harbour Seal)	No restriction of species range by artificial barriers to site use; breeding and moult and resting haul-out sites maintained in natural condition; and human activities should occur at levels that do not adversely affect the species at the site.	**As Above**	are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary

			surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment.

Overall conclusion: Integrity test
The applicant determined that following the implementation of mitigation measures the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for Lambay Island SAC. No habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.
Based on the information submitted, surveys carried out analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Lambay Island SAC.

Table 7: AA summary matrix for Baldoyle Bay SAC

Balydoyle Bay SAC [000199] **Detailed Conservation Objectives available:** ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes (summary-inserted)**	**Potential adverse effects**	**Mitigation measures**

Mudflats and sandflats not covered by seawater at low tide.	Maintain favourable conservation condition in relation to habitat area and community distribution.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.
Salicornia and other annuals colonising mud and sand	Maintain favourable conservation condition in relation to habitat area and distribution, physical structure – circulation of sediments, maintenance of creek and pan structure, flooding regime, vegetation structure: zonation - maintain the range of coastal habitats including transitional zones,, vegetation height, cover, composition and no expansion of common cordgrass.		
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi)	As above and including maintenance of structure variation within sward and maintenance of over 90% of area outside of creeks vegetated. Vegetation composition - maintain range of sub- communities with typical species listed in the Saltmarsh Monitoring Project		
Overall conclusion: Integrity test The applicant determined that following the implementation of mitigation measures the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.			

Based on the information provided, I am satisfied that adverse effects can be excluded for Baldoyle Bay SAC. No habitat loss will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.
Based on the information provided, I am satisfied that adverse effects can be excluded for **Baldoyle** Bay SAC site in view of conservation objectives of the site.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the Baldoyle Bay SAC.

Table 8: AA Summary matrix for North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Dalkey Islands SPA, Howth Head Coast SPA, South Dublin Bay and River Tolka Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA.

North Bull Island SPA [004006], Baldoyle Bay SPA [004016], Malahide Estuary SPA [004025] and Dalkey Islands SPA [004172], Howth Head Coast SPA [004113], South Dublin Bay and River Tolka Estuary SPA [004024], Rogerstown Estuary SPA [004015], Skerries Islands SPA [004122], Rockabill SPA [004014], Ireland's Eye SPA [004117], Lambay Island SPA [004069] Maintain or restore favourable conservation condition **Detailed Conservation Objectives available:** https://www.npws.ie		
North Bull Island SPA [004006], Light-bellied Brent Goose (Branta bernicla hrota), Shelduck (Tadorna tadorna), Teal (Anas crecca), Pintail (Anas acuta), Shoveler (Anas clypeata), Oystercatcher (Haematopus ostralegus), Golden Plover (Pluvialis apricaria), Grey Plover (Pluvialis squatarola), Knot (Calidris canutus), Sanderling (Calidris alba), Dunlin (Calidris alpina), Black-tailed Godwit (Limosa limosa), Bar-tailed Godwit (Limosa lapponica), Curlew (Numenius arquata), Redshank (Tringa totanus), Turnstone (Arenaria interpres), Black-headed Gull (Chroicocephalus ridibundus), Wetland and Waterbirds		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in distribution range, timing or intensity of use of areas by all the above named species other than occurring from natural patterns of variation.	An accidental pollution event during construction could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures

	The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations. Temporary and permanent loss of suitable GA2 habitat	to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme. See the mitigation measures described in Section 7.1.4.2 to prevent the introduction and/or spread of invasive species which includes the carrying out of preconstruction surveys and the implementation of an Invasive Species management plan, Restore habitat after temporary loss.
Baldoyle Bay SPA [004016} Light-bellied Brent Goose, Shelduck, Ringed Plover, Golden Plover, Grey Plover, Bar-tailed Godwit		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas by wintering waterbirds	As above	As Above
Dalkey Island SPA [004172] Roseate Tern, Common Tern, Artic Tern		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	As Above	As Above
Howth Head Coast SPA [004113] Kittiwake Rissa tridactyla		
Summary of Appropriate assessment		
Conservation Objectives	**Potential adverse effects**	**Mitigation measures**

Targets and attributes (summary)		
To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	As Above	As above
South Dublin Bay and River Tolka Estuary SPA [004024] Light-bellied Brent Goose (Branta bernicla hrota), Oystercatcher (Haematopus ostralegus), Ringed Plover (Charadrius hiaticula), Grey Plover* (Pluvialis squatarola), Knot (Calidris canutus), Sanderling (Calidris alba), Dunlin (Calidris alpina), Bar-tailed Godwit (Limosa lapponica), Redshank (Tringa totanus), Black-headed Gull (Chroicocephalus ridibundus), Roseate Tern (Sterna dougallii), Common Tern (Sterna hirundo), Arctic Tern (Sterna paradisaea), Wetland and Waterbirds. *Grey Plover (Pluvialis squatarola)] is proposed for removal from the list of SCI's for the site so no site specific conservation objective is included for the species		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing Distribution - no significant decrease in range, timing or intensity of use of areas by wintering waterbirds No decline in roosting or breeding colonies . Human activities should occur at levels that do not adversely affect breeding or roosting sites.	As Above	As Above
Irelands Eye SPA [0045117] Cormorant Phalacrocorax carbo, Herring Gull Larus argentatus, Kittiwake Rissa tridactyla, Guillemot Uria aalge, Razorbill Alca torda.		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas	As Above	As Above
Malahide Estuary SPA [004025] Great Crested Grebe Podiceps cristatus, Light-bellied Brent Goose Branta bernicla hrota, Shelduck Tadorna tadorna, Pintail Anas acuta, Goldeneye Bucephala clangula, Red-breasted Merganser Mergus serrator, Oystercatcher Haematopus ostralegus, Golden Plover Pluvialis apricaria, Grey Plover Pluvialis squatarola, Knot Calidris canutus, Dunlin Calidris alpina, Black-tailed Godwit		

Limosa limosa, Bar-tailed Godwit Limosa lapponica Redshank Tringa tetanus, Wetland and Waterbirds		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas Habitat area / Hectares /The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765ha, other than that occurring from natural patterns of variation	As above	As Above
Rogerstown Estuary SPA [004015] Greylag Goose Anser answer, Brent Goose Branta bernicla hrota, Shelduck Tadorna tadorna, Shoveler Anas clypeata, Oystercatcher Haematopus ostralegus, Ringed Plover Charadrius hiaticula, Grey Plover Pluvialis squatarola, Knot Calidris canutus, Dunlin Calidris alpina, Black-tailed Godwit Limosa limosa, Redshank Tringa tetanus, Wetlands		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas	As Above	As Above
Skerries Islands SPA [004122] Cormorant Phalacrocorax carbo, Shag Phalacrocorax aristotelis, Brent Goose Branta bernicla hrota, Purple Sandpiper Calidris maritima, Turnstone Arenaria interpres, Herring Gull Larus argentatu		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
As Above	As Above	As Above
Lambay Island SPA [004069] Fulmar Fulmarus glacialis, Cormorant Phalacrocorax carbo, Shag Phalacrocorax aristotelis, Greylag Goose Anser answer, Lesser Black-backed Gull Larus fuscus, Herring Gull Larus argentatus, Kittiwake Rissa tridactyla, Guillemot Uria aalge, Razorbill Alca torda, Puffin Fratercula arctica		
Summary of Appropriate Assessment		
Conservation Objectives	**Potential adverse effects**	**Mitigation measures**

Targets and attributes (summary)		
As Above	As Above	As Above
Rockabill SPA [004014] Purple Sandpiper Calidris maritima, Roseate Tern Sterna dougallii, Common Tern Sterna hirundo, Arctic Tern Sterna paradisaea		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas Human activities should occur at levels that do not adversely affect the breeding roseate tern population, the Common Tern population or the Artic Tern population – there should be no significant decline in these populations.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA. Note Purple Sandpiper is located a significant distance from the proposed scheme and on the far side of the Howth peninsula and is not at risk of signficantly effects.	As Above in relation to water quality protection.
North West Irish Sea cSPA (004236) Common Scoter (Melanitta nigra), Red-throated Diver (Gavia stellata), Great Northern Diver (Gavia immer), Fulmar (Fulmarus glacialis), Manx Shearwater (Puffinus puffinus), Shag (Phalacrocorax aristotelis), Cormorant (Phalacrocorax carbo), Little Gull (Larus minutus), Kittiwake (Rissa tridactyla), Black-headed Gull (Chroicocephalus ridibundus), Common Gull (Larus canus), Lesser Black-backed Gull (Larus fuscus), Herring Gull (Larus argentatus), Great Black-backed Gull (Larus marinus), Little Tern (Sterna albifrons), Roseate Tern (Sterna dougallii), Common Tern (Sterna hirundo), Arctic Tern (Sterna paradisaea), Puffin (Fratercula arctica), Razorbill (Alca torda), Guillemot (Uria aalge).		
Conservation Objectives Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures**
In the absence of any site specific conservation objectives it is reasonable to apply those outlined above pertaining to other sites as species are listed within these sites are the same as those listed above.	An accidental pollution event during construction could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal/coastal habitats	Detailed pollution control measures to protect water quality are outlined within section 7.1.4.1 and include but are not limited to: the use of silt fences, silt curtains, settlement lagoons and filter materials. Provision of exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles and temporary surfaces to

	that support the special conservation interest bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	prevent sediment washing into the existing drainage systems and hence the downstream receiving water environment. Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence. Fuels to be stored in bunded areas, management of construction related traffic etc. Implementation of SUDs when complete to control run off during the operation of the scheme.
	The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	See the mitigation measures described in Section 7.1.4.2 to prevent the introduction and/or spread of invasive species which includes the carrying out of preconstruction surveys and the implementation of an Invasive Species management plan,
	Temporary and permanent loss of suitable GA2 habitat	Restore habitat after temporary loss.

Overall conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of these European sites in view of the conservation objectives of those sites.

Based on the information provided, I am satisfied that adverse effects can be excluded for these SPA sites that are remote from the proposed development site and that no effects of any significance will occur.

No habitat loss within the European designated sites will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.

The spread of invasive species can also be controlled via mitigation measures, pre confirmatory surveys will be carried out in order to avoid or adequately treat or remove invasive plants prior to construction being carried out in accordance with an Invasive Species Management Plan.

Temporary ex-situ habitat within the development boundary has been shown not to be of significance to the SCIs recorded at these locations and restoration of temporary habitat loss will ensure the availability of these lands for species after construction. The loss of 0.02ha of suitable

GA2 habitat will not give rise to significant effects in the context of the availability of suitable habitat within the wider area and closer to the European sites.
Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.
The proposed development would not delay or prevent the attainment of the Conservation objectives of any of these SPA sites in Dublin Bay and beyond.

Table 9: AA summary for The Murrough SPA.

The Murrough SPA [004186] **Maintain or restore favourable conservation condition** **Detailed Conservation Objectives available:** https://www.npws.ie			
Qualifying Interest feature	**Conservation Objectives Targets and attributes (summary-inserted)**	**Potential adverse effects**	**Mitigation measures**
The Murrough SPA [004186] Red-throated, Diver Gavia stellata, Greylag Goose Anser answer, Light Bellied Brent Goose Branta bernicla hrota, Wigeon Anas Penelope, Teal Anas crecca, Little Tern Sterna albifrons, Wetlands	To maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. .	Similar concerns relating to water quality and the impact to habitats upon which the SCIs rely, as outlined in previous tables.	As outlined in previous tables in relation to protection of water quality.

Black-headed Gull Chroicocephalus ridibundus,		As Above & also although the temporary removal of amenity grassland habitat to facilitate construction compounds will not have a long-term effect on SCI populations, mitigation measures are proposed to ensure that this habitat is restored post-construction at Maypark **(**CBC0001WB003).	Restoration of lands to previous condition
Herring Gull Larus argentatus,		As above in relation to water quality and although the temporary removal of amenity grassland habitat to facilitate construction compounds will not have a long-term effect on SCI populations, mitigation measures are proposed to ensure that this habitat is restored post-construction at Buttercup Park (CBC0001WB002).	

Overall conclusion: Integrity test

The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of these European sites in view of the conservation objectives of those sites.

Based on the information provided, I am satisfied that adverse effects can be excluded for this SPA site and that no effects of any significance will occur.

No habitat loss within the European designated site will occur. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the Santry River and existing surface water pipes which drain directly into Dublin Bay. No increase in existing runoff rates will occur and appropriate treatment will ensure runoff quality.

The spread of invasive species can also be controlled via mitigation measures, pre confirmatory surveys will be carried out in order to avoid or adequately treat or remove invasive plants prior to construction being carried out in accordance with an Invasive Species Management Plan.

Temporary ex-situ habitat within the development boundary has been shown not to be of significance to the SCIs recorded at these locations and restoration of temporary habitat loss will ensure the availability of these lands for species after construction. The loss of 0.02ha of suitable GA2 habitat will not give rise to significant effects in the context of the availability of suitable habitat within the wider area and closer to the European sites.

Therefore, based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.

The proposed development would not delay or prevent the attainment of the Conservation objectives of any of these SPA sites in Dublin Bay and beyond.

Potential for Adverse effects

7.37. As outlined above the potential for adverse effects relates to the changes to water quality arising from pollution and sedimentation of watercourses arising at various locations and associated with various operations during the construction of the development and the deterioration of habitats and/or sedimentation arising from the spread of invasive plant species.

7.38. It is important to reiterate at this juncture that no works will take place within the boundary of any Natura 2000 site and as such the potential for direct effects does not arise.

7.39. In addition to the forgoing, I also consider it important to examine the potential for impacts to arise in relation to noise and vibration disturbance arising from construction works and in relation to Air Quality deterioration arising from both construction works and the operational phase of the development.

Noise & Vibration Disturbance

7.40. Potential Adverse effects in relation to noise disturbance and vibration have been examined by the applicant within the NIS and are not considered to be likely to give rise to significant adverse effect due to the distance of Natura 2000 sites and known ex-situ sites from the proposed works. Effects would not be expected beyond 150m for mammals such as otter and 300m for wintering birds. It is stated that noise levels arising from construction would attenuate to existing background noise levels at that

distance and there are no European sites within the disturbance ZoI of the Proposed Scheme.

7.41. I note that while the Proposed Scheme is within the potential home range of male otter, the Proposed Scheme is located in a different catchment to the Wicklow Mountains SAC which is the nearest designated SAC to the proposed scheme for which Otter is a QI, therefore, any otter present in the vicinity of the Proposed Scheme are not associated with the QI populations of any European site. As such no disturbance impacts arising from noise and vibration are considered likely.

Air Quality deterioration

7.42. In addition to the foregoing, consideration was given to the potential for adverse effects to occur in relation to habitat degradation as a result of air quality. I note that it is stated within the NIS that the unmitigated ZoI for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, and 500m from construction compounds during the construction phase, and up to 200m the Proposed Scheme boundary during the operational phase. There are no European sites present within these distances.

7.43. However, once operational the scheme will redirect traffic along the Clontarf road which lies adjacent to the South Dublin Bay and River Tolka Estuary SPA. the contribution of the Operational Phase of the Proposed Scheme to the NO_2 dry deposition rate was therefore modelled at Clontarf Road and I note that Nitrogen deposition levels have been compared to the lower and higher critical loads for terrestrial habitats. All sites are below the lower critical load of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011). It is not predicted therefore that there would be any harmful effects on vegetation within the SPA from NO and NO_2 and as a result there would not be any reduction in habitat area of the SCI wetland habitat nor any resulting change in the use of the wetland habitat as a resource for SCI species.

7.44. I further note that amenity grassland habitats adjacent to the SPA, have the potential to be used by wintering birds as ex-situ site. I note that it is stated that NO_2 deposition will remain below the critical loads of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011).

7.45. It is not predicted therefore that there will be any reduction in the permanent area occupied by the wetland habitat as specified by the conservation objectives for South Dublin Bay and River Tolka Estuary SPA, nor any change on how SCI birds utilise the SPA.

Habitat loss and fragmentation

7.46. As mentioned previously above the applicant identified three ex-situ locations which were utilised and traversed by Bird Species listed as SCIs of Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North West Irish Sea cSPA and The Murrough SPA. Species include light bellied brent goose, golden plover oystercatcher, curlew, black-headed gull and black-tailed godwit, herring gull.

7.47. These sites were located at lands opposite the Hilton Hotel at the junction of Malahide Road/ R135 (referred to as CBC0001WB001), Buttercup Park (referred to as CBC0001WB002), and Maypark (referred to as CBC0001WB003. Of these, Buttercup Park and Maypark were found to support SCI species. The Proposed Scheme will result in the temporary loss of 0.81ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Buttercup Park compound (referred to as CBC0001WB002), a permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, and a temporary loss of 0.7ha of suitable GA2 habitat at Maypark to facilitate boundary works.

7.48. Surveys were undertaken on a fortnightly basis in order to determine the importance of these sites for these species. I note that survey results demonstrated a relatively low frequency of occurrence of SCIs of the aforementioned Natura 2000 sites. Low occurrence suggests that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat and are likely to use other suitable sites available in the wider area on a similar or more regular basis. The availability of large areas of suitable foraging and/or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs ensures that both the temporary and permanent loss of GA2 habitat as outlined above will not have a significant adverse effect on the SCIs listed and consequently on the conservation objectives of the following SPAs, Malahide Estuary SPA, Baldoyle Bay

SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North West Irish Sea SPA and The Murrough SPA.

Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

7.49. The Proposed Scheme crosses two watercourses, the Santry_020, and the Wad River, both discharging into the Tolka Estuary, North Bull Island transitional water body, and Dublin Bay. Surface waters will also drain to Dublin Bay via existing drainage across the Proposed Scheme. Dublin Bay contains nine European sites: North West Irish Sea cSPA, North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Island SPA. In the northern section, the Proposed Scheme terminates at Mayne River Avenue, approximately 300m south of the River Mayne. The Proposed Scheme is hydrologically connected to the Mayne_010 via existing surface water drainage and ultimately discharges into the Mayne Estuary containing Baldoyle Bay SAC and Baldoyle Bay SPA.

7.50. The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids and the accidental spillage and/or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge.

7.51. Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Lambay Island SAC, Howth Head Coast SPA, North

Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA, North West Irish Sea cSPA, and, The Murrough SPA.

In combination Effects

7.52. In combination effects are examined within section 9 of the NIS submitted. The proposed works were considered in combination with all plans and/or projects with the potential to impact upon the European sites outlined above, I have also considered the North West Irish Sea cSPA in my consideration of in combination effects. Such plans and projects included any national, regional and local land use plans or any existing or proposed projects (that were in place at the time of lodgement of the Proposed Scheme for the consideration of the Board) that could potentially affect the ecological environment within the ZoI of the Proposed Scheme and are listed in Table 37 of the NIS submitted. Each plan and project has been individually considered for any potential in combination effects, these considerations are detailed in table 38 of the NIS submitted.

7.53. It is important to note that since the submission of the application the Dublin City Development Plan 2022-2028 has been adopted. I have had regard to this plan for the purpose of assessing the potential for cumulative effects in relation to the proposed development and note that no new issues arise within the development plan that would have a materially different impact upon the cumulative impacts assessed by the applicant under the previous development plan.

7.54. It is important to note at this juncture that concerns have been raised within the submissions received in relation to the potential for in combination effects with regard to other significant infrastructure projects in and around the city such as Metrolink. All such projects have been considered in the context of in combination effects and it is important to note that projects such as Metrolink must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not

adversely affect the integrity of any European sites, I am satisfied that the Metrolink and other such projects will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

7.55. In the interest of clarity, it is important to note that all other bus connect routes have been considered in the assessment of cumulative effects. Given the nature of the proposed works and the standard nature of the proposed mitigation measures I am satisfied that the proposal will not give rise to cumulative impacts of any significance.

7.56. The in-combination assessment within Section 9.3 of the NIS submitted has concluded that there is no potential for adverse effects on the integrity of any European sites including those within its ZoI, to arise as a consequence of the Proposed Scheme in-combination with any other plans or projects.

7.57. Mitigation measures detailed in Section 7 of the NIS and summarised within table 10 below will ensure that no adverse effects on European sites integrity will arise from the implementation of the Proposed Scheme.

7.58. The implementation of, and adherence to, the policies and objectives of the relevant plans set out in Section 9.2 of the NIS and those of the current Dublin City Development Plan 2022-2028 will ensure the protection of European sites across all identified potential impact pathways and will include the requirement for any future project to undergo Screening for Appropriate Assessment and/or Appropriate Assessment, as appropriate.

7.59. As the Proposed Scheme will not affect the integrity of European sites within the Zol of the Proposed Scheme, and given the protection afforded to European sites under the overarching land use plans, I am satisfied that there will be no adverse effects on the integrity of any European sites to arise as a consequence of the Proposed Scheme acting in-combination with any other plans or projects.

7.60. Overall, I am satisfied that the NIS and supplementary information provided as part of the application has examined the potential for all impact mechanisms in terms of the conservation objectives of the North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA,

Lambay Island SPA, North West Irish Sea cSPA, and, The Murrough SPA. The potential for adverse effects can be effectively ameliorated by both design-based and applied mitigation measures related to surface water quality and spread of invasive species.

Mitigation Measures and Monitoring

7.61. A summary of mitigation measures is presented in the tables above. Full details are provided in the NIS, Construction Management Plan and Invasive Species Management Plan and summarised below. I consider that all measures proposed are implementable and will be effective in their stated aims. Furthermore, an Ecologist will be employed to ensure that measures are implemented as prescribed. A summary of mitigation measures is presented in Table 10 below.

Table 10: Summary of Mitigation Measures to avoid adverse effects on European Sites

Measures to protect surface water quality and groundwater quality during construction:	Use of silt traps, silt fences, bunds for run off to collect in, good construction practice in relation to concrete use and wash out on site. The use of bunded areas, secured areas for hazardous materials, fuels, lubricants and use of spill kits. The use of onsite treatment for surface water runoff, use of settlement tanks/ponds and management of same. Monitoring of water bodies.
Measures to protect surface water quality during operation:	Sustainable urban drainage systems (SUDS) including bioretention areas and filtration drains water butts and permeable paving.
Measures to eradicate/control the spread of non-native invasive species	Preconstruction survey, Implementation of an Invasive species management plan and post construction monitoring programme.

Appropriate Assessment Conclusion: Integrity Test

7.68. In screening the need for Appropriate Assessment, it was determined that the proposal to develop a multimodal sustainable transport route had the potential to result in significant effects on Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, North West Irish Sea cSPA, Rockabill to Dalkey Island SAC and Lambay Island SAC, and that Appropriate Assessment was required in view of the conservation objectives of those sites.

7.69. Following a detailed examination and evaluation of the NIS all associated material submitted with the application as relevant to the Appropriate Assessment process and taking into account submissions of third parties, I am satisfied that based on the design of the proposed development, combined with the proposed mitigation measures, adverse effects on the integrity of Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, Rockabill to Dalkey Island SAC and Lambay Island SAC, can be excluded with confidence in view of the conservation objectives of those sites.

My conclusion is based on the following:

7.70. A detailed assessment of all aspects of the proposed development that could result in significant effects or adverse effects on European Sites within a zone of influence of the development site.

7.71. Consideration of the conservation objectives and conservation status of qualifying interest species and habitats

7.72. A full assessment of risks to special conservation interest bird species and qualifying interest habitats and species

7.73. Complete and precise survey data and analysis of wintering birds in particular those encountered at lands opposite the Hilton Hotel at the junction of Malahide Road/ R135

(referred to as CBC0001WB001), Buttercup Park (referred to as CBC0001WB002), and Maypark (referred to as CBC0001WB003). The proposed development site has been scientifically verified as not being of significance to or an area favoured by SCI bird species at any stage of the wintering or summer seasons.

7.74. Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.

7.75. The proposed development would not undermine the favourable conservation condition of any qualifying interest feature or delay the attainment of favourable conservation condition for any species or habitat qualifying interest for these European sites.

8.0 Environmental Impact Assessment

Introduction

8.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by an environmental team led by Jacobs on behalf of the applicant. This EIA section of the report should, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment above.

8.2. The application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. The application also falls within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, as the application was lodged after these regulations come into effect on 1st September 2018.

8.3. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR sets out a case regarding the need for the development (Section 2.0). The EIAR provides detail with regard to the consideration of alternatives in Section 3. An overview of the main interactions is provided at Section 21.3. Details of the consultation entered into by the applicant with Dublin County Council and other prescribed bodies as part of the preparation of the project are also set out in Section

1.7 of the EIAR and the Public Consultation Report 2018-2020 which is a separate document.

8.4. Article 3 (2) of the Directive requires the consideration of the effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are relevant to the project concerned. The potential for 'unplanned events' is addressed in Section 20.

8.5. The potential for 'flooding' is considered in Section 13 Water. I consider that the requirement to consider these factors under Article 3(2) is met.

8.6. In terms of the content and scope of the EIAR, the information contained in the EIAR generally complies with article 94 of the Planning and Development Regulations 2001, as amended, all studies informing the EIAR are up to date and recently acquired. Additional pre-construction surveys will be required in order to provide up to date information in relation to invasive species, mammals, bats and birds, however such issues can be adequately dealt with by condition.

8.7. It is important to note at the outset that the proposed development under consideration within this application does not cross international boundaries.

Alternatives

8.8. The consideration of Alternatives is documented within Section 3 of the EIAR submitted. I note that alternatives were considered at three levels, Strategic alternatives, route alternatives and design alternatives.

8.9. It is stated that the appropriate type of public transport provision in any particular case is predominately determined by the likely quantum of passenger demand along the particular public transport route. With this in mind the applicant considered the option of constructing a light rail service which would cater for a passenger demand of between 3,500 and 7,000 per hour per direction (inbound and outbound journeys). Based on the number of passengers predicted to use the new service, it was considered that there would be insufficient demand to justify a light rail option. The light rail option would also require significantly more land take, necessitating the demolition of properties.

8.10. Metro alternative was also considered and as there is a higher capacity requirement for such solutions it was not suitable for this route. In addition, the development of an

underground metro would not remove the need for additional infrastructure to serve the residual bus needs of the area covered by the Proposed Scheme.

8.11. Heavy rail alternatives carry in excess of 10,000 people each direction each hour and was considered an unsuitable solution.

8.12. Demand management in the form of restricting car movement or car access through regulatory signage and access prohibitions, to parking restrictions and fiscal measures (such as tolls, road pricing, congestion charging, fuel/vehicle surcharges and similar) were all considered as alternatives to the proposed scheme. However, it is stated that in the case of Dublin, the existing public transport system does not currently have sufficient capacity to cater for large volumes of additional users, such measures would not work in isolation to address car journeys into and out of the city and would not encourage people onto alternative modes.

8.13. Whilst technological alternatives are becoming increasingly advanced, the use of electric vehicles does not address congestion problems and the need for mass transit.

Route Alternatives

8.14. The applicant outlines within section 3.3 of the EIAR that alternative route options have been considered throughout the design development in response to consultations held with the public. The route selection process is outlined in Section 3.3.1 of the EIAR, I note that 70 individual links were considered, and a sifting process ensued resulting in the development of 4 routes. These routes were then considered against environmental considerations such as soils and geology, flora and fauna, potential archaeological, architectural and cultural heritage impacts and impacts to roadside amenity such as existing trees. Other constraints relating to these routes such as land availability and the extent of third-party lands to be acquired were also considered and the route selections reduced and modified accordingly.

8.15. Having regard to the information submitted it is clear that the applicant has considered a significant number of options for the proposed scheme and has been responsive to consultations held and concerns raised by the public. Each emerging route was considered in relation to a number of criteria such as economy, safety, integration, accessibility and social inclusion and environment.

8.16. Whilst I note that a number of submissions are concerned with the lack of alternatives considered by the applicant, this statement is not substantiated and in the context of

the information provided by the applicant I am satisfied that the applicant has carried out an extensive, detailed and robust assessment of all reasonable options for the proposed scheme. I draw the Board's attention to Chapter 3 of the EIAR in which the applicant comprehensively details all alternative considered and the detailed assessment and consideration of the final four routes and the emergence of the preferred route.

Population and Human Health

8.17. Chapters 10 and 11 of the EIAR consider the impacts to population and human health as a result of the proposed development. I note from the EIAR that impacts to population were considered under two sub assessments, i.e Community Assessment and Economic Assessment. Study area was informed by the CSO parish boundaries and are listed within section 10.2.1.1. of the EIAR. Economic study area is defined as individual businesses within the identified community areas that could be potentially impacted by the development as a result of displaced traffic.

8.18. Human health is considered in the context of the overall health status of the population within the study area, social inequalities, as this can be a determinant of health, and the overall exposure of the population in the study area to environmental impacts, such as the level of exposure to certain pollutants in the context .

8.19. It is important to note at this juncture that impacts to communities arising from traffic, air quality, noise and vibration and visual and landscape are considered within the relevant sections of the EIAR submitted and with the planning assessment above and in the interest of conciseness will not be repeated hereunder. This Section of my report should therefore be read in conjunction with the relevant sections mentioned.

8.20. Issues raised in this context within the submissions received, relate to accessibility to properties both residential and commercial. Dublin City Council have requested that access to commercial properties in terms of drop off and unloading areas are provided.

8.21. Private residents are concerned about the functionality of their properties in terms of access, noise and loss of privacy. Concerns are also raised in relation to air quality and the impact to travel times as a result of diversions during construction or rerouted traffic. Additional concerns relate to the loss of amenity space in particular at Ayrfield Drive.

<u>Baseline conditions</u>

8.22. In terms of relevant baseline data, the proposed scheme is located along an existing heavily trafficked route which is bounded by residential and commercial development. Of particular note in relation to baseline conditions along the route is current exceedances of both daytime and nighttime noise levels in excess of that recommended by the WHO. The applicant considers that the proposed scheme will improve the current situation in this regard as the proposed route will be operated by electric buses thus signficantly reducing noise generation from these large vehicles. The proposal also seeks to reduce the number of private vehicles travelling along the route and therefore further reduce noise emissions for residents.

Potential Impacts

8.23. Overall construction impacts relating to construction noise, dust, traffic disruption will be temporary and short term in terms of the magnitude of affect and are largely mitigated without any residual effects. Table 11 below provides a summary of the effects I have noted from these chapters in relation to population and heath, it outlines the magnitude of these effects and mitigation measures where proposed. I will reiterate for the benefit of the Board that such impacts are examined in detail within the relevant sections hereunder. However, it is important to note at this juncture that no significant offsite health risks are expected as a result of the construction or operation of the development. Temporary disturbances given the nature of the works will not extend in the long-term post construction. I am satisfied that such impacts will not result in significant effects and can adequately be dealt with by way of mitigation.

8.24. Thus, having regard to the information provided within the EIAR and the submissions received, I consider the disruption to traffic as a result of both the construction of the development and the operation of the development to be the greatest impact to population and human health.

Mitigation Measures

8.25. I note in this regard that the applicant proposes to implement traffic management plans and protective measures to ensure that pedestrians and cyclists are provided with safe routes during the construction phase, and I further note that measures are proposed to facilitate deliveries to commercial premises both during construction and once the development is operational. Whilst such measures are not a perfect solution for all concerned, on balance I am satisfied that the applicant has adequately addressed the

issue of traffic disruption by way of accommodation works during the operational phase of the development and mitigation during construction and I whilst I acknowledge that the inconvenience created by these diversions will cause annoyance to road users at certain times, it is for a limited period of time and the effect to population and human health is not a significant long term effect.

8.26. Whilst I acknowledge that permeant diversion of traffic to other routes as a result of the development will have a negative, moderate and long-term effect due to increases in traffic on some of the surrounding road network, it is anticipated that the improved access to a new multimodal route will reduce overall car dependence and therefore reduce the number of cars accessing the surrounding road network.

8.27. I note that cumulative effects in relation to surrounding permitted and planned development have also been considered within the EIAR and I agree with the conclusions of the EIAR that no significant impacts are expected to arise in this regard.

Conclusion

8.28. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on population and human health can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 11 Population and Human Health – Summary of potential & residual effects

Potential impacts	**Magnitude of Impact**	**Mitigation**	**Residual Impact**
Traffic disruption	Negative, Slight and Temporary to Short-Term.	Implementation of a traffic management plan. (See S. 6.5 & Ap. A5.1 CEMP)	**None**
Traffic collisions	Negative, Moderate and	As Above & Implementation	**None**

	temporary to Short-Term.	of measures to protect cyclists and pedestrians.	
Permanent traffic diversion – impact to individuals and businesses	Negative, moderate and long-term	As Above & Improved pedestrian & multi modal routes may encourage less car use.	Positive, Slight in the Long-term
Dust generation	Not significant and short term	Implementation of dust management measures.	**None**
Construction Noise – sleep disturbance	Negative, Moderate and Temporary	See Section 9.5 & Ap. A5.1 CEMP)	Negative, moderate to significant and temporary.
Operational Noise	Neutral, Imperceptible and Long-term	None	**None**
Other environmental hazards – water pollution, flooding, contamination. **(Construction & operational phases)**	Neutral	Measures to protect water quality and prevention of leaks and spills of hydrocarbons	**None**
Health impacts	Positive and Significant in the Long-Term.		**None**
Health inequalities	Positive, Moderate and Long-term	People will have better access to health services	Positive, Moderate and Long-term
Air impacts	Positive, Slight and Long-term – reduction in vehicles and electrification of bus fleet.	None	Positive, Slight and Long-term

Air Quality and Climate

8.29. Chapter 7 and 8 of the EIAR submitted address the potential for impacts to arise in relation to Air Quality and Climate.

Baseline Conditions

Air Quality

8.30. The key pollutants considered relevant to the proposed development are identified as:

- Nitrogen Dioxide
- Dust
- Particulate Matter PM_{10} and $PM_{2.5}$
- Greenhouse gases; Carbon Dioxide (CO_2), Sulphur Hexafluoride (SF_6)

8.31. The EIAR submitted outlines, within table 7.2, the upper limits for the above pollutants and within 7.2.2, 7.2.2.2 and 7.2.2.3, the relevant international and domestic legislation and policy pertaining to same. Baseline air quality is examined within section 7.3.2 of the EIAR and baseline line climate conditions are examined in section 8.4. Emissions are expected to arise in relation to both the construction and operation phases of the proposed development and will be examined in the context of the proposed mitigation measures hereunder.

8.32. For the purposes of the EIAR, the proposed scheme is examined in two sections to reflect the construction phases of the development. I note that Sections may be completed simultaneously and combined in certain areas.

- Section 1: Mayne River Avenue to Gracefield Road – Malahide Road;
- Section 2: Gracefield Road to Marino Mart / Fairview – Malahide Road

Potential Construction Impacts

8.33. In terms of effects, it is considered that demolition, earthworks, construction and track out activities will give rise to dust. I note that the applicant has had regard to IAQM guidance in relation to the identification of the magnitude of effects which are defined in the said guidance document.

8.34. The magnitude of dust emissions is defined in relation to each specific activity, as follows:

- Earthworks – large impact as the area is in excess of 10,000m^2 and there may be more than 10 heavy earth moving vehicles active at any one time.

8.35. Notwithstanding that the impact is large, the magnitude of effects from this activity to human health and ecological receptors is temporary and low.

- Construction works – small as this activity will comprise of the laying of paving and hard landscaping along the route. No buildings are proposed as part of the construction works.

8.36. The magnitude of effects to ecological receptors and human health arising from construction works is low.

- Trackout movements – medium impact, such activities may comprise of 10 to 45 HDV (heavy duty vehicles) outward movements in any one day during peak construction activity with surface material with a low potential for dust release.

8.37. The magnitude of effects to human health is considered to be medium and temporary and low in relation to ecological receptors.

8.38. Construction traffic – 12 public roads are identified as required construction access routes where construction traffic will be permitted to travel along. An additional 340 HDV vehicles per day associated with construction traffic along each road including construction deliveries and earthworks material haulage are added to the base traffic volumes. I note the estimated construction traffic volumes are based on the peak construction period volumes and are therefore a worst-case assumption. The applicant considers that the scheme will be constructed in phases with lower volumes and the corridor of the Proposed Scheme will be used for a large bulk of construction delivery vehicles along its route.

8.39. The potential air quality impacts associated with additional construction traffic is examined in relation to NO_x, $PM_{10,}$ and $PM_{2.5}$. Modelled receptors are outlined in table 2.2 within Appendix A7.1 of the EIAR. Most impacted receptors are outlined in table 7.25 and 7.26 of the EIAR and refer to receptors with non-negligible impacts. Overall it is stated within the EIAR that impacts relating to construction traffic pre mitigation are expected to be neutral and short term. I note that all pollutants modelled are within the upper level thresholds permitted.

Mitigation

8.40. Mitigation measures proposed during the construction phase of the development relate to the suppression of dust during the construction phase. Such measures include road sweeping, water misting or spraying during dusty activities, use of

tarpaulins when transporting materials and use of site hoardings of 2.4 metres high. Significant residual impacts are not expected to arise.

Potential Operational impacts

8.41. Operational impacts for the proposed route are stated to be positive with a reduction in emissions of all pollutants modelled. The majority of these reductions result from a predicted modal shift, with decreased car usage and a cleaner and more efficiently routed bus fleet. I note that NO_x levels are expected to increase slightly during the operational phase in the design year of 2028 but decrease by design year 2043, it is stated that this increase is due to the increase in emissions from light and heavy goods vehicles which offset the reductions achieved by more electric buses in the fleet. The overall impacts associated with the Operational Phase of the development are stated as neutral and long-term. I bring to the attention of the Board that predictions reported are based on conservative assumptions regarding background pollutant concentrations and the improvement in vehicle emission rates. I note that 2019 background pollutant concentrations have been used to represent 2028 and are likely be lower by the opening year than in 2019. The applicant states that older fleet projections were used in the absence of a fleet that incorporates the effects of 2021 Climate Action Plan measures – a larger proportion of electric vehicles is planned by the opening year than has been modelled. It is stated that total concentrations (and magnitude of change) are likely to be lower than those reported. I consider this to be reasonable assumption of future emissions.

8.42. It is of note that impact to ecological receptors in the form of NO_x deposits are stated as negative, slight and long term, I refer the Board to table 7.31 and 7.32 in which change in NO_x deposition relative to identified receptors (such as the Royal Canal pNHA, South Dublin Bay and River Tolka Estuary SPA and North Dublin Bay pNHA) are outlined. I am satisfied that the deposition levels will be below the permitted critical load and that in all cases no significant impacts will arise.

Mitigation for Operational phase

8.43. No mitigation is proposed in relation to the operational phase of the proposed scheme and no residual impacts are expected.

8.44. I have considered the potential for cumulative impacts to arise in relation air quality and having regard to the information submitted and given the lack of any significant

impacts associated with either the construction phase of the development or the operational phase of the proposal, I am satisfied that proposed development would not give rise to significant cumulative impacts in relation to air quality.

8.45. I further acknowledge that a significant number of submissions raised concerns regarding increases in air pollution as a result of the development. Particular concerns were raised in relation to the removal of trees and the movement of road space closer to properties. Whilst I acknowledge the concerns of third parties, the information provided in this regard is clear, robust and detailed and I am satisfied that based on the information provided notwithstanding the concerns raised within submissions significant impacts will not occur in relation to air pollution.

Climate

8.46. It is important to note at the outset when considering the proposed development in the context of climate that Bus Connects is identified within the Climate Action Plan 2023 (CAP 23) as a key project that will contribute to the reduction in GHG within Irelands cities. The CAP 23 supports the reallocation of road space to public transport and active travel and seeks to advance the bus connects programme in all 5 cities, over the coming years.

8.47. Impacts to climate are considered within section 8 of the EIAR and are considered in the context of GHG emissions relating to landuse change and construction, traffic related emissions and operational related emissions. Recent weather patterns and extreme weather events reported by Met Eireann, have been considered in the context of climate change locally.

Potential Construction Impacts

8.48. It is important to note at the outset that the key phases of the GHG generation are the embodied carbon of the construction materials and the construction activities, which, when combined, account for over 90% of all carbon emissions.

8.49. The applicant states that the Proposed Scheme is estimated to result in total Construction Phase CO2eq[1] emissions of 5,226 tonnes embodied CO2eq for materials over a 24-month period, equivalent to an annualised total of 0.005% of Ireland's national GHG emissions in 2019 or 0.008% of Ireland's non-ETS 2020 target.

[1] Carbon Dioxide Equivalent

8.50. In order to provide clarity to the Board it is important to consider the proposed construction related emissions in the context of CAP23 and the agreed Sectoral Emission Ceilings for transport projects within this document. In the context of the 2021-2025 carbon budget period, the proposed development represents 0.00967% of the transport emission ceiling for the period. It is likely that construction will extend into the following carbon budget period of 2026-2030 and as such the proposal would represent 0.01412% of this period's emission ceiling allocation.

8.51. It is important to reiterate at this juncture that the aforementioned climate emissions relate to embodied carbon during the construction phase of the development.

8.52. In terms of identifying the magnitude of effect arising from the construction phase of the development I note that in the absence of the agreed CAP 23 Sectoral Emission Ceilings, any increase in GHG had to be considered significant, as such the applicant has stated impacts arising from the construction phase of the development are negative, significant and short term. In an attempt to provide some context to the carbon emissions figures provided, the applicant states that the construction impacts are equitable to the construction phase of a three-bed housing development of 105 units. I consider this to be a useful comparison in order to visualise the quantum's referred to in this regard.

8.53. Thus, whilst I acknowledge the justification in relation to the stated magnitude of effects to climate arising from the construction phase of the development, I am satisfied that having examined the carbon emission equivalent of the proposal in the context of the Sectoral Emission Ceilings set out in CAP 23, that the proposed development would not give rise to any significant climate impacts and has been adequately assessed within the EIAR in this regard.

Potential Operational Impacts

8.54. With regard to the operational phase of the development is it important to note that climate is heavily influenced by GHG emissions and transport emissions are a significant factor in the level of GHGs released into the atmosphere. I draw the Boards attention to section 8.4.3 of the EIAR in which it is stated that private cars accounted for 73.7% of all road trips in 2019 whilst public transport accounted for 6.5% which I note is an increase of 3% from the previous year. It is stated within the EIAR submitted that transport is the second highest emitter of GHG nationally and currently accounts

for 20.3% of the national GHG output, with cars accounting for 57.4% of total road transport GHG emissions. I draw the Boards attention to CAP 23 in which updated figures are provided in this regard, latest figures state that transport is responsible for 15.7% of the national GHG output and importantly has been the fastest growing source of GHG emissions over the past three decades, showing a 112% increase between 1990 and 2021.

8.55. Whilst transport emissions associated with the construction phase will increase slightly, it is important to consider the overall impact of the development during both the construction and operational phase. The proposed development is expected to be in use for 60 years and will support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets. It is stated that the proposal has the potential to reduce GHG emissions equivalent to the removal of approximately 18,000 and 19,500 car trips per weekday from the road network in 2028 and 2043 respectively. This represents a significant contribution towards the national target of reducing car emissions by 1.87$MtCO_2eq$[2] by 2025 and 3.79 $MtCO_2eq$ by 2030 as set out in tables 15.4 and 15.5 of CAP 23. I note from the information submitted that haulage and heavy goods road freight emissions are not projected to decrease and are essentially outside of the scope of this development.

8.56. In relation to impacts to sequestered carbon I note a number of trees will be removed as part of the earth works and preparation stage of construction and third parties have expressed their concerns in this regard. Whist I acknowledge the concerns raised I note it proposed to plant 1.4 hectares of trees which taken in the context of the proposed construction works will have a neutral effect on the sequestering of carbon over the life of the development.

8.57. In summary of the foregoing, the applicant has stated that the magnitude of effects arising from the operation of the development will be Positive, Significant and Permanent. I note no mitigation is required in relation to the operation or maintenance of the proposed development and no residual impacts arise.

8.58. Having regard to the information submitted and the requirements outlined within CAP 23, I am satisfied that all impacts in relation to climate have been robustly assessed

[2] Million Tonnes of Carbon Dioxide Equivalent

and the applicant has considered all aspects of the development in a detailed manner within both sections 7 and 8 of the EIAR and has provided extensive information in support of the analysis submitted within the relevant appendices to this document. I also satisfied that the proposal is supported by the recently adopted CAP 23 which was not finalised prior to the submission of this application but is nonetheless essential to the assessment of the development in the foregoing context.

8.59. It is important to state at this juncture that in considering the impact on climate I have had regard to the Climate Action and Low Carbon Development (Amendment) Act 2021 which requires Ireland to achieve a 51% reduction in emissions by 2030 (relative to 2018 levels) and a 20% reduction by 2025.

Conclusion

8.60. In conclusion, I have considered all of the written submissions made in relation to air quality and climate and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on air quality and climate can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on air quality and climate can be ruled out I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise, given that overall risks subject to mitigation being implemented are predicted as being negligible.

Table 12 Air Quality & Climate – Summary of potential & residual effects

Potential impacts	**Magnitude of Impact**	**Mitigation**	**Residual Impact**
Dust Generation during construction.	Negative, not significant and short term	Cleaning of roads, watering of stockpiles, covering trucks, site hoarding 2.4 in height.	Not significant

Overall construction phase traffic impacts to air quality in vicinity of scheme. (Impacts to human health)	Neutral and short term	None	Not significant
Construction traffic impacts to air quality within areas taking diverted traffic.	Neutral and short term	None	Not significant
Embodied Carbon	Negative, Significant and Short-Term	Reduce use of materials such as concrete and fuels and reuse materials where practicable	Negative, Significant and Short-Term
Impacts arising from operation and maintenance	Positive and long term	None	None

Noise and Vibration

8.62. Chapter 9 of the EIAR examines the potential for impacts to arise in relation to noise and vibration. It is important to note at the outset that a significant number of third party submission have raised concerns in relation to noise and vibration and the potential for construction vibration to affect the integrity of buildings and operational noise to impact residential amenity. I will therefore examine the potential for such impacts to arise hereunder within this section of the EIAR.

Baseline Conditions

8.63. In order to establish baseline conditions, the applicant utilised Traffic Noise level monitoring data which is recorded and mapped by the EPA. The applicant also carried out independent noise surveys in the form of attended and unattended surveys at various locations along the route. Unattended were carried out between the 2 September 2020 and 9 September 2020 and attended were undertaken between 26

June 2020 and 9 September 2020. I refer the Board to Section 1.3 of appendix A9.1 of the EIAR which outlines specific survey dates and times for each location and results. Tables 9.18 and 9.19 of the EIAR outline the overall survey results in relation to each location.

8.64. With regard to EPA noise monitoring, noise levels are reported at set distances from the road i.e 15-30 metres and 30-40 metres, reference is also made to buildings located 150-200 metres from the road edge.

8.65. Baseline data results identify road traffic as the dominant noise experienced along the road during both daytime and nighttime hours. I note traffic noise levels reported along the Malahide road at distances between 15 metres and 30 metres, range between 65dB to 69dB and at distances between 30m to 40m the range is 60dB to 64dB. Educational buildings that are 150m to 200m from the road experience less than 55dB. The level of noise experienced at a specific location depends on distance from the road and boundary treatment present. I note that the highest noise levels were recorded at Ayrfield Drive which has an average daytime noise level of 70dB. Overall noise levels are high and all with the exception of 1 location, currently exceed the upper limits for ambient noise levels for daytime and nighttime hours.

8.66. I note that noise surveys were carried during level 2 and level 3 COVID restrictions, the applicant has addressed the potential impact to baseline data gathered at this time and has reviewed long term noise monitoring locations, noise levels at non covid impacted times are 1 to 2 dB higher than during the level 2 and 3 data gathered. This difference in levels is not significant in the overall context of describing the prevailing baseline noise environment.

8.67. Vibration surveys were also conducted at various locations and results indicate that vibration levels associated with a heavily trafficked urban – suburban road with a mix of fleet inclusive of dedicated bus lane result in negligible vibration levels at the edge of the road both in terms of human perception and building response.

Potential impacts of noise and vibration

8.68. Noise generation will arise in relation to construction works and the operation of plant during this time and will also relate to the increase in buses utilising the route during operation. There is also a potential for noise disturbance to arise in areas which cater

for diverted traffic both during construction and permanently during the operation of the development.

8.69. The applicant has examined all sources of noise associated with the construction and operation of the development. The EIAR examines each construction activity at specific locations and considers the impact in terms of a range of distances at noise sensitive locations, I draw the boards attention to tables 9.22 – 9.34 in which each construction activity is outlined in terms of noise emissions relative to the distance from NSLs. In the absence of mitigation, it is clear from the tables submitted that noise exceedances will occur in relation to all activities at the closest distances to NSLs and at some other distances to varying degrees of intensity. The magnitude of impacts therefore ranges from slight to very significant, on a temporary basis and over the short term during both daytime and nighttime hours.

8.70. Construction traffic has also been modelled and it is expected that 380 HGV movements (190 vehicles) will occur over a peak construction day. Modelling has been carried out at numerous locations outlined in section 9.4.3.4 of the EIAR which will not be repeated hereunder. Modelling results during the assessed construction year 2024, indicate that Oak Road will experience the highest potential noise impacts.

8.71. Such impacts arise as a result of traffic management measures and related redistributed traffic temporarily onto this road. The change in traffic noise is defined as major with traffic noise level calculated at the closest NSLs along this road categorised as medium. The overall impact is determined to be negative, moderate to significant and temporary. I draw the boards attention to table 13 below in which impacts in relation to all other roads considered within 1km radius of the development are outlined and range between negative medium/moderate to positive, imperceptible, and temporary.

8.72. Potential impacts arising from vibration are associated with the widening and upgrading of existing footpaths and kerbs. Such activities require earthmoving, excavation and compaction which are identified within the TII guidance for the treatment of Noise and Vibration in national road schemes as having potential to generate significant amounts of vibration.

8.73. I note from the information submitted that the magnitude of effects associated with this activity is stated as negative, slight to moderate, temporary effects at distances of 10m

from the activity. Beyond 50m from this type of activity, impacts are stated to be reduced to not significant to slight and temporary. For all other works, vibration impacts will be below those associated with perceptible vibration and will be imperceptible to not significant and temporary.

8.74. I further note that the applicant states that all construction works are orders of magnitude below limits values associated with any form or cosmetic or structural damage for structurally sound or protected or historical buildings or structures. Based on the information submitted I am satisfied that a robust and detailed assessment of vibration has been carried out by the applicant and that a no significant effects arise from the proposed works.

Mitigation Measures

8.75. Mitigation measures are included within the Construction Management plan and are discussed in Section 9.5 of the EIAR. As outlined above and within the summary table below it is clear that the largest magnitude of effects arises at distances of 15 metres from the proposed works and relate to construction related activities whereby concrete is to be removed and replaced and road widening is to be carried out. Other significant impacts arise during evening and weekend hours whereby the upper limit for ambient noise is lower.

8.76. Thus, whilst mitigation is proposed in relation to all construction related works, of particular note are the measures relating to general road works, road widening and diversion, works relating to quiet streets, site compounds and boundary treatment. I note in this regard that machinery will be fitted with acoustic exhausts and within enclosure panels which will reduce noise by 10dB. Mufflers will be fitted to pneumatic concrete breakers and tools, noisy items will be placed away from NSLs and sensitive boundaries. Compressors will be sounded by acoustic lagging or enclosed within the acoustic enclosure. Screens will be used to dampen noise near NSLs when breakers or drill bits are used. Such measures can also reduce noise levels by up to 10dB.

8.77. Works will be carried out largely within daytime hours, however it will be necessary to carry out some works infrequently during nighttime hours. The applicant states that cumulative noise impacts will be carefully considered and avoided in order to protect NSLs. It is intended that construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties.

8.78. The type of works and the duration will be communicated to residents at all times so that residents are aware of the type of work to be carried out and can plan accordingly. Noise monitoring will ensure that any exceedances are addressed without delay. Similarly works which may give rise to vibration will only carried out during daytime hours and monitoring will ensure exceedance of upper limits do not arise.

8.79. Overall mitigation measures are expected to reduce noise levels by 10dB. As outlined above baseline daytime noise levels are c. 67dB and evening baseline levels are 65dB. Following mitigation, the highest predicted construction noise levels are between 67 to 73 dB $L_{Aeq,T}$ at the closest properties impacted by the most intrusive works. The higher impacts will be at those properties where the prevailing baseline is below the specific predicted construction works noise levels. No significant effects are expected during daytime hours post mitigation. Significant residual effects only remain in relation to nighttime and weekend hours whereby upper limit thresholds are lower at these times.

8.80. Overall, it is expected that in most instances noise generated by works will assimilate into the existing background noise levels and will not give rise to significant impacts. In addition, as the proposed development is a linear route works will move continuously therefore being temporary in nature at any location along the route.

Residual Impacts

8.81. Significant residual impacts remain during nighttime and evening hours in relation to the following works:

- Quiet street treatment works,
- Construction compound
- Boundary wall construction works

8.82. In this regard I note that the applicant has had regard to the DMRB Noise and Vibration (UKHA 2020) in cases of moderate to major magnitude of impacts, the duration of works determines the overall significance rating. As part of the mitigation measures, the durations advised in the DMRB Noise and Vibration (UKHA 2020) will be followed, where feasible, to reduce overall significance effects (i.e. scheduling works to occur for periods of less than ten days/nights over 15 consecutive day/night periods and less than 40 days over six consecutive months where significant effects are identified).

Once the CNL and duration of works is considered in line with the DMRB Noise and Vibration (UKHA 2020) all key Construction Phase residual noise levels are not considered to be significant.

8.83. As outlined above significant impacts do not arise in relation to vibrations and as such significant residual impacts will not occur. In addition, the magnitude of effects arising from the operation of the development is positive to negative and slight, mitigation measures are therefore not proposed in relation to the operational phase of the development.

Conclusion

8.84. I have considered all of the written submissions made in relation to noise and vibration and the relevant contents of the file including the EIAR. I am satisfied that the potential for direct or indirect impacts on noise and vibration can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts in relation to Noise and Vibration can be ruled out I am also satisfied that cumulative effects, in the context of existing and permitted in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 13 Noise & Vibration – Summary of potential & residual effects

Potential impacts	Magnitude of Impact	Mitigation	Residual Impact
General Road works	Daytime - Negative, slight to significant, and temporary Evening time &wkds - negative, moderate to very significant, and temporary.	Yes, Localised screening around high noise level plant items.	Daytime hours range based ion distance to works - Negative, slight /not significant to moderate and temporary Evening time &wkd hours – Negative, moderate to significant and

			temporary to Negative, not significant and temporary
Road widening & utility diversion works	Daytime ranges relate to distance from works and range between negative, not significant to very significant, and temporary. Evening & wkd Negative, not significant to very significant, and temporary during the evening and weekend periods	Yes, Refer to Section 9.5.1.1 for the range of noise mitigation measures which will be adopted at specific working areas to reduce noise impacts at NSLs. Particular emphasis is given to localised screening around high noise level plant items including breakers and excavators and enclosures for power packs (vacuum excavators).	Daytime - Negative, slight to moderate and temporary. Nightime - Negative, significant to very significant and temporary.

Quiet Street treatment – Mayne River Avenue to Gracefield Road- Malahide Road	Daytime period - at nearest distance - Negative, significant to very significant, and temporary Evening & wkds – at nearest distance- Negative, significant to very significant, and temporary.	Yes, as above	Daytime range - at nearest distance - Negative, slight to moderate and temporary. Evening & wkd - at nearest distance - Negative, moderate to significant and temporary.
Quiet street treatment - Gracefield Road to Marino Mart / Fairview - Malahide Road	As above	Yes, As above	As above
Urban Realm Landscaping	Daytime - Negative, slight to significant, and temporary Evening time &wkds - negative, moderate to very significant, and temporary.	Yes, Localised screening around high noise level plant items.	Daytime hours range based ion distance to works - Negative, slight /not significant to moderate and temporary Evening time &wkd hours – Negative, moderate to significant and temporary to Negative, not significant and temporary
Construction site compounds	Daytime hours - Negative, slight to moderate and	Position of crushers at a reasonable	Daytime hrs - Negative, slight to moderate and

	temporary at NSLs between 10m to 30m distance from the construction site compound between Buttercup Park and R107 Malahide Road. Not significant and temporary at distances greater than 30m in the absence of noise mitigation. <u>Nighttime & wkd hrs-</u> Negative, significant to very significant and temporary at NSLs between 10m to 20m from the construction site compound. Moderate to significant and temporary at NSLs between 20m to 40m from site compound between Buttercup Park and R107 Malahide Road. Not significant and temporary at distances greater than 40m.	set back and use of construction hoardings along boundaries with sensitive receptors.	temporary within 10m and Negative, not significant and temporary <u>Nightitme hrs –</u> Negative, moderate to significant and temporary within 10m and Negative, not significant and temporary

Boundary treatment works	Daytime Hours – Range based on distance is Negative, not significant to significant, and temporary at varying distances Evening and weekend periods Range based on distance is Negative, not significant to very significant, and temporary.		
Construction vibration from general road works and construction activities	Negative, imperceptible to not significant and temporary	Liaise with residents and limit duration of works	Negative, imperceptible to not significant and temporary
Vibration in relation to ground breaking activities	Negative, slight to moderate, temporary effects.	Liaise with residents and limit duration of works	
Construction Traffic Oak Road	Negative, moderate to significant and temporary		Negative, slight to moderate, temporary to Negative, moderate to significant and temporary
Priorswood Road,	Medium		
Elm Road and Danieli Road,	Low to medium		

Belmayne Avenue, Adare Road and Adare Park	Low to medium		
All Other roads in study area of 1km.	Positive, imperceptible and temporary impact to negative, slight to moderate and temporary		
Operational Phase			
Opening Year (2028) traffic noise – Proposed Scheme	Direct, positive, imperceptible to slight, short to medium term	No	Direct, positive, imperceptible to slight, short to medium term
Opening Year (2028) traffic noise – Surrounding road network	Indirect, positive, imperceptible to slight, short to medium term to indirect, negative, moderate, short to medium term	No	Indirect, positive, imperceptible to slight, short to medium term to indirect, negative, moderate, short to medium term
Design Year (2043) traffic noise – Proposed Scheme	Direct, positive, imperceptible to slight, long-term	No	Direct, positive, imperceptible to slight, long-term
Design Year (2043) traffic noise – Surrounding road network	Indirect, imperceptible to slight, long-term, to indirect, negative, slight to moderate, long term	No	Indirect, imperceptible to slight, long-term, to indirect, negative, slight to moderate, long term

Operational Phase Vibration	Neutral, imperceptible, long-term	No	Neutral, imperceptible, long-term
Bus stops – existing location	Neutral, imperceptible, long-term	No	Neutral, imperceptible, long-term
Bus stops – new locations	Negative, slight to moderate, short term to negative, not significant to slight, short term.	No	Negative, slight to moderate, short term to negative, not significant to slight, short term.

Biodiversity

8.189. Chapter 12 of the EIAR submitted examines the potential for impacts to arise in relation to biodiversity. This element of the development will focus on biodiversity in general within the site and its surrounds.

Baseline Conditions

The lands within and adjacent to the development site are urban in nature with various sections of the route bounded by mosaics of landscaped habitats including hedgerows, treelines and amenity grassland. Amongst the urban-dominated habitats throughout Donnycarney, the Proposed Scheme is bordered by Maypark (Donnycarney Park), Clontarf Golf Club and Fairview Park where the scheme terminates. Habitats associated with the golf club and parks in the vicinity of the Proposed Scheme include hedgerows, treelines, scattered trees and parkland, and amenity grassland.

8.190. The ZoI of the Proposed Scheme in relation to terrestrial habitats is generally limited to the footprint of the Proposed Scheme, and the immediate environs. The applicant acknowledges within the EIAR that Hydrological and Air Quality impacts can cause effects to biodiversity at significant distances from the development boundaries. The potential for significant effects is therefore considered within a wider zone of influence for these two issues.

8.191. Air quality ZoI is set depending on the activity i.e 50 m from proposed scheme, 500m from construction compound during construction phases and 200m proposed scheme boundary or local road networks experiencing a change in AADT (Annual Average Daily Traffic) flows greater than 1,000 during the Operational Phase.

8.192. The ZoI for aquatic plant and animal species includes incorporates all estuarine habitats located downstream of where the Proposed Scheme will drain to the proposed crossing points (these are outlined in Table 12.4 of the EIAR) and the marine environment of Dublin Bay.

8.193. The ZoI for impacts to aquatic fauna species, such as Atlantic salmon Salmo salmar and lamprey species Lampetra spp., is limited to those water courses that will be crossed by the Proposed Scheme or water bodies to which runoff from the Proposed Scheme could drain to during construction.

8.194. ZoI for other species are as follows:

- Pygmy shrew – 100m from proposed scheme boundary
- Otters, badgers, stoat, and hedgehogs – extends to greater distances and breeding sites is 150m from boundary of scheme.
- Bat roost – 200m which can be adjusted accordingly depending on species. Habitat severance could extend for several km.
- Breeding birds – ex-situ up to 300m.
- Amphibian species – direct habitat loss / indirect impact to water quality.
- Lizard – direct habitat loss and severance / displacement during construction.

8.195. Overall, it is clear that the determination of the zone of influence differs depending on the construction and operational activity.

8.196. It is important to note at this juncture that the proposed development does not fall within the boundary of any European sites, Ramsar Sites, designated NHAs, Nature reserves or Biosphere Reserves. The nearest European site is South Dublin Bay and River Tolka Estuary SPA which is located c. 0.5km east of the Proposed Scheme. All European Sites within the zone of influence of the proposed scheme are outlined and examined within the Appropriate Assessment Section of this report and will not be repeated hereunder.

8.197. The closest nationally designated site to the Proposed Scheme is North Dublin Bay pNHA, which is located c. 0.4km east of the Proposed Scheme. All pNHAs within both the ZoI and the wider vicinity of the proposed scheme are listed within table 12.6 of section 12 of the EIAR. All other sites such as designated RAMSAR sites and Special Amenity Area Orders are recognised and considered in the context of the proposed development within the EIAR.

8.198. In order to establish biodiversity baseline conditions, the applicant carried out numerous walkovers of the site and carried out detailed mammal, bird, bat, reptile and amphibian surveys of the route and the surrounding areas between 2018 and 2020 with updated surveys carried out in 2021, details of all surveys are outlined in section 12.2.3 of the EIAR. As mentioned above habitats and species encountered are typical of that within developed urban environments of significance to the proposed development and I note that surveys and desk top studies did not record any evidence of the following within the development boundary of the proposed scheme: mammals such as badger and otter (the site is within foraging range for otter), breeding birds of conservation concern, common lizard, common frog or smooth newt. I also note that the Santry river is not a salmonoid river and there are no records of invertebrates such as white clawed crayfish, fresh water molluscs or marsh fritillary butterfly in the study area.

8.199. Notwithstanding the foregoing it is proposed to carry out preconstruction confirmatory surveys in order to ensure that such species are not affected by the proposed construction works. The implementation of SUDs will ensure the avoidance of habitat degradation for mammals that utilise the river banks. Such measures will also prevent additional sediment release to the river and other surrounding watercourses therefore protecting aquatic species from dis-improvements in water quality.

Potential Impacts in relation to bats

8.200. Bat surveys have been carried (see details in section 12.3.8.1 of EIAR) with the following species recorded:

- Leisler's bat
- Common Pipistrelle
- Soprano pipistrelle

8.201. Leisler's bat, was recorded along all four transects surveyed between 2018 and 2020, including CBC0001BT001(Father Collins Park), CBC0001BT002 (Belmayne to Northern Cross), CBC0001BT003 (Maypark / Donnycarney Park) and CBC0001BT004 (Clontarf Golf Club). It is important to note that no roost sites for Leisler's bat were recorded during any of the surveys for the Proposed Scheme. The desk study found that Leisler's bat is known to occur in the wider study area and utilise foraging habitat within the greater Dublin area. Common Pipistrelle bat were recorded at three of the foregoing sites with no roosts identified either.

8.202. Common Pipistrelle was recorded along three of the four transects surveyed between 2018 and 2020; including CBC0001BT001(Father Collins Park), CBC0001BT002 (Belmayne to Northern Cross) and CBC0001BT003 (Maypark / Donnycarney Park). A total of fourteen recordings of common pipistrelle bat were identified in these locations between 2018 and 2020. No roost sites for common pipistrelle bat were recorded during any of the surveys for the Proposed Scheme.

8.203. Soprano pipistrelle was recorded at two of the sites, CBC0001BT001 (Father Collins Park), and CBC0001BT002 (Belmayne to Northern Cross), with no roosts recorded. No other bat species were recorded along the proposed route. The removal of trees has the potential to impact bat species.

8.204. There were two trees with potential roost features identified during the multi-disciplinary surveys. The Proposed Scheme will not result in the loss of trees with PRFs. Therefore, there is no potential for impacts on bat roosts as a result of the construction of the Proposed Scheme.

8.205. In term of habitat degradation and fragmentation it is stated that notwithstanding the fact that there is evidence of bats foraging and commuting within the study area of the Proposed Scheme, particularly near Maypark (CBC0001BT003), Clarehall Avenue (R139) (CBC0001BT002) and Father Collins Park (CBC0001BT001), and that all parts of the Proposed Scheme which contain suitable habitat are likely to be within the core sustenance zone (CSZ) (the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the "resilience and conservation status") of at least one bat roost, considering the type of works proposed (e.g. upgrading of existing infrastructure for the most part), there is limited potential for the Proposed Scheme to act as a barrier to flight paths for bat species.

8.206. Removal of vegetation will occur within boundaries of the proposed scheme, however such vegetation will be within the road medians of the R107 Malahide Road. This habitat removal is therefore within a highly disturbed urban environment with low numbers of bat species records, and, as such is not deemed to provide significant contributions to core sustenance zones of roosts outside of the footprint of the Proposed Scheme.

8.207. Nonetheless it is proposed by the applicant that where practicable, habitats of importance to bats such as scattered trees and parkland, treeline and hedgerow habitat types, which lie within the footprint, or along the boundary of the Proposed Scheme, will be retained. It is also proposed to bolster such habitat with the planting of 545 street trees 2995m2 of hedgerow.

8.208. An additional potential impact to bats arises from the introduction of lighting in both the construction compound and previously dark areas at Maypark and St. David's Wood. In order to prevent significant impacts to bats utilising this area, lights will be installed in a manner that directs light downwards and will be of a reduced intensity to reduce any potential impacts to bats.

8.209. With regard to the construction compound, it is of note that this facility will be located in within a heavily trafficked urban area whereby bat species are habituated to light to a certain degree. Thus, given the limited numbers encountered, the absence of any roosts recorded and the environment in which the proposed development is located it is reasonable to assume that impacts to bats at this location will not be significant.

8.210. In addition to the foregoing, I note that the applicants have identified a number of potential roost features (PRFs) in trees within the footprint of the Proposed Scheme. The applicant proposes to protect these trees during construction thus avoiding any potential impacts to potential roost sites.

Mitigation in relation to Bats

8.211. Mitigation measures proposed include, pre-construction surveys, retention of vegetation and protection of trees with potential for roosting and the use of low lux directional lighting.

8.212. Overall, given the limited level of bat activity within the vicinity of the proposed works, the absence of any roost sites and the mitigation measures proposed above, I am satisfied that the proposed development will not result in any bat mortality. I also note

that works will be carried out during daytime hours and will therefore not result in disturbance to emergence patterns in the area.

Potential Impacts in relation to birds

8.213. It is important to note that the applicant has examined the potential for impacts to arise in relation to overwintering bird species within the Appropriate Assessment section of this report and as such in the interest of conciseness these details will not be repeated hereunder, and accordingly this section of the report should be read in conjunction the Appropriate Assessment above in relation to over wintering bird species. Nonetheless, it is important to note that the applicant has examined records of all overwintering birds relevant to the proposed scheme and has identified ex-situ feed grounds within 300m of the proposed scheme boundary. These sites have been surveyed as detailed within the AA above and whilst there will be a temporary loss of habitat at two locations and 1 permanent loss of 0.02ha of suitable GA2 habitat at the proposed Maypark footpath, no impacts of significance are expected to arise in relation to these bird species at these locations.

8.214. Habitats for other common birds that are affected by the development form part of larger expanses of similar habitat types and mosaics in the wider locality. Parks and greenspaces form a vital resource for breeding birds within an urban setting. These areas of suitable breeding bird nesting and/or foraging habitat are available in the wider locality of the Proposed Scheme. Impacts to birds in this regard are not expected to be significant.

8.215. Habitat loss in the general sense will arise along the full route and will occur in the form of permanent land take of edge habitats adjacent to the existing road network, or as temporary land take to facilitate construction activities. Such habitats are identified as being of Local Importance (Higher Value) and Local Importance (Lower Value). As mentioned above habitats impacted by the development are commonly found in urban settings and comprise of grass verges, trees, hedgerows, ornamental planting or scrub etc and given their location in highly trafficked urban areas are highly disturbed. Thus, considering the habitat types to be lost, their extents and the surrounding habitats beyond the Proposed Scheme boundary, the potential impacts will not result in a significant effect at any local geographic scale.

Potential Impact in relation to Aquatic species

8.216. Habitat degradation in relation to surface water quality has also been examined in detail within the Appropriate Assessment and Water Section of this report and subject to mitigation and the implementation of SUDs measures no significant impacts to water quality or aquatic species are expected.

Potential Impacts in relation to Plant species

8.217. No protected plant species listed on the Flora (Protection) Order, 2015 were recorded within or in close proximity to the Proposed Scheme. The desktop study did not reveal any records for rare and / or protected species in close proximity to the Proposed Scheme. Therefore, there is no potential for impacts on rare / protected species, as a result of the operation of the Proposed Scheme.

Invasive Plant Species

8.218. While it is noted that no invasive plant species have been recorded within the development site, it is acknowledged by the applicant that such species pose a significant threat to biodiversity and as such it is proposed to carry out preconstruction surveys. An Invasive Species Management Plan has been prepared to outline the strategy that will be adopted during the Construction Phase of the Proposed Scheme in order to manage and prevent the spread of the non-native invasive plant species. This approach is common practice and known to be effective in the management of invasive species. I am therefore satisfied that the proposed development will not give rise to the spread of invasive species within or outside of the site boundaries.

Potential Impacts Operational Phase

8.219. There are no significant effects expected during the operational phase of the development in relation to biodiversity. Measures such as the implementation of SUDs, directional lighting to protect bats and monitoring and management plan for invasive plant species with prevent any impacts of significance from arising.

Residual Impacts

8.220. It is important to note that the EIAR within section 12.6 outlines the residual likely significant effects of the proposed development on all birds, bats, mammals, aquatic and plant species. The Board should note as outlined above that no protected species with the exception of a small number of bats commuting were found within the works area which comprises an urban carriageway within the city and suburbs and mitigation

in the form of pre-construction surveys, protection of waterways and water quality are considered to prevent significant impacts from arising to species.

8.221. In this context I draw the Board's attention to table 12.16 of the EIAR in which residual impacts are for the most part expected not to be significant. However, I note in relation to grassland, scattered trees, hedgerows, treelines, bats, badger, otter and all other breeding bird species residual effects are expected to be significant at a local level. While I accept that the removal of vegetation can be identified has having a significant effect, I will consider the limited level of removal in the context of the significant replanting scheme proposed to be insignificant. The applicant has clearly stated that trees identified as having potential roosting features for bats will be retained and all trees will be inspected prior to felling to ensure no bats are present. In addition, whilst the river area adjacent to the proposed scheme is within foraging distance for otters, none were encountered and similarly preconstruction surveys will be undertaken to ensure that impacts do not arise. Similarly, no evidence of other protected mammals was recorded during surveys. In the absence of such species being recorded and having regard to the mitigation measures proposed to ensure no significant effects arise in this regard, I am satisfied that that effects of the scheme to biodiversity will not be significant.

8.222. I note DCCs requirement in relation to the restriction of vegetation removal during the bird breeding season and am satisfied that this can be adequately dealt with by way of condition.

8.223. Thus having regard to the foregoing, and having considered the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on biodiversity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect significant impacts on biodiversity can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 14 Biodiversity - Summary of potential & residual effects

Potential impacts	Magnitude of Impact	Mitigation	Residual Impact
Construction Phase on European sites	Likely significant effect at the international geographic scale	See CEMP, fuels to be stored in bunded areas no stockpiling near watercourse**,** Implementation of SUDs measures and attenuation.	None of significance
Construction Phase Local biodiversity	Likely significant effect at the local geographic scale	Pre construction surveys, protection of trees and vegetation.	None of national or international significance,
Operational Phase on European Sites	Likely significant effect at the international geographic scale	Implementation of SUDs measures and attenuation.	None of any significance.
Operational phase Local biodiversity	Potential for Likely significant effect at the international geographic scale	Implementation of SUDs measures and attenuation. Directional lighting and monitoring and management of invasive plant species.	None of any significance.

Water

8.224. Section 13 of the EIAR submitted examines the potential for impacts to arise in relation to hydrology. As mentioned above the proposed route will follow the existing Malahide Road and lies within Hydrometric Area (HA) 09 (Liffey and Dublin Bay) and is within the River Liffey catchment. Relevant water body status is outlined within table 13.7 of the EIAR. It is of note from this table that the known status of the waterbodies encountered along the route range between poor and moderate, and all, with the exception of the Mayne River which is under review, are at risk with pressures arising from urban waste water treatment plant. No SUDs were identified within the existing drainage environment along the route.

Baseline Conditions

8.225. The waterbodies examined for the purpose of EIA for the proposed scheme include the following:

- Mayne_010;
- Mayne Estuary;
- Santry_020; and
- Tolka Estuary.

8.226. With the exception of the Santry River crossing at the R107 Malahide Road / Greencastle Road Junction, there are no direct connections to the waterbodies listed. It is of note that the proposed route will cross the Wad River but this is culverted for the entirety of its length. All hydrological connections to these remaining waterbodies are via the sewer system and roadside gullies.

8.227. I draw the Board's attention to Appendix 13.1 of the EIAR which contains a Water Framework Assessment report. It is concluded within this report that the proposed scheme will not compromise progress towards achieving GES or cause a deterioration of the overall GEP of any of the water bodies that are in scope. The WFD also requires consideration of how a new scheme might impact on other water bodies and other EU legislation. The following assessment will examine the potential for the proposed development to impact waterbodies within the study area. The Board should note that an Appropriate Assessment has been carried out as outlined above and considers the impact to other EU legislation accordingly.

Potential Construction Impacts

8.228. The potential for impacts to arise in relation to these water bodies is summarised hereunder and the magnitude of any effects stated. The Board should note that the effects listed hereunder relate to the construction phase of the development, operational effects will be considered separately.

- **Mayne _010** – hydrological connection via drainage sewers (300m from river) - carriageway & pavement resurfacing works at northernmost extent of scheme drain to sewer which discharge to the Mayne – risk of sediment release – Magnitude of effects - **Imperceptible significance.**
- **Mayne Estuary** - hydrological connection via drainage sewers to Mayne River (3.3km from scheme) - No impacts predicted impacts - Magnitude of effects - **Imperceptible significance.**
- **North Bull Island** - hydrological connection via drainage sewers (2km from scheme) – works giving rise to potential effects - carriageway & pavement resurfacing works, kerbing and soil stripping at Construction Compound between Buttercup Park and Malahide Road - risk of minimal sediment release and/or hydrocarbon spills - Magnitude of effects - **Imperceptible significance.**
- **Santry_020 –** Road discharges directly to river –works giving rise to potential effects - carriageway & pavement resurfacing works, kerbing - risk of minimal sediment release -. Magnitude of effects - **Moderate significance**.
- **Tolka Estuary -** hydrological connection via drainage sewers on Malahide Rd or via Wad River - works giving rise to potential effects - carriageway and pavement resurfacing / reconstruction as required, readjustment of kerbs, new road layouts, roundabout converted to traffic signal junction, new junction layout and upgrading of an existing traffic signal junction - risk of minimal sediment release - Magnitude of effects - **Imperceptible significance.**
- **Wad River** - hydrological connection via drainage sewers works giving rise to potential effects - carriageway and pavement resurfacing / reconstruction as required, readjustment of kerbs, new road layouts, roundabout converted to traffic signal junction, new junction layout and upgrading of an existing traffic

signal junction - risk of minimal sediment release - Magnitude of effects - **Imperceptible significance.**

Potential Operational impacts

8.229. The potential impacts for the Operational Phase are related to water quality and hydromorphology only. No potential changes to hydrology are predicted as the drainage design ensures no net increase in runoff rates. The magnitude of effects to the waterbodies listed above is of imperceptible significance. The Board should note that it is proposed to incorporate SUDs measures into the proposed scheme along the entirety of its length where there are none at present. Such works will have a positive impact on the receiving waters surrounding the proposed scheme.

8.230. It is important to acknowledge that there will be additional traffic flows on diverted routes both during the construction and operation of the phases of the proposed scheme. I have considered such changes and agree with the conclusions in this regard that the proposed development would result in an imperceptible impact to the water environment within these areas and will therefore not give rise to significant environmental effects.

8.231. Overall I have considered the submissions and the contents of the application in relation to water and am satisfied having regard to the existing baseline environment and proposed mitigation measures that there will be no significant residual impacts on the hydrological environment within or connected to the proposed scheme.

Flooding

8.232. The applicant has carried out a flood risk assessment for the proposed scheme which is appended to the EIAR, it is important to note at the outset that a stage 2 FRA was not required as the development is in an area of low risk. The following is a summary of the potential for flooding along the scheme and the overall impact of the development in relation to each flood type.

Coastal Flooding: two areas have been identified as being at risk of coastal flooding as follows:

- Fairview (junction between R105 and R107) – This area is in Flood Zone B; and

- R105, between the Tolka River and the Royal Canal – This area is in Flood Zone A.

Due to the extreme nature of coastal flood events, mitigation measures involving coastal flood defences are not proposed as part of the Proposed Scheme.

Groundwater flood risk - Scheme falls into the 'Low' groundwater vulnerability categories with a portion of the site around Donnycarney to Fairview is assigned 'Extreme', 'High', and 'Moderate' groundwater vulnerability classification.

As the Proposed Scheme is on existing roads with no known flooding specifically due to groundwater it is not expected that this risk will increase to the site or surrounding areas due to the construction of the Proposed Scheme.

Pluvial Flooding – known 1 in 10-year rainfall event:

- R107 near the junction with the R104;
- R107 near the junction with the R103; and
- at the location where the Proposed Scheme crosses over the M50 (Port Tunnel).

8.233. Whilst there is a risk of pluvial flooding along the proposed route, this risk will be reduced as a result of the drainage improvements of the Proposed Scheme.

Fluvial Flooding:

- Donnycarney, located at the junction between the R103 and the R107 – relates to flow paths coming directly out of river to culvert through manholes.

8.234. With regard to the foregoing, I have reviewed the drainage implications of the proposed development and note that the drainage design will ensure no net increase in surface water flow discharges. New surface water sewers are designed to provide attenuation for return period of up to 30 years where possible and the introduction of SUDs measures along the route will contribute to the management of fluvial flooding risk through the provision of surface water storage capacity in the network. The overall impacts in relation to flooding and water quality are positive along the route of the proposed scheme.

8.235. Mitigation measures proposed to control sediments, restrict storage of fuels to bunded areas and restrict the method of concrete use near to water bodies will ensure that

accidental sediment and hydrocarbon release to waterbodies does not arise. The proposed scheme is expected to have an overall positive impact on water quality and is therefore in compliance with the requirements of the Water Framework Directive in that it will not cause a deterioration in status in any waterbody or prevent any waterbody from achieving good status.

8.236. I considered all of the written submissions made in relation to Water and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on water can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on water can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 15 Water - Summary of potential & residual effects

Potential impacts	**Magnitude of Impact**	**Mitigation**	Residual Impact
Increased surface water run off; Increased sediment in run off; Anthropogenic sources (fuel etc); Increased scouring of watercourse	Imperceptible - moderate	See CEMP, fuels to be stored in bunded areas no stockpiling near watercourse**,** Implementation of SUDs measures and attenuation.	None of any significance, positive and permanent.

Land, soil, geology and hydrogeology

8.237. Section 14 of the EIAR submitted addresses lands, soils, geology and hydrogeology.

Baseline Conditions

8.238. The land uses in the region are mainly comprised of urban developments including but not limited to; industrial, commercial, residential and recreational. Moving away from

the City Centre there are also marine, agricultural and forested areas in the region. Geomorphology and topography are examined within the EIAR in order to give context to any potential changes to land, soils, geology, and hydrogeology that could influence the importance of a feature and the magnitude of any impacts.

8.239. The Proposed Scheme is predominantly underlain by made ground over alluvium over glacial till over limestone bedrock. The topography of the proposed scheme is approximately 30mOD until it reduces from Donnycarney where it then falls to 20mOD at Killester and to 10mOD at the Fairview Park where the Proposed Scheme will finish.

8.240. The majority of the soils expected to be encountered within the study area are made ground comprising varying forms of hard standing materials including road pavements and footpaths. Alluvium and marine sediments are also present along the route mostly around the Santry River and at the Clontarf Road. Subsoils comprise glacial till for the most part with windblown sands at Clontarf and alluvium around rivers.

8.241. The underlying bedrock of the study area is predominantly comprised of the Lucan Formation, Tober Colleen Formation and Malahide Formation. Excavations will not exceed 300mm, reference to bedrock is therefore for context and not related to concerns relating to potential impacts. There are no karst features identified within the study area.

8.242. Given the urban setting of the proposed development it was considered prudent to examine the potential for contaminated lands to be present within the route of the scheme. A number of sites were identified which included uses such as petrol stations along the route, all are outlined within table 14.22 of the EIAR.

Potential Construction Impacts

8.243. It must be stated at the outset that no significant impacts are expected to arise in relation to land, soil, geology and hydrogeology. Impacts are expected to occur in relation to the following:

- **Loss or damage of topsoil** – works giving rise to potential effects – contamination of soils due to spillage of concrete/hydrocarbons/bitumen sealants etc, excavations and soil stripping and construction machinery – magnitude of effects is expected to be **slight to imperceptible.**

- **Excavation of potentially contaminated ground** – works resulting in exposure of contaminated material – magnitude of effects - **slight**
- **Loss of future quarry or pit reserve** – no notable existing or historic quarries with the study area – No impact**, negligible significance**
- **Loss or damage of proportion of aquifer** - minimal excavation into the limestone rock as part of the Proposed Scheme – magnitude of impact **negligible**
- **Change to groundwater regime** - Localised pumping of excavations could lead to change in groundwater levels – magnitude of effects – **imperceptible.**

Potential Operational Impacts

8.244. The Operational Phase has the potential to lead to occasional accidental leakage of oil, petrol or diesel, allowing contamination of the surrounding environment. The magnitude of the impact is **negligible**.

8.245. Standard mitigation measures are proposed in relation to the protection of soils, geology and geomorphology during construction and are outlined in section 14.5 of the EIAR and the CEMP accompanying the application. No mitigation measures are deemed necessary for the operational phase of the development. Consequently subject to the implementation of construction mitigation no residual effects are expected.

8.246. Cumulative impacts have been considered in this regard and given the nature of the proposed works are considered to be unlikely.

Conclusion

I have considered all of the written submissions made in relation to lands, soils, geology and hydrogeology and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on lands, soil, geology and hydrogeology can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on lands, soils, geology and hydrogeology can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 16 Land, Soils, geology & hydrogeology - Summary of potential & residual effects

Potential impacts	Magnitude of Impact	Mitigation	Residual Impact
Loss or damage of topsoil	Moderate / Slight	Prevention of leaks and spills of hydrocarbons and other chemicals.	Imperceptible
Disturbance of contaminated land	Slight	Licenced contractor will remove and dispose at licenced facility if encountered. Dewatering in such areas will be carried out in manner that reduces mobilisation of contaminants.	Imperceptible
Loss of future quarry or pit reserve	Imperceptible	None	Imperceptible
Loss or damage of proportion of aquifer	Imperceptible - moderate	None	Imperceptible
Change to groundwater regime	Imperceptible	Prevention of leaks and spills of hydrocarbons and other chemicals.	Imperceptible

Archaeology, Cultural Heritage & Architectural Heritage

8.247. Section 15 & 16 of the EIAR submitted examines the potential for impacts to arise in relation to Archaeology, Cultural Heritage and Architectural Heritage.

Baseline Conditions - Archaeology & Cultural Heritage

8.248. In terms of baseline conditions with regard to monuments, archaeology and cultural heritage I refer the board to Section 15.3 of the EIAR in which the historical baseline conditions are outlined. It is clear from the information submitted that the area surrounding the proposed route has been a hive of activity for centuries and is rich in archaeology and cultural heritage.

8.249. For the purpose of assessment, the scheme has been divided into two distinct sections i.e Mayne River Avenue to Gracefield Road - Malahide Road and Gracefield Road to Marino Mart / Fairview - Malahide Road.

8.250. I note that there are no national monuments or sites under preservation order within or in the vicinity of the section of the Proposed Scheme between Mayne River Avenue to Gracefield Road - Malahide Road. There is only one RMP/SMR within 50 metres of this section of the proposed scheme located at the grounds of Cadbury's Factory, Old Malahide Rd, Coolock (DU015-074). No stray finds are recorded along or in the vicinity of this section of the Proposed Scheme.

8.251. Similarly, to the foregoing with regard to the Gracefield Road to Marino Mart / Fairview - Malahide Road I note Donnycarney Bridge spanning the River Donnycarney, on the Malahide Road, is the only RMP recorded on this section of the route. The other closest is c. 180m west, Marino Casino demesne building, on the Malahide Road (RMP DU018-144, National Monument 302).

8.252. In addition, this section of the Proposed Scheme traverses the western edge of the ZAP for a burial site recorded at Marino Crescent (RMP DU018-067) which is located within 50 metres of the scheme boundary.

8.253. One Architectural Conservation Area, the Casino Marino ACA is located within the zone of influence of the proposed scheme to the west of the R107 to the rear of Nazareth House.

Potential Impacts in relation to Archaeology & Cultural Heritage

8.254. Potential impacts to archaeology and cultural heritage relate to the construction phase of the proposed development. In order to minimise and avoid such impacts it is proposed to carry out monitoring of any excavation or groundbreaking works. This will ensure that in the event such material is encountered it is preserved and recorded appropriately.

8.255. The operational phase of the proposed development will not give rise to impacts to archaeology, recorded monuments or cultural heritage as a whole.

Baseline Conditions - Architectural Heritage

8.256. In relation to Architectural heritage there are four Protected Structures, or groups of Protected Structures (RPS sites) within the study area of the Proposed Scheme along the stretch.

Potential Impacts in relation to Architectural Heritage

8.257. Of particular relevance to the proposed scheme is Winston Ville, 62, 64 Malahide Road (DCC RPS 4852-3). The proposed scheme will require a temporary land-take, and setback of the existing boundaries along Malahide Road, which will negatively impact on the curtilage of the houses. I note that these structures are not original to the Protected Structures and the magnitude of this impact is therefore stated as being Medium. The potential Construction Phase impact is considered to be 'Negative', 'Moderate' and 'Permanent'.

8.258. The magnitude of effects to the setting of the Casino Marino ACA are expected to be Negative, Moderate and Temporary. This ACA is located to the west of the R107 and includes the ArdScoil Ris Sports Grounds which directly abuts the proposed scheme route. The nature of the works within this area will not impact on any identified sensitive fabric. Whilst I acknowledge the Council's concerns in relation to proposed material finishes, I am satisfied that no significant effects to the setting of the ACA will arise in this regard.

8.259. The setting back of boundaries at the following locations are noted, I have examined these sites and consider the proposed alterations to be acceptable. The setting back of boundaries will not impact the overall setting of these properties and I am satisfied

that the magnitude of effects are adequately described as ranging from negative, slight permanent to negative moderate and permanent.

- 1-12 Artane Cottages Upper
- 1-2 Maypark
- Charlemont Terrace, 38-60 Malahide Road (38, 48, 50, 52, 54, 5, 58 and 60)
- Casino Terrace, 30-36 Malahide Road
- Marino Terrace, 24, 26 and 28 Malahide Road
- Alpha Cottages, 20 and 22 Malahide Road

8.260. I note the Council's concerns in relation to the relocation of street furniture, lighting poles, and acknowledge that such measures are necessary to implement the proposed scheme. In the interest of retaining the integrity of these structures I recommend that an Architectural Heritage Specialist is employed to monitor the removal and replacement of such structures.

8.261. Overall general impacts to architectural heritage arise in relation to the alterations to bus stop locations, particularly where these include the erection of new shelters, or the removal of existing shelters, and alterations to the public realm including the provision of new trees, and the removal of trees which may impact on the settings of sensitive features and sites. The proposed development will improve the overall streetscape along the proposed route and whilst I acknowledge that the removal of trees at specific locations may impact the setting or character of a particular structure I am satisfied that on balance the overall scheme will be a vast improvement to the character and setting of not only protected structures referred to above but to buildings such as the Artane cottages which, although not protected, provide a historical reference to the past.

8.262. Whilst no negative impacts of significance are expected as a result of the development, I note in the case of the relocation of front boundaries 62 and 64 Malahide Road which are Protected Structures, the applicant proposes to record the existing boundaries in position prior to the commencement of construction works.

8.263. The affected railings, gates, gate posts, capping stones and historic masonry are to be labelled prior to their careful removal to safe storage, and their reinstatement on

new lines, reinstating the existing details, and the relationships between the entrances and the historic buildings. Recording is to be undertaken by an appropriate architectural heritage specialist engaged by the appointed contractor.

8.264. The boundaries of other protected structures of which there are three, which have an indirect risk of impact during construction will also be recorded, protected and monitored prior to, and for the duration of the Construction Phase. A similar approach is to be undertaken in relation to other Structures of Architectural Heritage Interest as listed above.

8.265. Such measures are commonplace in relation to works within the curtilage of a protected structure or historical building or street furniture. The specific features will not be damaged or removed but merely relocated. It is reasonable therefore to consider the magnitude of effects not to be significant in this instance.

8.266. I draw the Board's attention to table 17 hereunder in which all of the potential impacts, and the magnitude of same are summarised for ease of reference.

8.267. Significant impacts do not arise in relation to the operation of the development.

Mitigation

8.268. As outlined above the applicant is to employ an Architectural Heritage Specialist to monitor works and to record all materials during removal and replacement. A archaeologist will also be employed during the proposed works to monitor all ground works at locations whereby archaeological material is known or suspected to be present. The Archaeologist will record and preserve material as appropriate and will determine measures to for the protection of materials or features during the work period.

Conclusion

8.269. I have considered all of the written submissions made in relation to Archaeology, Cultural Heritage and Architectural heritage and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Archaeology, Cultural Heritage and Architectural heritage can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on Archaeology, Cultural Heritage and

Architectural heritage can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site including the proposed the other bus connects routes are not likely to arise.

Table 17 Archaeology, Cultural Heritage and Architectural heritage – Summary of potential and residual effects.

Potential impacts	**Magnitude of Impact**	**Mitigation**	Residual Impact
Relocation of boundaries & post box Gracefield Road to Marino Mart / Fairview - Malahide Road	Negative, Significant and Long Term - Negative, Moderate, Permanent	Yes, recording, labelling and reinstating at different location. To be undertaken by an architectural heritage specialist	Not significant – range - Negative, Slight and Long-Term - Positive, Moderate and Permanent
Works at: DCC RPS 4855 Mount Temple Gate Lodge DCC RPS 4852-3 Winston Ville 62, 64 Malahide Rd DCC RPS 4893 - 4915 1-25 Marino Crescent DCC RPS 2735 St Joseph's CBS	Negative, Moderate, Temporary	As Above	Negative, Not Significant and Temporary
Works close to: NIAH 501302221 Cadbury's Factory, NIAH 501302252 Our Lady of Consolation	Negative, Moderate, Temporary	**As above**	Negative, Not Significant and Temporary

NIAH 50120063 Marino Health Centre, NIAH 50120089-90 21-31 Marino Mart NIAH 50120122 Electricity Sub-Station NIAH 50120123 Bram Stoker Park NIAH 50120088 1-13 Marino Mart NIAH 50120088 Marino College			
Other Structures of Architectural Heritage Interest (all Sections) Refer to Table 16.12 including Artane cottages	Negative, Moderate, Temporary	**As above**	Negative, Not Significant and Temporary
Post bxes & milestones	Negative, Moderate, Temporary	**As Above**	Negative, Not Significant and Temporary

Landscape, Townscape & Visual

8.270. Section 17 of the EIAR submitted examines the potential for impacts to arise in relation to landscape, townscape and visual impact. It is of note that visual impacts in relation to the proposed scheme have been examined in the context of the project design and the public realm within the assessment section of this report. Such matters will not be repeated hereunder and this section of the EIAR should be read in conjunction with the aforementioned. It is important to mention at the outset that likely significant adverse effects will arise but are short term and temporary in nature, with the exception of the permanent acquisition of property which have mature gardens and plantings

with established boundaries. All other impacts are considered to be of moderate magnitude.

Baseline Conditions

8.271. The establishment of baseline conditions was carried out based on initial desk studies, supported by full route walkovers and augmented by further specific site reviews. The Proposed Scheme includes a wide variety of suburban and inner-city suburban residential landscapes, townscape and visual features from streetscape boundary and public realm features, to residential and mixed use zonings, historic landscapes and boundaries, to biodiversity and heritage assets.

8.272. For the purpose of the visual & townscape assessment the proposed route has been divided into three sections as follows:

- Mayne River Avenue to Belcamp Lane – Malahide Road
- Belcamp Lane to Gracefield Road – Malahide Road
- Gracefield Road to Marino Mart / Fairview – Malahide Road.

8.273. Baseline conditions for each of the above sections is outlined in table 17.6 of the EIAR. In brief I note that with regard to the first section above, the area is located within the outer suburbs and comprises of dual carriageway flanked by mixed use development. There are no amenity designations within this section of the development or tree preservation orders or protected views. There are protected structures present along this section of the route and the impact to same has been examined within the relevant section of this report above and will not be repeated hereunder save to state that such structures are present within this section of the scheme.

8.274. In relation to the second section identified above; Belcamp Lane to Gracefield Road – Malahide Road, I note that this section of the proposed route currently comprises a major road corridor, mostly dual carriageway flanked by predominantly residential development on both sides with some stretches of business and commercial development including the Cadbury facility. Amenity designations include open spaces at Buttercup Park, O'Toole's GAA, Santry River corridor. Similar to the foregoing section, there are no protected views or tree preservation orders, and there is a No. 4861 a Moat at Fry-Cadbury Factory and protected structures along this section.

8.275. Finally, the Gracefield Road to Marino Mart / Fairview – Malahide Road comprises a major primarily single carriageway road corridor, with short section of dual carriageway. Flanked by predominantly established residential development or open space / amenity to either side, with short sections of local commercial uses. This section of the route is predominantly two storey semi-detached houses with mature gardens and transitions to terrace south of Clontarf Golf Course and through Marino where Marino Crescent is noted by the applicant as a striking architectural element. The area is an established residential suburb along a historic road corridor. Historic buildings along this section of the route include the Casino Marino and Our Lady of Consolation, Donnycarney. There are no tree preservation orders within this section of the route, however amenity designations include open space at St. David's Park, Thorndale Park and Maypark, the Casino Marino, Marino Crescent Park, Fairview Park. Architectural Conservation Area at the Casino Marino and protected structures include no. 4859 a granite milestone with cast iron plaque at St. David's, No. 4854 a Granite milestone with cast-iron plaque outside Marino Health Centre, No. 4858 the Casino, Marino, Nos. 4893-4917 Nos. 1 to 25 Marino Crescent.

Potential Impacts

8.276. The potential for impacts to arise relate to both the construction and operational phase of the development. The applicant within section 17.4.1.1 of the EIAR has listed the key characteristics of the proposed development which are of particular relevance to the townscape and visual assessment. Such characteristics relate to proposed works at specific locations such as the provision of new junction layouts, lighting, drainage, road markings and surfaces, land take for the widening of surfaces, removal of trees and landscaping and removal of residential boundaries and garden landscaping. The proposed construction compound to be located on existing open space at Buttercup Park will be the most dominant change to the landscape and street scape during the construction phase of the development.

8.277. It is also important to note that the applicant has provided photomontages of the scheme which I have had regard to in the assessment of effects to landscape, townscape and the visual aspects of the proposed development. These demonstrate that the overriding visual changes to the proposed route relate to the loss of trees and vegetation and the replacement of same with species at a smaller growth stage.

8.278. In the interest of conciseness, I will examine the potential impacts relevant to each of the three sections of the scheme individually hereunder. However certain construction activities are common to all sections and will have a certain level of impact visually. The presence of construction machinery, fencing and hoardings and general construction activities associated with the diversion of services and widening and resurfacing of road space will all have a visual impact albeit temporarily. Such activities can not be mitigated and are not considered to be significant given the temporary nature of the works.

Mayne River Avenue to Belcamp Lane – Malahide Road

8.279. The majority of works within this section of the route will occur within the existing road corridor and will involve minimal demolition, excavation and construction works of sections of kerbs, road carriageways, sections of footpaths, junctions, surfacing, drainage features and utilities. Changes within this section of the route will not alter the existing character of the streetscape or townscape and will be minor in nature. The magnitude of effects arising from the development is therefore stated as being Slight / Moderate, Temporary / Short Term, Negative. It is of note that the operation of the scheme will not result in significant negative visual effects within this section of the route.

Belcamp Lane to Gracefield Road – Malahide Road

8.280. The Construction Phase involves demolition, excavation and construction works to kerbs, road carriageways, footpaths, junctions, planted areas, surfacing and parking, utilities, construction of SUDS and drainage features. More significant changes will be limited to particular locations, which are contained within the existing road corridor, including the vicinity of the Malahide Road / Priorswood Road / Blunden Drive junction; Buttercup Park (site of Construction Compound), and the vicinity of the Malahide Road / Ardlea Road / Gracefield Road junction which will undergo substantial changes in layout of landscaped areas and features, including changes to pedestrian / cycle circulation routes, loss of trees and replacement / additional tree planting.

Whilst the proposed works are not expected to alter the townscape, impacts to the streetscape are expected and the overall magnitude of change in this regard is expected to be significant, temporary / short term, negative. However, it is of note that

the positive benefits are expected during the operational phase of the scheme which arise from additional planting and improved public realm works.

Gracefield Road to Marino Mart / Fairview – Malahide Road

8.281. Unlike the former two sections of the route, the baseline environment of this section is of high sensitivity. The applicant states that the construction works will give rise to major changes within the corridor of the primarily single carriageway of the Malahide Road through these established inner-city suburbs. The Construction Phase involves demolition, excavation and construction works to kerbs, road carriageways, footpaths, junctions, planted areas, property boundaries, front garden areas, surfacing and parking, utilities, and drainage features.

8.282. Whist the construction works will not alter the existing townscape character along this section of the Proposed Scheme, they will include land acquisition and impacts on residential properties with established boundaries, and impacts on protected structures, and other property, open spaces, and mature trees as a result of street widening. The magnitude of effects to the streetscape in this section of the development is therefore stated to be significant / very significant, temporary / short-term, negative.

8.283. With regard to the Architectural Conservations areas in the vicinity of this section of the scheme, I note the Casino Marino Conservation Area is located adjacent to the proposed scheme and no direct effect will occur.

8.284. I further note that the applicant refers to a ‘Santry Conservation Area’, however the Board should note that this is not an Architectural Conservation Area and as such consideration of same is in the context of the overall setting of this location. No significant impacts are expected in this regard.

8.285. Protected structures present at no.62 and 64 Malahide Road will be impacted by the removal of trees and the relocation of railings and boundary features further into the curtilage of these structures. The magnitude of impacts arising from such works in terms of visual impacts is stated to be significant / very significant, temporary / short term and negative.

8.286. In addition, there are protected structures at no. 1 to 35 Marino Crescent, construction works at the junction between Malahide Road / Clontarf Road / Marino Mart will have

a visual effect on no. 1 Marino Crescent however the magnitude of this effect is considered to be low.

8.287. The magnitude of effects arising from the construction compound at Buttercup park are expected to be significant and negative but short term in duration. Construction impacts to other open space areas range in magnitude from not significant to very significant but temporary in duration.

8.288. Direct impact to residential properties is considered to have the greatest impact visually. The following properties contain mature front gardens and original boundaries, which will be removed and relocated as a result of the proposed scheme:

- Villa Maria, Arva, Sunview, Helenville, Upmeads, Saint Gerard's, Iona, and Maria Philomena, Malahide Road (8 properties);
- Nos. 1,2, 3, 4, 5, 6 and 7 Maypark, Malahide Road;
- Nos. 232, 234, 216, 218, 226, 212, 210, 202, 200, 198, Malahide Road;
- Nos. 62, 64 and Winston Villa, Malahide Road;
- Nos. 20, 22, 24, 26, 28, 38, Malahide Road; and
- Nos. 1, 3, 5, 7, 9, 11, 13, 15 and 17, Malahide Road.

8.289. The magnitude of effects to the foregoing is stated to be significant and profound but short term in duration.

8.290. In addition to the foregoing the following properties will also be subject to similar acquisition however these properties have been altered at the front garden to accommodate car parking and as such will experience a lower magnitude of effects i.e. significant / very significant but also for a temporary period.

- Nos. 44, 44a, Malahide Road;
- Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 Artane Cottages Upper, Malahide Road;
- Nos. 8, 9, 10 Maypark, Malahide Road;
- Nos. 236, 238; No.204, 206, 208; No.220, 222, 224, Malahide Road;
- No. 48, 50, 52, 54, 56, 58 and 60, Malahide Road;

- No.30, 32, 34, 36, Malahide Road; and
- No. 19, Malahide Road.

8.291. Other works will require the small area of temporary acquisition of portions of non-residential properties (e.g. Hilton Hotel, Coolock Village, commercial area at Kilmore Road Junction) directly fronting the Proposed Scheme / Malahide Road. The townscape / streetscape and visual effect of the Construction Phase on these properties will be Moderate / Significant, Temporary / Short-Term, Negative.

8.292. Impacts to landscape largely relates to the removal of trees and vegetation, where it is necessary to remove vegetation and trees, I note that the applicant will seek to replace such vegetation with similar species or species that are appropriate to urban settings. I further note that whilst similar species will be sought out, the replacement vegetation will be of a semi mature stage of growth. This is reasonable, and common practice in such circumstances. The magnitude of effects in relation to the removal and replanting of trees and vegetation is not significant.

8.293. Construction changes will occur over a period of 1 to 2 years and as such as mentioned above are for a short period of time. Impacts will therefore not be significant in the long term.

8.294. The operational phase of the development will result in impacts to many areas of open space including roadside areas, small open space areas all of which are listed within the EIAR. It is important to note that impacts in relation to these open spaces and the removal of mature trees are not expected to be significant.

8.295. The proposed development as mentioned above will result in many positive benefits to landscape and the streetscape through the provision of additional planting and improved surfaces and layouts of public circulation areas, pavements, cycle lanes and open spaces. The insertion of SUDs measures will soften the existing landscape and provide additional opportunities for biodiversity to thrive.

Mitigation

8.296. In order to reduce the magnitude of effects to landscape, streetscape and townscape it is proposed to protect vegetation that is to be retained during construction through the use of protective fencing. Where boundaries and vegetation are to be removed a record will be kept in order to replace the features with similar items. Where possible

vegetation will be retained and replanted. All works will be carried out in accordance with a CEMP.

8.297. No mitigation or monitoring is proposed for the operational phase of the development.

Residual Impacts

8.298. Whilst mitigation will achieve a reduced impact and protect trees and vegetation to be retained, it will not eradicate the impacts listed above. The removal of mature trees cannot be mitigated and as such significant Construction Phase impacts at a local level remain unchanged in the post-mitigation and monitoring scenario. Operational phase impacts will improve with time as vegetation matures and will therefore not be significant. In conclusion therefore, significant long-term impacts to landscape and visual amenity do not arise in relation to the proposed development.

Conclusion

8.299. I have considered all of the written submissions made in relation to Landscape, Streetscape and Visual and the relevant contents of the file including the EIAR. I am satisfied that the potential long term impacts on Landscape, Streetscape and Visual can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect long term impacts on Landscape, Streetscape and Visual can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site including the proposed the other bus connects routes are not likely to arise.

Table 18 Landscape & Visual Summary of potential and residual effects.

Potential impacts	**Magnitude of Impact**	**Mitigation**	**Residual Impact**
Construction phase impacts			
Mayne River Avenue to Belcamp Lane – Malahide Road	Slight / Moderate Temporary Negative	Protect trees to less effects	Slight / Moderate Temporary Negative

Belcamp Lane to Gracefield Road – Malahide Road	Significant Temporary / Short-Term Negative	As Above	Significant Temporary / Short-Term Negative
Gracefield Road to Marino Mart / Fairview – Malahide Road.	Significant / Very Significant Temporary / Short-Term Negative	As Above & s.	Significant / Very Significant Temporary / Short-Term Negative
Operational Phase			
Mayne River Avenue to Belcamp Lane – Malahide Road	Imperceptible	None	Imperceptible
Belcamp Lane to Gracefield Road – Malahide Road	Slight Long-Term Positive	None	Slight Long-Term Positive
Gracefield Road to Marino Mart / Fairview – Malahide Road.	Moderate Long-Term Negative	None	Moderate Long-Term Negative

Roads and Traffic

Section 6 of the EIAR examines the impact of the proposed scheme on traffic. For the purpose of assessment, the proposed route has been considered under two sections, i.e. Section 1 – Mayne River Avenue to Gracefield Road – Malahide Road and Section 2 Gracefield Road to Marino Mart / Fairview – Malahide Road.

Baseline Conditions

8.309. Overall cycling infrastructure provision on the corridor in its entirety consists of 77% cycle priority outbound (4% cycle track, 73% advisory cycle lane), with 65% inbound (4% cycle track, 61% advisory cycle lane). Bus services along the Proposed Scheme currently operate within a constrained and congested environment, with 68% priority outbound and 79% priority inbound on the corridor. Current deviation for bus journey times is 9 minutes, any increases in traffic levels will exacerbate bus time deviations.

8.310. The following section of this report will outline the base line conditions in relation to the relevant sections mentioned above.

Section 1 – Mayne River Avenue to Gracefield Road – Malahide Road

8.311. This section commences at the Mayne River Avenue – R107 Malahide Road Junction. The route then comprises 3km of the R107 Malahide Road, finishing at Artane Roundabout, a four-arm roundabout between the R107 Malahide Road North and South, the R808 Gracefield Road and Ardlea Road.

8.312. Pedestrian facilities and street lighting are present on both sides of the road Mayne River Avenue and the junction with the R139 Brookfield Crescent. In addition, wide shared spaces are present at and near to the Hilton Hotel along the building frontage at this location. The route then passes over the junction and continues as a dual carriage way with pedestrian footpath on both sides of the road separated by a grass verge. Cycle lanes along this section of the route comprise of on road advisory markings of approximately 1.5m wide. There is no designated cycle hire along this section of the route and cycle parking is outside of the red line of the development boundary at varying locations along the route.

8.313. The road separates into dual carriageway with a central vegetated strip prior to meeting the second section outlined above. Pedestrian movement across this dual carriageway are facilitated by signalised junctions and various crossing points which the applicant has detailed within the EIAR.

8.314. Bus lanes are provided at sections along this part of the route in both directions between the junction with the R139 and the junction with Blunden Drive and in both directions between the junction with Blunden Drive / Priorswood Road and the junction with R808 Gracefield Road / Ardlea Road. This section of the route contains 15 no. bus stops with only 6 indented from the carriageway the remainder are in line. Shelters and bus information are provided at all but 1 of these stops. Should the board wish to review bus journeys and frequency, the applicant has provided this information within table 6.7.

8.315. Speed limits along this section are 60kmphr with the exception of 1 no. 50km zone. The number of traffic lanes varies widening at junctions and narrowing to one lane at points, however for the large part the road is a dual carriageway in both directions within this section. This route is an alternative route to Dublin Port when the Port tunnel is closed and is heavily trafficked.

8.316. Junctions along this section of the route include:

- R107 Malahide Road / R139 Northern Cross Route Extension / R139 Clarehall Avenue four-arm signalised junction.
- R107 Malahide Road / Clarehall Shopping Centre three-arm signalised junction.
- R107 Malahide Road / Belcamp Lane three-arm priority junction.
- R107 Malahide Road / Priorswood Road / Blunden Road four-arm roundabout.
- R017 Malahide Road / Newtown Road three-arm priority junction.
- R107 Malahide Road / Greencastle Road four-arm signalised junction.
- R107 Malahide Road / R104 Tonlegee Road / R104 Brookville Crescent four-arm signalised junction.
- R107 Malahide Road / Brookville Park four-arm priority junction.
- R107 Malahide Road / Ardlea Road / R808 Gracefield Road four-arm roundabout.

8.317. Parking along this section of the road at the following locations:

- Adjacent to the northbound carriageway between Greencastle Road and the R104 Tonlegee Road - 23 informal residential parking.
- North bound carriageway - immediately south of Mayne River Avenue, associated with the adjacent commercial units (maximum stay of 30 minutes) – 6 spaces.
- Eastern side of the R107 Malahide Road, adjacent to 43 to 48 St Brendan's Avenue – 8 informal spaces.

8.318. Parking is also available on adjacent streets.

Section 2 – Gracefield Road to Marino Mart / Fairview – Malahide Road

8.319. Section 2 begins at the roundabout between the R107 Malahide Road / Ardlea Road / R808 Gracefield Road, is approximately 2.7km in length and runs in a northeast to southwest direction along Malahide Road.

8.320. South of the R808 Gracefield Road, footpaths and street lighting are provided on both sides of the R107 Malahide Road adjacent to the carriageway for the entirety of

Section 2 of the Proposed Scheme. There are a number of pedestrian crossings along this section of the route which are listed in section 6.3.3.1 of the EIAR.

8.321. Cycle infrastructure is intermittent and includes an advisory cycle lane of approximately 1.5m wide on both sides of the carriageway between the R808 Gracefield Road and Danieli Road. From Danieli Road to Kilmore Road, the advisory cycle lane is provided for cyclists travelling northbound only. Between Kilmore Road and Donnycarney Road, cyclists have to make use of a shared bus / cycle lane.

8.322. From Donnycarney Road to the R102 Griffith Avenue, advisory cycle lanes are provided in both directions, and for the final section to the R105 Clontarf Road, cyclists travelling southbound are to use a shared bus / cycle lane, with a continuous advisory cycle lane travelling northbound. Cycle parking is outside the boundary of the proposed scheme.

8.323. Bus lanes are provided along the majority of this section of the route and operate during specified times. Details of such are outlined in section 6.3.3.3 of the EIAR. There are 17 bus stops and the majority have shelters and bus information available. Bus service frequency is detailed in table 6.9 of the EIAR.

8.324. In terms of general traffic, south of the R808 Gracefield Road, the R107 Malahide Road is a single carriageway with two lanes in each direction, one standard lane and one bus lane until Donnycarney Road. The carriageway is approximately 7.0m wide and becomes wider in the proximity of junctions. The speed limit on this section is 50km/h.

8.325. Between Donnycarney Road and the R102 Griffith Avenue, the road is predominantly dual carriageway and has a speed limit of 50kmph. From the R102 Griffith Avenue to R105 Clontarf Road, the R107 Malahide Road is single carriageway with one lane traveling northbound and two lanes travelling southbound.

8.326. Junctions along this section of the route include:

- R107 Malahide Road / Kilmore Road three-arm signalised junction;
- R107 Malahide Road / Killester Road / St David’s Wood four-arm signalised junction;
- R107 Malahide Road / Elm Mount Road three-arm Signalised junction;

- R107 Malahide Road / R103 Collins Avenue / Collins Avenue East four-arm signalised junction;
- R107 Malahide Road / Elm Road three-arm priority junction;
- R107 Malahide Road / Donnycarney Church Car Park three-arm priority junction;
- R107 Malahide Road / Clancarthy Road three-arm priority junction;
- R107 Malahide Road / Donnycarney Road three-arm priority junction;
- R107 Malahide Road / Casino Park three-arm signalised junction;
- R107 Malahide Road / Nazareth House / Clontarf Golf Club four-arm priority junction;
- R107 Malahide Road / Fire Brigade Training Centre / Mount Temple School Access four-arm priority junction;
- R107 Malahide Road / Copeland Avenue / R102 Griffith Avenue four-arm signalised junction;
- R107 Malahide Road / Brian Road three-arm priority junction;
- R107 Malahide Road / Charlemont Road three-arm priority junction;
- R107 Malahide Road / The Crescent three-arm priority junction; and
- R107 Malahide Road / R105 Clontarf Road / R105 Marino Mart three-arm signalised junction.

8.327. All junctions layout are outlined in detail within the EIAR in order to clearly describe the current situation within the site of the proposed scheme.

8.328. Parking along this section of the road at the following locations

- Southbound carriageway of R107 Malahide Road, between R808 Gracefield Road and Danieli Road– 15 informal spaces.
- Northbound carriageway of R107 Malahide Road immediately to the south of Mornington Grove – 7 informal spaces and 1 disabled space.
- Northbound carriageway of the R107 Malahide Road immediately north of Kilmore Road – 6 informal spaces.

- Northbound carriageway of the R107 Malahide Road between Donnycarney Road and Casino Park – 11 informal spaces associated with commercial properties.
- Southbound carriageway of the R107 Malahide Road between Crescent Place and Marino Crescent – 14 pay and display – associated with commercial properties.

Potential Impacts

8.329. For the purpose of the assessment of potential impacts the applicant has also considered the proposed route in two sections as above. I will consider potential impacts in relation to the individual mode, i.e. walking, cycling, bus and private car with reference to the relevant section and in relation to both the construction and operational phases of the development.

Construction phase

8.330. In relation to the full proposed scheme, haulage of materials is expected to be minimal with the daily projected number stated as c. 17 HGV trips. The applicant has identified haul routes as follows:

- M1 / N1 and M50 Motorway;
- R139 Northern Cross Extension / Clarehall Avenue;
- R104 Oscar Traynor Road / Brookville Crescent; and
- R107 Malahide Road

8.331. Traffic flows on all routes and at site compounds and works areas will be managed by the construction traffic management plan and the magnitude of impacts arising from these movements is stated as Negative, Slight and Short-term effect. No further analysis is therefore carried out in this regard by the applicant. Given the levels are signficantly below the thresholds set out in TII's Guidelines for Traffic and Transport Assessments.

8.332. Disruptions to pedestrian and cycle movement will also occur on a temporary basis as works proceed, however alternative routes and access will be provided as required. Similarly bus stops may require temporary relocation but access will be retained in order ensure continuity in the service.

8.333. It is of note that private parking for construction workers will be limited at compounds and will not accommodate the required 70 to 80 staff which will work on the scheme. The use of public transport will therefore be required by staff and impacts arising from construction staff traffic are therefore not expected to be significant.

8.334. Overall, the magnitude of impacts associated with the construction of the proposed scheme range between Negative, Slight and Temporary to Negative, Moderate and Temporary.

Operational Phase – both sections

8.335. In terms of the operational impacts, I note that the assessment of impacts relates to the functionality of the infrastructure to be provided. The applicant has developed a set of criteria for each mode which are outlined in tables 6.12 and 6.15 for pedestrians and cyclists respectively. Similarly bus infrastructure is examined in relation to both the frequency of service to be provided and the infrastructure such as shelter, seating, accessible kerbs etc.

8.336. In relation to parking the applicant has clearly outlined the number of spaces to be lost at each location which is set out hereunder and has provided a justification for such losses and in some cases has provided alternative solutions. The applicant has also examined parking and loading requirements for businesses in the area. It is of note that Dublin City Council have raised concerns in relation to the loss or relocation of parking and has requested that the scheme provides for set down and loading areas to serve local businesses. Many residents have also raised concerns within the third party submissions in relation to the loss of parking both on street and within their properties. Such issues have been examined within the assessment part of this report above and will not be repeated hereunder, this section of the EIAR should therefore be read in conjunction with the assessment section of this report. It is important to note however that no significant effects are expected to arise in this regard and the applicant has demonstrated that adequate car parking has been retained within both the on-street locations (as detailed below) and within private residences (as detailed within the assessment section above).

Pedestrian Infrastructure.

8.337. In terms of operational impact in relation to pedestrian infrastructure it is important to note at the outset that all impacts to both sections of the proposed scheme are

expected to be positive and long term. This is as a result of the proposed improvements to the existing pedestrian facilities in the form of additional crossing locations, increased pedestrian directness, provision of traffic calming measures to reduce vehicle speeds, improved accessibility and increased footpath and crossing widths. I note that all facilities have been designed in accordance with the principles of DMURS and the National Disability Authority (NDA) 'Building for Everyone: A Universal Design Approach' (NDA 2020) with regards to catering for all users, including those with disabilities. For ease of reference details of junctions and relative effects are outlined in tables 6.18 and 6.23 of the EIAR.

Cycle Infrastructure

8.338. Cycle infrastructure impacts are also considered to be positive and long term in terms of magnitude of effects. A number of submissions raised concerns in relation to junction layouts, cycle lane widths, treatment of cycle lanes at bus stops and the turning movements provided for cyclists at junctions. Similar to the foregoing all issues have been examined in detail within the assessment section of this report and will not be repeated hereunder, save to say that I am satisfied that the design approach to this infrastructure has been adequately justified by the applicant and I am satisfied that no significant negative impacts will arise in this regard. The use of dedicated cycle lanes, quiet roads in the case of cyclist diversions from the main route and the segregation of general traffic will provide for a signficantly enhanced experience for cyclists over that currently available. I am satisfied that the applicants have examined the potential for impacts to arise in relation to the proposed cycle infrastructure and have examined all reasonable alternatives in this regard also.

Bus Infrastructure

8.339. It is proposed that there will be a total of 15 bus stops along both Section 1 and 2 of the Proposed Scheme providing for a total of 30 stops along the entire length of the scheme. The layout of new bus stops is considered to better serve the existing and future catchment and be closer to existing and new pedestrian crossing facilities for improved convenience. The magnitude of effects arising from the operation of the proposed new bus stops is expected to be positive and very significant.

8.340. Similar to the foregoing infrastructure, issues have been raised in relation to the relocation of some bus stops, the accessibility of bus stops for people with disabilities

and the visually impaired and the provision of shelters. See assessment section above for detailed assessment of bus shelter accessibility.

8.341. Based on the information submitted and the NTA responses to the concerns raised as outlined within the assessment section of this report, I am satisfied that the applicant has adequately justified the proposed alterations to bus stops. I also note that all bus stops will have accessible kerbs and real time information and the majority will also have shelters which is currently not the case at all stops. Overall, the accessibility and reliability of the bus service will be signficantly improved to that available currently. Such improvements will have a positive and long-term impact for patrons and will not result in any significant negative effects.

Parking

8.342. As mentioned above, significant concerns have been raised by third parties in relation to the removal of on street car parking along the route of the proposed scheme. Each section of parking to be removed has been examined individually as follows:

Section 1 – Mayne River Avenue to Gracefield Road – Malahide Road

- 23 spaces along R107 between Greencastle Road and the R104 Tonlegee Road – required to provide a 2.0m wide footpath alongside a more formalised cycle lane, bus lane and general traffic lane arrangement. To be replaced with 9 no. marked bays along Brookville Park, accessible from the R107 Malahide Road via the R104 Brookville Crescent. The residential properties adjacent to these lost spaces have offstreet parking within driveways as well as kerb-side parking along Brookville Park. Magnitude of effects are expected to be **Negative, Slight and Long-term effect.**
- Loss of 11 spaces on the western side of the R107 Malahide Road, between the R104 Tonlegee Road and St Brendan's Drive to widen the footpath, formalise the cycle lanes and therefore provide improvements for pedestrians and cyclists. Current taxi bays to be retained. There are 50 other spaces within 100 metres available. Magnitude of effects is expected to be **Negligible and Long-term effect.**
- Loss of 10 general residential parking spaces along the eastern side of the R107 Malahide Road, between the R104 Tonlegee Road and St Brendan's

Avenue which are proposed to be removed to widen the footpath and provide a cycle track which bypasses the bus stop island. Residential properties have off street parking and there are over 50 other informal parking spaces available within 100m of this location. Magnitude of effects is therefore considered to be **Negligible and Long-term effect.**

- I note that an additional 7 spaces will be provided at Brookville Park, near Chanel Road between Main Street and Mask Avenue.

8.343. Overall there are 77 current spaces impacted by the proposed development with 29 to be lost. Given the location of the proposed development within an urban highly accessible area and that spaces are to be lost to facilitate enhanced walking, cycling and bus infrastructure, I am satisfied that the loss of spaces is justified.

Section 2 – Gracefield Road to Marino Mart / Fairview – Malahide Road

- 10 informal general residential parking spaces along the eastern side R107 Malahide Road between the R808 Gracefield Road and Danieli Road to gain the road space to accommodate cycle lanes on both sides of the road. The adjacent residential properties have dropped kerb driveways and off-street parking capacity for approximately two vehicles. Additionally, there are approximately 80 further informal residential parking spaces along side streets within 200m of this location, such as Danieli Road and Danieli Drive. Magnitude of effects - **Negative, Slight and Long-term.**
- A revised parking arrangement outside the shops on the west side of R107 Malahide Road, to the south of. Morning Grove. The existing parking arrangement comprises a parallel style parking however motorists currently park perpendicular to the carriageway. This parking arrangement causes a safety issue with cars blocking the cycle lane, which is illegal, whilst also reversing onto main carriageway and on-road cycle lane. Instead, it is proposed that a small off-street car parking area is provided next to this location, comprising five general parking spaces and one disabled bay. Magnitude of effects **Negligible and Long term**.
- Removal of the six informal general / commercial parking spaces along the R107 Malahide Road on the footpath at the frontage of the commercial units, immediately north of Kilmore Road. This is to allow for widening of the footpath

and provision of a cycle track which bypasses the bus stop island, and therefore provide wider improvements for pedestrians and cyclists. There are a further approximately 16 pay & display parking bays along Kilmore Road, less than 50.0m from this location, and over 100 informal parking spaces available along side streets within 200m. Magnitude of effects - **Negative, Moderate and Long-term.**

- Removal of five of the 11 informal general / commercial parking spaces along the R107 Malahide Road between Donnycarney Road and Casino Park to provide improvements for pedestrians and cyclists in the form of widening the footpath and provision of a continuous, uninterrupted cycle lane. There are approximately 140 informal parking spaces along side streets within 200m of this location, such as Casino Park, Cherrymount Crescent and Donnycarney Road. Magnitude of effects - **Negative, Moderate and Long term**.
- Removal of the 14 pay & display general / commercial parking spaces within the southbound bus lane along the R107 Malahide Road between Crescent Place and Marino Crescent. Magnitude of effects is considered to be **Negative, Moderate and Long-term.**

8.344. Overall, there are 53 parking spaces affected by the proposed scheme with 37 to be removed. The Proposed Scheme will formalise the parking arrangements at these locations to improve the environment, particularly for pedestrians and cyclists. Given the availability of equivalent types of parking along adjacent streets within 200m of these locations (and typically within under 100m), the overall impact of this loss of parking is considered to have a Negative, Moderate and Long-term effect. I am satisfied that no significant effects arise in this regard.

Summary of infrastructure to be provided.

8.345. I draw the Board's attention to section 6.4.6.1.7 of the EIAR which provides a summary of Corridor-Wide Infrastructure Works. In short, the proposed scheme will provide an additional 26% inbound and 14% outbound footway area, Increase pedestrian crossings from 36 to 52. Increase table crossings from 9 to 31.

8.346. It will also provide 4.7km inbound and 5.3km outbound of segregated cycle facilities. Total cycle facilities (segregated and non-segregated) will be increased by 47%. The

proportion of the corridor with segregated facilities (including quiet street treatment) will increase from 5% to 100%. Cycle parking provision will increase by 87%.

8.347. With regard to buses, the proposed scheme will provide an increase of 36% in total of bus priority measures in both directions.

8.348. While parking will reduce by 66 spaces, 1 additional disabled space will be provided above that currently available.

8.349. In terms of the modelled benefits of the proposed scheme, I draw the Board's attention to section 6.4.6.2.1 of the EIAR in which the movement of people is assessed. Modelling examines the potential for modal shift in the years 2028 and 2043 in relation to the am and pm peak times. The most significant shift is seen in the increase in people walking and cycling. In the year 2028 during the am peak it is predicted that walking and cycling will see an increase of 93%. Private car use for the same year is predicted to decrease by 30%. The PM peak for the same year is predicted to have a similar modal shift with 83% of people walking outbound, and a 24% reduction in the private car.

8.350. Modelled modal shifts for the year 2043 also see a significant increase in people walking and cycling with a 124% increase in the am peak hour and an 80% increase in the pm peak hour and a greater uptake of public transport with an additional 700 passengers in the am peak hour of 2028 and approximately 1000 for the same peak hour in the 2043 year. Peak hours also see the same increases.

8.351. The overall magnitude of the forgoing modelled changes is positive, very significant and long term. It is clear from the information provided that the proposed development will be a significant piece of infrastructure that will assist in the reduction of GHG in Dublin City and will have a significantly positive impact on the sustainability of the city.

8.352. It is clear that the improvements proposed will create the conditions for a modal shift to more sustainable modes of travel. Improved bus times and scheduling, travel information and accessibility to the bus infrastructure are positive changes that are supported at both a national and local level in terms of policy.

8.353. It must be clarified that the initial modelling for the years 2028 and 2043 were based on current metrics for population, traffic levels etc. I note that the applicant has resilience tested the proposed scheme in relation to population and traffic growth. The

results of which demonstrate that the proposed scheme will have adequate capacity to cope with such changes without impacting the reliability of the service.

General traffic impacts

8.354. Given the improvements to bus priority, walking and cycling as a result of the Proposed Scheme, there will likely be an overall reduction in operational capacity for general traffic along the direct study area. This may in turn result in some level of redistribution of general traffic away from the main corridor onto the surrounding road network. The surrounding road network including junctions has therefore been examined in detail within the EIAR submitted and has been carried out in accordance with TII's Traffic and Transport Assessment Guidelines.

8.355. The following junctions were identified as having capacity issues:

- Clontarf Road / Seaview Avenue North three-arm signalised junction (13112) – operates above 100% during both the Do Minimum and Do Something scenarios;
- St Lawrence Road / Clontarf Road three-arm priority junction (13173) – operates above 100% during both the Do Minimum and Do Something scenarios;
- Grace Park Road / Beaumont Road / Collins Avenue four-arm signalised junction (13196) – operates above 100% during both the Do Minimum and Do Something scenarios;
- Oscar Traynor Road / Kilmore Road three-arm signalised junction (13463) – operates between 85% – 100% during the Do Minimum and above 100% during the Do Something scenario;
- Clonshaugh Road / R139 Northern Cross Extension three-arm signalised junction (17115) – operates above 100% during both the Do Minimum and Do Something scenario;
- R139 / Clonshaugh Road (North) three-arm roundabout (17118) – operates above 100% during both the Do Minimum and Do Something scenario; and

- Baskin Lane / Clonshaugh Road / Stockhole Lane three-arm priority junction (35656) – operates between 85% – 100% during the Do Minimum and above 100% during the Do Something scenario.

8.356. In situations where the 'do minimum' result is the same as the 'do something' result impacts are considered to be negligible and no further analysis is carried out. As seen from the list above, 2 no. junctions will experience negative effects, i.e. Oscar Treynor Road / Kilmore Road three-arm signalised junction, which will experience negative moderate long term effects and Baskin Lane / Clonshaugh Road / Stockhole Lane three-arm priority which will experience negative significant and long term effects. Given the significance of impacts the foregoing junction additional analysis was carried out.

8.357. In order to mitigate issues at this junction it is proposed to amend the proposed signal timings to give greater green time to the R107 Malahide Road, for traffic turning onto the R139 this will discourage rat running onto Baskin Lane and encouraging more traffic through the junction on the R107.

8.358. The following roads were identified as needing additional analysis and are relevant to the AM and PM peak hour:

- AM peak hour - Grange Road, R104 Tonlegee Road, Harmonstown Road, R105 Howth Road, Vernon Avenue, R105 Clontarf Road, Clonshaugh Road, Clonshaugh Avenue, M1 Southbound (at Junction 3), Baskin Lane, and M1 Junction 2 Circulatory
- PM peak hour - R106 Main Street, R106 Coast Road, R123 Moyne Road, R809 Grange Road, Millbrook Avenue, R104 Tonlegee Road, Kilbarrack Road, R807 James Larkin Road, R807 Clontarf Road, R807 Dublin Road, R105 Howth Road, Chapel Road, Beaumont Road, Skellys Lane, Kilmore Road, R104 Oscar Traynor Road, Coolock Drive, Clonshaugh Road, Riverside Park, M50, and Baskin Lane.

8.359. Specific details of the analysis are summarised in section 6.4.6.2.8.7 of the EIAR. In summary, significant effects in relation to general traffic were only identified in relation to the Baskin Lane / Clonshaugh Road / Stockhole Lane three-arm priority junction in the 2043 Design Year during the PM Peak Hour. Detail analysis has shown that this junction is operating over capacity in the 'do minimum' scenario and the increase in

the 'do something scenario' is less than 5%. The proposed impacts are considered acceptable when considered against the Proposed Scheme Objectives.

8.360. Accordingly, across the study area as a whole, it is determined that there will be an overall Negative, Slight and Long-term effect from the redistributed general traffic as a result of the Proposed Scheme. This impact is considered acceptable in line with the scheme objectives and the considerable improvements for sustainable modes in the direct study area, with the consequential reduction in capacity for general traffic leading to some level of traffic redistribution. Given that the redistributed traffic will not lead to a significant deterioration of the operational capacity on the surrounding road network, no additional mitigation measures, beyond what is included already in the design, have been considered to alleviate the impact outside of the direct study area.

Mitigation

8.361. Construction related mitigation will be included within the CEMP. Implementation of the CEMP will ensure disruption and nuisance are kept to a minimum during the Construction Phase. The CEMP has regard to the guidance contained in the TII Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan, and the handbook published by Construction Industry Research and Information Association (CIRIA) in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).

8.362. A detailed Construction Traffic Management Plan will be prepared and included in the CEMP, and subsequently implemented, by the appointed contractor prior to construction, including Temporary Traffic Management arrangements prepared in accordance with Department of Transport's 'Traffic Signs Manual, Chapter 8 Temporary Traffic Measures and Signs for Roadworks'. The CTMP will be consulted upon with the road authority and will include measures to minimise the impacts associated with the Construction Phase upon the peak periods of the day.

8.363. No mitigation measures are proposed for the operation of the proposed scheme. Residual impacts remain as stated above and will not be significant.

8.364. I considered all of the written submissions made in relation to traffic and transport, and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on traffic and transport can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation

measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on traffic and transport can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 19 Traffic & Transport – Summary of potential and residual effects.

Potential impacts	**Magnitude of Impact**	**Mitigation**	**Residual Impact**
Construction phase impacts Road network opertaion	Negligible	Traffic management Plans	Negligible – Positive Slight
Operational Phase			
Pedestrian Infrastructure	Positive, Moderate to Significant and Long-term	None	Positive, Moderate to Significant and Long-term
Cycling Infrastructure	Positive, Very Significant and Longterm	None	Positive, Very Significant and Longterm
Bus Infrastructure	Positive, Very Significant and Longterm	None	Positive, Very Significant and Longterm
Parking and Loading	Negative, Moderate and Long-term	none	Negative, Moderate and Long-term
People Movement	Positive, Very Significant and Longterm	None	Positive, Very Significant and Longterm
Bus Network Performance Indicators	Positive, Significant and Long-term	None	Positive, Significant and Long-term

General Traffic Network Performance Indicators	Negative, Slight and Long-term	None	Negative, Slight and Long-term

Material Assets & Waste

8.395. Section 18 & 19 of the EIAR examines the potential for impacts to arise in relation to waste and material assets. The study area regarding major infrastructure and utilities comprises all areas within the Proposed Scheme, including both permanent and temporary land take boundaries. The study area for waste has been carried out on a regional basis an encompasses Dublin and the Eastern-Midlands.

Material Assets

8.396. All major infrastructure and utilities which may be impacted by the Proposed Scheme have been assessed including:

- Aviation Fuel Pipeline;
- Electricity;
- Water / Wastewater;
- Surface Water Drainage;
- Gas; and
- Telecommunications

8.397. The applicant has identified several utilities in place along and crossing the Proposed Scheme roads, the majority of which are buried within and along the roadways. These utilities include:

- ESB electricity lines (high, medium, and low voltage) and associated infrastructure;
- Gas Networks Ireland gas mains (high, medium, and low pressure) and associated infrastructure;
- Irish Water potable water mains and associated infrastructure;
- Irish Water sewer lines (foul and combined sewers) and associated infrastructure;

- Local Authority surface water drainage network and associated infrastructure;
- Eir, Enet and Virgin Media telecommunications lines and associated infrastructure;
- Local Authority traffic signal ducting; and
- The Aviation Fuel Pipeline between Dublin Port and Dublin Airport (which was under construction at the time of preparation of this EIAR).

8.398. It is important to note at the outset that significant effects are not likely to arise in relation to the proposed development during either the construction phase or operational phase of the development.

8.399. Impacts on existing infrastructure and utilities may occur in order to accommodate changes to junction layouts or changes to carriageway widths. Where protection of utilities in place is not an option, this will involve realignment, upgrade, or replacement of this infrastructure as part of works within those areas.

8.400. I note from the information submitted that the proposed development would require the diversion of medium and low voltage underground and overhead lines, watermains, gas mains and telecommunication ducts and chambers. These diversions will result in temporary and short-term interruptions to services in the vicinity of the proposed works.

8.401. The magnitude of effects arising from infrastructure diversions ranges between no significant impact to Negative, Moderate, Temporary. Impacts relating to each individual infrastructure element is outlined in table 19.11 of the EIAR submitted. Impacts arising to such infrastructure during the operational phase of the development relate to the us of electricity to power new traffic lights and street lighting. Overall effects are expected to be imperceptible in this regard.

8.402. In considering the impacts to material assets, I note that the applicant has also considered the impact of the development on imported materials, such as concrete and aggregate. No significant effects are expected in relation to imported materials during either phase of the development.

Waste

8.403. Construction waste, including demolition and excavation waste, will be the main type of waste generated as a result of the Proposed Scheme. Waste licenced facilities within the area have been identified and will be used according to the waste management plan which will be submitted to the Council.

8.404. **It is important to note at the outset that impacts arising from waste are not deemed to be significant**.

8.405. It is the intention of the applicant to monitor, manage, reduce and reuse waste where possible. Waste will be appropriately segregated. It is anticipated that up to 19,500 tonnes of recycled or reused material could be incorporated into the Proposed Scheme. All monitoring and auditing of waste will form part of the mitigation measures to reduce waste arising from the development in compliance with Article 27 of the Waste Directive Regulations.

8.406. Where practicable and appropriate, and if in reusable condition, materials to be reused include street and roadside infrastructure such as bus stops, lighting poles, traffic signals, manhole access covers and signs.

8.407. I have examined the waste estimates provided by the applicant and note the following in relation to construction waste:

- Estimates of demolition waste are outlined in table 18.8 of the EIAR and result in a total predicted amount of 1,620 tonnes which equates to 0.02% of the demolition waste in the Eastern Midlands Waste Region. The magnitude of effects relating to demolition waste when considered in the context of the region are stated to be **adverse, not significant and short-term.**
- Excavation waste is outlined in table 18.9 of the EIAR and a total of 75,000 tonnes is expected to be generated from the development which equates to 0.7% of the demolition waste in the Eastern Midlands Waste Region. The magnitude of effects when taken in the context of the region is stated as being **adverse, slight and short-term**.
- Waste also relates to waste construction materials which has been quantified by the applicant within table 18.10, whereby it is expected that 5-15% of materials used will be wasted. Such levels of waste are standard in construction

and as such are not expected to give rise to significant impacts in the regional context.

8.408. Operational waste may arise as a result of carriageway maintenance which will be undertaken at regular intervals, or as necessary. This will primarily consist of bituminous mixtures due to maintenance of carriageway pavement. It is envisaged that bituminous mixtures will be reused within new carriageway construction as far as practicable and in accordance with all applicable legislation. It is important to note that the quantity of bituminous mixtures generated over the assumed lifetime of the Proposed Scheme (60 years), will decrease by approximately 6,000 tonnes due to an overall narrowing of the carriageway. Therefore, there will be a decrease in maintenance needs during operation of the Proposed Scheme. The magnitude of effects during the operation will therefore be **positive and long term**.

8.409. Given the limited percentage of waste to be generated from the site it is reasonable to state that cumulative effects arising from development along the route will not arise in this instance. The proposed development once operational will infact reduce waste and therefore have a positive effect on waste quantities in the region.

Conclusion

8.410. I considered all of the written submissions made in relation to Waste & Material Assets and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Waste & Material Assets can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on Waste & Material Assets can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

Table 20 Material Assets & Waste – Summary of potential and residual effects

Potential impacts	**Magnitude of Impact**	**Mitigation**	Residual Impact
Demolition waste	Not Significant and Short-Term Adverse	Monitoring, auditing and reusing waste	Not Significant and Short-Term

Excavation waste	Adverse, Slight and Short-Term	As above	Adverse, Slight and Short-Term
Construction waste	Adverse, Imperceptible and Short-Term	As above	Adverse, Imperceptible and Short-Term
Municipal waste	Adverse, Imperceptible and Short-Term	As above	Adverse, Imperceptible and Short-Term
C&D waste during operation	Positive, Not Significant and Long-Term	Monitoring, auditing and reusing waste	Positive, Not Significant and Long term
Municipal waste	Neutral, Imperceptible and Long-Term	As above	Neutral, Imperceptible and Long-Term
Construction & operational phases of development: • Aviation Fuel Pipeline; • Electricity; • Water / Wastewater; • Surface Water Drainage; • Gas; and • Telecommunications	Range between - No significant impact - Negative, Moderate, Temporary	Notification and liaison with utility providers.	Range between - No significant impact - Negative, Moderate, Temporary

Risk of major accidents and / or disaster

8.411. An assessment of the risk of major accidents or disasters is outlined in section 20 of the EIAR. In terms of potential risks, it is of note that the proposed development gives rise to a neutral risk in relation to major accidents or disasters and will therefore not be considered further.

Interactions between the Factors and Cumulative Impacts

8.412. Section 21 of the EIAR considers the potential for cumulative impacts to arise and the potential for interactions between factors to occur. Cumulative impacts are considered

in the context of other permitted and planned development in the area as well as the remaining 11 other bus connects routes in the context of the foregoing sections of the EIAR. Development considered in the context of cumulative development include but are not limited to the following:

- DCC planning reference 4498/19: Construction of a new predominantly three storey 1000 pupil Post Primary School building at the site of the existing Mount Temple Comprehensive School, which is located off Malahide Road;
- DCC planning reference 3506/20: 55 no. apartments and 2 no. double height commercial units on lands known as Site 5, Northern Cross, Malahide Road;
- DCC planning reference 4214/18: Belmayne Main Street and Belmayne Avenue scheme;
- SHD ref: ABP-305943: Construction of 331 apartments. Newtown, Malahide Road, Dublin 17;
- SHD ref: 307887: 191 apartments and associated site works. Site 2, Mayne River Avenue, Northern Cross, Malahide Road, Dublin 17;
- SHD ref: 310077: 260 no. apartments and associated site works. Site at Belmayne P4. The corner of Churchwell Road and Churchwell Crescent, Belmayne, Dublin 13
- SID ref 245738 (DCC planning reference 2552/15): Dublin Airport Aviation Fuel Pipeline; and
- MP34: Greater Dublin Area Cycle Network Plan including the Clontarf to City Centre Cycle & Bus Priority project, which will provide segregated cycling facilities and bus priority infrastructure along a 2.7km route that extends from Clontarf Road at the junction with Alfie Byrne Road, to Amiens Street at the junction with Talbot Street. The Cycle Network Plan proposals intersect with Proposed Scheme at Santry River Greenway; Brookville Crescent; junction with Ardlea Road/R808 Gracefield Road; Kilmore Road; junction with R103 Collins Avenue/Collins Avenue East; junction with Griffith Avenue/Copeland Avenue; Marino Mart.

8.413. The applicant has also had regard to the relevant plans for the area and I am satisfied that a robust and detailed assessment of the potential for cumulative impacts to arise has been carried out.

8.414. It is important to note at the outset that for the large part no significant cumulative impacts are expected.

Water, soils, geology and hydrogeology

8.415. Water, soils, geology and hydrogeology are examined as a group of receptors for the purpose of the consideration of cumulative effects. Standard mitigation measures as outlined within the relevant sections above will avoid significant impacts from arising in relation to such factors and therefore no significant effects are expected. Similarly, mitigation measures to avoid such impacts also form part of the permitted schemes and I am therefore satisfied that significant cumulative impacts will not arise in this regard.

Traffic

8.416. In the consideration of cumulative traffic impacts the applicant in the first instance considered the cumulative impact of all 12 schemes and modelling exercise of a worst-case scenario was carried out. The results would give rise to significant traffic displacement across the Dublin area with significant impacts occurring on local residential roads as the carrying capacity of arterial routes is designed to cater for such volumes in traffic.

8.417. In order to prevent such significant impacts from arising the applicant has stated that a number of routes will not be constructed simultaneously as follows:

- Ballymun/ Finglas to City Centre Core Bus Corridor Scheme – will not be constructed concurrently with Swords and Blanchardstown Schemes;
- Lucan to City Centre Core Bus Corridor Scheme – will not be constructed concurrently with Liffey Valley and Blanchardstown Schemes;
- Templeogue /Rathfarnham to City Centre Core Bus Corridor Scheme will not be constructed concurrently with Kimmage and Bray Schemes; and
- Bray to City Centre Core Bus Corridor Scheme – will not be constructed concurrently with Blackrock/Belfield and Templeogue /Rathfarnham Schemes.

8.418. The remaining eight schemes, of which the current proposed scheme is one, can be constructed concurrently or with a combination of other schemes incorporating the limitations. The proposed scheme will retain two-way traffic along the route for the duration of construction and will therefore maintain traffic flows. It is for this reason that significant cumulative traffic impacts are not expected. Similarly significant cumulative traffic impacts do not arise in relation to other developments in the area of the proposed scheme or in relation to the operation of the scheme.

Dust and air pollution & Climate

8.419. An appraisal has been carried out to assess the cumulative risk to sensitive receptors as a result of dust soiling and the health impacts and ecology impacts due to the construction phase of the Proposed Scheme. Other projects within 350 metres of the proposed scheme, as outlined above were considered in this regard. Mitigation measures to prevent dust are to be implemented as outlined within the relevant section above and as such no significant dust impacts are expected to arise in relation to the proposed scheme. Given that such mitigation is standard practice in relation to construction and excavation works it is reasonable to state that significant cumulative dust emissions are not expected to arise in relation to other development within the area. Such mitigation measures are included within the permitted schemes referred to and I am therefore satisfied given the limited nature of the proposed works and the measures proposed within it to avoid dust emissions, that no significant impacts will arise.

8.420. In terms of pollutants, I note that the applicant has outlined the cumulative construction phase in terms of a percentage of the regional output in table 21.2 of the EIAR and given the relatively small percentage of pollutants that the scheme will give rise to in this context, no significant cumulative impacts are expected.

8.421. Cumulative impacts in relation to climate are considered within the EIAR within a national context. The impacts to climate have been quantified within the Air Quality and Climate Section of this EIAR above and will not be repeated hereunder, however it is important to note that impacts arising from the operation of the development are positive and the proposal will result in a reduction of carbon emissions over the life of the scheme. As mentioned above construction impacts in terms of climate are considered to be significant this was determined in the absence of ceiling thresholds.

This issues has been discussed in detail above and will not be repeated hereunder. However in the context of the proposed development as a whole I acknowledge that the scheme will ultimately have a positive impact on climate I am therefore satisfied that significant long term adverse cumulative impacts will not arise.

Noise & Vibration

8.422. Cumulative impacts in relation to Noise and vibration have been examined in the context of the proposed 12 routes and the developments listed above. Due to the distance between routes cumulative impacts in relation not the other proposed routes are not expected. Such impacts range from Negative, Moderate, Temporary to Negative, Slight -Moderate, Temporary. Other major infrastructure projects could directly interface with the construction of the Proposed Scheme. To prevent such impacts from arising it is proposed to liaise with the contractors of other projects, to ensure that there is coordination between projects and no significant cumulative impacts arise.

Biodiversity

8.423. Cumulative impacts to biodiversity relate to habitat loss, disturbance and loss of foraging and habitat fragmentation. It is important to note given the location of the Proposed Scheme and the on-going urban development trends across Dublin, there is likely to be continued habitat loss and fragmentation in the area. The applicant however has had regard to the environmental protective policies of the relevant development plan for the scheme and the scheme is compliant with same.

8.424. Cumulative impacts arising from other developments referred to above within the vicinity of the site could result in relation to bats, however I note that impacts will be no higher than the already predicted residual effects significant at the local geographic scale for the Proposed Scheme alone. Similarly for birds, impacts will be local in scale and not significant. The removal of trees will be compensated by the replanting program proposed as part of the scheme, any potential impacts will therefore be temporary in nature.

8.425. Disturbance or displacement impacts to mammals during construction will be temporary or short-term and are not likely to have long-term population level effects, even cumulatively with any future projects that might be proposed.

8.426. In terms of archaeology, I note that archaeological investigations will take place in order to identify any below-ground remains that may be present, this is true of all permitted significant infrastructure in the area, no significant cumulative effect on below-grounds remains is anticipated. In terms of built heritage, no significant effects are expected, and mitigation will ensure the appropriate relocation of features such as boundaries and street furniture to be moved.

Landscape and Visual

8.427. It is stated within the EIAR that potential localised moderate temporary / short-term cumulative construction effects are expected for non-concurrent but successive construction phases the Dublin Airport Aviation Fuel Pipeline project and the Proposed Scheme.

8.428. Cumulative construction effects are likely to be limited if the construction periods coincide as the overall period of construction would be reduced and construction would mainly occur within a shared footprint (along Malahide Road). There is also potential for localised slight / moderate temporary / short-term cumulative construction effects for the 331 apartments and Belmayne Main Street and Belmayne Avenue scheme where these are in close proximity to the Proposed Scheme. No landscape and visual residual effects are expected outside of these scenarios.

8.429. Other cumulative impacts whereby no significant impacts are expected relate to waste and material assets.

8.430. Having regard to the very detailed information provided by the applicant in relation to cumulative effects, I am satisfied that no significant cumulative effects arise in this instance.

Interactions

8.431. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis.

8.432. I consider that there is potential for population and human health to interact with all of the other factors (biodiversity, water, air and climate, noise, landscape and visual, cultural heritage and material assets – traffic). The details of all other interrelationships are set out in Section 21 of the EIAR which I have considered.

8.433. The proposed construction phase of the development has the most potential to interact with human health and biodiversity in relation to water contamination. Spills to waterbodies of hydrocarbons, concrete wash or other chemicals can have a direct effect on human health and biodiversity. It is important to note therefore that residual impacts to water were expected to be imperceptible and as such there is no likely significant interaction between Water and Human Health or Water and Biodiversity from this Proposed Scheme during construction.

8.434. Similarly human health and biodiversity can interact with Air Quality, noise & vibration and traffic no significant impacts are expected in this regard and I am satisfied on the basis of the information provided that there is no likely significant interaction between these factors and human health. A number of trees and grassland are to be removed as part of the scheme; however these works will be temporary in that trees will be replanted and grass areas reseeded. Only one area is to be removed permanently which is of local significance.

8.435. Interactions between soils and water will arise but as mentioned above due to mitigation will not give rise to significant interaction. Similarly, interactions between water traffic and transport, however, all changes in traffic flows would occur within the same drainage catchments and so there would be no significant impacts from this interaction.

8.436. Interactions also occur between Landscape (Townscape) & Visual, Architectural Heritage, Archaeology and Cultural Heritage. The Construction Phase will have impacts on a number of local features of heritage value, e.g., Protected Structures, Conservation Areas, historic mileposts etc. Excavations may interact with archaeology, but this would be restricted to the construction phase of the development. Having regard to the mitigation measures proposed by the applicant in this regard I am satisfied that significant interactions will not arise.

8.437. Having regard to the foregoing I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated for the most part by the measures which form part of the proposed development, the proposed mitigation measures detailed in the EIAR, and with suitable conditions

Reasoned Conclusion

8.438. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submission from the planning authority, prescribed bodies, and observers in the course of the application, is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- Negative impacts on **human health and population** arising from construction include noise, traffic and dust disturbance to residents of neighbouring dwellings. All of these impacts are low to moderate. Adequate mitigation measures are proposed to ensure that these impacts are not significant and include adequate mitigation for operational noise.
- Benefits/positive impacts on the **Air and Climate**, the operation of the proposed development will have a significant positive effect on human health and population due to the displacement of CO_2 from the atmosphere arising from an increased use of public transport which will be electrified and the reduction of cars on the route. Negative impacts during construction relate to the embodied carbon of construction materials which will have a negative significant impact but for the short term, any increase in carbon is considered significant, however the construction phase represents a signficantly small percentage of the sectoral emission ceilings outlined in CAP 23 for the 2021-2025 carbon budget period, the proposed development represents 0.00967% of the transport emission ceiling for the period.
- Negative impacts on **Water** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering watercourses, the sea or groundwater via piling activities during the construction phase of the development. These impacts will be mitigated by measures outlined within the application and can therefore be ruled out.
- Negative impacts on **biodiversity** relate to the removal of habitat in the form of hedgerows and treelines. Such impacts are not considered significant and can adequately be mitigated for within the scheme. Vegetation will be planted in the vicinity to bolster existing treelines and hedgerow. Significant impacts are therefore not expected in this regard. The avoidance of trees with roosting

potential for bats and the maintenance of commuting corridors, as well as pre construction bat surveys will ensure significant impacts to bats are avoided. Pre construction surveys will ensure that no mammals, birds or invasive species are present within the works areas. Adequate mitigation measures are proposed to ensure the protection of such mammals and birds encountered and to prevent the spread of invasive species. Significant impacts to biodiversity can therefore be ruled out.

- **Noise and Dust** impacts arise during the construction phase from construction activities. These impacts will be mitigated through adherence to best practice construction measures in relation to dust and the use of noise abatement at sensitive locations. Significant noise impacts arise in relation to construction noise during nighttime and weekend hours when thresholds are lower. Works will generally be carried out in daytime hours causing no significant effects. In the event that works are required during nighttime or weekend hours, liaison with residents in this regard and the use of noise abatement will reduce the level of impacts. Noise disturbance from the operation of the development can be ruled out, electric bus fleet and less cars will have a positive impact on operational noise. Significant impacts arising from noise and dust disturbance during the construction, operational and decommissioning stages can therefore be ruled out.
- Negative **traffic** impacts arise during the construction phase of the development, these impacts will be mitigated through the implementation of a traffic management plan and a construction management plan. Whilst some localised impacts arising from road closures may arise, significant impacts arising from traffic can be ruled out.

8.439. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. Thus, having regard to the foregoing assessment, I am, therefore, satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

8.440. The EIAR has considered that the main significant direct and indirect and cumulative effects of the proposed development on the receiving environment.

Following mitigation, no residual significant long-term negative impacts on the environment or sensitive receptors would occur. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. Overall, I am satisfied that the information contained in the EIAR complies with the provisions of Article 3, 5 and Annex (IV) of EU Directive 2014/52/EU.

9.0 Recommendation

9.1. I recommend that permission is granted subject to the following conditions.

10.0 Reasons and Considerations

In coming to its decision, the Board had regard to the following:

European legislation, including of particular relevance:

- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.

National and regional planning and related policy, including:

- Climate Action Plan 2023
- National Development Plan
- National Planning Framework

Regional and local level policy, including the:

- Regional Spatial Economic Strategy for the Eastern and Midlands Region

The local planning policy including:

- Dublin City Development Plan 2022-2028
- Dublin City Biodiversity Action Plan 2021-2025.
- **Greater Dublin Area Transport Strategy – 2022-2042**
- Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020)

- Smarter Travel – A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020
- Department of Transport National Sustainable Mobility Policy on 7th April 2022.
- Design Manual for Urban Roads and Streets, 2019
- other relevant guidance documents
- the nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity, including the proposed offshore element of the development,
- the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites
- the submissions made to An Bord Pleanála in connection with the planning application, and
- the report and recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment and environmental impact assessment.

10.1. **Proper Planning and Sustainable Development**

10.2. It is considered that the proposed development would accord with European, national, regional and local planning and that it is acceptable in respect of its likely effects on the environment and its likely consequences for the proper planning and sustainable development of the area.

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, North West Irish Sea cSPA, Rockabill to Dalkey Island SAC and Lambay Island SAC are the European sites for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, North West Irish Sea cSPA, Rockabill to Dalkey Island SAC and Lambay Island SAC, in view of the Sites Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment.

In completing the assessment, the Board considered, in particular, the

Likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon the Baldoyle Bay SAC, North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough SPA, North West Irish Sea cSPA, Rockabill to Dalkey Island SAC and Lambay Island SAC

i. Mitigation measures which are included as part of the current proposal,
ii. Conservation Objective for these European Sites, and
iii. Views of prescribed bodies in this regard.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the site's conservation objectives.

Reasoned Conclusion for EIA

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below.

The main significant effects, both positive and negative, are:

- Negative impacts on **human health and population** arising from construction include noise, traffic and dust disturbance to residents of neighbouring dwellings. All of these impacts are low to moderate. Adequate mitigation measures are proposed to ensure that these impacts are not significant and include adequate mitigation for operational noise.
- Benefits/positive impacts on the **Air and Climate**, the operation of the proposed development will have a significant positive effect on human health and population due to the displacement of CO_2 from the atmosphere arising from an increased use of public transport which will be electrified and the reduction of cars on the route. Negative impacts during construction relate to the embodied carbon of construction materials which will have a negative significant impact but for the short term, any increase in carbon is considered significant, however the construction phase represents a signficantly small percentage of the sectoral emission ceilings outlined in CAP 23 for the 2021-2025 carbon budget period, the proposed development represents 0.00967% of the transport emission ceiling for the period.
- Negative impacts on **Water** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering watercourses, the sea or groundwater via piling activities during the construction phase of the development. These impacts will be mitigated by measures outlined within the application and can therefore be ruled out.

- Negative impacts on **biodiversity** relate to the removal of habitat in the form of hedgerows and treelines. Such impacts are not considered significant and can adequately be mitigated for within the scheme. Vegetation will be planted in the vicinity to bolster existing treelines and hedgerow. Significant impacts are therefore not expected in this regard. The avoidance of trees with roosting potential for bats and the maintenance of commuting corridors, as well as preconstruction bat surveys will ensure significant impacts to bats are avoided. Preconstruction surveys will ensure that no mammals, birds or invasive species are present within the works areas. Adequate mitigation measures are proposed to ensure the protection of such mammals and birds encountered and to prevent the spread of invasive species. Significant impacts to biodiversity can therefore be ruled out.
- **Noise and Dust** impacts arise during the construction phase from construction activities. These impacts will be mitigated through adherence to best practice construction measures in relation to dust and the use of noise abatement at sensitive locations. Significant noise impacts arise in relation to construction noise during nighttime and weekend hours when thresholds are lower. Works will generally be carried out in daytime hours causing no significant effects. In the event that works are required during nighttime or weekend hours, liaison with residents in this regard and the use of noise abatement will reduce the level of impacts. Noise disturbance from the operation of the development can be ruled out, electric bus fleet and less cars will have a positive impact on operational noise. Significant impacts arising from noise and dust disturbance during the construction, operational and decommissioning stages can therefore be ruled out.
- Negative **traffic** impacts arise during the construction phase of the development, these impacts will be mitigated through the implementation of a traffic management plan and a construction management plan. Whilst some localised impacts arising from road closures may arise, significant impacts arising from traffic can be ruled out.
- The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate.

- The EIAR has considered that the main significant direct and indirect and cumulative effects of the proposed development on the receiving environment. Following mitigation, no residual significant long-term negative impacts on the environment or sensitive receptors would occur.

10.3. Having regard to the above, the Board is satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment. The Board is satisfied that the reasoned conclusion is up to date at the time of making the decision and that the information contained in the EIAR complies with the provisions of Article 3, 5 and Annex (IV) of EU Directive 2014/52/EU.

11.0 **Conditions**

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

   Reason: In the interest of clarity.

2. (a) All mitigation, environmental commitments and monitoring measures identified in the EIAR shall be implemented in full as part of the proposed development.

   (b) All mitigation and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.

   Reason: In the interest of development control, public information, and clarity.

3. Prior to the commencement of development at each section of the proposed works, pre-construction surveys shall be carried out to determine the presence of protected mammal, bird or bat species.

   Reason: In the interest of environmental protection

4. Proposed kerb height differentials between footpaths, cycleways and bus lanes shall be retained in perpetuity.

   Reason: In the interest of maintaining the proper functionality of the scheme.

5. The applicant shall plant low level hedging and or scrubs along the boundary with the Malahide Road of the proposed green area either side of the proposed pedestrian and cycle link at Ayrfield Drive.

   Reason: In the interest of visual amenity.

6. The applicant shall provide a footpath directly outside properties at and adjacent to 109 Malahide Road.

   Reason: To provide direct access to the front entrances to these properties.

7. In accordance with the EIAR, all works shall be monitored by an Ecological Clerk of Works or Ecologist. Where appropriate, monitoring shall be specialists. Monitoring schedules shall be included in Site Specific Habitats Protection and Re-instatement Method Statements.

   Reason: In the interest of environmental protection

8. In accordance with the EIAR, all works to Protected Structures, and Structures of Cultural heritage interest shall be monitored and recorded by an Architectural Heritage Specialist, Re-instatement Method Statements shall be submitted to the Local Authority to be held on file.

   Reason: In the interest of environmental protection

9. Noise monitoring shall be carried out at all times during the construction phase of the development.

   Reason: In the interest of environmental protection and public health.

10. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works in respect of both the construction and operation phases of the proposed development.

Reason: In the interest of environmental protection and public health.

11. Any new or improved surface water outfalls shall be constructed in a manner which protects riparian habitat and does not result in excessive erosion of such habitat.

Reason: In the interest of habitat protection.

12. Construction works will be undertaken in accordance with best practice and relevant guidance to prevent any deterioration of water quality and disturbance to bird species, as set out in the preliminary CEMP. These measures will be integrated in full into the final CEMP by the eventual contractor as a means of effective implementation of all measures. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste.

Reason: In the interests of public safety, protection of ecology and residential amenity.

13. The developer shall monitor queuing time / delays at each works location on the R107 and record traffic flows on the local road network at locations to be agreed with the Local Authority. Such monitoring information shall be provided in a report to the Local Authority on a weekly basis.

Reason: In the interest of orderly development.

14. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall – (A) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and (B) provide

arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove. In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

All archaeological pre-construction investigations shall be carried out in accordance with the details specified with the EIAR submitted with the application.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

15. (a) All lighting shall be operated in such a manner as to prevent light overspill to areas outside of compounds and works areas.

(b) Prior to the commencement of development, the applicant shall submit a detailed lighting plan to be held by the planning authority. The plan shall include the type, duration, colour of light and direction of all external lighting to be installed within the site compounds of the development site.

Reason: In the interests of clarity, and of visual and residential amenity and protection of local biodiversity.

16. Prior to the commencement of development, the applicant shall submit an Invasive Species Management Plan to the local authority, which includes details of a pre-construction survey to be carried out. The plan shall include full details of the eradication of such invasive species from the development site prior to construction or if discovered during construction as soon as is practicably possible.

Reason: In the interest of nature conservation and mitigating ecological damage associated with the development.

17. Trees to be felled shall be examined prior to felling and demolition to determine the presence of bat roosts. Any works shall be in accordance with the TII Guidelines for the Treatment of Bats during the construction of National Road Schemes.

Reason: In the interest of wildlife protection.

18. The developer shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

Reason: In the interest of the proper planning and sustainable development of the area.

19. No ground clearance shall be undertaken and no vegetation shall be cleared during the bird breeding season, unless otherwise agreed with the local authority.

Reason: In the interest of local biodiversity

Sarah Lynch
Senior Planning Inspector

9th August 2023

Appendix 1 – Summary of third-party submissions

Appendix 1

1. Anita Cullen:
    - Concerns in relation to opening of green space between 45 – 47 Ayrfield Drive.
    - The proposed works could give rise to antisocial behaviour.
    - Existing bus top access from the submitters home is adequate as is cycle infrastructure.
2. Bernie Grant
    - Concerns over the potential for the proposed development to give rise to antisocial behaviour. The green is planted and kept by residents who enjoy it as an amenity.
    - Justification required for opening of Ayrfield Drive, existing entrances present at Blunden Drive and at the church.
3. Dan and Marie Carolan & other
    - Concerns that work will open up access to dual carriage way where there is currently none.
    - Antisocial behaviour.
    - Loss of green play area for children.
    - Works will give rise to parking in estate.
4. Elizabeth D'Arcy
    - Concerns relating to child safety – abduction and drugs.
    - Increase in parking and traffic in estate.
    - Antisocial Behaviour, littering, noise dog theft.
5. Freddie Poole
    - Concerns relating to child safety, walk to bus stop is close.
    - Wish to retain green area and cul de sac.
6. Ian and Louise O'Shaughnessy & others
    - Concerns that proposed works will give children direct access to dual carriageway.
    - Antisocial Behaviour, loss of play area, noise, increases in traffic.
    - Local residents are against proposal.
7. James Kelly –

- Concerns that proposed works will give children direct access to dual carriageway.
- Antisocial Behaviour, loss of play area, noise, increases in traffic.

8. Patrick Gaffney:
   - Existing access to bus stop through church grounds.
   - Buses should be redirected to Blunden Drive to first roundabout which will facilitate residents of Greewood and Foxhill.
   - Concerns that proposed works will give children direct access to dual carriageway.
   - Antisocial Behaviour, loss of play area, noise, increases in traffic.
9. Peg Connolly:
   - Capacity of malahide road for extra traffic.
   - When estate was buit there was an opening at top of Slademore ave onto the Malahide rd, this was deemed to be too dangerous.
   - Loss of green area and concern about antisocial behaviour.
10. Robert Byrne
    - Loss of play area, antisocial behaviour, child safety concerns,
    - Existing entrances are adequate.
    - Additional parking in area with occur.
11. Seán Haughey TD:
    - Support residents' objections to the opening up of 45-47 Ayrfield Drive.
    - Concerns are similar to those set out above and will not be repeated.
12. Adrian and Anne Byrne:
    - Antisocial behaviour.
    - Loss of green play area for children.
    - Works will give rise to parking in estate.
    - Safety concerns.
13. Adrienne Murphy:
    - Child protection issues
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
    - Noise, traffic and parking.

14. Aidan & Christina McGovern: 1014(1). 1d &2d
    - Loss of privacy
    - Increase in noise and air pollution
    - Loss of parking for vehicles in front of property.
    - Creation of a traffic hazard for vehicles and entering and leaving the property.
    - Location of bus stop will create an obstruction to view.
15. Alan & Susan O'Brien
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
    - Noise, traffic and parking.
16. Alison Corrigan
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
    - Noise, traffic and parking.
17. Anthony Masterson
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
    - Noise, traffic and parking
18. Aodhán Ó Ríordáin TD
    - Bus corridor is a short to medium term solution.
    - Metro system is needed for future development of city.
    - Support in relation additional pedestrian crossings, cycle facilities, bus priority measures.
    - Haverty Road Barrier – this is welcomed.
    - Proposed pedestrian and cycle track linking Ayrfield Drive and Malahide Road is an area of concern, the existing green is a significant amenity for local residents and the loss would radically alter the character of their community. This element should not be included in the CPO.
    - Removal of the this element will not impact the functioning of the remainder of the project.

- Concerns are raised in relation to the location of bus stop at the Artane cottages, there is no space for a bus shelter at this location.
- Bus stop at this location would create ongoing disturbance to residents.
- Right turn for cyclists should be located at wider footpath area in front of no. 10 Artane Cottages.

19. Bernadette Clarke and Maria Clarke:
    - Property dates back to 1930's
    - 50.6sqm / 4.4 metres of garden is to be acquired.
    - Concerns relating to the impacts of traffic to house in terms of vibrations, noise, disturbance and loss of privacy.
    - Removal of mature trees and hedges.
    - Loss of trees will expose residents to additional pollution.
    - Loss of space will impact disabled residents and cars will be forced to back out onto dual carriageway.
    - How will access to mains sewer be accommodated.
    - Use of filter light rather than widening of carriageway should be used at this point.
    - The proposed project is not value for money.
    - There is no economic or social justification for the CPO.
    - Impacts to residents health and well being.
20. Blarney Stone Public House
    - Goblet Pub doors must open outwards, the removal of outside space and the installation of a footpath and cycleway in front of premises will lead to health and safety issues.
    - The proposal will result in the removal of outdoor seating thus impacting business.
    - Bus stop will impede sightlines from car park.
21. Brendan Heneghan:
    - Overall support for the scheme as much of it in terms of cycleways are in place.
    - Issues raised in relation to consultation process – compliance with Aarhus convention and the Kazakhstan advice on its application during covid.
    - Needs assessment not carried out.

- Different scheme to that consulted on.
- Lack of clarity in relation to proposed works.
- Site notices effected roads and fees – excessive for copies of documents and €50 cost of submission.
- Roundabouts – inconsistent approach throughout scheme, reference to Tallaght to Terenure corridor 10.
- No clear justification for the removal of roundabouts, expert opinion suggested. Retention of roundabouts in the absence of a clear justification for traffic lights.
- Removal of Artane roundabout should be reconsidered.
- Elimination of left turns not justified.
- Will bus lanes be used by cyclists in lieu of more complicated cycle lane junctions.
- Removal of trees is not indicated particular regard should be had to Brian Rd and Griffith Avenue.
- Simultaneous construction with other routes will cause disruption.
- NTA have made excessive claims in relation to improved bus journey times.
- Some houses now not affected but were previously under the emerging route documents.

22. Brendan Rice:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
    - Noise, traffic and parking.
23. Bridie and Joe Corcoran:
    - Safety concerns
    - Anti-social behaviour
    - Loss of play area.
24. Caroline O'Hara Plot 1039(1).1d, 1039(2).2d.
    - Restricts right of way to house.
    - Potential damage to structure of house.
    - Loss of parking space

- Safety
- Devaluation of property.

25. Chaira Hughes & Alan Byrne
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Anti-social behaviour
    - Loss of community space.
26. Cian O'Callaghan TD:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Anti-social behaviour
    - Loss of community space
    - Noise
    - Lack of consultation
    - Artane Cottages – lack of garden buffer, increased air and noise pollution and proposed distance to bus stop not feasible.
27. Cllr Daryl Barron:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Anti-social behaviour
    - Carparking issues.
28. Cllr Tom Brabazon:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Anti-social behaviour.
    - Lack of consultation.
29. David & Lisa Clarke: 1061 (1). 1d, 1061 (2) 2
    - Loss of parking spaces.
    - Concerns over potential collisions.
    - Noise concerns.
    - Loss of landscaping.
    - Inconvenience during construction phase.
30. Deborah Byrne: 1003(1). 1f
    - Objection to breaking through of wall at 45-47 Ayrfield Drive.

- Malahide road can be accessed via Blunden Drive to the north of Ayrfield.
- Child safety.
- Parking in estate.
- Noise issues, and crime.
- Loss of green space.
- Lack of consultation.

31. Denise Mitchell TD and others
    - Concerns relating to removal of green area at Ayrfield Drive
    - Safety concerns
    - Loss of amenity space.
    - Increase traffic and parking in estate.
    - Impede emergency vehicles.
    - Buttercup Park – loss of green space would diminish people's quality of life.
32. Dermot and Linda Kavanagh
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Access could create a rat run
    - People will leave area
    - Increase in noise and air pollution.
    - Loss of usable open space for children.
33. Donneycarney West Community Association:
    - Measures to reduce traffic speeds on Malahide road are requested.
    - Crossing times and improvements are required to facilitate vulnerable users at locations such as Elm Road.
    - Relocation of bus stop 672 to Casino Park/Cherry Mount is less convenient.
    - Proposed green area to front of 109 Malahide road makes no sense.
    - Redesign at this location removes access to lane serving houses.
    - Eir advertising unit will cause obstruction.
    - Flower baskets are retained at shops on Malahide road.
    - Clarification of off-street parking at 179 to 187 Malahide Road.

- Improvement of main entrance to Casino Park.

34. Dublin Commuter Coalition:
    - Road width justification.
    - Alternative design would be more appropriate.
    - Enforcement measures for traffic compliance need to be included in scheme.
    - Primary junction design is in appropriate and should be more like the Dutch junction design. Proposed junction has potential to create conflict with cyclists.
    - Two stage crossings do not prioritise pedestrians.
    - Some junctions are missing.
35. Dublin Cycling Campaign:
    - Without modifications the project will not deliver a modal shift.
    - Left turning with traffic instead of pedestrians will result in collisions.
    - Unproven junction designs will put people at unnecessary risk, Dublin junction design will mean cyclists cross junctions at the same time as traffic.
    - Visit Ballbutcher lane in Ballymun or Lombard Street / Townsend Street junction – Dublin style junction where near misses are reported.
    - Dutch style is more appropriate design.
    - Planted green buffers are recommended between traffic and cycle lane.
    - Lanes should be 2/2.25m
    - All toucan crossings on Malahide Road are shared spaces, separate walking/cycling should be provided.
36. Dun Laoghaire Rathdown County Council:
    - Council supports the proposed development.
37. Eamon Kearney:
    - Objects to breaking an entrance at Ayrfield Estate.
38. Eamon McGlinn:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Increase in noise and air pollution.

- Loss of usable open space for children.

39. Eamon Tierney:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Community has worked hard to maintain area and closed up alley ways which lead to antisocial behaviour.
40. Edel Carroll
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Access could create a rat run
    - Increase in noise and air pollution.
    - Loss of usable open space for children.
41. Elizabeth Keegan:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Increase in crime.
42. Eoin Lynam:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Increase in traffic
    - Loss of usable open space for children.
43. Eva Gahan:
    - Supports barrier that will prevent rat running at Haverty Road.
    - Cars are driving at speed up the 'no right turn' and giving rise to serious traffic safety issues.
    - Gardai can not address effectively.
44. Fintan and Eileen Murphy: 1068(1).1d, 1068(2).2d
    - Property will be closer to main road and therefore more vulnerable.
    - Concerns over how the residents will lock gates on leaving property as there will be no where to pull in.
    - Residents of Maypark must be permitted to use bus lane.
45. Gareth Young:

- Concerns relating to removal of green area at Ayrfield Drive
- Child Safety
- Anti-social behaviour
- Access could create a rat run
- Lack of consultation.
- Door to door poll suggests 97% residents are opposed to breaking entrance at the green area.
- Increase in noise and air pollution.
- Loss of usable open space for children.

46. Garrett and Rena Carey:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Increase in traffic
    - Loss of usable open space for children.
47. Garrett and Clara Guinane: 1048(1).1d, 1048(2).2d
    - Object to land acquisition as it appears to be surplus for scheme,
    - Inadequate mitigation in relation to noise.
    - Inadequate details have been provided in relation to speed bumps/traffic calming measures.
    - Object to road closures.
    - Lack of detail provided for access to property.
    - Road will be too close to house.
    - Inadequate drainage details.
    - Health and safety in relation to dwelling access.
    - Inadequate screening proposed.
    - Inadequate detail in relation to boundary treatment.
    - Lack of detail in relation to road level changes.
    - Lack of clarity regarding set back distances.
    - Irreparable damage will occur to local environment.
    - Lack of communication with residents, no offer of relocation.
    - Impact to work environment.
    - Impact to enjoyment of home.
    - Lack of alternatives explored.

- Oral hearing requested.
- Information provided by acquiring authority is incomplete.

48. Gemma and Brendan Finn:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
    - Current bus stop location is accessible.
49. Gerard and Davina Murnaghan:
    - Object to land acquisition as it appears to be surplus for scheme,
    - Inadequate mitigation in relation to noise.
    - Inadequate details have been provided in relation to speed bumps/traffic calming measures.
    - New gate will be required, no details have been provided.
    - Object to road closures.
    - Lack of detail provided for access to property.
    - Road will be too close to house.
    - Inadequate drainage details.
    - Health and safety in relation to dwelling access.
    - Inadequate screening proposed.
    - Inadequate detail in relation to boundary treatment.
    - Lack of detail in relation to road level changes.
    - Lack of detail in relation to lighting.
    - Lack of clarity regarding set back distances.
    - Irreparable damage will occur to local environment.
    - Lack of communication with residents, no offer of relocation.
    - Impact to work environment.
    - Impact to enjoyment of home.
    - Lack of alternatives explored.
    - Oral hearing requested.
50. Jacqueline and Anthony Grant:
    - Conflict with cyclists on cycle lane.

- New plan will have to navigate footpath, cycle lane and bus lane prior to getting onto Malahide Road.
- Reduction in number of car parking spaces available to house.
- Noise
- Inconvenience of building works.
- Access to driveway will be restricted.

51. James English:
    - Overall support of proposed development.
    - Improved safety for vulnerable road users.
    - Closure of rat run
    - Proposal will bring better sense of community
52. Jennifer Mc Laughlin:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased traffic in area
    - Current bus stop location is accessible.
53. Joe Thompson:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased traffic in area
    - Noise
54. John Fannin:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased traffic in area
55. Ken Lynam:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety

- Anti-social behaviour
- Loss of green space
- Increased parking in area
- Current bus stop location is accessible

56. Kerri McCracken:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
57. Kieran & Brenda Mahon:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Current bus stop is accessible.
58. Leslie & Bernadette Doyle:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour/crime
    - Loss of green space
    - Increased parking in area
    - Noise
59. Liene Atrena & Konstantinos Pachoulas:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour/crime
    - Loss of green space
    - Increased traffic in area
60. Linda & Christopher Hamilton:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour/crime
    - Only estate with access to dual carriageway.
61. Lorraine and Paul Carroll:
    - Concerns relating to removal of green area at Ayrfield Drive

- Child Safety
- Anti-social behaviour
- Loss of green space
- Increased parking in area

62. Mandy & Tony Donnelly:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
63. Margaret Quinn:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
    - Bus stop is accessible.
64. Maria Kavanagh:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
    - Noise and rubbish.
65. Mark & Shirley Rose:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Lack of communication from NTA
    - Decrease in property value.
66. Mark Byrne:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Previous campaign to close up lanes improved safety in area.
67. Martin Baker:

- Concerns relating to removal of green area at Ayrfield Drive
- Child Safety
- Anti-social behaviour/crime
- Increase in traffic in estate
- Increase in noise due to proximity of bus stop and pedestrian crossing to house.
- Loss of privacy due to bus stop looking into rear of house.
- Perceived convenience would be outweighed by impact it would cause.

68. Martin Lewis:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Noise
69. Martina Devlin:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
70. Michael Healy:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area
    - Noise
    - Increase in traffic volumes
71. Niall Maher:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Increased parking in area

- Increase in traffic volumes

72. Noel Regazzoli:
    - Concerns regarding Mornington Park
    - 3.5 metres to be taken from front garden
    - Disabled person in property, daily travel requires a bus to stop at side of road outside house, proposal would render this not possible.
    - Disturbance to birds via removal of hedge
    - Removal of trees of sentimental value
73. Patricia Normally & Patrick Claffey:
    - Fully support barrier to stop illegal traffic on Haverty Road.
74. Patrick Carey and others:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Traffic Hazard
75. Patrick Claffey & others:
    - Support measures to improve safety on Carleton Road and Haverty Road.
    - Barrier junction as proposed is only option as motorists ignore the no right turn into Haverty Road.
    - There is ample room for turn around space at the junction if parked cars are removed.
76. Paul Foley:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Traffic Hazard
77. Paula & Declan Free:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space

- Traffic Hazard
- Community have created an eco-system in green area.
- Increase in parking which will impact vulnerable pedestrians and wheelchair users.
- Increase in litter

78. Raymond & Ursula Butler:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Parking problems
79. Roisin Harbourne
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Parking problems
    - Increase in traffic which impacts safety
    - Lack of safety measures in design
    - Supportive of scheme apart from this element.
80. Ruth Moloney:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Parking problems
    - Increase in traffic in estate
81. Ruth Penny & others:
    - Lack of clear documentation and cost of submission is prohibitive
    - Majority of people on Haverty road wanted the status quo and were unaware of the proposal.
    - Road closures are a significant inconvenience.
    - Increase volumes of traffic as a result of road closures and increase in speeds.

- Residents will be forced to give up front gardens and green areas to park cars.
- Access to homes will be more difficult if there are more scooters and bikes passing.
- These vehicles pose a threat road safety.
- Proposal to block off Haverty road will impact access to other areas and the local school.
- Proposal will relocate rat run.
- Impact to house prices.

82. Sean Haughey TD
    - Residents to Artane cottages are strongly against proposal.
    - Artane Cottages – oldest remaining buildings on this stretch of road, these houses suffering from severe, air, light and noise pollution and lack of privacy.
        - EIA identifies a low visual impact in relation to the proposed new bus stop opposite these cottages.
        - Impact on residential amenity to these cottages is not recognised anywhere in EIA.
        - The bus stop will undermine the residents efforts to maintain the original character of these houses.
        - Removal of existing bus stops on either side of Artane cottages was not considered in depth during the consultation stage and should have been highlighted more clearly within these stages of change.
        - Justification for location of bus stop at Artane Cottages is not adequately addressed.
        - Distance between two bus stops to be removed is similar to all other proposed bus stop separation distances, it is argued that there is no justification for removing these stops and instead these should be modified.
        - Proposed bus stop at Artane cottages is substandard in terms of design.
        - Proposed bus stop also does not retain agreed 3.5 metre width of footpath.

- Reduction of cycle lane width to 1 metre at bus stop is also not acceptable and is contrary to guidance.
- Bus stop is not appropriate for wheelchair users as it requires the crossing of a cycle lane.
- Sufficient seating is not provided at bus stop which will lead to people sitting on window cills.
- The project will see the removal of two sheltered bus stops and the replacement with a section of shared path.
- Bus stop location is in contravention of NTA's own criteria.
- It is the duty of NTA and Local Authority to not worsen living environment for residents. It is contended that the bus stop would worsen conditions for the residents of the Artane cottages.
- Pedestrian crossing is c. 25m from bus stop which will result in buses backing up in front of the houses.
- Objection to the local narrowing to the footpath at the junction – proposed layout leaves 1.8m footpath compared to the current 3.5m. These changes also divert footfall closer to the cottages.
- Cycle lane could be accommodated at the front of no.10 Artane cottages where footpath is wider and allowing for a two way cycle lane on the northern and western arms of junction or revised cycle crossing layout on northern arm.
- Existing bus stops are located at areas with signficantly wide footpaths.
- A revision of bus stop 1219 south by 30-50m in front of 25a Malahide road would move 1277 to more than 250m, bus stop 1220 could be retained and all stops would be in the proposed separation range.
- In the case that these bus stops can not be retained, the new stop could be relocated to 302/300 Malahide Road whereby properties have deep front gardens.
- This could be coupled with the relocation of bus stop 1277 south.

- Improvement of access to pedestrian crossing provided by proposed new bus stop at Artane Cottages is signficantly outweighed by the negative impact to the cottages.
- There are multiple bus stops proposed within the development which are in excess of 50 m.
- There is a request for direct engagement with residents during the implementation stage of the development in relation to details related to the replacement gate, detailed finishes of footpath with the inclusion of a French drain.
- Clarification in relation to proposed car parking, currently residents park on footpath, access to rear gate needs to be improved.
- No bollards should be placed between Artane Cottages and the development as this would prevent deliveries and maintenance to these properties.

83. Sherry Abraham & Bijo George
    - NTA ignoring proposal put to them.
    - NTA did not engage properly.
    - Request for a bus priority lane north and south would reduce land take and has been implemented in other bus connects routes.
    - Occupant of house has restricted mobility and proposal will impact parking.
    - Impact to mature trees
    - 5 cars associated with house
    - Persistent correspondence yielded no response until Ministers and TDs became involved.
    - Neighbouring property requires access for disabled person also.
84. Sorcha Eivers:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Anti-social behaviour
    - Loss of green space
    - Parking problems
    - Increase in traffic which impacts safety

85. Stephen Flanagan:
    - Concerns raised in relation to scheme and its impact on safe access to house
    - Scheme will reduce turning space at front of house
    - Proximity of road to house poses safety issues
    - Air pollution
    - Noise pollution and related health effects
    - Loss of value to property
    - Unable to sell house due to planned works.
86. Tesco Ireland:
    - HGVs current use junction at front of shop to enter, tesco want to ensure that this remains the case.
    - When turning right, all cyclists should be held by red light to prevent accidents.
    - Concerns relating to modelling.
    - No tracking modelling has been provided to demonstrate that vehicles can be accommodated safely at the tesco junction.
    - Swept path analysis is requested for this junction.
    - Concerns relating to modelling accuracy at Clare Hall junction
    - Validation and calibration is required for this element of the process and data should be collected for the network peak as well as the retail peak periods.
87. Veronica Byrnes:
    - Concerns relating to removal of green area at Ayrfield Drive
    - Child Safety
    - Increase in traffic which impacts safety
    - Parking problems
88. Anna Hofheinz & others:
    - EIA identifies a low visual impact in relation to the proposed new bus stop opposite these cottages.
    - Impact on residential amenity to these cottages is not recognised anywhere in EIA.
    - The bus stop will undermine the residents efforts to maintain the original character of these houses.

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- No bollards should be placed between Artane Cottages and the development as this would prevent deliveries and maintenance to these properties.

Appendix 2

7. Dublin City Council

- In terms of planning policy, it is stated that the proposed development is in compliance with the RSES and is recognised as a development which will support regional growth for the Eastern and Midlands Region and the Dublin MASP. High quality bus corridors will enable and support the delivery of both residential and economic development opportunities.
- The proposal has been considered in relation to the core strategy of the Dublin City Council Development Plan.
- The Council will not comment on the acceptability of the EIAR.
- The NIS is acceptable, no concerns are raised in relation to the conclusion of the NIS.
- The development is largely on road and footpaths whereby there is no specific zoning objectives, the development does pass through a small section of the conservation areas at the junction of the Malahide Road and Greencastle Road given the nature of the development it is stated that the proposal is unlikely to have any impact on the character of the conservation area.
- The council is satisfied that the proposed development which falls within the administrative boundary of the Council will not have any excessive or undue impact on the amenities of the area.
- Temporary traffic disruption is acknowledged but long-term impacts are considered to provide for enhanced amenities.
- The scheme is fundamental to achieving the objectives of compact and sustainable growth; sustainable mobility and permeability and place making, while signficantly contributing towards climate action.
- It is submitted that the proposed development must not impede the development of Belcamp Lane lands as outline in the new DCC Development Plan.

<u>Environment and Transportation Comments</u>

- Overall strong support for proposed scheme.
- Scheme will remove bicycles from bus lane and therefore improve speed of bus service.

- DCC links to bus information in relation to traffic flow management will be upgraded to improve this service and ensure free flow for buses. This digital improvement is necessary to ensure the scheme operates to its full potential.
- Scheme should seek to maintain existing footpath where possible and seek to improve pedestrian connectivity to bus stops.
- Where cycle lanes move behind bus stops and car parking areas, measures should be put in place to slow cyclist down.
- NTA should undertake a substantial awareness campaign and behavioural change programme.
- Changes to parking at commercial units is proposed, adequate set down for deliveries should be provided at these premises and changes to parking and road markings should be agreed with DCC.
- Where residential properties are to lose space adequate dimensions of 3mx5m should be retained to facilitate parking and adequate manoeuvring in these gardens.
- Greener and softer approach to the management of surface water drainage should be used.
- Clongriffin CBC outfalls to a number of protected waterbodies that are identified as Priority Areas for Action under the Water Framework Directive's 2nd and 3rd River Basin Management Plans. The proposal should not impact the Councils efforts to obtain a 'good' water status for waterbodies that the proposal is contiguous with downstream.
- Council have initiated Santry Restoration and Greenway Project which is contiguous with the proposed Clongriffin CXBC Scheme, NTA should engage with the LA in this regard in order to ensure the achievement of this environmental project's objectives.

<u>Archaeology</u>

- Project runs through the Zone of Archaeological Constraint for two Recorded Monument listed on the Record of Monuments and Places –
    - ❖ Malahide road runs through the Zone of Archaeological Constraint for the Recorded Monument DU018-006 Bridge – Donnycarney Bridge,
    - ❖ At south end of Malahide Road, site runs through the Zone of Archaeological Constraint for the Recorded Monument D018-067 9

burial site) where human remains were unearthed during construction of the Georgian houses at Marino Crescent.

- ❖ The scheme runs immediately adjacent to Zone of Archaeological Constraint for the Recorded Monument DU015-074 (mound). Proposal will not affect the setting of the recorded monument and is well screened from the route in its immediate setting within the Cadbury Factory Grounds.
- ❖ Two bridges on the Malahide road are listed on the Dublin Industrial Heritage Record - 15_13_009 Coolock Bridge and 18_04_010 Donnycarney Bridge.
- ❖ The archaeology department of the Council concurs with the broad methodology of the EIAR in relation to archaeology and monitoring.

<u>Conservation Department</u>

- o The proposed works were possible avoid loss of the city architectural heritage.
- o A List of Protected structures adjacent to the route are listed in the Council's response. No impacts are expected however the front boundaries of two protected structures – RPS 4852 & 4853 are to be altered. It is stated by the Council that these are later replacement boundaries.
- o Buildings and other non protected structures included in the National Inventory of Architectural Heritage are also listed in the response. An improved bus stop is proposed at the front of Church of our Lady Consolation (NIAH 50130252), it is recommended that this is kept in its existing location.
- o Terrace of 9 houses 20-36 Malahide Road – boundaries to be altered – some properties retain historic railings which are important contributor to special character of these structures.
- o Three post boxes on Malahide road require protection from works.
- o Former electricity substation at junction between Malahide Road and Clontarf Road will require protection.
- o Bus shelter at Marino Health Centre will be screened by grass verge and trees.
- o Structures within the route of the development listed on the Dublin City Industrial Heritage Record Survey:
    - o Coolock Bridge – only west elevation of bridge survives and some may remain under the road surface. Surviving parapet will need repair work.

    - Donnycarney Bridge – West parapet is only surviving element of the bridge and is to be protected during construction.
- ACAs – Route runs along part of Marino ACA, no historic buildings or features near.
- Z2 lands which seek to protect/improve amenities of residential conservation areas, run along Haverty road, Carleton Road and St. Aidan's Park Road.
- The following protected structures are impacted by the proposed works:
- 78 properties will be impacted by the proposed widening, details of changes are not specific as there is reference to a temporary land take. The variety of boundaries along Malahide Road provides commentary on the evolution of the city's residential areas.
- There is a potential impact to historic kerbing, paving, street furniture and lamp standards –
    - Historic kerbing at Mount Temple School – should be protected.
    - Kerbing/cobbles at entrance to Clontarf Golf club – provenance to be ascertained prior to works.
    - Historic lampposts on Haverty Road, Carleton Road, and St. Aidans Park – should be protected.
    - Cast Iron bollard along boundary of Clontarf Golf Club – Should be retained and protected.
    - Post box on Malahide Road to north of Collins Ave, to be relocated as part of works – recording in original position to be carried out.

<u>Tree Removal-</u>

- Loss of trees will have a significant impact on RPS 4852 & 4853.
- Loss of trees along boundary of Clontarf Golf Club would have impact on the setting of Mount Temple Lodge.
- All measures to retain and protect historic paving, setts, kerbing and Associated features should be carried out.

<u>Boundary treatments</u>

- All boundary treatments the contribute to the special character of Protected Structures and their settings, ACAs and areas zoned Z2 in the City Development Plan should be retained where possible or where relocated are replaced on a like for like basis.
- All works should be supervised by an expert in architectural conservation.

- Relocation of boundaries should respond to the parent structure.
- Photomontages suggest that detailing and design of replacement boundary walls will not be done on a like for like basis and which will reflect an erosion of character in these areas particularly around early 20th Century housing schemes. These relate to View no. 1-4

General comments

- Street Furniture should be retained or sensitively relocated.
- Open spaces and gardens provide important function and should be retained where practicable.
- Loss of on street parking will place pressure on the need to alter front gardens.
- Measures to mitigate visual impact of bus stops/shelters should be used.
- Signage to be kept to minimal
- Red tarmac for cycle lanes may have impact on historic areas, an alternative colour will be required in these areas.
- Scheme will enhance a modal shift.
- Overlay of survey drawings at a larger scale over proposed drawings would have assisted in assessment.
- Scale of drawings too small, clarity in relation to quantity of compensatory street planting along route.
- Arborist and landscape architect should be appointed for duration of works to ensure trees indicated for retention are retained.
- List of recommended conditions are provided in the Appendix of the submission.

8. Dun Laoghaire Rathdown County Council

- Whilst the development falls outside of the Council's jurisdiction, support is given to the development from the Council and the Bus Connects Scheme is also supported within the Dun Laoghaire Rathdown Development Plan.

9. **Transport Infrastructure Ireland**

   No observations to make.

10. Department of Housing, Local Government and Heritage - DAU

- No removal of trees/hedgerow during breeding season.

11. Inland Fisheries

- Mayne River – non salmonoid
- Santry River – Non salmonoid, river restoration is underway with greenway project, brown trout were recorded in lower reaches.
- Tolka – linkage for migrating salmon, sea trout and eels.
- Adequate protections are required during construction through environmental construction management planning.
- Any dewatering of excavations must be treated by overland infiltration or attenuation area.
- Guidelines on protection of fisheries during construction should be consulted.

12. Irish Water

- No objection in principle
- Applicant has engaged with IW
- Detailed design drawings are required.
- Designs will have to be in accordance with IW standard details and codes of practice, all specifications for design details are outlined in submission.