

Inspector's Report ABP-317121-23

Development BusConnects Swords to City Centre

Bus Corridor Scheme

Location Swords to Dublin City Centre

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

Observers(s) Refer to Appendix 1

Prescribed Bodies Fingal County Council

Dublin City Council

Department of Housing, Local

Government and Heritage

Transport Infrastructure Ireland

Dublin Airport Authority

Date of Site Inspections 24th August 2023

Inspector Liam Bowe

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Appendix 1: Third Party Submissions

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 12km along the Swords Road (R132) from Pinnock Hill Junction, through Santry Village, Drumcondra, and along Dorset Street Lower and Upper to finish at the southern ends of both Parnell Square East and West. 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 317164-23. 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 12th August 2021.
- 1.4. The Application is accompanied by an EIAR and a NIS. No Oral Hearing was held in relation to the application as per the Boards Direction dated 22nd December 2023.

2.0 Site Location and Description

- 2.1. The proposed scheme submitted under this application will comprise the construction of the Swords to City Centre Bus Corridor which has an overall length of approximately 12km and commences south of Swords at Pinnock Hill Junction and travels in a southerly direction along the R132 Swords Road past Airside Retail Park, Dublin Airport and Santry Park. The route continues on the R132 past Santry Demesne, where the Swords Road joins the R104 at Coolock Lane. The route continues on the R132 in a southerly direction through Santry Village. It continues along the Swords Road past Whitehall to Griffith Avenue. The route follows Drumcondra Road Upper past the Dublin City University St Patrick's Campus to the River Tolka. It continues through Drumcondra, on Drumcondra Road Lower to Binns Bridge on the Royal Canal. From there it continues on Dorset Street Lower as far as Eccles Street, from where it continues on Dorset Street Upper to North Frederick Street and Granby Row and finishes at the southern ends of both Parnell Square West and Parnell Square East. The route lies entirely within the administrative areas of Fingal County Council and Dublin City Council.
- 2.2. The Swords to City Centre Cycle & Bus Priority Project will provide segregated cycling facilities and bus priority infrastructure along the 12km route that extends from Pinnock Hill Junction to the south of Swords to Parnell Square West and East in the city centre.
- 2.3. From the Pinnock Hill Junction, south of Swords to Airside Junction, the existing route comprises two inbound and one outbound general traffic lanes, inbound and outbound bus lanes and footpaths. At this point, the route is semi-rural in character until approaching the Airside Retail Park.

- 2.4. From Airside Junction to Northwood Avenue, the existing route narrows slightly to accommodate single lane general traffic and inbound and outbound bus lanes with inbound and outbound advisory cycle lane passing the Texaco filling station. This format continues to the Cloghran Roundabout where inbound and outbound cycle lanes are introduced in order to facilitate cyclists navigating the roundabout. This part of the route has rural aspects (fields and hedgerows) but there are a number of retail parks and commercial uses in places with the airport side of the Swords Road treelined to the Airport Roundabout. From the Airport Roundabout, the existing route widens to accommodate two lane general traffic, inbound and outbound bus lanes, and inbound and outbound cycle lanes, which continues to the southern end of the airport and the entrance to Dardistown Cemetery. From this point onwards, the route narrows and becomes more urban/commercial in nature. By narrowing, it accommodates single lane general traffic and inbound and outbound bus lanes where it proceeds under the M50. Both cycle lanes become dedicated after the Furry Road/ Turnapin Lane Junction until Northwood Avenue.
- 2.5. From Northwood Avenue to Shantalla Road, the road continues past Santry Park into Santry Village with single lane general traffic and inbound and outbound advisory cycle lanes. An inbound bus lane and dedicated inbound cycle lane is introduced near the entrance to Morton Stadium but the inbound cycle lane is incorporated in the bus lane shortly after this point. The route widens briefly between Coolock Lane and Santry Avenue but re-establishes to a narrower from of single lane general traffic and an inbound bus lane until the Omni Park Shopping Centre entrance/ junction. After this it narrows again to single lane general traffic and an advisory outbound cycle lane. The route now enters a residential part of the city to its junction with Shantalla Road.
- 2.6. At Shantalla Road, the Swords Road splits for a short distance as the southbound carriageway traverses the N1/Dublin Tunnel and then turns southwards to re-join the Swords Road at Whitehall Church. The route continues past Whitehall Junction in the form of single lane general traffic and inbound and outbound bus lanes with an outbound cycle lane. An inbound cycle lane recommences after the entrance to the Bonnington Hotel. From the junction with Griffith Avenue, Drumcondra Road Upper is tree lined on both sides and forms an instant change of character entering Drumcondra Village. The outbound cycle lane is only demarcated at this point until

- the Ivy House where the inbound cycle lane recommences for a short distance. There is an outbound cycle lane present and sharing the bus lane on the outbound side passing the DCU campus/ St. Patrick's College and on-street parking is present opposite the retail units in Drumcondra village.
- 2.7. Crossing Drumcondra Bridge over the River Tolka, the route is comprised of two lanes of general traffic that recommences as single lane general traffic inbound and outbound with inbound and outbound bus lanes after Fagan's public house. The inbound and outbound cycle lanes become segregated from the traffic at this point by railings and grass margins with mature trees within the grass margins. This continues almost to the junction with Clonliffe Road where two lane inbound and outbound traffic recommences. There is an inbound bus lane on this part of Drumcondra Road Lower and a planted median runs to Binn's Bridge as the route crosses the Royal Canal.
- 2.8. The median planting is re-established on Dorset Street Lower as the route continues with two lanes of general traffic inbound and outbound and both inbound and outbound bus lanes. This format continues along the route, past the Big Tree public house, to its junction with Eccles Street. From Dorset Street Upper, the route begins to narrow and continues in the form of single lane general traffic and inbound and outbound bus lanes. The bus lane then turns southwards down Frederick Street North and onto Parnell Square East where it joins the existing bus network infrastructure. Cyclists have the option at this junction to turn down Frederick Street North or to continue along Dorset Street Upper. The outbound bus lane and general traffic lane runs northwards from Parnell Square West to join Granby Row and onto Dorset Street Upper where it meets the equivalent inbound lanes again at the top of Frederick Street North. Cyclists share the road space with buses along here.
- 2.9. The major junctions along the route are as follows:
 - Swords Road/Pinnock Hill Roundabout.
 - Swords Road/Airside Junction,
 - Swords Road/Cloghran Roundabout,
 - Swords Road/Airport Roundabout,
 - Swords Road/Corballis Road,

- Swords Road/Old Airport Road,
- Swords Road/Turnapin Lane,
- Swords Road/Coolock Lane,
- Swords Road/Santry Avenue,
- Swords Road/Lorcan Road at Omni Park Shopping Centre,
- Swords Road/Shantalla Road,
- Swords Road/Collins Avenue,
- Swords Road/Griffith Avenue,
- Swords Road/Richmond Road,
- Swords Road/Botanic Avenue,
- Drumcondra Road Lower/Clonliffe Road,
- Drumcondra Road Lower/Belvedere Road,
- Dorset Street Lower/North Circular Road,
- Dorset Street Lower/Gardiner Street Upper,
- Dorset Street Lower/Eccles Street,
- Dorset Street Upper/Frederick Street North, and
- Dorset Street Upper/Granby Row.

3.0 **Proposed Development**

3.1. The Proposed Scheme submitted under this application will comprise the construction of the Swords to City Centre Bus Corridor which has an overall length of approximately 12km and is routed along the R132 Swords Road. The Proposed Scheme travels in a southerly direction along the R132 Swords Road past Airside Retail Park, Dublin Airport and Santry Park. The route continues on the R132 past Santry Demesne, where the Swords Road joins the R104 at Coolock Lane. The route continues on the R132 in a southerly direction through Santry Village. It continues along the Swords Road past Whitehall to Griffith Avenue. The route follows Drumcondra Road Upper past the DCU St Patrick's Campus to the River Tolka. It

continues through Drumcondra, on Drumcondra Road Lower, to Binns Bridge on the Royal Canal. From there it continues on Dorset Street Lower as far as Eccles Street, from where it continues on Dorset Street Upper to North Frederick Street and Granby Row.

3.2. Key improvements include:

- The number of pedestrian signal crossings will increase by 47% from 86 to
 125 as a result of the Proposed Scheme,
- The total segregated cyclist facilities (both directions) will increase from 6.8km to 18.8km and the proportion of segregated cycle facilities will increase from 48% on the existing corridor to 100% on the Proposed Scheme, and
- The proportion of the route having bus priority measures will increase from 72% on the existing corridor to 100% on the Proposed Scheme.

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

- 100% of route with bus priority measures and traffic management.
- 21.6km (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 a pedestrian and cycle bridge consisting of a 50 metre 2-span steel structure to the western side of Frank Flood Bridge.
- Provision of 34 junction upgrades including conversion of two existing roundabouts to signalised junctions and associated ancillary works.
- Reconfiguration of existing bus stops resulting in 24 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 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.
- 3.4. The Construction Phase for the Proposed Scheme is anticipated to take approximately 36 months to complete. It will be constructed based on individual sectional completions that will individually have shorter durations typically ranging between 3 to 18 months. Various amounts of third-party lands will be required to be compulsorily acquired along the entirety of the route to facilitate the proposed development.
- 3.5. The applicant lodged the application to the Board on 12th May 2023. The application was accompanied by the following documents:
 - Environmental Impact Assessment
 - Natura Impact Assessment
 - Relevant plans and particulars
 - Supplementary Information including a Planning Report, Public Consultation
 Report and a Preliminary Design Guidance Booklet
 - Relevant Public Notices and Prescribed Body Notices
 - Preferred Route Option Report

4.0 Submissions

4.1. Prescribed Bodies

4.1.1. Submissions have been received from 5 no. prescribed bodies which are summarised hereunder and under section 4.3. 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. Transport Infrastructure Ireland (TII)

 TII's submission seeks to address the safety, capacity and strategic function of the national road network and existing Luas.

Summary of potential interaction with the Proposed Scheme

- TII observes that the Proposed Scheme will interact with the national road network carriageways and the light rail network at five general locations:
 - (i) R132 Airport Roundabout,
 - (ii) Crossing under the M50 between Junctions 3 and 4,
 - (iii) Coolock Lane adjacent to Junction 2 of the M50,
 - (iv) Part travelling over the Dublin Tunnel, and
 - (v) Parnell Square East and West where the Luas runs.
- TII highlight that neither the existing national road nor light rail networks appear to be separately considered as discreet chapters or subsections of the submitted EIAR.
- TII request that a commitment is made to include a detailed Construction Traffic Management Plan in the CEMP.
- TII consider that it would have been appropriate to include and record mitigation of potential impacts for the protection of national roads and light rail networks as part of Chapter 22 of the EIAR and the CEMP.

National Roads Interaction and Mitigation

- TII advises that any crossing of the national road network, including by under (M50) or overpass (Dublin Tunnel) will require prior consultation with TII and compliance with TII standards.
- TII advises that consultation and appropriate protocol agreement with the Motorway Maintenance and Renewals Network A Contractor (MMaRC) is required in relation to works at the R132 Airport Roundabout.
- TII notes that minor modification to the verge beneath Turnapin Bridge (underbridge carrying the M50) has been agreed with the NTA but advise that all detailed design and execution be in accordance with TII Publications standards and access protocol be followed.
- Prior consultation will be required for any works at Coolock Lane that may impact the national road network including pavement, structures and drainage adjacent to Junction 2 of the M50.

- TII advises that works to be carried out to or in close proximity to Dublin
 Tunnel must be subject to co-ordination with and the prior approval of TII.
- It is appropriate that specific mitigation and monitoring commitments for potential impact on the national road network are reflected in the scheme and in the proposed CEMP.
- TII advises that the Proposed Scheme includes the introduction of new infrastructure within the TII MMaRC boundary, which will have consequences for liability and maintenance responsibilities.
- TII recommend conditions in relation to written agreement for plans and details of works on or in the vicinity of the national road network, long term maintenance agreements, Design Reports, written agreement of the CEMP, and written agreement of a Construction Traffic Management Plan.

Light Rail Interactions and Mitigation

- The proposed works at the junction of Parnell Street with Parnell Square
 East (Cavendish Row) and Parnel Square West will require a specific
 construction methodology approach, co-ordinated with TII and Luas
 operator to ensure the protection of the asset and minimal Luas service
 disruption.
- TII advises that works associated with the Proposed Scheme have the
 potential to impact on the capacity and efficiency of the Luas infrastructure
 and service, and consider that specific mitigation and monitoring
 commitments for potential impact are reflected in the scheme and in the
 proposed CEMP.
- TII recommend conditions in relation to Overhead Conductor System
 poles, written agreement of the CEMP, timing of works outside of Luas
 operational hours, written agreement of a Construction Traffic
 Management Plan, access and maintenance agreement with Luas
 operator/ TII, and the requirement for a works permit under the Light
 Railway (Regulation of Works) Bye Laws 2004.

2. Fingal County Council

 FCC strongly supports the Core Bus Corridors element of the BusConnects programme.

- In terms of planning policy, it is stated that the proposed development is in compliance with CAP23, the NPF, the NDP, the National Sustainable Mobility Policy, the National Investment Plan for Transport in Ireland, the RSES and the Transport Strategy for the Greater Dublin Area.
- The proposal is also supported by local planning policy within the Fingal
 Development Plan 2023-2029 particularly in the promotion of integrated landuse and transportation and the role of public transport in supporting the
 future sustainable and economic growth of Fingal.
- The Development Plan also highlights the South Fingal Transport Study 2019 and its recommendations (including BusConnects) for facilitating sustainable growth within the Swords and south Fingal areas, particularly before the delivery of Metrolink.
- FCC bring attention to some other land-use plans in the vicinity of the Proposed Scheme, including Barryspark and Crowscastle Masterplan,
 Fosterstown Masterplan, Dublin Airport LAP and Dublin Airport Masterplan.
- Sustainable Swords 2022 is a strategy that includes a public realm and transport strategy to facilitate more sustainable modes of transport to places of work and study as well as enabling recreation and tourism.
- Highlights landscape designations within the Development Plan and confirms
 that the proposed works to facilitate the scheme are to be carried out within
 the existing road corridor in an area that is predominantly urban in character.
- Highlights built heritage, archaeological and historic landscape designations
 within the Development Plan and requests that the scheme be designated to
 minimise the impact on architectural and archaeological heritage assets.

Conservation Department

- A list of protected structures and historic landscapes adjacent to the route is provided in the Council's submission. Notes that the protected structures in the Fingal area are not annotated in Figure 16.1 of Volume 3 in the EIAR.
- States that alterations to the position of the milestone (RPS No.866) at
 Pinnock Hill fundamentally alters the significance of the protected structure
 as it severs the technical link between the measurement that its placement is
 marking. Requests that the position of the new bus stop is reconsidered and
 amended to avoid re-positioning of the historic milestone.

- Requests that trees to be removed at Castlemoate House (RPS No.611) are replaced with mature trees of sufficient depth and height to provide screening from a tall hangar on the airport lands. Seeks clarity on whether there are any proposed changes to the roadside boundary and vehicular entrance to Castlemoate House and, if so, requests that the changes be agreed with the Conservation Officer.
- Concerned about the impact that the Proposed Scheme would have on the thatched cottage (RPS No.604) at Collinstown and requests that the proposal is re-designed to avoid impacting on the protected structure.
- Seeks clarity on the proposal to 'cut back'/ demolish part of the demesne wall at Santry and whether this is limited to sections of the wall that have been previously amended.

Other Comments

- States that the signalisation of junctions will provide much needed safety improvements for pedestrians and cyclists.
- Requests that the NTA liaise with FCC regarding the final tie in point at the Fosterstown Link Road.
- Considers that the cycleway is incoherent at the Airport roundabout part of the scheme and will result in southbound cyclists remaining in the bus lane.
- To facilitate multi-modal trips, FCC suggests the inclusion of 10-20 bicycle stands at all CBC bus stops and not just 'where practicable'.
- Acknowledges the contents of the Flood Assessment and agrees with justification and SuDS proposals.

3. Department of Housing, Local Government and Heritage - DAU

 The Department has reviewed the EIAR and is broadly in agreement with the findings in relation to Archaeology and Cultural Heritage and recommend a condition be attached to any permission issued.

4. Dublin Airport Authority

 Welcomes the BusConnects project and considers that it will provide improved infrastructure for active travel and bus priority for staff and passengers at Dublin Airport.

- Requests that all obstacles on and adjacent to the aerodrome be illuminated with approved lighting sources and that a condition be attached to any grant of permission requiring consultation/approval by the daa.
- Requests further consultation regarding the relocation of utilities facilitating the airport and part of the security fence.
- Highlights the possible congregation of people within the Outer Public Safety
 Zone and associated policy for the protection of safety zones in the Fingal
 Development Plan 2023-2029.
- Notes that BusConnects will impact passengers travelling to the airport by
 private car as it will create a reduction in the operational capacity of the
 roads for general traffic and requests that consideration be given to ensuring
 the allocation of capacity to the flow of traffic east-west through the airport
 roundabout during the transition period to a public transport orientated future.

4.2. NTA Response to Prescribed Bodies

4.2.1. Response to issues raised by the DAU

- The NTA welcomes the Department's review.
- Confirms that the CEMP contains the construction phase mitigation measures,
 which are also set out in the EIAR and NIS.
- States that the NTA will procure the services of a suitably qualified archaeologist as part of its Employer's Representative team administering and monitoring the works.
- Confirms that when archaeological excavation takes place, there will be a
 paper and digital archive of the works adding to the archaeological knowledge
 of a specified area.

4.2.2. Response to issues raised by Fingal County Council

- FCC's support for the scheme is noted and welcomed by the NTA.
- The NTA acknowledge FCC's comments around their need for the scheme and note that reference is made to the Fingal Development Plan 2023 – 2029, the National Development Plan and Transport Strategy for the Greater Dublin

- Area, along with a number of other local, regional, national and international policies.
- Acknowledges the four features recorded on the Fingal Record of Protected Structures located within or in the immediate vicinity of the Proposed Scheme, namely:
 - The milestone (RPS Number 866) at Pinnock Hill,
 - Castlemoate House (RPS Number 611),
 - Cloghran Church (in ruins) and Graveyard (RPS Number 609), and
 - The Thatched Cottage (RPS Number 604) at Collinstown Cross.
- Confirms that the milestone (RPS Number 866) will be temporarily removed to
 ensure its protection, before being reinstated within the vicinity of the existing
 and cites justification for the siting of a bus stop at this location. The NTA
 acknowledges that the magnitude of this impact is High.
- The potential impact on the stone walls on Old Stockhole Road (including those providing access to the church and graveyard site and thew NTA states that there is no potential impact to the walls given that there are no proposed works to the walls.
- Confirms that the Proposed Scheme will not impact on the existing wall and vehicular entrance at Castlemoate House but that approximately 2,747m² of the tree group at the house will require removal. Contend that, given the depth of the wooded area at this location, the retained trees will continue to provide visual screening of the hangar structures to the west.
- Provides existing and proposed photomontages for the Proposed Scheme at the thatched cottage in Collinstown (RPS 604), which demonstrates that there will be no significant impact on the Protected Structure as a result of the construction and operation of the Proposed Scheme.
- Confirms that the iterative design process has eliminated most impacts on Santry Demesne/ Park and the historic sections of boundary wall, main entrance and main tree groups are unaffected by the works. The construction of the Proposed Scheme is limited to the southern corner of Santry Demesne

- with associated removal of one mature Category C (low value) tree, three early mature trees and an impact on the existing (modern) wall/ railing boundary which will be set back and reinstated.
- Reiterates that proposed modifications to junctions, including Pinnock Hill and the Airport Roundabout, have all been undertaken in accordance with the Preliminary Design Guidance Booklet (PDGB).

4.2.3. Response to issues raised by Transport Infrastructure Ireland

- The NTA welcome TII's support for the scheme.
- It is the intention of the NTA to continue to collaborate with TII both in advance of, and during, the subsequent construction stage of the Proposed Scheme.
- The NTA confirms that Turnapin Bridge carries the M50 over the R132 and there is proposed widening of the highway corridor below the structure however there is no impact to structural elements.
- The NTA acknowledge that prior consultation with TII in accordance with TII
 publications will be required for any works that may impact the national road
 network including pavement, structures, LUAS related infrastructure and other
 infrastructure including drainage.
- The NTA are satisfied that the construction of the Proposed Scheme will not impact the safe and efficient operation of the national road network.
- Confirms that the Proposed Scheme upon its completion reverts to the status
 of a public road under the management of the relevant local authority, in this
 case Dublin City Council (DCC) and Fingal County Council (FCC).
- State that, in respect of the interaction with the M50 at Turnapin Bridge, the
 design of the corridor beneath the bridge has been developed in accordance
 with TII publications DN-STR-03001 & AM-STR-06042 and this has included
 liaison and consultation with TII.
- Acknowledges TII's request for a CEMP and construction traffic management plan.

- Confirm that no alterations to the Luas infrastructure and associated services are proposed as part of the Proposed Scheme along the Parnell Square East and Parnell Square West section of the route.
- State that it is not anticipated that there will be any impact on Luas Green line services, with access to the Luas Tram stop maintained at all times.

4.2.4. Response to issues raised by daa

- The support for the scheme is noted and welcomed by the NTA.
- The NTA confirm that the Critical Part of the Security Restricted Area Fence is not impacted by the Proposed Scheme and that no proposed bus stops are relocated within the Inner Public Safety Zones.
- Confirm that the junction design in the Proposed Scheme retains a dedicated left turn lane between the Old Airport Road and the R132 and that the removal of the existing left turn slip and splitter island on Old Airport Road will provide improved pedestrian crossing opportunities.
- State that, given the strategic importance of airport traffic flows and accessibility, the BusConnects scheme interventions at the Airport Roundabout vary from those proposed at other junctions along the BusConnects Swords corridor.

4.3. Responses from Prescribed Bodies

4.3.1. The prescribed bodies were invited to respond to the applicant's response to their submissions. 2 responses from prescribed bodies were received and are summarised hereunder. Further to this, DCC made their submission on the Proposed Scheme at this stage of the consultation process and this is also summarised hereunder.

4.3.2. **TII**

 Advises that a brief meeting on BusConnects Swords to City Centre Bus Corridor Scheme was held with the NTA on 5th of May 2023.

- Considers that the response does not adequately address the recommendations made by TII regarding interactions with national road assets and managed areas, especially the Airport roundabout.
- State that proposed new infrastructure will have consequences for liability and maintenance responsibilities.
- Recommends three conditions requiring pre-commencement agreement on:
 - Detailed designs and works that interact with TII assets,
 - A CEMP, including a method statement to resolve all Luas interfaces, and
 - A CTMP that includes identification of mitigation measures to protect operational Luas infrastructure.
- Highlight legal and cost liability with the removal and reinstatement of Luas related building fixings and infrastructure.

4.3.3. **DCC**

The Board should note that DCC did not make a submission within the first consultation period for the application. Thay have availed of the opportunity to make a submission as a prescribed body within the second period of public consultation. This is summarised hereunder.

- DCC state that the Proposed Scheme is supported by the RSES and Dublin City Development Plan 2022-2028.
- DCC consider the proposals to be compatible and consistent with the zoning objectives for the area.

Environment & Transportation Department

- Recognises that the bus is the most important mode of public transport in Dublin.
- An increase in the level of priority afforded to the bus service and segregated cycle ways are welcomed.

Traffic Division

- Supportive of the integrated sustainable transport proposals.
- States that it is essential that the corridor is managed as part of the DCC traffic control system.

 Contend that the deployment of camera-based bus lane enforcement will need to be rolled out before the full benefit of bus reliability is achieved under the Proposed Scheme.

Roads Division

- Generally supportive of the Proposed Scheme and its intention to improve bus and cycling provision.
- Includes a set of recommended standard conditions for the attachment to each of the BusConnects schemes.
- Contends that user priority is unclear at recurring situations throughout the Proposed Scheme e.g., at bus stops and where cycle routes cross footpaths.
- Concerned about the removal of potential kerbside loading and servicing as safeguarding the ability of local services to operate is imperative in order to achieve the 15 Minute City.
- Notes that trees and heritage features appear to be shown within footpaths, which will be a cause of obstructions.
- Notes that intended loading and parking areas appear narrow with inadequate buffer spaces provided between parking/ loading and cycle lanes.
- State that bicycle parking spaces that are proposed to be removed should be reinstated.
- Provides a list of location specific comments referring to Sheet Numbers 18 to 37 of the Proposed Scheme within DCC's functional area.

Environmental Protection Division

- Contend that stormwater design is incomplete without the correct discharge information relating to outfalls.
- Requests that full details of Sustainable Drainage systems in the management of surface water be agreed in writing with DCC.
- Request NTA to confirm that the Proposed Scheme does not increase the risk of flooding to any adjacent or nearby area.
- State that pluvial flooding risk shall be assessed at all locations along the route.

- Request NTA to demonstrate that the Proposed Scheme passes the three stages of the SFRA Justification Test, particularly for tidal and fluvial flooding.
- State that new compensatory SuDS measures should be close to any green areas lost.
- Seeks identification of flow control manholes.
- Highlights a number of locations on the proposed surface water network where more details are required.

Water Framework Directive

- State that all surface water that discharges from the Proposed Scheme into existing or proposed waterbodies should be intercepted and treated, using nature-based solutions wherever possible.
- Highlights the requirement to improve the status of all waterbodies and requests an evidence-based assessment of the impact, if any, of the Proposed Scheme on the two rivers within its curtilage.

Flood Prevention

 Seeks more detail at detailed design stage at a number of locations, including the Tolka River crossings, and the new cycle and pedestrian bridge, as well as in relation to the Climate Change Flood Adaption Plan and the FRA.

Archaeology Section

- State that the Proposed Scheme traverses the Zone of Archaeological Constraint for recorded monument DU018-020 (*Historic City*).
- Concurs with the findings of the archaeological assessment in the EIAR and supports the proposed mitigation measures in it.

Conservation Section

- Finds that a thorough study of the receiving environment has been carried out in the EIAR.
- State that, once the mitigation measures have been applied, there will be no significant adverse residual impacts on the architectural heritage resource as a result of the construction and operation of the Proposed Scheme.
- Outlines extensive list of key impacts on protected structures, NIAH structures, ACA's, Conservation Areas, industrial heritage sites, historic

- paving and granite kerbing, lamp posts, street furniture, tree removal, boundary treatments, cycle lanes, traffic semaphore and signage, and bus stops.
- Requests a revised proposal for the design of the proposed pedestrian/ cycling bridge adjacent to Frank Flood Bridge and an associated architectural heritage impact assessment.
- Request that the stone setts lining the road at 45 Drumcondra Road Lower be retained in situ.
- State that the removal of trees to the south of Holy Child church in Whitehall will have a significant visual impact on the church.
- Request that where cycle lanes are located in close proximity to protected structures and within Conservation Areas an alternative high quality cycle lane surface is provided in-lieu of red tarmacadam.
- Contend that consideration should be given to the omission of gantry traffic signage in the vicinity of protected structures and within conservation areas, and that mitigation will be required for bus stops at these locations.
- A suite of recommended planning conditions is included in Appendix 1 of the submission.

City Architects Division

- Welcomes in principle the objectives of the Proposed Scheme to support integrated sustainable transport use through infrastructure improvements for active travel and the provision of enhanced bus priority measures.
- States that limited information is provided to facilitate the proper assessment of proposed public realm improvements at Iveragh Road, DCU, Cat & Cage pub, and Drumcondra Bridge.
- Seeks full details of the design of each bus shelter and the siting of utility cabinets/ above-ground utility infrastructure.
- Highlights lack of reference to existing historic fabric such as historic granite paving/ kerbs within the Proposed Scheme e.g., Parnell Square West.
- States that the proposal to replicate historic stonework at Frank Flood Bridge creates a lack of definition between the old and the new and does not follow best conservation practice.

- Requests that all street furniture and boundary finishes be agreed in writing with the planning authority.
- Requests that all boundaries to be relocated along the route be assessed for their conservation and cultural value.
- Request the rationalisation and reduction in the number of poles/ gantry signs to be installed along the route.
- Seeks retention of signage at village entry points.
- Highlights that Frederick Street North and Parnell Square East forms part of the City Parade Route where a 7m minimum carriageway width is required.
- Seeks details regarding selection and location of artworks along the route in accordance with the Per Cent for Art scheme (1%).

City Parks, Biodiversity & Landscape Division

- Outlines taking in charge, tree risk assessment and contract maintenance arrangements that will be required post-development.
- Welcomes tree planting proposals but seeks an assessment of the constraints within the urban environment at detailed design stage.
- Seeks clarity on the proposed quantity of compensatory public street tree
 planting in comparison to the proposed removal of existing street trees along
 the route of the Proposed Scheme.
- Requests that an Arborist and Landscape Architect be retained on-site for the duration of the works.
- Includes specific comments about certain locations along the route of the Proposed Scheme, such as Shanrath Road, Whitehall, Iveragh Road, Upper Drumcondra Road, Our Lady's Park, and Dorset Street Lower.
- Notes the AA Screening report and NIS and requests that proposed mitigation measures be implemented.

4.3.4. **FCC**

- Welcome the response of the NTA to their submission and generally agree with the approach outlined in the document, Swords to City Centre Core Bus Corridor Scheme November 2023.
- Request colour differentiation and parking facilities for cargo bikes at bus stops.

- Highlight there does not appear to be a raised table ramp at the vehicular exit for the Premier Inn. Airside.
- Reiterate their concern regarding the relocation of the milestone ((RPS No.866) to facilitate a bus stop to the north of Airside junction. Contend that minimal repositioning of the bus stop would avoid the necessity of relocating the milestone.
- Request that any metal fence on lands either side of Castlemoate House should be black in colour.
- Consider the impact of the proposed temporary land acquisition along the front boundary of the thatched cottage (RPS No.604) at Collinstown to be high magnitude and not appropriate.

4.4. Third Party Observations

- 4.4.1. 47 no. third party submissions have been received and are summarised within Appendix 1, 3 of which have requested an Oral Hearing. In the interest of conciseness, I refer the board to this appendix should they wish to examine individual submissions. 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, 14 no. are concerned with traffic management during the construction phase, 10 no. submissions raise concerns in relation to the loss of trees/ green space at locations along the route, 9 no. are concerned about aspects of pedestrian/ cyclist safety, and others relate to individual properties or other elements of the scheme.
- 4.4.2. 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 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 parking 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 R132.
- Visual impact/ loss of privacy.
- Impact on property values.
- 4.4.3. 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 visual impact on Dorset Street, Drumcondra and Santry villages.
 - Concerns regarding the design of the proposed pedestrian/ cycling bridge adjacent to Frank Flood Bridge.
 - Concerns regarding the use of Lorcan Road/ Shanrath Road as a 'quiet street'.
 - Changes to road layout at Fosterstown/ Pinnock Hill and integration with link road, housing developments and Metrolink.
- 4.4.4. It is important to note that third parties were invited to respond to the applicant's response to their submissions. A total of 14 third party responses were received. These mainly relate to individual properties and the accessibility of entrances. The issue of the use of the 2016 Census data for the assessment of travel patterns is reiterated and is considered that this is out of date. A number of third parties request the Board to hold an oral hearing. There are no new issues raised in these responses.

¹ No Oral Hearing was held in relation to the application as per the Boards Direction dated 22nd December 2023.

4.4.5. I highlight here that all issues raised are considered in detail under the specific headings within my report hereunder.

4.5. NTA Response to Submissions

4.5.1. 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 and, 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.

4.5.2. Response to issues relating to Seven Oaks/ Griffith Downs

- A two-way cycle track has been provided as part of the Proposed Scheme between Seven Oaks and Griffith Downs to allow cyclists travelling in a northbound direction to access the existing pedestrian/ cyclist access into Seven Oaks. The two-way cycle track was implemented following feedback received during the non-statutory public consultations of the Proposed Scheme.
- The existing flowers and 'Griffith Downs' signage will remain unaffected. Two
 trees are proposed to be removed but these are not of high quality. Four new
 trees and an area of species rich grassland are proposed at the corner of the
 Bonnington Hotel site adjacent to the Seven Oaks entrance in close proximity
 to the two trees proposed to be removed.
- The move towards electric and hybrid city bus fleets limits the long-term noise of buses, reducing noise pollution within the area at Seven Oaks.
- The cycle track will be located approximately 1.5m closer (at most) to properties at this location, however, the existing boundary wall outside the properties is retained as part of the Proposed Scheme.
- Enforcement of road traffic laws is a matter for An Garda Síochána.
- Confirms that there are no road closures proposed at Seven Oaks during the construction phase or operational phase.

- Confirms that the existing pedestrian entrance will not be impacted by the scheme.
- States that a Safety and Health Plan will be formulated which will address
 health and safety issues from the design stages through to the completion of
 the Construction Phase.
- Reiterates the street lighting proposals at Seven Oaks/ Griffith Downs.
- States that the Proposed Scheme has been designed to minimise the impact on major infrastructure/ utilities and confirms that protection measures will be in place during construction i.e., warning signs and markings indicating the location of utility infrastructure.
- Outlines the comprehensive assessment of the impacts on the environment as a result of both the construction and operation of the Proposed Scheme.
- Gives an overview of the consultation phases undertaken within the Emerging Preferred Route Option Consultation.
- Confirms that no road closures are proposed in the vicinity of Seven Oaks for the duration of the works so access and egress from peoples' homes will not be impacted by the Proposed Scheme.
- States that a comprehensive process was undertaken in relation to the route selection for the Proposed Scheme and that the Proposed Scheme reallocates road space for bus priority and cycling infrastructure. It will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport.

4.5.3. Response to issues relating to Santry

Confirms that the existing general traffic slip road at the Santry Bypass
junction is being widened to provide a bus lane and a general traffic lane and
that only a small portion of the overall area of trees and vegetation is to be
removed. Also confirms that the existing boundary wall between the slip road
and Swords Road is not impacted as part of the Proposed Scheme and will be
retained.

- Confirms that a terminus for the D4 bus route is proposed in the green space
 at the junction of Coolock Lane and the Swords Road and that the Proposed
 Scheme is designed to enhance the interchange between the various modes
 of public transport operating in the city and wider metropolitan area, both now
 and in the future.
- States that the creation of a second access route to the Omni Park Shopping
 Centre is outside the scope and objectives of the Proposed Scheme planning
 application.
- Outlines the iterative process that was carried out within the Emerging
 Preferred Route Options in selecting the 'quiet street' around Santry village for
 the use of cyclists.
- Acknowledges the loss of trees, notably at Whitehall Church of the Holy Child and Swords Road/ Griffith Avenue junction but states that trees will be replaced in the majority of cases and associated negative effects will be largely negated over the long-term as the replacement planting matures.
 Confirms that new trees are proposed at the entrance to Lorcan Road,
 Magenta Crescent, opposite Swiss Cottage, on both sides of the road adjacent to Santry Villas and at Coolock Lane.
- Highlights that it is not anticipated that any upgrades will be carried out on the existing footpath on the slip road at the Santry Bypass junction.
- Confirms that the existing guardrails at Collins Avenue junction will be removed as part of the Proposed Scheme.
- Confirms that a dedicated phase for cyclists is provided for cyclists at the Swords Road (R132)/ Larkhill Road/ Shanrath Road junction to allow them to cross between Shanrath Road and Swords Road.
- Confirms that the area in front of The Comet and the retail area on the eastern side of the route is proposed to have surface treatment enhancements.
- Confirms that the existing pedestrian guard rails at the Swords Road (R132)/ Larkhill Road/ Shanrath Road junction will be removed as part of the Proposed Scheme.

- States that it is not possible to provide a wider footpath along Shanowen Road.
- States that the introduction of a cycle lane along Collins Avenue West results
 in a narrower traffic lane on the approach to the Swords Road slip road and
 the slip road to the N1 and anticipates that this will encourage slower vehicle
 speeds and will discourage vehicles from overtaking at this location.
- Outlines the comprehensive assessment of the impacts on the environment as a result of both the construction and operation of the Proposed Scheme.
- States that the Proposed Scheme has been designed to deliver upon the scheme objectives, which include enhancement of the potential for cycling by providing safe infrastructure for cycling, and that this necessitates permanent and temporary land acquisitions.
- Outlines the extensive public consultation process undertaken and references the Preferred Route Option Consultation Overview contained in Chapter 1 of the EIAR.
- Confirms that there is no requirement to demolish the new build at 1 Magenta Crescent.
- Confirms that it is an objective of the Proposed Scheme to ensure that the
 public realm is carefully considered in the design and development of the
 transport infrastructure and seek to enhance key urban focal points where
 appropriate and feasible.
- Confirms that the Proposed Scheme facilitates improved existing and new interchange opportunities with other transport services including the Santry River Greenway and the Royal Canal Greenway.
- States that removal of left turn slip lanes at the Santry Avenue junction is required to achieve the necessary enhanced pedestrian, cyclist and bus priority infrastructure.
- In relation to concerns about congestion at Griffith Avenue, the NTA state that
 the proposed improvements will help to provide an attractive alternative to the
 private car and promote a modal shift to walking, cycling and public transport,
 allowing for greater capacity and comfort along the corridor to facilitate the

sustainable movement of people as population and employment levels grow in the future.

- Confirms that providing accessibility for mobility impaired users is a core
 element of the Proposed Scheme and the potential impact on people with
 disabilities has been appropriately considered in both the scheme design and
 the impact assessment.
- States that all bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met.
- Confirms that the earth bank adjacent to the footpath in front of Magenta Hall on the east side of the Swords Road will be removed as part of the Proposed Scheme.
- The NTA confirm that off street parking is proposed at residential properties between the shopping centre and Shanowen Road to offset the loss of onstreet parking.
- State that deviations from standard footpath widths are required at Santry
 Demesne, as providing a standard width would require additional land take,
 impacting the ground of Santry Demesne and the adjacent historical wall.
- The NTA confirms its awareness of the SHD planning permission issued under ABP-307011-20 to the northeast of Omni Park shopping centre, identified the potential for cumulative impacts with is permission, and confirms that the proposed BusConnects Scheme will not prejudice the delivery of the permitted housing units.

4.5.4. Response to issues relating to Drumcondra

- The support for the scheme is noted and welcomed by the NTA.
- States that the Proposed Scheme aims to provide an attractive alternative to the private car and promote a modal shift to public transport, walking and cycling on this key access corridor in the Dublin region.

- With regards to the point raised about junctions being challenging for cyclists and going against NTA Cycling Design Manual, highlights that no two junctions are the same.
- States that the junction types set out in the PDGB directly align to the
 Proposed Scheme core aims and objectives, and one of the core aims is to:
 'Enhance the potential for cycling by providing safe infrastructure for cycling,
 segregated from general traffic wherever practicable.' Contends that the
 proposed scale of the BusConnects CBC Infrastructure Works will be
 transformational for cycling in Dublin, delivering a large number of the primary
 cycling routes identified in the Greater Dublin Area Cycle Network plan.
- Acknowledge that the Proposed Scheme is to be delivered in constrained urban environments, and the delivery of a 2.0m+ wide cycle track may not always be practicable e.g., outside Plunkett College where providing a standard width would result in significant loss of mature trees.
- State that the crossings between Clonliffe Road and Botanic Avenue (which
 include the intersections at Saint Alphonsus Road and Hollybank Road) are
 minor junctions and raised tables are provided to raise the road level up to
 footpath level and facilitate unimpeded crossing. Similarly, state that
 Whitworth Road and St. Annes Road junctions are both proposed to be
 upgraded to improve infrastructure for pedestrians and cyclists.
- Regarding the suggested use of Dutch kerbs at house entrances, state that it
 is proposed to use dropped kerbs at such locations to avoid undulating cycle
 tracks.
- The NTA acknowledges the comments raised in relation to camera enforcement and notes that enforcement for the lawful use of bus lanes is currently a matter for An Garda Síochána.
- State that issues relating to illegal parking are the responsibility of Dublin City
 Council and are outside of the remit of the NTA in this Proposed Scheme.
- State that the disabled parking bay outside Markey's shop on Drumcondra Road Lower has been relocated approximately 25m away to facilitate the segregated cycle track along Drumcondra Road Lower and state that the

- suggestion to relocate the parking bay to Hollybank Road is not feasible given that there already is a segregated cycle track and relocated bus stop proposed at this location.
- Confirm that the impact assessment concluded that the Operational Phase noise impacts will not be significant (Negative, Moderate to Positive, Imperceptible), there are no specific mitigation measures required during the Operational Phase.
- Regarding the comment about the bus lane between Hollybank Road and Botanic Avenue previously allowing traffic to merge into the inner lane to turn left into Botanic Avenue, the NTA confirm that the existing junction is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure.
- State that there are no plans under the Proposed Scheme to make changes to the environs of Richmond Road and that the existing Maximum Gross Weight regulatory traffic sign at the start of Richmond Road will remain.
- State that it is an objective of the Proposed Scheme to ensure that the public realm is carefully considered in the design and development of the transport infrastructure and seek to enhance key urban focal points where appropriate and feasible. Examples of public realm improvements in the Drumcondra area are provided.
- Confirm that the NTA's Eastern Regional Model is the primary tool and
 provides the overarching information on forecast travel demand for each mode
 of transport, but it has also been used with a suite of other models such as a
 local area model, microsimulation modelling and local junction modelling that
 have been calibrated to a greater level of detail based on traffic survey data.
- In relation to the request to close Saint Anne's Road, the NTA state that the
 Proposed Scheme provides a balance between ensuring that the use of these
 side streets by through traffic is discouraged at all times, while also ensuring
 that access by car to local streets, schools and businesses is maintained, via
 the surrounding road network.

- Confirm that the Statue of Our Lady will not be permanently relocated, if the statue requires temporary removal to facilitate the construction of the proposed bridge on the west side of Frank Flood Bridge, it will be returned to its current setting and as close as possible to its current location.
- States that the design intent for the Frank Flood Bridge is to provide a welldetailed structure that complements the existing historical bridge and local surroundings.
- Regarding concerns about the traffic flow within the Drumcondra area, the
 NTA state that the modelling shows that the impact of the redistributed
 general traffic along the surrounding road network will be Negative, Slight and
 Long-Term which is considered not to be a significant deterioration in the
 general traffic environment in the study area.
- State that the results of the traffic distribution assessment demonstrate that
 the surrounding road network has the capacity to accommodate the
 redistributed general traffic as a result of the Proposed Scheme.

4.5.5. Response to issues relating to Dorset Street

- State that removal of the central reserve in order to accommodate the cycle tracks and widen the footpaths on either side was considered during the design stage but it was determined to be contrary to the needs of the Proposed Scheme.
- Outlines the extensive public consultation process undertaken and references the Preferred Route Option Consultation Overview contained in Chapter 1 of Volume 2 of the EIAR.
- State that Dorset Street is not identified as a Key Urban Village under Map K
 Strategic Development and Regeneration Areas and Key Urban Villages of the Dublin City Development Plan 2022-2028.
- Highlight that Dublin City Development Plan 2022-2028 identifies the 'Greater Dorset Street Plan' an example of a local initiative that could be used to inform a future Local Environmental Improvement Plan (LEIP) for the area and that a LEIP be prepared for Dorset Street, however no such Plan is in place at present.

- Notes the identified inconsistencies in the scheme drawings and provides clarity on each one.
- Regarding the issue raised about a turning ban at Eccles Place, the NTA confirm that there is no change to the existing arrangement at Eccles Place junction as part of the Proposed Scheme.
- State that access to Temple Street and Eccles Street will be available via the surrounding road network and that the no-left-turn from Dorset Street onto Temple Street (Hardwicke Place) is adopted as per the BusConnects Preliminary Design Guidance Booklet to enhance cyclist and bus priority infrastructure and to maintain bus and cycling priority along the corridor.
- Highlights the Bus Stop Review Report where a comprehensive exercise was been carried out to review existing bus stops along the route of the Proposed Scheme and, where appropriate, to rationalise these stops in line with best practice principles related to bus stop placement.
- Regarding the concern that no cycle facilities are provided on Parnell Square
 West or Granby Row, the NTA state that there is two-way cycle infrastructure
 proposed on the corridor along North Frederick Street and Parnell Square as
 far as O'Connell Street and a combined bus and cycle lane is proposed along
 Parnell Square West between Parnell Street and the Dorset Street Upper/
 Granby Row Junction and also between Blessington Street and Granby Row.
- State that junction design iterations, including the one for the Parnell Square/
 Granby Row Junction, have been undertaken to optimise pedestrian, cyclist
 and bus priority infrastructure on the Proposed Scheme
- Confirm that the kerbs along Dorset Street on Sheets 34 and 35 were installed as part of the Dorset Street Urban Renewal project and will be retained under the Proposed Scheme.
- Contends that impacts of emissions as a result of the Proposed Scheme's
 Construction Phase will be localised moderate adverse impacts and the
 residual impacts as a result of the Operational Phase will be neutral and long term.

- State that issues raised relating to Western Way, Mountjoy Street and Black Church are outside the scope and objectives of the Proposed Scheme planning application.
- State that bike racks will generally be provided, where practicable, at Bus Stops and key additional locations as noted in the Landscaping General Arrangement drawings.

4.5.6. Response to issues relating to Fosterstown / Pinnock Hill

- Confirms that the proposed Pinnock Hill signalised junction has been
 designed to integrate with the aspirations of the Fosterstown Local Area Plan
 which recognises the requirement for the provision of the Fosterstown Link
 Road and understands that the Fosterstown North SHD forms the southern
 part of the Fosterstown Masterplan area, situated to the south of the town
 centre of Swords.
- The NTA acknowledges the future requirement for a temporary junction to the Fosterstown North SHD and state that they will continue to engage with the relevant local authorities and developers with regards to future schemes.
- The NTA acknowledges the future requirement for a pedestrian crossing between the Fosterstown North SHD and the proposed Fosterstown MetroLink station, has been considered as part of the EIAR, but states that the need for such a crossing is associated with the proposed MetroLink Scheme and, consequently, is outside the scope of the Proposed Scheme.

4.5.7. Response to issues relating to the Whole Scheme

- States that at the northern end of the route, the route in Swords, north of Pinnock Hill, will be developed separately by Fingal County Council as part of local connectivity project.
- Confirms that the Proposed Scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane, resulting in improved journey time reliability.
- States that the bus stop analysis concluded that bus stop 3671 is currently lightly used and for this reason it has been removed. Suggests the use of alternative bus stops approximately 275m to the north across from the

- Coachman's Inn and to the south, approximately 550m away near Kealy's pub.
- In relation to the concern expressed that BusConnects is a large Scheme with multiple corridors and the demand for a fee to make a submission on each Proposed Scheme is excessive, the NTA states that the fees payable for observations/ submissions are determined by An Bord Pleanála, as allowed by Section 144 of the Act.
- Outlines that as part of the scheme development stage, various non-statutory
 public consultation processes have been undertaken. State that these
 processes were in excess of the requirements of the Aarhus Convention,
 whose obligations are already enshrined in Irish legislation including "statutory
 public consultations" which is the stage that the project has now reached.
- Regarding the elimination of roundabouts, the NTA state that it is essential to
 enhance pedestrian and cyclists' safety, as well as providing priority to bus
 movement over general traffic movements, particularly at road junctions,
 including segregating cyclist from general traffic wherever practicable. The
 design rationale is to introduce more direct and compact pedestrian crossing
 facilities on all arms of junctions, provide protected cycle infrastructure and
 crossing facilities, whilst improving bus priority.
- State that the retention of the left turn slip lanes would be contrary to the requirements of DMURS.
- Confirm that the NTA's Eastern Regional Model is the primary tool and
 provides the overarching information on forecast travel demand for each mode
 of transport, but it has also been used with a suite of other models such as a
 local area model, microsimulation modelling and local junction modelling that
 have been calibrated to a greater level of detail based on traffic survey data.
- In relation to the concern about the destruction of trees, the NTA state that
 with the establishment of the proposed landscape measures (15 years postconstruction), the impact on trees and vegetation will have reduced to
 Negative, Slight / Moderate, Long-Term.

- Confirm that no new bus gates are proposed within this Scheme and the
 existing arrangement restricting traffic on North Frederick Street which,
 although not demarcated as a bus lane/ bus gate, preforms similar to a bus
 gate and will be maintained.
- States that journey time variation and reliability are shown to improve in all Do Something scenarios compared to the Do Minimum.
- State that the issues relating to the No.16 bus service (Whitehall to Terenure) and to the A2/ A4 bus service is outside the scope and objectives of the Proposed Scheme.
- Acknowledges that, due to an administrative error, some very limited information such as the omission of 5 side road plans and profile drawings, 6 drainage catchment drawings, and architectural heritage maps were not available for inspection during the first 6 weeks of the period for public consultation that began on 23 May 2023. However, the period for public consultation was extended beyond the original end date of 18th July 2023 to 12th September 2023 so as to ensure full and effective public participation.
- Highlights that the need for the Proposed Scheme is comprehensively outlined in Chapter 2 Need for the Proposed Scheme in Volume 2 of the EIAR.
- States that Table 10.4, Chapter 10, Volume 2 of the EIAR provides the
 number of community receptors in the vicinity of the Proposed Scheme,
 broken down by community area and type of receptors (i.e., Place of Worship,
 Hospital / Health Centre, Schools, and Recreation), with the total number of
 community receptors within the assessment being 197.
- Highlights that Santry Stadium (Morton Stadium) is listed in the Appendix
 A10.1 (Schedule of Commercial Businesses) in Volume 4 of the EIAR as entry
 number 48 and that Tolka Park is not included within Appendix A10.1 as it is
 not directly on the Proposed Scheme.
- Notes the residential developments that have been approved or proposed for the Drumcondra area, per Donal O'Brolchain's submission, and confirms that Chapter 21 (Cumulative Impacts & Environmental Interactions) in Volume 2 of the EIAR assesses the potential for cumulative impacts between the Proposed

Scheme and these other developments. Notes that one such development (LRD6009/23-S3; ABP-317438-23 refers) was lodged after the final round of planning application reviews but confirms that no significant residual cumulative impacts have been identified in cumulation with the Proposed Scheme.

- Noted that the 'community areas' used for the population assessment were informed by the Central Statistics Office (CSO) 2016 Census parish boundaries and that a number of schools referenced in a submission are located within the Marino community area.
- States that the labels indicated on the General Arrangement drawings are included as high-level identifiers to aid with understanding the drawings and that not all developments or landmarks are depicted on the drawings.
- Outlines the analysis that underlies the proposal to remove trees in the centre
 of the Lower Drumcondra Road from the Railway Bridge to the Royal Canal
 for road widening and to retain the trees in the centre of Dorset Street.
- Confirms that all bus lanes will operate 24 hours a day 7 days a week.
- States that for some pedestrian crossings, direct single movement crossings
 were explored in accordance with the PDGB however, in some instances two
 stage crossings were the preferred design as a straight across would result in
 a crossing distance of greater than 19m.
- Confirm that the existing 3 arm signalised junction, with left turn slips, is to be retained at the Green Long Term Car Park, due to low pedestrian count and also to maintain access to the long term car park considering the strategic location of the junction. Similarly, South Corballis Road junction, the existing 4 arm signalised junction layout, with left slip lanes, is to be maintained due to low pedestrian counts.
- Confirm that Old Airport Road junction, the existing 4 arm signalised junction and slip road is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure.

- State that the junction designs, broadly categorised into 4 types of junction as set out in the PDGB, directly align to the Proposed Scheme core aim and objectives.
- State that Island Bus Stops are the preferred bus stop option to be used as standard on the CBC scheme where space constraints allow as Island bus stops 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.
- State that the design of the Proposed Scheme has been undertaken such that
 pedestrians and cyclists are segregated wherever practicable and shared
 spaces are only used in specifically constrained locations.
- Explains the rationale and improvements to the design of South Corballis Road Junction, Millmount Avenue Junction, Dorset Street and Dorset Street Junctions.
- In response to concerns outlined by Dublin Cycling Campaign, the NTA state
 that the cycling infrastructure assessment demonstrates that the Level of
 Service of the Do Minimum (existing infrastructure) scenario is typically of D-B
 rating for the section of the R132 between Cloghran Roundabout and the Old
 Airport Road Junction. For the Do Something (Proposed Scheme) scenario,
 the Level of Service is predominantly an A-B rating.
- Contends that the proposed investments in walking and cycling infrastructure
 will not just benefit individuals but also all of the businesses whose workers
 live along the corridors, due to the improved health and productivity of their
 work force.
- Confirms that Quiet Streets (due to the low amount of general traffic) are deemed suitable for cyclists sharing the roadway with the general traffic, without the need to construct segregated cycle tracks or painted cycle lanes.
- Clarifies the requirement for a break in bus lane at CH4300, the need for a
 yellow box at CH5150, no changes to Church Avenue and Ormond Road
 sideroads, the width of cycle tracks along Dorset Street, the retention of the

- left-turn ban onto North Frederick Street and Parnell Square East, the design/ layout of raised tables, and the design/ layout of the Parnell Street junction.
- The NTA notes the suggestion made by Neasa Hourigan TD regarding loading bay for commercial properties from Griffith Avenue to the city centre.
 State that such a proposal is not required to achieve the Proposed Scheme objectives but that the Proposed Scheme would not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this.
- States that there is an existing vehicular access to the back of a small number
 of residential and commercial properties on Richmond Road that are
 facilitated by the proposed design of the path at the corner of Richmond Road
 and Frank Flood Bridge.
- States that the Proposed Scheme would not preclude the future introduction of planting of the medians on Griffith Avenue to Richmond Road should the local authority wish to give consideration to this.
- Regarding the protection of trees and green areas along Drumcondra Road, the existing cycle track will be widened, and the existing trees will be retained; the green spaces will be maintained as per existing, apart from the area that will be utilised for widening of the cycle track.
- In relation to a request to streamline the process and expedite the delivery of the scheme, the NTA state the Proposed Scheme includes the full extents of the Swords to City Centre Core Bus Corridor Scheme and will be delivered in its entirety.

4.5.8. Response to issues relating to Individual Properties

- In response to the request from Collinstown Business Park for consideration
 of a signalised junction, the NTA are applying for approval of a minor
 modification to the Proposed Scheme in terms of a minor modification to the
 design of a junction at the entrance to the Collinstown Business Park to
 introduce a signalised junction.
- Confirm that an assessment of this proposed minor modification has been conducted by all relevant experts and that no additional lands are required to

- facilitate this proposed minor modification beyond those lands already included in the Swords to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2023 as submitted to the Board for confirmation.
- Confirm that 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.
- Confirms that Collinstown Business Park was included within the community and economic assessment, with it being included as entry 34 in the Schedule of Commercial Businesses in Volume 4 of the EIAR.
- The NTA confirms its awareness of the planning application at Hollytree
 House and that it has engaged with FCC and the developers regarding this proposed development.
- States that the request for an Oral Hearing is a matter for An Bord Pleanála to consider.
- Regarding the house owned by Collinstown Caravans Limited, the NTA
 confirm that reinstatement of property frontage including boundary walls,
 gates, railings, driveway, footpath and landscaping will be on a like for like
 basis and detailed accommodation works plans will be prepared in
 consultation with landowner.
- State that the Proposed Scheme will result in the boundary wall being repositioned 0.95m to 1.8m closer to this house than the existing wall and that the main visible change at this location will the addition of the segregated cycle tracks on each side of the road.
- State there is no existing vegetation to be removed at this house and that here will be no change to the lighting impact as part of the Proposed Scheme.

5.0 **Planning History**

5.1. 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 Fingal County Council and Dublin City Council within their submissions on the application are the following:

- ABP-307011: Permission granted for a mixed-use development including 324 apartments on lands to northeast of Omni Park Shopping Centre.
- ABP-307422-20: Permission granted for a student accommodation development with 122 bed spaces at Drumcondra Road Upper (DCC planning reference 4533/19).
- ABP-312221-21: Permission granted for alterations to previously permitted development ABP-303615-19 resulting in a total of 276 no. student bedspaces at 124-126 Parnell Street.
- ABP-313289-22: Permission granted for 443 apartments at Hartfield Place, Swords Road.
- AB P-317438-23(LRD6009/23-S3): Permission granted 811 apartments at Richmond Road and Convent Avenue, Fairview.
- DCC 2838/15: Permission granted for 108 no. student accommodation units at Dorset Street Upper.
- DCC 2713/17: Permission granted for 137 residential units at Santry Avenue.
- DCC 2951/17: Permission granted for the construction of a retail and student accommodation (161 no. bed spaces) development comprising of a part-three to part-four storey building onto Dorset Street Lower, and a part-four to part six no. storey building, with the fifth floor set back, over a single level basement, onto North Circular Road.
- ABP-245738 Permission granted for an Aviation Fuel Pipeline from Dublin Port to Dublin Airport (2016).
- F22A/0687 Permission granted by Fingal County Council for the development of 1. Demolition of existing residential dwelling Hollytree House (c. 449.2 sqm).
 Construction of 85 no. residential apartments (35 no. 1-bed, 37 no. 2-bed units and 13 no. 3 bed units) within a 5 8 no. storey building, with all

apartments served by private terrace or balcony (currently under appeal: PL06F.318046 refers).

- F20A/0331: Permission granted for the temporary continuance of use of the existing 2,700 long-term car parking spaces at the Express Red Long-Term Car Park, Cloghran.
- F16A/0587: Permission granted for a new standalone five storey over basement level hotel comprising 100 bedrooms, meeting rooms and ancillary services including snack bar, breakfast area, fitness room, toilets, plant rooms etc. with associated elevational signage at lands adjacent to the Carlton Dublin Airport Hotel, Turnapin Great, Old Airport Road/Swords Road, Cloghran. (Note: minor alterations to the above permitted under F20A/0166).

5.2. Decisions are pending on the following applications:

- ABP-314019-22: Permission for mixed use development including 350 apartments at Chadwick's Builder's Merchants site on the corner of Swords Road and Santry Avenue.
- ABP-314458: Permission for mixed use development including 457 apartments on lands to northwest of Omni Park Shopping Centre.
- ABP-316108-23 (LRD6019/22-S3): Permission granted by DCC for 853
 residential units at Oscar Traynor Road Site, Coolock Lane 3rd party appeal.
- ABP-314724-22: Permission for Metrolink through Swords, Dublin Airport,
 Ballymun, Glasnevin and City Centre to Charlemont.

6.0 Policy Context

6.1. European

6.1.1. 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 and businesses,
- · supporting digitalisation and automation, and
- improving connectivity and access.

6.1.2. 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.

6.1.3. 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.

6.2. National

6.2.1. 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.

6.2.2. National Sustainable Mobility Policy Action Plan 2022-2025

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

6.2.3. 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.

6.2.4. National Sustainable Mobility Policy (DoT, 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

6.2.5. 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.

6.2.6. 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 Metrolink 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 busbased projects in the other cities and towns.

6.2.7. 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.

6.2.8. 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 highquality active travel infrastructure can incentivise people to travel using sustainable modes rather than by car.

BusConnects 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.

6.2.9. 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.

6.2.10. Cycle Design Manual (NTA & DoT 2023)

The manual provides guidance on the design of both on-road and off-road cycle facilities for both urban and rural locations and should be used for the design of all new or improved cycle facilities in Ireland unless otherwise agreed with the relevant oversight body (e.g., NTA, TII, DoT, Local Authority). The guide places increased emphasis on segregation of facilities from motor traffic, provides information on what designers need to be aware of in regard to every aspect of cycle infrastructure design. The Manual sets out the five main requirements that designs should fulfil to cater for existing cyclists and to attract new cyclists to the network:

Safety,

- Coherence,
- Directness,
- Comfort, and
- Attractiveness.

6.2.11. 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 2022 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 to 18 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.

6.3. Regional

6.3.1. 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.

6.4. **Local**

6.4.1. Fingal County Development Plan 2023-2029

- Chapter 5 Climate Action
 - Fingal County Council seeks to promote healthy placemaking and provide well serviced neighbourhoods which will ensure permeability and promote

walking and cycling as the primary, default choice by making these options easier and safer. This will be achieved through the principles of compact growth and integration of land-use and transport planning that underpin this Plan and that inform the policies and objectives of the Plan. This approach has a dual benefit, reducing reliance on the private car, which will 'help' climate change and our transition to a low carbon society, but also improving the day to day lives of residents of Fingal.

- Chapter 6 Connectivity and Movement
 - Fingal County Council recognises the opportunity to strengthen the alignment between land-use and transport infrastructure and continue to work closely with national agencies to advance the delivery of key public transport projects. This can be achieved through prioritising the increased provision of high-quality, walkable and accessible public realm environments and safe and attractive cycling facilities and to optimise connectivity between sustainable modes through increased walking and cycling provision. Through these measures, there is an opportunity to assist modal shift and to make walking and cycling the natural choice for everyday shorter trips, many of which are currently made by car. Fingal County Council will facilitate active travel across the County and will engage widely with the public through open consultation in relation to a sustainable transport system and active travel.
 - Policy CMP1 Decarbonisation of Motorised Transport
 Support the decarbonisation of motorised transport and facilitate modal shift to walking, cycling and public transport and taking account of National and Regional policy and guidance, while supporting an efficient and effective transport system.
 - Objective CMO1 Transition to Sustainable Modes
 Work with the NTA, TII and other transport agencies in facilitating the integrated set of transport objectives for the County as set out in this Plan, in line with National and Regional policy including the NTA's GDA Transport Strategy and any subsequent plan to encourage modal shift towards more sustainable modes of transport and patterns of commuting to reduce reliance on the private car.

- Objective CMO2 Modal Shift
 - Work with the NTA to develop mode share targets for the County to achieve and monitor a transition to more sustainable modes including walking, cycling and public transport, during the lifetime of this Plan. This includes providing targeted infrastructure in the most appropriate locations and prioritising development at the most accessible locations in order to achieve the appropriate levels of integration and sustainable transport provision.
- Policy CMP3 Integrated Land-Use and Transport Approach
 Provide for an integrated approach to land-use and transportation aimed at minimising the demand for travel and prioritising sustainable modes of transport including walking, cycling and public transport.
- Policy CMP6 Integrated Transport Network
 Support and facilitate sustainable mobility objectives set out in the NPF,
 RSES, Smarter Travel and the NTA's GDA Transport Strategy and any
 subsequent plan to ensure the creation of a high-quality and integrated
 transport network to serves the needs of the County and the wider region.
- Policy CMP12 Public Realm
 Support and facilitate the provision of high-quality and attractive public realm that is accessible for all with a focus on improving connectivity and permeability in accordance with best practice public realm and guidance documents.
- Objective CMO16 Public Realm and Development
 Encourage and facilitate the delivery of high-quality public realm in tandem with new developments throughout the County through the Development Management process and the retrospective provision in existing developments, including the provision of a pedestrianised core in town centres where appropriate.
- Policy CMP18 Public Transport
 Support the provision of a high-quality public transportation system that is accessible to all to serve the needs of the County and to enable a significant shift from car-based travel to public transport.
- Objective CMO23 Enabling Public Transport Projects

Support the delivery of key sustainable transport projects including MetroLink, BusConnects, DART+ and LUAS expansion programme so as to provide an integrated public transport network with efficient interchange between transport modes to serve needs of the County and the mid-east region in collaboration with the NTA, TII and Irish Rail and other relevant stakeholders.

Objective CMO24 – NTA Strategy

Support NTA and other stakeholders in implementing the NTA Strategy including MetroLink, BusConnects, DART +, LUAS and the GDA Cycle Network.

 Objective CMO29 – Integration of Public Transport Services and Development

Work with the NTA, TII and other relevant national transport agencies to optimise accessibility to public transport, increase catchment and maximise permeability through the creation of high-quality walking and cycling routes linking to public transport stops.

6.4.2. **Dublin Airport Local Area Plan 2020**

Climate Action Objective CA05

Facilitate improved public transport links to and from the Airport and require that all traffic generating applications at the Airport demonstrate measures to maximise non-motorised and public transport use while minimising the use of the private car.

Objective EA06

Facilitate the delivery of the R132 Swords Road Core Bus Corridor and to seek its prioritisation as a scheme of strategic national importance in enabling sustainable growth of Dublin Airport in the short-term.

• Objective EA07

To ensure proposals for road network improvements in the vicinity of Dublin Airport have regard to the effective operation of future bus services generally and on the Swords Road Core Bus Corridor in particular.

Cycling Objective CY01

Provide for cycle paths separated from traffic along the R132 between Pinnock Hill Roundabout and the boundary with Dublin City Council as part of the Swords Core Bus Corridor.

Objective PT04

Facilitate the delivery of the R132 Swords Road Core Bus Corridor and to seek its prioritisation as a scheme of strategic national importance in enabling sustainable growth of Dublin Airport in the short-term.

6.4.3. Dardistown Local Area Plan 2013 (as extended to November 2022)

CPO11

Provide for full integration of the LAP lands with existing and planned QBCs, the proposed internal high capacity bus corridor, and future Dardistown Metro Stop at an integrated public transport interchange at Dardistown, thereby reducing car dependency and supporting sustainable modes of transport/smarter travel.

6.4.4. 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
- It is acknowledged that new street/road infrastructure and improvements to existing streets/roads will be required over the period of the plan.

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.

6.4.5. 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 BusConnects 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:
 - Increased frequencies on the BusConnects orbital and local services;
 and
 - 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:
 - Providing sufficient capacity for sustainable modes;
 - o Improving safety for pedestrians and cyclists; and
 - Encouraging mode shift from the private car and reducing emissions.

6.4.6. **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.

6.5. Legislative Context

- 6.5.1. 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.
- 6.5.2. 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.

6.6. Natural Heritage Designations

- 6.6.1. 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,
 - Howth Head SAC,
 - Rockabill to Dalkey Island SAC,
 - Ireland's Eye SAC
 - Lambay Island SAC,
 - Baldoyle Bay SAC,
 - Malahide Estuary SAC,
 - Howth Head Coast SPA,
 - Dalkey Islands SPA,
 - Rockabill SPA,
 - North Bull Island SPA,
 - South Dublin Bay and River Tolka Estuary SPA,
 - Baldoyle Bay SPA,
 - Malahide Estuary SPA,
 - Rogerstown Estuary SPA,
 - Skerries Islands SPA,
 - Ireland's Eye SPA,
 - Lambay Island SPA,
 - The Murrough SPA, and

- North West Irish Sea cSPA.
- 6.6.2. A Natura Impact Statement (NIS) has been prepared with regard to the foregoing European Sites² 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).

6.7. EIA Screening

6.7.1. 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.

7.0 Assessment

7.1. Overview

- 7.1.1. The proposed development as outlined above is essentially an upgrade to the existing bus priority and cycle facilities associated with the Swords Road Quality Bus Corridor (QBC). The Proposed Scheme includes a substantial increase in the level of bus priority provided along the Swords QBC, including the provision of additional lengths of bus lane resulting in improved journey time reliability.
- 7.1.2. 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 Lorcan Road/ Omni Park Shopping Centre along Shanrath Road, and then along the old Swords Road to the junction with Collins Avenue.

² The North West Irish Sea cSPA was designated after the planning application for the Proposed Scheme was submitted to An Bord Pleanála. I have included the assessment of impacts on this cSPA within the Appropriate Assessment in Section 8 of this report.

- 7.1.3. Currently within the existing extents of the Proposed Scheme there are cycle tracks on approximately 6.8km (both directions) of the route. This will increase to 18.8km and the proportion of segregated cycle facilities will increase from 48% on the existing corridor to 100% on the Proposed Scheme. In addition to this, the significant segregation and safety improvements to walking and cycling infrastructure that is a key feature of the Proposed Scheme will further maximise the movement of people travelling sustainably along the corridor.
- 7.1.4. 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.
- 7.1.5. This application is accompanied by a separate Compulsory Purchase Order ref: ABP-317164-23 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 commercial and residential properties.
- 7.1.6. 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.
- 7.1.7. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.
- 7.1.8. 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 Authorities and the observations from prescribed

bodies. I consider the critical issues in determining the current application and appeal before the Board are as follows:

- Policy considerations
- Need and justification for the proposal
 - Addressing Population Growth and On-Street Congestion
 - Land Use and Transport Integration
 - Improved Connections
- Consideration of alternatives
- Impacts on street environment
 - Pedestrians and public realm
 - Provision for cyclists
 - Bus priority and infrastructure
 - Access to commercial premises
 - Private cars
- Impact on residential amenity
- Ecological impacts
- Impacts on built heritage
- Consultation
- Other issues raised in submissions

7.2. Policy Considerations

National Level

7.2.1. The Climate Action Plan 2023 (CAP23) introduces carbon budgets and sectoral emissions ceilings for different sectors. The Avoid-Shift-Improve Framework is outlined to achieve a net zero decarbonisation pathway for the transport sector, whereby actions are prioritised to avoid the need to travel; shift to more

- environmentally friendly modes; and to *improve* the energy efficiency of vehicle technology.
- 7.2.2. The proposed BusConnects programme includes road space reallocation, which is a measure outlined under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. Road space reallocation can discourage car use, with valuable street space being redirected from on-street parking and public urban roadways to bus lanes, segregated cycle tracks, more spacious footpaths, and public realm improvements. BusConnects is also seen as 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.
- 7.2.3. It should be noted, however, that BusConnects was designed under a previous Climate Action Plan and the Avoid-Shift-Improve Framework is new to CAP23. Whilst road space reallocation forms one of the main components of the proposed scheme, the assessment hereunder will, amongst other aspects of the assessment, seek to establish if such reallocation goes far enough to achieve a proper balance in the use of road space, in compliance with all levels of policy.
- 7.2.4. The National Planning Framework outlines a set of goals expressed as ten National Strategic Outcomes (NSO) to deliver shared benefits for communities across the country. Of most relevance to the proposed Swords to City Centre Core Bus Corridor is National Strategic Outcome Sustainable Mobility, which recognises the need to move away from combustion engine driven transport systems. This will be achieved through the expansion of public transport alternatives to car transport, thereby reducing congestion and emissions, and catering for the demands associated with longer term population and employment growth.
- 7.2.5. The Proposed Scheme will also help to deliver other NSO's relating to compact growth and transition to a low carbon and climate resilient society. The Proposed Scheme can therefore be viewed as a wider integrated land use and transportation plan that sets out to fulfil the National Strategic Outcomes and National Policy Objectives of the NFP. Of particular relevance are, National Policy Objective 27, which aims to "ensure the integration of safe and convenient alternatives to the car into the design of our communities, by prioritising walking and cycling accessibility to both existing and proposed developments, and integrating physical activity facilities

- for all ages"; and National Planning Objective 54, which targets a "reduction in carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."
- 7.2.6. National Policy Objective 35 seeks to "increase residential density in settlements, through a range of measures including reductions in vacancy, re-use of existing buildings, infill development schemes, area or site-based regeneration and increased building heights." As can be seen in the following section, this objective is being implemented along the core bus corridor through the large volume of higher density development. High density development and high quality public transport accords with NPO64 through integrated land use and spatial planning that supports public transport, walking and cycling.
- 7.2.7. The National Development Plan makes provision for investment in public transport and sustainable mobility solutions, with BusConnects being recognised as one of the Major Regional Investments for the Eastern and Midlands Region. It is stated that BusConnects will overhaul the current bus system in Dublin, Cork, Galway, Limerick and Waterford by implementing 'next generation' bus corridors (including segregated cycle facilities). This will be enabled through The National Investment Framework for Transport in Ireland.

Regional Level

- 7.2.8. The Eastern & Midlands Regional Spatial & Economic Strategy (RSES) provides an investment framework and climate action strategy to support the implementation of Project Ireland 2040 (National Planning Framework and National Development Plan) at a regional level. The Strategy includes the Dublin Metropolitan Area Strategic Plan (MASP), which is an integrated land use and transportation strategy that sets out guiding principles for the sustainable development of the Dublin Metropolitan Area. This plan seeks to focus growth along existing and proposed high quality public transport corridors in the interests of transport and land use integration and to support the delivery of BusConnects and other major transport programmes.
- 7.2.9. RSES also states that the 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), in

- addition to public transport use, and the creation of a safe attractive street environment for pedestrians and cyclists. This is reflected in the BusConnects programme whereby streets and public spaces are being redesigned to prioritise active transport modes and bus transport as alternatives to the car.
- 7.2.10. BusConnects forms a key part of the overall aim of the Transport Strategy for the Greater Dublin Area, 2022-2042 to provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy. The proposed Swords to City Centre CBC scheme is one of 12 radial schemes being brought forward under this programme to facilitate faster and more reliable bus journeys on the busiest bus corridors in the Dublin region.
- 7.2.11. BusConnects accords with the specific measures outlined in the Strategy to incorporate a high standard of urban design and placemaking into major public transport infrastructure schemes and walking and cycling projects, taking account of architectural heritage (PLAN14 and PLAN15). The reallocation of road space to prioritise walking, cycling and public transport use and the placemaking functions of the urban street network (PLAN16) also form key considerations within the BusConnects network design.
- 7.2.12. The updated Greater Dublin Area Cycle Network Plan is published alongside the Transport Strategy. Cycle facilities proposed under BusConnects will contribute towards the intention of the NTA and local authorities to deliver a safe, comprehensive, attractive and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network.
- 7.2.13. The 2013 Greater Dublin Area Cycle Network Plan included a primary cycle route along the Proposed Scheme (Cycle Route 2A) and a number of secondary cycle routes, including N02, N03, N04 and N05. The updated 2022 GDA Cycle Network Plan shows the CBC as a primary radial cycle route from its commencement in Swords to its junction with Clonliffe Road; as a secondary route from its junction Clonliffe Road to the southern end of Parnell Square West; and as a primary orbital route along Cavendish Row, Parnell Square East and North Fredrick Street. A number of feeder routes intersect with the CBC at North Circular Road, Whitworth

- Road, Clonliffe Road, Iona Road, Richmond Road, Griffith Avenue, Collins Avenue, Old Airport Road, Naul Road, Boroimhe Road, Nevinstown Lane, and Pinnock Hill.
- 7.2.14. The Proposed Scheme will help to deliver the Cycle Network through installation of cycle tracks and safer junctions, many of which are located at intersections with other routes in the network e.g., at the Collins Avenue Junction conversion to a signalised junction at the intersection of a primary radial route and primary orbital route.

County Wide Policy

- 7.2.15. The proposed CBC extends through Fingal County Council and Dublin City Council administrative areas. The current operative plans for these local authorities are the Fingal Development Plan 2023-2020 and the Dublin City Development Plan, 2022-2028.
- 7.2.16. The Fingal Development Plan 2023-2029 provides a vision for the County's growing communities, places, housing, jobs and sustainable transport, and for the delivery of services in a manner which promotes climate action and efficient patterns of land use. At a high level, the BusConnects programme is fundamental to the achievement of Development Plan core aims relating to climate resilience, land use change and sustainable movement.
- 7.2.17. Under the Connectivity and Movement chapter of the Fingal Development Plan, the need for a collaborative approach by all stakeholders is recognised and supported to ensure the delivery of a sustainable transport network including key transport projects, new walking and cycling infrastructure, behavioural change initiatives and improved roads access. This policy will be supported through the delivery of BusConnects and the Greater Dublin Area Cycle Network, and as noted above, the recent amount of high-density development proposals along the CBC (see Section 5). It is apparent that the BusConnects proposal is encouraging development in proximity to the route through integrated land use planning and public transport provision.
- 7.2.18. Fingal County Council's policy (CMP18) on public transport generally seeks to "support the provision of a high-quality public transportation system that is accessible to all to serve the needs of the County and to enable a significant shift from carbased travel to public transport." BusConnects is one of the major public transport projects that will fulfil this policy.

- 7.2.19. Developing well-serviced and well-connected communities is a key focus for development within Fingal, with reduced travel distances between home, work, education and services and enhanced active modal share, with an overall reduction in emissions. This recognises the ambitious goal of the NPF to ensure compact growth with 50% of housing to be provided within or contiguous to the built-up area of Dublin City and Suburbs recognising that key public transport corridors (existing and planned) present significant development opportunities. As highlighted, compact growth proposals are being fulfilled along the route of CBC. These proposals would have been partly justified on the basis of being located on a CBC and therefore the proposed scheme is essential to serve such proposals.
- 7.2.20. There is also an emphasis in the Fingal Development Plan on the promotion of attractive street environments and active travel by creating places where people want to live and spend time and by removing barriers to movement. Policy CMP12: Public Realm seeks to "support and facilitate the provision of high-quality and attractive public realm that is accessible for all with a focus on improving connectivity and permeability in accordance with best practice public realm and guidance documents." This policy will also be supported by the increased volumes of people that will be living or visiting hotels, shops, etc. along the CBC.
- 7.2.21. The movement of people along the CBC by active travel modes (walking and cycling) is promoted in the Fingal Development Plan and facilitated through the BusConnects programme, in particular through the provision of safer junctions for pedestrians and cyclists to cross. There will also be improved footpaths and an increased provision of cycle tracks. Fingal County Council's policy on walking and cycling (CMP7) seeks "to secure the development of a high-quality, connected and inclusive pedestrian and cycling network and provision of supporting facilities / infrastructure across the County, including the upgrade of the existing network and support the integration of walking, cycling and physical activity with placemaking including public realm improvements, in collaboration with the NTA..."
- 7.2.22. The Sustainable Movement and Transport chapter of **Dublin City Development Plan 2022-2028** highlights that the sustainable and efficient movement of people and goods is crucial for the success and vitality of the city, along with the need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change.

- 7.2.23. It is acknowledged that the impact of public transport infrastructure projects, such as BusConnects, on mode share is more likely to come into fruition during the lifespan of the following Development Plan. Notwithstanding this, Dublin City Council under Policy SMT22 Key Sustainable Transport Projects supports the delivery of an integrated public transport network serving existing and future needs of the city.
- 7.2.24. Improvements to the environment and public realm will be necessary to encourage walking, cycling and public transport use and the opportunities are recognised for developing public realm when new public transport proposals are being developed. This will be implemented through the BusConnects programme facilitating active travel and public transport improvements and associated public realm improvements.
- 7.2.25. The integration of active travel with public transport will comply with Policy SMT19 which seeks "to work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking/cycling etc.) with public transport, ensuring ease of access for all." Dublin City Council has actively engaged with the NTA during the consultation process.
- 7.2.26. The overall aim of Dublin City Council with respect to transport and sustainable movement is a key objective of the BusConnects programme and this can be summarised under Policy SMT34 Street and Road Design, which seeks "to ensure that streets and roads within the city are designed to balance the needs and protect the safety of all road users and promote place making, sustainable movement and road safety providing a street environment that prioritises active travel and public transport whilst ensuring the needs of commercial servicing is accommodated."

Local context

- 7.2.27. The Fosterstown Masterplan 2019 boundary adjoins the Proposed Scheme on the western side of the R132 immediately to the south of Pinnock Hill Roundabout. It is stated that "the Fosterstown lands have a unique opportunity to utilise the new connections that will emerge in Swords via the MetroLink station and Core Bus Corridor on the R132." The Proposed Scheme will help to facilitate this objective.
- 7.2.28. A submission was received from the owner/developer of part of the lands within the masterplan area that is presently under consideration for a SHD development (ABP-313331 refers). An overlay of the BusConnects proposals with the proposed SHD development was provided in Appendix 1 of the submission and the owner/developer

requests that the proposed temporary left in/left out junction from/to the R132 proposed in the SHD development be considered in conjunction with the proposed bus route. In response, the NTA stated that they engaged with Fingal County Council in respect of the Fosterstown Local Area Plan and understand that the Fosterstown North SHD forms the southern part of the Fosterstown Masterplan area. Furthermore, the NTA confirm that the proposed Pinnock Hill signalised junction has been designed to integrate with the aspirations of the Fosterstown Local Area Plan which recognises the requirement for the provision of the Fosterstown Link Road. I am satisfied that the strategic importance of this junction has been considered within the proposed design and access is not precluded. It would appear from the proposed CBC drawings that the proposed junction is fully compatible with the access arrangements to the Local Area Plan lands.

- 7.2.29. The **Dublin Airport Local Area Plan 2020** boundary also adjoins the Proposed Scheme on the western side of the R132 from north of the Cloghran Roundabout to the Airport Roundabout and on both sides of the R132 between the Airport Roundabout and the Corballis Road Junction. There are objectives in the LAP to:
 - Support the continued sustainable growth of Dublin Airport and connectivity as a hub airport whilst ensuring protection of the environment,
 - "Provide for the necessary airside and landside infrastructure to facilitate the projected increase in passengers over the life of the LAP whilst safeguarding for longer term growth, and
 - Facilitate improved public transport links to and from the Airport and require
 that all traffic generating applications at the Airport demonstrate measures to
 maximise non-motorised and public transport use while minimising the use of
 the private car.
- 7.2.30. The Proposed Scheme will provide the infrastructure to deliver a modal shift from private car usage to sustainable transport and will facilitate sustainable growth by delivering the transport infrastructure necessary to provide a high quality and more efficient and reliable public transport network.
- 7.2.31. The non-statutory **Great Dorset Street Together Project** identified the disconnection between both sides of the street caused by a dedication of road space to a central median and private car users. This project is highlighted within two of the

- submissions received and disappointment is expressed that there is no recognition of this DCC funded, community-led public realm improvement plan in the planning application. It is contended that this has the unintended consequence of prioritising the street as a route rather than a destination where people live, work and visit. The Plan identified the removal of the median and redistributing the space to the sides of the street in the form of a number of potential enhancement measures such as greening, wider enhanced footpaths and protected cycleways.
- 7.2.32. In response, the NTA stated that Dorset Street is not identified as a Key Urban Village under Map K Strategic Development and Regeneration Areas and Key Urban Villages of the Dublin City Development Plan 2022-2028. They highlight that Dublin City Development Plan 2022-2028 identifies the 'Greater Dorset Street Plan' an example of a local initiative that could be used to inform a future Local Environmental Improvement Plan (LEIP) for the area and that a LEIP be prepared for Dorset Street, however no such Plan is in place at present.
- 7.2.33. In line with the commitments outlined above to facilitate transport and land use, the proposed CBC also passes the North East Inner City Strategic Development Regeneration Area, which identifies public realm improvement on all sides of Parnell Square and a core pedestrian spine with public transport hubs along Drumcondra Road and Dorset Street.
- 7.2.34. Overall, the proposed BusConnects programme remains an integral and pivotal part of the requirement to tackle climate change and to enable a meaningful shift within the transport sector to active and sustainable transport modes. I would be satisfied that the proposed development is acceptable in principle and follows the consistent message within all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires a reduction in car dependency to contribute towards lower energy consumption, CO₂ levels and pollutant emissions. Sustainable mobility, compact growth and land use and transportation integration are essential for the creation of sustainable communities that minimise private car use, prioritise cycling, walking and public transport and promote the efficient use of land. I am therefore satisfied that the proposed development is in accordance with the policy objectives set out in various plans and documentation referred to above.

7.3. Need and Justification for the Proposal

7.3.1. It has been demonstrated above that the proposed Swords to City Centre CBC scheme is needed and justified in terms of overarching policy considerations on climate change and a necessary shift to sustainable transport modes to reduce greenhouse gas emissions in the transport sector. Section 3.2 also outlines the general need for the Proposed Scheme in terms of existing deficiencies in the bus, cycle and pedestrian network. The section hereunder addresses more specific ways that the Proposed Scheme is needed and justified to tackle on-street congestion; encourage land use and transport integration; and improve connections, particularly for disadvantaged groups.

Addressing Population Growth and On-Street Congestion

- 7.3.2. Significant on-street traffic congestion occurs throughout the Greater Dublin Area from private car dependence. Road network congestion causes delay, with associated economic impacts and frustration for motorists. Other quality of life issues caused by traffic congestion include pollution, noise, adverse impacts on the street environment, road dominance, community severance and pedestrian/ cyclist safety and comfort issues.
- 7.3.3. Congestion also has direct impacts on bus service reliability. Bottlenecks are formed along sections that do not have bus priority and this affects journey times, particularly at peak hours. At present, Automatic Vehicle Location (AVL) data indicates that bus services suffer variations in travel time of up to 10 minutes along the route of Proposed Scheme. A less reliable bus service requires operators to roll out extra buses to maintain headways to fill gaps created in the timetable.
- 7.3.4. 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. The EIAR compares the effects of do-nothing, do-minimum and do-something scenarios in future years. The do-nothing scenario represents the current traffic and transport conditions without the Proposed Scheme and other GDA Strategy projects in place. The do-minimum scenario for opening year (2028) and design year (2043) represents the likely conditions without the Proposed Scheme in place but allowing

- for all other GDA Strategy schemes to be implemented (other BusConnects elements, Dart+, Luas green line capacity enhancement, GDA Cycle Network Plan for 2028, and for 2043 assumes full implementation of GDA Strategy including MetroLink, Dart+ Tunnel, and Luas extensions to Lucan, Finglas and Bray). Finally, the do-something scenario represents the conditions with everything in place.
- 7.3.5. A people movement assessment was undertaken for the EIAR using outputs from the NTA Eastern Regional Model (ERM) and Local Area Model (LAM) and comparing the 'do minimum' and 'do something' peak hours for 2028 and 2043. Population growth has been derived by linear interpolation between 2016 Census data and the NPF 2040 population growth forecast. It is envisaged that the population will grow by 11% up to 2028 and by 25% by 2043. Employment growth is also forecasted to grow by 22% by 2028 and 49% by 2043, with an assumed growth in goods vehicle of 45% and 77% respectively up to the same years.
- 7.3.6. As noted above, the overriding motivation for BusConnects is to reduce CO₂ emissions and this is critical from a global climatic perspective. At the local and shorter-term level, the issue of congestion is more obvious, and both congestion and CO₂ emissions are continuing to rise. Any further increases in traffic levels will see an exacerbation of congestion, CO₂ 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.
- 7.3.7. 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-decker bus takes up the equivalent spatial area of three cars but typically carries 50-100 times the number of passengers. The prioritisation of buses over cars and the creation of more space for pedestrians and cyclists will 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.
- 7.3.8. As a result of the Proposed Scheme in opening year (2028), there will be an increase of 71% and 79% in AM and PM peaks respectively in the number people travelling by bus along this core bus corridor and an increase of 39% and 54% in AM and PM

- peaks respectively in the number people walking or cycling. In design year (2043), there is forecasted to be an increase of 45% and 16% in the number of people travelling along the Proposed Scheme corridor by sustainable modes during the AM and PM peak hours respectively. In an inbound direction at AM peak, there will be an increase of 45% in the number of people travelling by bus between 2028 and 2043; an increase of 55% in the number of people walking or cycling; and a reduction of 25% in the number of people travelling by car along the core bus corridor.
- 7.3.9. 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, equivalent to the removal of approximately 21,130 and 22,150 car trips per weekday from the road network in 2028 and 2043 respectively. 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.

Land Use and Transport Integration

- 7.3.10. One of the main objectives of the Proposed Scheme is to enable compact growth, regeneration opportunities and more effective use of land in Dublin, for present and future generations, through the provision of safe and efficient sustainable transport networks. The ability to move greater numbers of people along the core bus corridor also presents the opportunity to increase the volumes of people living, working and staying along the corridor.
- 7.3.11. A number of significant projects are proposed, have been permitted or are under construction along the CBC. Those that have been permitted, are under construction or are completed include the northern runway at Dublin Airport, student accommodation with 122 bed spaces at Drumcondra Road Upper, 108 no. student accommodation units at Dorset Street Upper, 137 residential units at Santry Avenue, 219 no. residential units at Fosterstown North, an aviation fuel pipeline from Dublin Port to Dublin Airport, and 1,614 no. build to rent apartments at Holy Cross College,

- Clonliffe Road. Planned projects include the development at Fosterstown incorporating 645 residential units, and Metrolink through Swords, Dublin Airport and onto the City Centre, and an LRD encompassing 853 no. residential units at the Oscar Traynor Road site, Coolock Lane.
- 7.3.12. It is crucial that BusConnects is implemented to serve the compact growth that is occurring along the length of the corridor so that walking, cycling and public transport emerge as the preferred modes of travel in the interests of sustainable city living, efficient use of road-space, and environmental impacts. Sustainable travel patterns should be easier to achieve if the new population along the corridor has high quality active travel and public transport infrastructure in place. New residents or users of the CBC may be less habituated to the private car and can utilise active modes and public transport without having to perform a modal shift. It should also be reemphasised that many of the larger scale developments along the corridor would have been planned and permitted on the basis of the proposed core bus corridor scheme.
- 7.3.13. Public transport works better on higher density corridors because there is critical mass to maintain services throughout night and day. The concern would be that buses might become overloaded. However, service frequency was assessed in the micro-simulation model with a 10 bus per hour increase (65 inbound and 59 outbound) along the busiest section of the CBC. The model showed that there will be a high level of journey time reliability in the Do Something scenario. This shows that bus journey time reliability and consistency will be maintained as passenger demand continues to grow. If traffic levels were to increase (typical daily variations are in the order of +/- 15%) then the bus priority infrastructure would further protect journey time reliability and resilience in comparison with the Do Minimum scenario.
- 7.3.14. In addition to greater demand for travel along the CBC, compact growth and higher densities will also require improved public realm both in terms of quality and quantity. There is an opportunity for the proposed CBC and associated compact growth to actually discourage travel, by providing for critical mass as noted, and leading to the provision of better services and facilities for everyday living and the creation of local jobs within walking distance.

- 7.3.15. For this pattern of land use and transport integration to be successful, good public realm is necessary. This is addressed further in Section 9.10 below. Well-designed public spaces with a high presence of people and services can help to change the way we view streets/ roads as corridors for transporting people, towards places where people interact with each other, and with the natural and built environment.
- 7.3.16. Overall, good land use and transport integration complies with the Avoid/ Shift/ Improve hierarchy promoted within CAP23. The need to travel is minimised; modal shift to public transport and active travel is encouraged due to better services and infrastructure that will be widely used; and bus electrification becomes more practical as the fleet expands. In general, the Swords to City Centre CBC and the associated compact growth along the corridor is a good example of land use and transport integration taking place in a planned and retrofitted manner that will be hugely beneficial to existing and future residents and users of the corridor.

Improved Connections

- 7.3.17. It is a key objective of the Proposed Scheme to improve accessibility to jobs, education and other social and economic opportunities through the provision of improved sustainable connectivity and integration with other public transport services.
- 7.3.18. Improved connections as a result of the Proposed Scheme can disproportionately benefit those who are most disadvantaged or socially excluded. There are a number of areas along the length of the CBC that are categorised as disadvantaged as indicated by the Pobal HP Index 2016, including small pockets of disadvantage close to the city centre around Gardiner Street Lower, Gloucester Place Upper and Summerhill Place, and around Henrietta Lane and Dominick Street Lower (refer to Figure 11.1 in Volume 3 of the EIAR). It is also noteworthy that access to a car is proportionately lower for people with disabilities compared to the general population.
- 7.3.19. The Proposed Scheme will allow for the provision of high-quality bus transport along the CBC, thereby providing better connections to those on low incomes or those disabilities without access to car transport. Households along the route will also benefit from improved access to a wider range of job opportunities, which can result in wealth increase and improved mental and physical wellbeing. The Proposed

- Scheme will improve access to services across the city and encourage activity and footfall to support new businesses and services.
- 7.3.20. The CBC provides access to a large number of healthcare facilities, including the Mater Hospital, the Mater Private Hospital, CHI at Temple Street, and the Rotunda Hospital. Improvements to bus journey times and reliability would make public transport access to health facilities more feasible, particularly where there is limited parking such as at Temple Street and the Rotunda Hospital. Bus lanes and bus priority can also be used by ambulances and other emergency services.
- 7.3.21. The Building for Everyone A Universal Design Approach (Centre for Excellence in Universal Design, 2020) guidelines have been followed in the design of the Proposed Scheme. This will make the urban environment easier and safer for people with visual impairment and mobility difficulties, as well as parents with pushchairs. Tactile paving and dropped kerbing will be installed throughout and buses will be wheelchair accessible.
- 7.3.22. It is likely that young and elderly people will benefit from more reliable bus services and a safer pedestrian and cycling environment. Independent mobility for children can grow as road safety improves and this can increase social interaction and exercise. It should be noted that there are a number of schools and colleges along the CBC. The most vulnerable road users are pedestrians and cyclists who are five to 10 times more at risk of injury per kilometre than a motorist in a car-dominated environment (Elvik 2009). One of the main advantages of the Proposed Scheme will be the actual reduction of general traffic, thus making the corridor safer, more accessible and usable for vulnerable road users and those with no access to a car.
- 7.3.23. The other main benefit of the Proposed Scheme in terms of improved connections is better integration between transport services and facilities. Multi modal journeys will be facilitated through provision of cycle parking at bus stops and a general increase in cycle parking will encourage walking along with cycling. The Proposed Scheme will integrate with the Metrolink at Fosterstown. The Proposed Scheme will also integrate with Luas at O'Connell Street. Exchange between transport services will be made easier by next generation ticketing and integrated fare structure proposals. There may also be opportunities for park and ride along the CBC.

- 7.3.24. On the whole, the Proposed Scheme will promote a better-connected street environment particularly for the most disadvantage and vulnerable road users. Perhaps the most obvious benefit in terms of improved connections will relate directly to the pedestrian environment, which is addressed further in Section 9.11 below.
- 7.3.25. In overall conclusion for this section, the obvious need and justification for the Proposed Scheme has been clearly demonstrated from a population growth and congestion perspective, and in the interests of land use and transport integration. The Proposed Scheme is also essential to bring about improved connections, particularly for non-car users, the disadvantaged and vulnerable road users. As noted above, there is also a clear justification for the Proposed Scheme throughout all levels of Government policy.

7.4. Consideration of alternatives

- 7.4.1. In my opinion, the consideration of alternatives is critical to future proof the Proposed Scheme. As outlined above, congestion occurs at present throughout the road network and the Proposed Scheme will reallocate road space to increase capacity for people movement. Car dominance will be reduced but access by private car will be retained for the most part.
- 7.4.2. The consideration of alternatives within the EIAR submitted with the application and the EIA in Section 9.2 considers a range of alternatives at three levels comprising strategic alternatives, route alternatives and design alternatives. The strategic alternatives considered are Bus Rapid Transit (BRT), light rail, metro, heavy rail, demand management and technological alternatives. The reasonable conclusion is reached that enhanced bus priority and cycle facilities, together with the Metrolink to the city centre are best placed to serve the corridor having regard economic and environmental factors and passenger numbers that each mode would carry. The route selection stage examined the road network along the corridor using a "spiders web" approach to select the most desirable roads for the corridor. Design alternatives were examined during the different phases of public consultation where certain details, such as impact on mature trees, provision of segregated cycle lanes along certain sections and bus gate operation were refined.

- 7.4.3. It is noteworthy that the Proposed Scheme was designed a number of years ago and events relating to climate change have become more prominent and urgent. Moreover, CAP23 has introduced sectoral emissions ceilings and the Avoid-Shift-Improve framework to achieve a net zero decarbonisation pathway for transport. Road space reallocation is a measure under both 'avoid' and 'shift' to promote active travel and modal shift to public transport. CAP23 recognises 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.
- 7.4.4. I have a concern about the nature of the of the continuous segregated cycle infrastructure provision between the proposed toucan crossing located immediately to the south of the Coachman's Inn where cyclists travelling in a southerly direction are required to cross the 6-lane carriageway to proceed in a southerly direction on the western side of the bus corridor. Southbound cyclists would then continue through the Airport Roundabout in a clearly demarcated two-way cycle lane towards the Corballis Road Junction. At this point, in order to continue their southbound journey cyclists are then required to navigate this junction to rejoin the southbound cycle lane on the eastern side of the bus corridor. I consider that the requirement for southbound cyclists and pedestrians to cross to the western side of the carriageway at the Coachman's Inn should be clearly indicated and appropriate signage should be installed at this location flagging this requirement. I recommend that the Board include a condition on any grant of planning permission to effect this.
- 7.4.5. Further to this, I consider that the design proposals for the Corballis Road Junction are more suited to the provision of access/ egress to/ from the airport and, due to this design feature, may be less safe than other junctions within the Proposed Scheme for more vulnerable road users such as cyclists. Although I am not satisfied that an alternative design solution could not have been proposed at this junction that would assist cyclists to navigate this junction in a safer manner, I accept that the existing left-turning lanes play a significant role for vehicular traffic going to/ from the airport via this junction. In their response to submissions, the NTA explain the rationale and improvements to the design of South Corballis Road Junction where the existing 4 arm signalised junction layout, with left slip lanes, is to be maintained due to low

- pedestrian counts. Similarly, the existing 3 arm signalised junction, with left turn slips, is to be retained at the Green Long Term Car Park, due to low pedestrian count and also to maintain access to the long term car park considering the strategic location of the junction.
- 7.4.6. I also note similar concerns raised in submissions highlighting a matter about the inconsistent treatment of other smaller road junctions along the route of the Proposed Scheme, including Grattan Parade, Saint Alphonsus Avenue, Saint Alphonsus Road, Dargle Road, Carlingford Road and Hollybank Road (please refer to Sheets 31 and 32 of 37, General Arrangement Drawings, Volume 1, EIAR). The Board should note that the cyclists would be required to yield to vehicular traffic entering/ exiting these streets from/ to the route of the Proposed Scheme. I note the concerns raised about the treatment of these junctions and also highlight that similar nearby junctions e.g., Clonturk Park, Ormond Road and Church Avenue, give priority to the more vulnerable road user/ cyclist. The NTA responded to this by stating that the crossings between Clonliffe Road and Botanic Avenue (which include the intersections at Saint Alphonsus Road and Hollybank Road) are minor junctions and raised tables are provided to raise the road level up to footpath level and facilitate unimpeded crossing.
- 7.4.7. There are other elements of the Proposed Scheme whereby alternative proposals have been suggested in submissions. The issue of public realm and pedestrian connectivity improvements along Dorset Street is raised. In this regard, it is highlighted that the existing central median, to be retained within the Proposed Scheme, forms a barrier to connectivity between both sides of Dorset Street. It is suggested in the submissions that the central median be removed and the space reallocated to the pavements to provide enhanced pedestrian and landscaping in order to improve safety, connectivity and the public realm. I would agree with the sentiment expressed in these submissions, and contained within the Greater Dorset Street Together Project, that there might be greater scope to incorporate better connectivity for pedestrians along the Dorset Street section of the Proposed Scheme.
- 7.4.8. In response, the NTA state that removal of the central reserve in order to accommodate the cycle tracks and widen the footpaths on either side was considered during the design but it was determined to be contrary to the needs of the Proposed Scheme. They further highlight that Dublin City Development Plan 2022-

- 2028 identifies the 'Greater Dorset Street Plan' an example of a local initiative that could be used to inform a future Local Environmental Improvement Plan (LEIP) for the area and that a LEIP be prepared for Dorset Street, however no such Plan is in place at present. In order to improve connectivity for pedestrians along Dorset Street and minimise interference with the objectives of the Proposed Scheme, I recommend that the Board consider the inclusion of a condition on a grant of planning permission requiring the design and layout of additional pedestrian crossing facilities on Dorset Street following a Street Design Audit.
- 7.4.9. Other submissions raise issues of road design/layout, and the location of bus stops particularly in the Santry area. The NTA completed a Bus Stop Review Report which is a comprehensive exercise that reviews existing bus stops along the route of the Proposed Scheme and rationalises these stops in line with best practice principles related to bus stop placement. For example, one of the main considerations in the siting of bus stops is to minimise walking distance between interchange stops. The bus stop locations were reviewed at each stage of the design process with a view to ensuring that the objectives of the Proposed Scheme were met. The result of the reviews means that 4 of the 41 bus stops inbound and 12 of the 31 bus stops outbound will be relocated along the route. I am satisfied that this review is comprehensive and that population catchments across the route of the Proposed Scheme will be within 10 and 15 minutes from bus stops.
- 7.4.10. In the short term, bicycles and e-bikes / scooters will be a major part of the necessary modal shift from private car use. General traffic lanes could naturally become dominated by faster moving e-bikes or scooters because the space may not be available on conventional cycle tracks. In my opinion, if the cycle tracks are designed even with minor constraints the likelihood is that this movement of e-bikes or scooters to general traffic lanes will occur sooner rather than later. The commencement of regulations associated with the Road Traffic and Roads Act 2023 is imminent. It is anticipated that the classification of e-scooters as Personal Powered Transporters (PPTs) and e-bikes with a maximum power output of 250W and a motor cut-off speed of 25km/hr will be the same as bicycles under Irish law. Consequently, it is imperative that the necessary infrastructure is available, and future proofed, to accommodate and encourage a more sustainable and efficient use of road space for personal transport.

7.4.11. Overall, I conclude that that the Proposed Scheme was designed at a point in time, and I consider that attitudes have since changed and will continue change rapidly as climate change awareness increases. I have concluded above that the Proposed Scheme will help to reduce transport related emissions and should therefore be implemented as planned as a matter of urgency.

7.5. Impacts on street environment

- 7.5.1. The Proposed Scheme will give rise to significant changes in the way that the street environment is experienced along the route of the CBC. However, the actual works are not of a substantial nature. Most construction activity will affect the surface of the street only; few up-standing structures are proposed with the exception of bus shelters and signage. The Proposed Scheme will nonetheless radically alter the way the street is used on an everyday basis.
- 7.5.2. This section examines the impacts of the Proposed Scheme on the street environment by reference to each of the main affected users, i.e., pedestrians, cyclists, bus users, commercial premises (deliveries) and private motor vehicles.
- 7.5.3. Firstly, the Board should note that the most significant physical changes to the street environment are proposed to occur at each of the junctions (34 no.) along the route of the Proposed Scheme. There are four general junction designs proposed, which are outlined in the Preliminary Design Guidance Booklet (PDGB) submitted with this application. This guidance emanated from the Dutch Design Guide Ontwerpwijzer Fietsverkeer, which discourages partial conflicts between cyclists and vehicles if the volume of turning vehicular traffic exceeds 150 PCUs per hour. Each specific junction design is then based on the number of Passenger Car Units (PCUs) that move through that junction per hour i.e., 0-100, 101-150, or >150. In this regard, the four junction types proposed are as follows:
 - Junction Type 1 is to be used when volume of left-turning vehicles is greater than 100 PCUs per hour or in an urban setting where no space is available for a dedicated left-turning lane/pocket. These junctions have dedicated bus lane, vehicle lane and cycle lane, no left turning lane is provided for general traffic. This junction is proposed at Pinnockhill (Swords (R132) Rd/ Dublin Rd), Kettle Lane Priority Junction, Dublin Road (R132)/Naul Road/Stockhole

Lane, Dublin Airport Roundabout, Swords Road (R132)/Green Long-Term Car Park, Swords Road (R132)/Old Airport Road, Swords Road (R132)/Quick Park, Swords Road (R132)/Turnapin Lane, Swords Road (R132)/Northwood Avenue, Swords Road (R132)/Coolock Lane, Swords Road (R132)/Santry Avenue, Swords Road (R132)/Magenta Crescent, Swords Road (R132)/Lorcan Road/Omni Park Shopping Centre, Swords Road (R132)/Shanowen Road, Swords Road (R132)/Larkhill Road/Shanrath Road, Swords Road (R132)/Shantalla Rd, Swords Road (R132)/Iveragh Road, Swords Road (R132)/Seven Oaks, Drumcondra Road Upper (R132)/Home Farm Road, Drumcondra Road Upper (R132)/Richmond Road/Millmount Avenue, Drumcondra Road Lower (R132)/Botanic Avenue, Drumcondra Road Lower (R132)/Clonliffe Road, Drumcondra Road Lower/Whitworth Place/Whitworth Road, Dorset Street Lower/Belvidere Road/Innisfallen Parade, Parnell Square north/Gardiner Row, and St Mary's Pl North/Granby Row.

- Junction Type 2 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. This junction is proposed at Swords Road (R132)/Boroimhe Road (L2300)/Access to Airside, Dublin Airport Roundabout, Swords Road (R132)/Green Long-Term Car Park, Swords Road (R132)/Corballis Road, Swords Road (R132)/Collins Avenue, Dorset Street Lower/North Circular Road, Dorset Street Lower/Gardiner Street Upper/Synnott Place, Dorset Street Lower/Eccles Street/Hardwicke Place, and Dorset Street Lower/Frederick Street North/Blessington Street.
- Junction Type 3 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. 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. This junction is proposed at Swords Road (R132)/Magenta Crescent, Swords Road (R132)/Collins Avenue, Swords Road (R132)/Iveragh Road, and Drumcondra Road Upper (R132)/Griffith Avenue.
- <u>Junction Type 4</u> has pedestrian crossings with two signalised crossings, one to cross the cycle lane and one to cross the junction. Similar to Junction Type 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. Left turning cyclists can bypass the junction while giving way to pedestrians crossing as well as cyclists already on the orbital cycle track. This junction is not proposed as part of this scheme.

Pedestrians and public realm

- 7.5.4. As noted above, some of the main objectives of the scheme are to relieve congestion, reallocate road space and improve conditions for the increasing amounts of people that will be using street space as continued compact growth emerges along the CBC. It is widely held that 80% of road space is allocated to the private car, with public transport, cyclists and pedestrians sharing the other 20% of space. The Proposed Scheme, therefore, needs to be designed to address the conflicts between the road/ street users competing for space. It is an aim of the Proposed Scheme to ensure that the urban realm is carefully considered in the design and development of the transport infrastructure and to seek the enhancement of key urban focal points where appropriate and feasible.
- 7.5.5. It is important to note that under DMURS, the creation of walkable, cyclable and public transport orientated communities will require designers to re-examine the way streets are designed in order to meet the needs of all users. Pedestrians must be placed the top of the street user hierarchy, followed by cyclists and public transport. The car is placed at the bottom of the hierarchy, but it is recognised that this may be the only option for many users for medium to longer distance journeys. It is highlighted again that the key issue is one of balance, and the needs of the car should no longer take priority over the needs of other users or the value of place.

- This balanced approach is to be achieved through the four key principles of integrated and connected networks, multi-functional place-based streets, a pedestrian focus and a multi-disciplinary approach.
- 7.5.6. A transport project of this nature focuses purely on the efficient movement of people along the corridor by public transport and bicycle. By extension, the CBC becomes more of a movement corridor at the expense of developing good quality places for people to stop along the street. It should be noted, however, that the Proposed Scheme includes public realm improvements at Santry River Gateway, along the Swords Road at Santry Demesne and Morton Stadium, Coolock Lane, Santry Avenue junction, through Santry village, Collins Avenue junction, Iveragh Road junction, through Drumcondra village and in the area of Drumcondra Bridge, opposite the Abbey Presbyterian Church on North Fredrick Street and opposite the Gate Theatre on Cavendish Row. These improvements should encourage people to stop and linger in these areas. I would recommend a programme of engagement with stakeholders in the Dorset Street area with a view to creating connectivity between both sides of the street along this section of the CBC, and this should also have the effect of improving the pedestrian environment at this location. A further assessment of the proposed public realm improvements on the local townscape is included in the Cultural Heritage and the Landscape section of the EIA below.
- 7.5.7. The pedestrian environment along the route of the Proposed Scheme will also be significantly improved through the provision of additional crossing locations, increased pedestrian directness, provision of traffic calming measures, improved accessibility facilities and increased footpath and crossing widths. There will be a 47% increase in controlled pedestrian crossings and minimum footpaths widths of 2m will be provided along the proposed scheme.
- 7.5.8. A Level of Service (LoS) assessment concludes that there will be a positive long-term impact on the quality of pedestrian infrastructure, with most junctions improving to an A or B rating. Along the busiest section from the Botanic Avenue Junction to the city centre/ Granby Row, 7 of the 13 impacted junctions currently have low D /E/F ratings and this will improve to an A/B rating at all impacted junctions. The LoS rating is applied to each junction for both 'do minimum' and 'do something' scenarios based on indicators such as footpath and crossing widths, accessibility, promotion of lower vehicular speeds, directness and signalisation.

- 7.5.9. The preferred arrangement at junctions is to facilitate pedestrians crossing all arms of the junction in one movement, including diagonally, whereby the wrap-around pedestrian signal stage will take place at the start of the signal cycle. This is referred to as a wrap-around pedestrian stage within the Preliminary Design Guidance Booklet accompanying the planning application and I consider it represents a significant improvement in terms of pedestrian convenience and directness.
- 7.5.10. A number of specific issues have been raised in submissions relating to the pedestrian environment and these are addressed hereunder. The most common issue concerns the public realm and the lack of connectivity on Dorset Street Lower due to the retention of the central median along the length of this street.
- 7.5.11. In my opinion, this is an example of the movement corridor taking precedence over the public realm. I agree with the points raised in submissions that more effort could have been put into landscaping and urban design along this section of the corridor. I acknowledge the development of the Greater Dorset Street Together Project, funded by Dublin City Council, and I consider that this provides the framework for an appropriate design solution for the street at this location. Although the existing central median and landscaping therein act as both a visual enhancement and traffic calming measure on the street at present, I consider that it also acts as a barrier to pedestrian connectivity on Dorset Street Lower.
- 7.5.12. The kernel of the Greater Dorset Street Together Project for the enhancement of connectivity and recreation of the village on Dorset Street Lower was the removal of the central median and the reallocation of this space to the pavement area in the form of landscaping and public realm improvements. I note the NTA's rationale in this regard, as outlined in their response to the submissions and, consequently, I am satisfied that it would not be possible to incorporate these design elements into the Proposed Scheme to create a more vibrant place and to achieve the aims of the BusConnects scheme. However, I consider that it may be possible to improve connectivity between both sides of Dorset Street by the introduction of an additional pedestrian crossing, or two, at this location. A Street Design Audit of this section should then be carried out in accordance with DMURS Advice Note 4 and agreed with the planning authority as a condition of any grant of planning permission.

- 7.5.13. Similarly, concerns have been raised in a number of the submissions regarding the public realm at Our Lady's Park and the area around Frank Flood Bridge. These issues relate to concerns about:
 - The visual impact that the proposed pedestrian/ cycle bridge,
 - The safety of moving/ storing the statue,
 - The treatment of the path at the corner of Richmond Road and Frank Flood Bridge, and
 - The treatment of the central medians proposed to the north of the Richmond Road junction.
- 7.5.14. I am satisfied that the contemporary design of the proposed pedestrian/ cycle bridge is an appropriate approach for new build within the context/ setting of older structures and buildings. In this regard, I also note the City Architect's comments in the DCC submission that the proposed materials replicate the historic stonework of the 200 year old bridge and, therefore, this will create a lack of definition between the historic and new structures. I recommend to the Board, if minded to grant permission, to include the type of finishes/ materials for proposed pedestrian/ cycle bridge as a condition that can be agreed with the planning authority prior to commencement of works.
- 7.5.15. I am also satisfied that the applicants' proposal to remove and store the existing Statue of Our Lady (NIAH 50130158) in accordance with the methodology provided in Appendix A16.3, Volume 4 of the EIAR is acceptable, and its reinstatement at the same/ alternative location in Our Lady's Park is also acceptable.
- 7.5.16. On the day of my site inspection, I examined the corner of Richmond Road and Frank Flood Bridge and observed that there is a vehicular access at the side of No.4 Richmond Road and noted that this was the cause of concern in relation to the treatment of the footpath at this location. I also noted that this provides access and off-street parking to the rear of a number of businesses and houses on Richmond Road. The NTA confirmed this in their response to the submissions. I have reviewed the iteration process for this junction design contained in Appendix A6.1 Junction Design Report and also note that with the proposed works to the junction the LoS

- improves from a D to a B rating. Essentially, the status quo will prevail at this part of the junction with a signalised pedestrian crossing to remain on this corner.
- 7.5.17. Finally, I note the request for the central median immediately to the north of Richmond Road to be planted with suitable trees/ shrubs in lieu of the proposed treatment of 'poured concrete'. The NTA state that such a proposal is not required to achieve the Proposed Scheme objectives and that the Proposed Scheme would not preclude the future introduction of such a measure at a future date should the local authority wish to give consideration to this. I consider the request to be reasonable and can be easily incorporated into the Proposed scheme as a public realm improvement. I recommend to the Board, if minded to grant permission, to include this as a condition that can be agreed with the planning authority prior to commencement of works.
- 7.5.18. The residents of Griffith Downs/ Seven Oaks and their public representatives wish that the green space immediately outside of their estates be retained and seek the removal of the metal railing positioned outside of the pedestrian entrance to Seven Oaks. I have reviewed both the General Arrangement Drawings (Sheet No.28 of 37 refers) and Landscape General Arrangement, and I am satisfied that the existing landscaping between the vehicular accesses to Seven Oaks estate and Griffith Downs estate will be retained, bar the removal of 2 no. trees. I also note that the metal railing positioned outside of the pedestrian entrance to Seven Oaks will be removed as part of the Proposed Scheme.
- 7.5.19. A request for public realm improvements was also made for the area at the junction of St. Anne's Road and Drumcondra Road Lower. I consider that public realm improvements would make a significant contribution to the streetscape at this location, particularly to the southern side of the train station building. However, a large part of the area suggested in the submission for public realm improvements is located outside of the Proposed Scheme boundary and the applicant does not have the remit to improve the public realm and/ or pedestrianise areas outside the boundary of the application area.
- 7.5.20. There have been a number of concerns raised about the Santry area. Róisín Shortall T.D. expressed concern that the Santry Avenue approach to the Swords Road has been reduced to two lanes and that this may increase congestion here and that

- inadequate consideration has been given to the needs of older people and those with a disability in the design of the Proposed Scheme. She acknowledges the addition of pedestrian crossings at the Comet Pub but disappointed that none has been proposed at Santry Close.
- 7.5.21. I note that the proposed Santry Avenue approach to the Swords Road has omitted the existing slip lane facilitating left turn only. This will result in traffic having to proceed to the junction and then turn left. My observation of the junction is that it effectively operates as a two-lane junction at present with limited space for three-way traffic. I consider that consolidating the junction as two-lane will have a minimal effect on waiting times and the operation of the junction whilst having a positive impact on the safety of both cyclists and pedestrians navigating this junction and for those accessing Santry Park. In relation to the accessibility of the Proposed Scheme, the NTA have outlined in their response to the submissions that providing accessibility for mobility impaired users is a core element of the Proposed Scheme and the potential impact on people with disabilities has been appropriately considered in both the scheme design and the impact assessment. On the remaining issue, I note the proposal to provide toucan crossings at Northwood Avenue (General Arrangement Drawings, Sheet No.16 of 37 refers). These are in close proximity to the north of Santry Close and can be easily accessed by the residents of Santry Close if they wish to cross the Swords Road.
- 7.5.22. Deirdre & Aidan O'Callaghan have also raised a number of specific design issues/ queries about the Proposed Scheme in Santry village and made some suggestions, which include:
 - Request confirmation that the existing railing and wall between the Swords Road and Swords Road Slip Road will be retained.
 - Existing barriers/ guardrails at each side of Whitehall Junction should be replaced/ upgraded.
 - The footpath along the Swords Road Slip Road should be upgraded.
 - The paving area and wall at the Comet, and the area outside of the shops on the east side of the village should be upgraded.
 - Existing barriers/ guardrails at each side of Santry Bypass Junction should be removed/ upgraded.

- The footpath on the lefthand side of the Shanowen Road and Santry Bypass Junction should be widened.
- The wall between Santry Bypass Junction, the Church and Whitehall Junction should be upgraded with stone facing.
- The new wall at Magenta Hall should be stone faced.

7.5.23. The NTA have responded satisfactorily with clarity on each of the above:

- Regarding the walls, as there is no impact to these walls as part of the Proposed Scheme, no works are proposed.
- The existing guardrails at Collins Avenue junction will be removed as part of the Proposed Scheme.
- The existing kerb line and footpath will be retained along the Swords Road
 Slip Road and, therefore, it is not anticipated that any upgrades will be carried out on the existing footpath.
- The area in front of The Comet and the retail area on the eastern side of the
 route is proposed to have surface treatment enhancements. This includes a
 wider pedestrian footway in concrete paving and the vehicular forecourt in
 concrete setts.
- The pedestrian guardrails at the Swords Road (R132)/ Larkhill Road/
 Shanrath Road junction will be removed as part of the Proposed Scheme.
- Confirm that it is not possible to provide a wider footpath along Shanowen Road itself, as away from the junction the footpath on the other side of Shanowen Road is quite narrow.
- A pre-cast concrete wall with 1.2m high fence on top to prevent falls is proposed at Magenta Hall. The face of the wall is to have vertical channels (approximately 50mm wide) every 500mm to break up the mass of the wall.

7.5.24. A number of other amendments were requested in submissions, such as:

 The toucan crossing proposed at Northwood Avenue be designed to facilitate safe access to/ from the proposed Santry River Greenway.

- Re-design of the Collins Avenue/ Swords Road junction for pedestrians due to the excessive width of the road and number of lanes that are required to be traversed.
- Improvements for pedestrians at the Parnell Square/ Granby Road junction and that the footpaths need to be widened both here and on Parnell Square.
- 7.5.25. I am satisfied that the design of the Proposed Scheme at Northwood Avenue (Sheet No.16 of 37, General Arrangement Drawings refers) facilitates safe access to/ from the proposed Santry River Greenway with the provision of toucan crossings, footpaths, cycle tracks and a bus stop immediately adjacent to the access to the proposed greenway. I have also reviewed the iteration process for this junction design contained in Appendix A6.1 Junction Design Report and note that with the proposed works to the junction the LoS improves from an E to an A rating.
- 7.5.26. I share the concerns expressed in the submission about the design of the Collins Avenue/ Swords Road junction for pedestrians. These concerns are validated in the Impact Assessment (sub-Appendix 4, Appendix 6.1, Volume 4 (Part 2) of the EIAR) whereby it is stated that with the proposed works to the junction the LoS only improves from an F to a C. The concerns, and rating, are due to the excessive width of the road and number of lanes that are required to be traversed i.e., indirect pedestrian movements are required due to the slip lane on the western arm and refuge islands in the centre of the northern, eastern and southern arms. In this case, I acknowledge the scale and importance of the road junction and the need to facilitate left turns, as well as the complexity of the link in with the Santry bypass/ N1 to the north of the junction. Consequently, it may be only possible to reconsider the provision of the left slip lane coming from the westward side of the junction on Collins Avenue. At this point, vehicles turning north may be able to proceed to the junction rather than having the use of a slip lane. Although such a scenario would eliminate one area of direct conflict between pedestrians/ cyclists crossing to/ from the quiet street, I am satisfied with the NTA's response to this issue whereby a cycle lane is introduced on Collins Avenue West that will encourage slower vehicle speeds and will discourage vehicles from overtaking at this location, thus resulting in a safer environment for pedestrians and cyclists.

- 7.5.27. It is further mentioned in a submission that some three and four-way junctions are missing pedestrian crossings entirely and, consequently, not in compliance with DMURS. Having reviewed the General Arrangement Drawings, I can confirm that there are a number of junction designs that do not incorporate pedestrian crossings on all arms of the junction. The guidance in DMURS is clear and states that large roundabouts are generally not appropriate in urban areas. 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 they are more compact and/ or pedestrian and cycle friendly, as is appropriate.³
- 7.5.28. However, I consider that the guidance does not make such provision a requirement and, in the context of retrofitting the Proposed Scheme within the existing built environment, I am satisfied that the aim of the NTA is to enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable. In this regard, the NTA have stated that it is important to note that no two junctions are the same and the principles contained in the Preliminary Design Guidance Booklet are specifically set out at each junction location in the Junction Design Report which has been included in the EIAR. For example, I suggest one such instance where a pedestrian crossing is not desirable would be on the northern side of Frank Flood Bridge where the vertical alignment of the street, due to the carriageway having to bridge the Tolka River, may present an unnecessary hazard for pedestrians.

Provision for cyclists

7.5.29. Only 57% of the route is currently providing segregated cycle tracks i.e., approximately 34% and 23% of the route outbound and inbound respectively. This would increase to 82% in both directions as a result of the Proposed Scheme. Having regard to the above, I would be satisfied that the provision of 82% segregated cycle tracks is satisfactory for the purposes of providing a good level of service for cyclists and for attracting a reasonable modal shift onto active modes subject to appropriate traffic calming measures along the stretches of road without dedicated

³ P105, Design Manual for Urban Streets (2019)

- cycle infrastructure. Furthermore, the safety of vulnerable road users will also be greatly improved through traffic reduction.
- 7.5.30. I consider that the most significant improvement for cyclists would be at junctions. Most accidents involving cyclists occur at junctions and the Proposed Scheme will include the replacement of roundabouts with new signalised junctions, with the exception of the Airport Roundabout. There are existing roundabouts at Pinnock Hill and Cloghran that will be replaced with standard BusConnects signalised junctions.
- 7.5.31. There are a number of different junction types proposed throughout the CBC, outlined earlier in this report. The protected junction for cyclists is the preferred option, which provides kerb buildouts to protect cyclists travelling through the junction. Kerbed corner islands force left-turning motorists into a wider turn and the cycle lane is set slightly to the left so that the cyclist and motorist see each other at more of a right angle. The corner islands create a protected ring for cyclists navigating the junction, including those turning right. Essentially, the cyclist can make a right turn at the junction without leaving a cycle lane. The traffic signal arrangement removes any uncontrolled conflict between cyclists and pedestrians and also between a cyclist crossing the arm and an approaching right turning motorist. The cycle tracks approaching the junction are ramped down and protected by a buffer and the cycle stop line sits in front of the bus lane stop line.
- 7.5.32. In general, I consider this arrangement represents a significant improvement in safety terms for cyclists at all junctions, and in particular, at Pinnock Hill Roundabout, Airside junction, Cloghran Roundabout, Old Airport Road, Turnapin Lane, Coolock Lane, Collins Avenue, Griffith Avenue, Richmond Road and North Circular Road. I acknowledge that all junctions are different and certain flexibility will be necessary in cases. However, the protected junction provides a relatively consistent approach throughout the BusConnects programme and a degree of certainty for the most vulnerable users. Flashing left turn arrows, coloured surface treatment, tighter kerb radii and narrower lanes will encourage motorists to proceed through junction with greater caution and less confidence. This is critical from a cyclist safety viewpoint.
- 7.5.33. My main concern relates to the absence of a cycle track between the Coachman's Inn and the Airport Roundabout on the southbound lane and the lack of signage at the Coachman's Inn to indicate that cyclists (and pedestrians) must cross at the

- signalised crossing to proceed in a southerly direction on the dual cycle track on the western side of the Proposed Scheme. On the day of my site inspection, I observed a number of cyclists proceeding southbound on the eastern side of this carriageway where no cycle track, cycle lane or hard shoulder is present. It is unclear whether appropriate signage is proposed at this location under the Proposed Scheme to direct cyclists to cross to the western side of the carriageway and proceed southwards on the proposed dual cycle track. Such signage can be agreed with the planning authority as a condition of any grant of planning permission.
- 7.5.34. I note a number of the submissions have raised concerns about conflict at the proposed junction types between the vulnerable road users (pedestrians and cyclists) and vehicles as well as conflict between pedestrians and cyclists. In this regard, I have a concern about the design of the South Corballis Road junction where I consider the most vulnerable road users are not given priority. As a consequence of the retention of the four slip/ left-turning lanes, the design solution here presents two-stage and three-stage crossings for both pedestrians and cyclists. However, I consider that this is an infrastructure retrofitting project and it may not be possible to design all junctions in accordance with the DMURS guidance. Therefore, I consider a degree of flexibility and creativity is required in designing best possible solutions particularly at junctions in proximity to and affecting the operation of Dublin Airport.
- 7.5.35. I note that a number of observers on the Proposed Scheme refer to the potential for the provision of 'Dutch Style' junctions. There are similarities between the preferred proposed scheme junction design and the 'Dutch' style design. Most notably, both junction designs separate pedestrian, cyclist and motor traffic. Furthermore, both types have protective corner islands, which will force the motorist to make wider and therefore slower left turns around a tighter radius. It is noteworthy, however, that the 'Dutch' style design has larger corner islands, and this gives more space for cyclists waiting at the stop line. The other main similarity is that cyclists can proceed through the junction without leaving a cycle lane. I consider this to be one of the most important safety features over the often-seen arrangement whereby right turning cyclists are expected to utilise an advanced cycle stop line to make the right turn manoeuvre at a junction.

- 7.5.36. In response, the NTA referred to the Preliminary Design Guidance Booklet for the Proposed Scheme, which categorises junctions into four broad types that have been developed for a local Irish context. I note that the preferred protected junction as outlined above is already operating at a number of locations in the Dublin. A protected junction of similar design but of more of a 'Dutch' style approach has opened recently at the junction of Drummartin Link Road and Lower Kilmacud Road.
- 7.5.37. In weighing up the Proposed Scheme preferred junction layout against the 'Dutch' style layout, I consider that there are pros and cons with both. The 'Dutch' style design has shorter pedestrian crossing distances and there is no straight-ahead cyclist/ left-turning motorist conflict. The degree of separation for cyclists and motorists on the approach to the junction is greater and more space is available for straight ahead and right turning cyclists waiting at the stop line. Left-turning cyclists will not encounter signals. In my opinion, the 'Dutch' style layout is superior to the Proposed Scheme preferred junction layout from a cycle safety and comfort perspective.
- 7.5.38. Notwithstanding this, I note that the aim of the NTA's Preliminary Design Guidance Booklet is 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. In this regard, it is noted that 'Dutch-style' junctions allow for potential un-signalised conflict between pedestrians and cyclists, and this was a concern for disability groups. The NTA also point out that Dutch-style junctions can result in a reduced level of service for pedestrians with at least 3 crossing movements (2 no. cycle tracks and 1 no. carriageway) to cross a side road.
- 7.5.39. Along with the potential for cyclist and motorised vehicle conflict, the potential for pedestrian and cyclist conflict should be a pertinent consideration in the assessment of the proposed scheme, particularly with the emergence of faster moving personal mobility vehicles. For this reason, there may be some advantages with the Proposed Scheme preferred junction layout which signalises pedestrian and cyclist conflict.
- 7.5.40. I reiterate that BusConnects is essentially a retrofitting project which seeks to reallocate road space for bus priority and active modes of transport. Care must therefore be taken to address conflicts between active modes within the reallocated

- space. It may be the case that, even with road space reallocation, space for active modes will still be limited and therefore kerb separation and the preferred protected junction may only be feasible. Added to this is the need for a consistent design approach for all modes when introducing radically altered junction layouts. I would therefore be reluctant to recommend different designs such as the 'Dutch' style. Furthermore, I am limited to assessing the merits of the scheme before me and I consider that it represents a substantial improvement in terms of safety and comfort for cyclists.
- 7.5.41. With respect to the potential for conflict between straight ahead cyclists and left-turning motor vehicles, measures will be put in place to increase the visibility and awareness of cyclists to motorists. Cyclists will be given an advanced green light after which motorists can turn left during a flashing amber phase. Signage will be installed to instruct motorists to yield to cyclists continuing straight ahead. The junction layout will also encourage motorists and cyclists to meet at more of a right angle to one another. I consider that these measures are satisfactory and will help to alleviate the risk of left turn collisions.
- 7.5.42. Therefore, on balance, I am satisfied with the overall level of infrastructural improvements for cyclists along the entirety of the route. The figures presented in the EIAR show that the Proposed Scheme will have beneficial impacts in terms of safety and projected increase in cycling activity along the route. I consider that the Proposed Scheme will add significantly to more sustainable transport infrastructure within the city.

Conflict at bus stops

- 7.5.43. The Proposed Scheme will significantly improve the safety of cyclists passing bus stops by deflecting the cycle track behind the stop. This will negate the need for cyclists to either wait behind the bus at the stop or to continue around the outside of the stopped bus. This inevitably means that conflict at the bus stop will then occur between pedestrians and cyclists.
- 7.5.44. A hierarchy of bus stops is proposed, with island stops being the preferred design, followed by a shared bus stop landing zone and then laybys. All bus stops where there are cycle tracks along the route of the Proposed Scheme are to be the island or landing zone design, except the stop to the south of the Coachman's Inn, and the 6

- no. stops proposed between Santry village and Collins Avenue where cyclists are diverted off the main carriageway to 'quiet streets'. The Board should also note that bus stops on Parnell Square East and West would be entirely separated from cyclist by the provision of a two-way cycle track on the western side of the carriageway on Parnell Square East. However, there is concern within submissions that the narrow island bus stops place cyclists in conflict with boarding and alighting bus passengers. In response, the NTA note that island bus stops are preferred and the shared bus stop landing zone will only be installed where there are space constraints.
- 7.5.45. The Preliminary Design Guidance Booklet illustrates the bus stop options including measures to mitigate potential cyclist and pedestrian conflicts. This includes the narrowing of the cycle track as it approaches the bus stop, yellow bar markings, ramps, tactile paving and LED warning studs. A cycle signal with pedestrian push button unit is proposed for the preferred island bus stop arrangement.
- 7.5.46. In my opinion, the signalised crossing of a 1.5m wide cycle track seems excessive. Signal poles will lead to clutter at the bus stop and there is the risk that signals will not be adhered to by both cyclists and pedestrians. I consider that zebra crossing road markings would suffice at bus stops. Notwithstanding this, it appears that signalised crossings at bus stops are preferred by disability groups. I have seen island bus stops without signalised crossings over the cycle lane in other parts of Dublin e.g., along the Stillorgan dual carriageway between the UCD campus and the Talbot Hotel. I consider that new island bus stops could be fitted with sockets in the event that signals need to be fitted. I recommend that a condition is attached to any grant of permission stating that the applicant shall consider the installation of signals at bus stops on a case-by-case basis.
- 7.5.47. I would otherwise be satisfied with the design of proposed bus stops from a cyclist and pedestrian safety perspective. The deflected cycle lane will have the effect of slowing cyclists down, and this is becoming a more important consideration with the increasing use of personal mobility vehicles.

Cycle Lane Width and Kerb Height

7.5.48. It is contended in one of the observations that any cycle track being constructed at less than 2m in width is not designed for future capacity and that it is possible to construct all cycle lanes along the proposed route to a minimum of 2m in width.

- 7.5.49. The desirable minimum width for cycle tracks along the CBC is 2m and the minimum width is 1.5m. The cycle track is reduced to 1.5m at various locations along the route with the reasoning associated with the protection of built heritage (thatched cottage at Collinstown and historical wall at Santry Demesne), the protection of natural heritage (pNHA at Santry Demesne and mature trees along Drumcondra Road Lower), the protection of institutional lands (Plunkett College and Highfield Hospital), where two-way cycle tracks are proposed, and where there are space constraints closer to the city centre.
- 7.5.50. I am satisfied that the treatment at pinch points is in line with the road user hierarchy as designated within DMURS i.e., the width of the general traffic lanes should reduce first, then the width of the cycle track should be reduced before the width of the pedestrian footpath is reduced.
- 7.5.51. In my opinion, kerb heights along cycle tracks are an important factor for eliminating illegal parking, particularly where a general traffic lane adjoins the cycle track. A low kerb height makes illegal parking or pulling up onto the cycle lane more tempting to motorists. The Preliminary Design Guidance Booklet proposes a kerb height of 60mm between the cycle track and roadway. I consider this to be appropriate.

Traffic Calming

- 7.5.52. DMURS refers to self-regulation where the idea is that speed is controlled by place. A number of psychological and physical measures are set out that influence driver speed, enhance place and manage movement. Some of these measures are already in place and others could be introduced to control speed. There are sections of road that are relatively long and straight with good forward visibility that can encourage speeding however, cyclists are segregated from the main carriageway for 82% of the route and directed to quiet streets between the junctions from the Omni Shopping Centre to Collins Avenue.
- 7.5.53. It is stated in a submission that the residents are concerned about the use of Lorcan Road and Shanrath Road and I note that no traffic calming is proposed on these quiet cycling streets or from the junction of the old Swords Road with Collins Avenue to its junction with Shanrath Road. On the day of my site inspection, I observed the residential nature of these streets and I consider that this would be a safe environment for cyclists and the associated increase in cycling activity would not

impact unduly on existing residents. 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. I am satisfied that traffic calming along these streets is unnecessary because of the low traffic volumes utilising them.

Cycle Parking

- 7.5.54. The Landscaping General Arrangement drawings shows the locations of proposed bike racks along the Proposed Scheme corridor at The Comet in Santry village, the junctions with Iveragh Road, Church Avenue, Clonturk Park, Richmond Road, Hollybank Road, Clonliffe Road, North Circular Road, and on Dorset Street Lower.
- 7.5.55. It was noted in submissions that there is a lack of cycle parking along certain sections of the Proposed Scheme and having reviewed the drawings I note the absence of provision of bike racks between Pinnock Hill to Santry village. To facilitate multi-modal trips, Fingal County Council suggests the inclusion of 10-20 bicycle stands at all CBC bus stops and not just 'where practicable'. In response, the NTA reiterate that bike racks will generally be provided, where practicable, at island bus stops and key additional locations.
- 7.5.56. I consider that cycle parking provision could be increased from Pinnock Hill to Santry village. In my opinion, it would be reasonable for the applicant to outline cycle parking provision in detail as a condition of any grant of planning permission to ensure that areas of most activity are properly provided for. In general, subject to this condition, I am satisfied that the Proposed Scheme will provide for a good level of cycle parking at appropriate locations.

Other Specific Cycling Issues

7.5.57. A number of other specific issues were raised by Fingal County Council and others and have been responded to by the NTA. Fingal County Council considers that the cycleway is incoherent at the Airport roundabout part of the scheme and will result in southbound cyclists remaining in the bus lane. I consider this to be similar to the issue that I highlighted earlier in this report whereby appropriate signage is required on the southbound cycle track immediately to the south of the Coachman's Inn to

- alert cyclists to cross to the western side of the carriageway in order to be able to proceed safely southwards on the proposed dual cycle track. The NTA state that Dublin Airport roundabout is proposed to be upgraded as per the BusConnects Preliminary Design Guidance Booklet to enhance pedestrian, cyclist and bus priority infrastructure. The design rationale was to improve cycle facilities and provide bus priority on the CBC mainline.
- 7.5.58. Similarly, it is highlighted that a number of other junctions have what is considered an inconsistent treatment for cyclists along the route of the Proposed Scheme namely, Northwood Avenue Junction, Santry Avenue Junction, Shanrath/Shantalla Road Junction, Collins Avenue Junction, Griffith Avenue and other configurations at junctions towards the City Centre. It is also contended in a submission that cyclists should have priority at 5 junctions on the cycle lane between Clonliffe Road and Botanic Avenue, per the NTA's Cycling Design Manual (2023). Clarity is also sought for right of ways for pedestrians and cyclists at exit points from industrial estates, business and leisure premises along the proposed route. In response to the submissions, the NTA have stated that safe, segregated cycling facilities that are accessible to all are provided along the corridor. They also state that crossing points at minor junctions are provided with raised tables in order to raise the road level up to footpath level and facilitate unimpeded crossing. The NTA also confirm that details regarding temporary access provisions will be discussed with residents and business owners prior to construction starting in the area and that the duration of the works will vary from property to property, but access and egress will be maintained at all times. I am satisfied with the response of the NTA to these issues.
- 7.5.59. I also note the submissions of public representatives stating that the residents of Lorcan Road and Shanrath Road are concerned about these roads being used as 'quiet streets' and that more could be done to facilitate safe cycle lanes on the Swords Road through Santry Village. There are also a number of other submissions that raise varying and sometimes conflicting suggestions about the usage of the 'quiet streets', namely:
 - The light sequence at Santry Bypass Junction should include a dedicated turn for cyclists to encourage cyclists to use Shanrath Road,

- Concerned that the cycle lane to be routed through shrubbery would create an opportunity for anti-social behaviour and illegal dumping,
- Consider that the crown lifting required to some trees at Shanrath Road to facilitate a safe route for cycling to be unnecessary as they contend that cyclists will continue to use the pathway on the main road at this location to cycle through Santry Village.
- Highlight the lack of clarity on the design of the 'Quiet Street'.
- 7.5.60. As stated earlier in this report, I am satisfied that the Lorcan Road/ Shanrath Road and old Swords Road 'quiet streets' can operate as safe zones for cyclists without any significant infrastructure interventions. On the day of my site inspection, I observed the old Swords Road operating as such. I do agree with the suggestion that cyclists would need to be encouraged at the Santry Bypass Junction to proceed onto Shanrath Road/ northwards as legibility at this junction would dictate that cyclists proceed into the bus lane through Santry village. A simple light sequence/ directional signage would coax cyclists onto the quiet street. I have no concerns about impact on the trees/ green area that the provision of cycle tracks would incur and I consider that the increased level of activity that a cycle track would bring would make this a safer area with the increased passive surveillance.
- 7.5.61. There is general opposition to the removal of mature trees and shrubs to accommodate a cycle lane. This occurs intermittently along the route of the Proposed Scheme and most significantly to the south of Castlemoate House to the Airport Roundabout. It is annotated on the Landscape General Arrangement drawing that new tree planting is proposed to repair the wooded edge where planting is removed to widen the carriageway. I am satisfied that this is a reasonable approach.
- 7.5.62. It is contended that there is poor usage of the cycle lane at the junction of Griffith Avenue and the Swords Road and that the Proposed Scheme has not addressed this. It is nonetheless hoped that superior cycle facilities along the CBC will encourage better connections to surrounding areas, including adjoining housing estates that are currently segregated from the main road. Again, the provision of cycling infrastructure on nearby streets is outside the remit of the Proposed Scheme.
- 7.5.63. The absence of a segregated cycle track on the city-bound side of the street between Blessington Street and Granby Row is highlighted, as is the absence of pedestrian/

- cycling infrastructure on Parnell Square West/ Granby Row. I note the comments regarding the lack of segregation on Dorset Street Upper however, in order to retain on-street parking at this location it is necessary to provide a cycle lane rather than a cycle track at this location. As stated previously in this report, the cycling infrastructure for both in-bound and out-bound cyclists is provided on Parnell Square East and, therefore, the provision of similar infrastructure on Parnell Square West was not considered necessary. I consider this to be reasonable as sufficient cycling infrastructure is being provided in close proximity.
- 7.5.64. A number of other issues highlighted such as the bus lane break at the Quick Park site, the function/ design of yellow junction box on southbound lane to the north of Turnapin Lane Junction, design confusion at raised table crossings at side road junctions, and design clarity required for the Parnell Street junction and how all modes connect to on-going routes. I am satisfied that these minor issues have been satisfactorily addressed by the NTA within their response to the submissions.
- 7.5.65. In conclusion, I consider that the proposed scheme will result in significant improvements for cyclists along the CBC, particularly at junctions.

Bus priority and infrastructure

7.5.66. BusConnects is first and foremost a comprehensive programme of bus priority installation and associated infrastructure along the Core Bus Corridors of Dublin City. The main purpose of the programme is to improve public transport in the main urban areas by redesigning the bus network; building new bus corridors and cycle lanes; implementing new simpler fare structure, ticketing and cashless payment systems; introducing new bus livery, bus stops, shelters and park & ride sites; and transitioning to a new zero emissions bus fleet. This section of the assessment addresses the elements of BusConnects bus programme which fall under the Proposed Scheme, i.e., building of the new bus corridors, bus stops and shelters.

Bus Priority

7.5.67. It is an aim of the Proposed Scheme to enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement over general traffic movements.

- 7.5.68. From the outset, it should be noted that the proposed scheme will see the proportion of its 12km route increase from the present 72% with bus priority measures to 100% of the route. Currently bus lanes are available for 72% of the Swords to City Centre route, with no signal control priority for buses. There are large gaps in bus priority along the R132 with challenges for reliability around Santry Village, Whitehall and Drumcondra. Bus priority in the case of the Proposed Scheme falls under three categories, i.e., bus lanes, bus gates and traffic signalling. Continuous bus lanes are the preferred means of achieving bus priority and most of the Proposed Scheme will have bus lanes on both sides of the road.
- 7.5.69. Furthermore, there are key sections of the current bus lanes that are not operational on a 24-hour basis in addition to being shared with both formal and informal parking facilities and cyclists which compromises the reliability and effectiveness of the bus services in these areas.
- 7.5.70. Dedicated bus lanes will be located along the inner lane between junctions. These lanes will be used by the BusConnects services along the CBC but will also be available to taxis, coaches and bicycles. There will be situations where taxis and coaches will have to merge into the general traffic lane in order to make a left turn. The NTA have confirmed in their response to the submissions that bus lanes on the Proposed Scheme will operate 24 hours a day, 7 days a week.
- 7.5.71. Signal controlled priority will allow buses to get ahead of general traffic on single lane road sections. This typically happens where space restraints do not allow for a separate bus lane and the carriageway has to be shared with general traffic over short distances. Buses will receive a green light and general traffic will stay stopped at the signal, and when the bus passes, general traffic will be allowed to proceed. Overall, the Proposed Scheme will provide bus priority measures along the entirety of the corridor.
- 7.5.72. Buses may also be afforded priority at normal junctions, particularly where there is left-turning general traffic. Cyclists and buses travelling straight ahead through a junction will receive a short early start stage so that they can advance before general traffic. Buses travelling straight through the junction in dedicated bus lanes and left-turning traffic from adjacent shared straight/ left-turn lanes should not usually be

- permitted to run together; buses will receive a green light when the general traffic has a red light.
- 7.5.73. I note that one of the Observers stated that allowing general traffic onto North Fredrick Street would compromise the functioning of the bus lanes. At present, North Fredrick Street is the only part of the route that operates as a bus gate i.e., a short length of road that is exclusive to buses, taxis, cyclists and emergency vehicles. General traffic is directed by signage to divert in other directions. Signage may also indicate the hours of operation of the bus gate. The NTA have confirmed that this arrangement will prevail, and I am satisfied that this will continue to be the case under the Proposed Scheme.
- 7.5.74. Bus journey times can be affected in situations where slower moving cyclists are sharing the bus lane, and this will not occur on the route of the Proposed Scheme. The results of the micro-simulation modelling assessment demonstrate that the total bus journey times on all modelled bus services will improve by between 8% and 19% during the AM and PM Peak hours of the 2028 Opening Year and 2043 Design Year.
- 7.5.75. Overall, I am satisfied with the overall level of priority afforded to buses along the route. The figures presented in the EIAR show that the Proposed Scheme will have beneficial impacts in terms of time savings and reliability for bus services. It has also been shown that there is the scope to increase the number of bus services on the route without compromising reliability.

Bus stops

7.5.76. The main bus infrastructure to be installed along proposed scheme comprises the bus lanes, bus signals and a bus gate, as described above, i.e., infrastructure to enable bus movement. The other main infrastructural provision relates to bus stops. Bus stops are typically spaced at distances of 400m apart in suburban areas and 250m apart in urban centres. Island bus stops, shared landing area bus stops and inline bus stops are proposed along the CBC. Island bus stops are the preferred layout, and these contain an island with shelter for bus passengers with a deflected cycle track continuing behind. In the shared landing zone arrangement, cyclists are ramped up to the footpath level where they continue through the bus stop. In urban areas, it is generally acceptable for general traffic to wait behind buses that are

- stopped at in-line bus stops. The Board should note that bus stop types are described in detail in Section 11 of the PDGB for BusConnects Core Bus Corridors.
- 7.5.77. The island bus stop is the preferred layout, and where space is more limited in urban areas, a shared bus stop landing zone is proposed. In particularly constrained locations, a cantilever bus shelter can be provided adjacent to the carriageway to maintain access to frontages at the back of the footpath. All bus stops will have a shelter where possible and there will be CCTV and Real Time Passenger Information (RTPI). All stops will have 160mm kerbs for ease of access for wheelchairs and buggies. Appropriate tactile kerbing will be provided to ensure that visually impaired users are aware of crossing and access points. Push button signals to cross cycle lanes are also proposed.
- 7.5.78. There is concern with the narrow width of landing space for boarding and alighting passengers at certain bus stops and the potential for conflicts with passing cyclists. As noted above, measures will be included to slow cyclists down on the approaches to bus stops. Narrow landing areas will be used where space is limited, and pedestrians and cyclists are likely to be more conscious of each other in these situations. I consider that the benefits of all of the proposed bus stop types outweigh existing arrangements from an overall safety perspective.
- 7.5.79. Concern is also expressed in some submissions that bus stops may attract antisocial behaviour. On the contrary, I would be of the opinion that the increased numbers of people using bus services and waiting at bus stops will provide "eyes on the street" type surveillance and this will have the effect of reducing anti-social behaviour. It should also be noted that the provision of CCTV will be increased at bus stops.
- 7.5.80. In general, I consider that bus stop design, together with increased frequency of service and improved journey times, will represent the main improvements to the bus user experience under the BusConnects programme. The new bus stop infrastructure will be superior to existing infrastructure in terms of comfort, visibility, access, safety and information. Seating and shelters will provide added comfort for waiting passengers and wait times can be minimised through RTPI on screen at the stop and from mobile phone applications. Stops will generally be more visible and shelters can contain additional information such as bus timetables and route maps.

- 7.5.81. The issues of bus lane policing and enforcement were raised in submissions. This is outside the scope of the Proposed Scheme, being an enforcement measure under which the Board has no jurisdiction. However, I note that NTA is exploring proposals for bus lane enforcement as set out under Measure INT20 Enforcement of Road Traffic Laws of the Draft Greater Dublin Area Transport Strategy 2022-2042.
- 7.5.82. A number of submissions suggest the relocation of certain bus stops; however, bus stops are located in areas of activity/ access and are more or less evenly spaced in accordance with recommended standards. Relocation of a bus stop may also have knock-on impacts on the location of other stops. Having assessed their location and siting along the overall route, I am satisfied that the placing of bus stops is appropriate and acceptable, and will not give rise to significant amenity issues.

Terminus

- 7.5.83. A new bus terminus/ turning area will be provided in the existing car park and on part of the green space opposite the group of retail premises at the junction of the Swords Road and Coolock Lane. There are a number of submissions where people have objections to the proposed location of the bus terminus at an already challenging junction to navigate with a busy shop and new housing developments consented. There are concerns that this terminus would lead to further congestion, will exacerbate the parking constraints at this location, and that pedestrian circulation in the parking area will create a potential traffic hazard for pedestrians going to/ from the supermarket. One of the Observers suggests an alternative location for the bus terminus to the east of the Coolock/ Santry roundabout on undeveloped green space adjacent to the Centra Supermarket.
- 7.5.84. The proposed terminus/ turning area is a mechanism for buses on the D4 route to turn around and go back out on their route and the purpose is to provide for improved existing or new interchange opportunities with other transport services. The NTA confirm that four trees are to be removed within that open space to facilitate the proposed bus terminus (semi-mature lime trees and are all categorised as being of moderate value and conservation). The proposals at this location are not anticipated to result in any change to parking demand or volumes of traffic. Regarding the suggestion to relocate the terminus to another location east of the Coolock/Santry roundabout, the NTA state that this is not a viable option.

7.5.85. I am satisfied that the only identifiable impact at this location would be the loss of four trees at this location, all of which are categorised as being of moderate value and conservation. I am also satisfied that the terminus will not result in any change to parking demand or volumes of traffic at this location.

Other

- 7.5.86. One of the Observers states that there is no indication of how buses are going to continue with reliable journey times north of Pinnock Hill to/ from Swords. I note the NTA's response that the route in Swords, north of Pinnock Hill, will be developed separately by Fingal County Council as part of local connectivity project. Furthermore, I agree that the Proposed Scheme does not have the remit to improve bus facilities at surrounding areas. Again, this is outside the remit of the Proposed Scheme.
- 7.5.87. Similarly, there is a suggestion that buses use the existing motorway to shorten journey times to/ from Swords. I consider this to be an operational matter for the bus service provider as to whether they wish to provide a direct service between Swords and the city centre as opposed to or in addition to providing a service to all the residential areas along the route of the Proposed Scheme.
- 7.5.88. I also note Fingal County Council's request that the NTA liaise with FCC regarding the final tie in point at the Fosterstown Link Road. I consider this to be an important consideration and I recommend to the Board that, in the event of a grant of permission, an appropriate condition be attached requiring this.
- 7.5.89. It is stated within one of the observations that minimal time savings on all schemes does not justify the amount of money that will be spent on the projects or the invasive measures in the outer suburbs and that the time savings stated do not appear to be significant when looked upon as savings on a single bus journey. However, I consider that over the course of a year the cumulative time savings can be considered significant and, added to this, the introduction of a level of reliability to the scheduling will add significantly to the quality of the bus service available to residents along the each of the routes, including Swords to city centre. Furthermore, I consider that it is too simplistic to look upon single journey time savings as a barometer for this Proposed Scheme and the overall BusConnects project. I am of the opinion that the multi-modal approach being taken in the provision of pedestrian, cycling and bus

infrastructure will result in significant time (economic) and environmental gains. This will accrue as a result of the better use/ re-allocation of the existing road space to more efficient and sustainable forms of private (foot, bicycle, and e-bike/ e-scooter) and public (bus) transport.

Access to commercial premises

7.5.90. Access to commercial premises is a recurring issue within submissions from businesses and other organisations located along the CBC. The compulsory purchase of land will also affect the operation of certain businesses along the route, and this is addressed in further detail in the accompanying/ concurrent report on the CPO application. This section addresses the issues raised regarding access arrangements during the construction and operational phases of the proposed scheme for deliveries, customers, and staff members.

Construction Phase

- 7.5.91. Clearly, a scheme of this nature will cause disruption and inconvenience for adjoining businesses during the construction phase. The street is the main point of access, and the construction phase is likely to last approximately 36 months. The main construction activities will involve site preparation and clearance works, road and street upgrades, and construction site decommissioning, including the removal of all construction facilities and equipment. Impacts will include temporary traffic diversions or lane restrictions and disruption to footpaths, cycleways, and other areas.
- 7.5.92. Access will be maintained to adjacent businesses, residences, and community facilities during the construction period. In addition, the Proposed Scheme will be constructed in sections and therefore businesses within each section will not be directly impacted for the full 36 months of the construction phase. A Construction Environmental Management Plan (CEMP) will be prepared for the Proposed Scheme, and this will contain mitigation measures to ensure that disruption and nuisance are kept to a minimum.
- 7.5.93. A Construction Traffic Management Plan (CTMP) forming part of the CEMP will identify opportunities for the maximum movement of people during the construction phase with access being maintained for emergency vehicles. Temporary traffic

- management measures will be included to minimise the impacts during peak periods and safe routes past works areas will be provided for pedestrians and cyclists. The NTA will liaise with local authorities, An Garda Síochána, residents and businesses prior to all road closures and diversions.
- 7.5.94. In general, I consider that the construction works can be adequately managed so that significant effects on the street environment are minimised. Impacts on businesses are an inevitable consequence during construction and it is incumbent on the applicant to minimise these impacts to the greatest extent possible. I note that all temporary traffic measures to facilitate the works will be undertaken in accordance with Department of Transport's 'Traffic Signs Manual, Chapter 8 Temporary Traffic Measures and Signs for Roadworks' (DTTAS 2019f) and associated guidance. Furthermore, general traffic redistribution onto the surrounding road network is not expected to be a significant issue during construction, and emergency access will be maintained for emergency vehicles along the Proposed Scheme throughout the construction phase. This is particularly important given the presence of substantial health facilities (Mater Hospital and CHI Temple Street) along the CBC.
- 7.5.95. I do note TII's observations in relation the potential interaction between the Proposed Scheme with the national road network carriageways and the light rail network at five general locations and their associated request for mitigation and agreements for plans and details of works on or in the vicinity of the national road network and the timing of works outside of Luas operational hours. I consider this to be a reasonable request and can form part of the details contained within the CEMP and CTMP.
- 7.5.96. Nesta Ltd. state that they have direct access from the lands that the NTA proposes to acquire and are concerned that this may significantly and adversely affect vehicular access to their business. A cause of further concern was the confirmation from NTA's representative that continued access will be maintained to businesses affected by the works, where practicable. They highlight, given the nature of their self-storage business, vehicular access needs to be maintained at all times. I am satisfied that a CEMP will contain the details required to maintain continued access to this property. I also note that they consider that the interference with vehicular access for an unknown period to be contrary to the land use zoning. I am satisfied that the land use is established on this site and any interference with access to the property will be temporary at most.

7.5.97. Overall, I am satisfied that any impact during construction will therefore only be temporary, affecting commercial premises along the route for a relatively short period of time.

Operational Phase

- 7.5.98. The main objections from businesses along the Proposed Scheme relate to impacts during the operation phase. Moving from north to south along the route of the Proposed Scheme, Scanaill Veterinary Surgeons at Pinnock Hill junction contend that the proposal will reduce the number of access points to the property / business from two to one, which together with the loss of 6 no. car parking spaces on their site, will impact their operational capacity. They also contend that the removal of hedgerows will have implications for noise and the hospital's ability to treat horses. The details of the proposed revised access and parking arrangements are annotated on the General Arrangements Drawing (Sheet No.1 of 37 refers) and I consider the proposals would result in changes to the property that will affect the operation of the business. I consider that this matter would form part of the arbitration process with the NTA. I note the proposed alterations to the existing trees/ hedgerows at this location are annotated on the Landscape General Arrangement drawings. This drawing demonstrates the area of vegetation/ trees to be removed, the vegetation/ tress to be retained, the proposed native planting, and the proposed hedgerow along the shared boundary with the Proposed Scheme. I am satisfied that, once established, the proposed planting and hedgerow will provide adequate screening for the veterinary clinic.
- 7.5.99. Juliana Boland queries whether existing access to and parking arrangements at their property will be possible on a permanent basis during and after works. The General Arrangement Drawing (Sheet No.3 of 37) presents the proposals for this area to include a footpath, cycle track and a bus lane. No changes are proposed to the operation of the entrance to this house/ business and, consequently, I am satisfied that staff/ customers and general road users are unlikely be adversely affected by the Proposed Scheme at this location.
- 7.5.100. Patrick Fitzsimons and Parfit are concerned that there is insufficient detail regarding the post-construction access arrangements and that drainage arrangements may negatively impact the retained property and parking areas. At

present, there is a single junction for access and egress to the property. There is a footpath and a cycle lane along the front of the property. The General Arrangement Drawing (Sheet No.6 of 37) presents the proposals for this area to include a footpath, a cycle track and a bus lane. No changes are proposed to the operation of the junction associated with the property. Consequently, I am satisfied that staff/ customers and general road users are unlikely be adversely affected by the Proposed Scheme at this location.

- 7.5.101. Kealy's of Cloghran are concerned that the proposal will result in the creation of a long-term traffic hazard and that the proposal will render the existing staff/coach parking to the front of their property unusable. They state that there is a lack of detail on the drawings in relation to the accessibility of the car park to the rear of their property and guery whether traffic accessing their property will have to gueue on the Swords Road for cyclist priority at the junction. At present, there are two junctions with Kealy's Pub and the Proposed Scheme, one to the north of the property and one to the south. The southern junction is used for access and egress and the northern junction is used for access only. There is a shared footpath/ cycle track along the front of the property at present and a paved area to the front of the building. The General Arrangement Drawing (Sheet No.9 of 37) presents the proposals for this area to include a dual cycle track and a separate footpath. No changes are proposed to the operation of either junction associated with the property and, consequently, I am satisfied that staff/ patrons and general road users are unlikely be adversely affected by the Proposed Scheme at this location.
- 7.5.102. I note that there is an observation from Brendan Collins and from Collinstown Caravans Limited about similar issues on adjoining properties in Cloghran. Mr. Collins contends that the revised access arrangements will compromise the long-term accessibility of Collinstown Business Park, that the proposed works on his entrance are unnecessary in the context of achieving the wider objectives of the Proposed Scheme, and that the proposed works to the access arrangements to Collinstown Business Park will have a detrimental impact on traffic flow on the Swords Road.
- 7.5.103. In this regard, the NTA are applying for approval of a minor modification to the Proposed Scheme relating to the design of a junction at the entrance to the Collinstown Business Park to introduce a signalised junction. The NTA state there

are no significant impacts arising from this minor modification and there is no change to the assessment conducted in the EIAR. The introduction of this proposed additional signalised junction at the entrance to Collinstown Business Park has been considered in relation to the outcomes of the assessment of the Proposed Scheme outlined in Chapter 6 (Traffic & Transport) in Volume 2 of the EIAR. They state that the additional signalised junction will not result in any impacts beyond those assessed and reported in Chapter 6 and there are no changes to the overall conclusions and significance of effects.

- 7.5.104. I am satisfied that the new design will be a slight improvement for pedestrian and cyclist safety. I note that the NTA state this improvement is not significant and does not change the overall pedestrian and cycling infrastructure rating for the junction. There are no changes to the parking and loading arrangements, but the signal control will introduce a small amount of delay to the overall traffic network as through traffic will occasionally be required to stop for side road traffic to enter the network. It should be noted that the signalisation of the junction has the potential to also cause a slight increase in bus journey times, but within the accepted tolerances. I agree with the NTA's assessment that no additional significant changes across the environmental topic of traffic and transport are anticipated when compared to the original assessment that was undertaken in the submitted EIAR.
- 7.5.105. Similarly, it is stated that the house adjacent to Collinstown Business Park will be rendered inaccessible by the Proposed Scheme with no pedestrian or vehicular access to the Swords Road. There appears to be on-going attempts to secure the relevant consents to extend this house and it is the owner's contention there is a pre-1963 residential use with the extant building on the site. This is a matter that needs to be resolved between the owners of the house and the planning authority, Fingal County Council, and is outside the remit for consideration on this particular application. I do note that the owner confirms his willingness to facilitate the provision of a left-in left-out entrance/ exit arrangement if the relevant consents are acquired on the site/ property. The NTA have confirmed that reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed accommodation works plans will be prepared in consultation with landowners. I consider this to be acceptable.

- 7.5.106. Maxol, located immediately to the south of the Omni Park Shopping Centre, are not clear how the NTA will achieve two-way general traffic and two bus lanes outside the existing petrol filling station or houses opposite without any land take. They state that the operator of the filling station requires a minimum of 4.25m to the back of the footpath to comply with safety regulations and request that the location of tanking and services be considered when finalising design detail. The General Arrangement Drawing (Sheet No.21 of 37) presents the proposals for this area to include two general traffic lanes, two bus lanes and two footpaths. The narrower nature of the street at this location required the re-location of both north bound and southbound cycle tracks to a 'quiet street'. The provision of proposed infrastructure is facilitated by temporary land take on both sides of the street at this location. Further to the south in Santry village, some permanent land take is also proposed. It is not clear in the Observer's comments that their requirement of 4.25m separation distance from the footpath is measured from the base of the existing pumps. It is confirmed in the NTA's response to this submission that this can be achieved without any changes to the Proposed Scheme at this location and I am satisfied that this is the case.
- 7.5.107. Magner's Pharmacy contends that the proposed works are excessive in nature and too long in duration and will cause major disruption to businesses at schoolhouse mews. They are concerned that the removal of car parking spaces to the front of Magner's Pharmacy and Eurohouse will threaten the survival of these businesses. They state that the car parking spaces are needed for the loading and unloading of goods and to allow access to the pharmacy for people with limited mobility. On the day of my site inspection, I observed cars parked on the footpath at this location in what appears to be a private arrangement for off-street parking. The General Arrangement Drawing (Sheet No.19 of 37 refers) presents the proposals for this area to include three no. designated car parking spaces on the Swords Road opposite Magner's Pharmacy. I consider that customers/ delivery vans could avail of these spaces and further spaces/ loading bay available on the adjacent Schoolhouse Lane. Overall, I am satisfied that the businesses at this location are unlikely be significantly affected by the Proposed Scheme.
- 7.5.108. Tesco Ireland request that any proposed alterations in the area of the service yard entrance to the Omni Shopping Centre are carefully considered and that the

junction can continue to facilitate HGV access in a safe manner. Residents have also expressed regret that suggestions from local residents in relation to traffic improvements at the Omni Park Shopping Centre have not been facilitated. It is suggested that the bank of earth adjacent to the footpath in front of Magenta Hall be removed to facilitate a bus lane and right-turning into Omni.

- 7.5.109. The NTA state that a swept path analysis was carried out considering a suite of vehicles which included articulated vehicles and no issues with swept path analysis were identified on the Proposed Scheme. They state that the creation of a second access route is outside the scope and objectives of the Proposed Scheme planning application. They also confirm that the bank of earth adjacent to the footpath in front of Magenta Hall will be removed as part of the Proposed Scheme to facilitate widening of the existing road corridor to provide a general traffic lane, bus lane, cycle track and footpath in each direction. A right turn lane for traffic turning right into the Omni Park Shopping Centre is also proposed at this location.
- 7.5.110. Tesco Ireland reiterate the request that they made at the Preferred Option stage that a portion of the parking outside of its Metro store on the Drumcondra Road be dedicated as a loading bay. They also request that detailed design of the footpath and cycle track at the Drumcondra Metro facilitates the movement of stock and goods to the premises and seek the inclusion of a designated loading bay on Dorset Street Lower and also that detailed design of the footpath and cycle track facilitates the movement of stock and goods to the premises. The General Arrangement Drawing (Sheet No.30 of 37 refers) shows that there are no changes proposed to the existing on-street parking opposite the entrance to the Metro store on Drumcondra Road. This is a Core Bus Corridor and main thoroughfare, and car parking should be placed at the bottom of the hierarchy as far as street space allocation is concerned. In my opinion, there is no justification for retaining parking at this location when there is ample parking in surrounding streets, and I consider that this area could be designated as a loading bay only. At present, there is a loading bay outside of the Tesco Express on Dorset Street Lower. The General Arrangement Drawing (Sheet No.34 of 37 refers) shows that the loading bay is to be retained at this location.
- 7.5.111. More generally, Leo Street and District Residents Association & Lower Dorset Street Community Group contend that the current proposal for Dorset Street lacks loading bays to facilitate the safe delivery of goods to the businesses on the street

- and that this can be facilitated by the removal of the central median. Neasa Hourigan TD also requests that sufficient loading bays are provided from Griffith Avenue to the city centre so that the bus/ cycle lanes are not blocked by delivery vehicles.
- 7.5.112. In response, the NTA confirmed that the Proposed Scheme loading bay design will facilitate the movement of trolleys from the kerbside over the cycle lane. They state that loading bays for commercial properties are not required to achieve the Proposed Scheme objectives and that the Proposed Scheme would not preclude the future introduction of loading bays at a future date should the local authority wish to give consideration to this.
- 7.5.113. It is contended that the Mater Hospital has not been consulted on the BusConnects scheme and proposed changes to traffic flow and that the right-turn ban onto Eccles Street will create traffic, as well as noise and pollution, issues for residents of North Circular Road, Berkeley Road and Wellington Street Lower. Neasa Hourigan TD also seeks clarity on accessing the Mater Hospital by car from Dorset Street when travelling inbound. Better traffic management is also sought at the area to the front of the Mater Private hospital and at Eccles Street/ Berkeley Road junction. Another Observer is concerned that the introduction of no right-turn onto Eccles Street and the no left-turn onto Hardwicke Place from Dorset Street will restrict access to the Mater Hospital car park/ Mater Private Hospital and CHI Temple Street, respectively. I am satisfied that all traffic management proposals have been incorporated into the modelling used by the applicant and the Proposed Scheme will provide a level of public transport service that will facilitate easier public access to the hospitals in the area, whilst allowing emergency vehicles uninhibited road access.
- 7.5.114. On the whole, I recognise that the streetscape is being substantially altered and businesses along CBC are amongst those who are likely to the most affected by the proposals. Businesses are critical to street life and must be facilitated as best as possible through construction and operational stages. Notwithstanding this, businesses cannot assume ownership of public space to the front and there is no right to on-street parking. Furthermore, delivery arrangements should be facilitated without impacting on the operation of bus services. In my opinion, adequate loading bays are proposed to serve the CBC and businesses should be expected more often to load from nearby side streets to avoid disruption on the main thoroughfare. On

balance, whilst businesses and other facilities along the CBC will experience a general reduction of vehicular access for parking and deliveries, this will be outweighed by the benefits to these businesses and facilities from an improved public realm and better footpaths, as well as improved public transport access.

Private cars

- 7.5.115. DMURS sets out street/ road user priorities for designers to consider.

 Pedestrians should be afforded the higher priority, followed by cycles and then public transport. Private motor vehicles should be placed at the bottom of the user hierarchy. However, this should not be interpreted as an anti-car stance. It is recognised that people will always be attracted to cars where they are a convenient and flexible option and for many users, it is the only viable option for medium to longer distance journeys.
- 7.5.116. I note that the level of access for private motor vehicles has been largely retained along the CBC. Consequently, I consider that the attraction of the car will remain because the Proposed Scheme may not inconvenience drivers to an extent that modal shift becomes a realistic option. I acknowledge that the private car may be the only viable option for some for medium to longer distance journeys. However, CSO figures show that more than half of travellers use the car for journeys under 2km. If drivers are limited to a realistic speed limit of 30 kph and 50 kph they may begin to realise that alternative modes, particularly with the emergence of personal mobility vehicles, are just as attractive.
- 7.5.117. There are arguments both for and against the removal of parking along the CBC within submissions. One such propose is for the removal of on-street parking, as off-street parking is available to residents along the route. The control and limitation of car parking is a measure that can be successful in encouraging modal shift to sustainable modes. Overall, there will 58 parking spaces removed as a result of the Proposed Scheme over the 12km route. 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. The Proposed Scheme will also formalise the parking arrangements at these locations to improve the environment, particularly for pedestrians and cyclists. Further to this, the availability of equivalent types of parking

- along adjacent streets within 200m of these locations (and typically within 100m) will limit the overall impact of this loss of parking. It can be concluded that the significant improvements to walking, cycling and bus facilities encouraging use of sustainable modes will reduce demand for private parking.
- 7.5.118. Both the Iona and District Residents Association and Carmel Sherry and Celine Byrne suggest the re-location of accessible parking bay from Markey's shop/ AIB on Drumcondra Road Lower to the end of Hollybank Road rather than the proposed re-location outside of Fagan's Pub on Botanic Avenue. On the day of my site inspection, I noted both the location of the existing accessible bay and the proposed location. I am satisfied that its relocation to side street, Botanic Avenue, would represent a safer location for using this space. I also looked at the suggested location on Hollybank Road but note that this location would be outside the site area for the Proposed Scheme. The Board should note that there is an accessible space available already on Hollybank Road.
- 7.5.119. One of the two accessible parking bays on Dorset Street is proposed to be removed, and one of the Observers considers this to be unacceptable given its proximity to hospitals. In the context of a significantly improved public transport service and benefits throughout the Proposed Scheme in terms of facilities for people with disabilities, such as tactile paving, increased kerb height at bus stops and improved public realm and footpaths, I consider that loss of one accessible space to be acceptable. The Building for Everyone A Universal Design Approach (Centre for Excellence in Universal Design 2020) guidelines have been followed in the design of the Proposed Scheme, which ensures accessibility to services for all.
- 7.5.120. A number of landowners/ developers such as MKN Properties Limited, Clondev Properties Limited, J. Murphy (Developments) Limited and MKN Investments Limited raise concerns in their submissions regarding the connectivity to/ from the Proposed Scheme with road objectives in the Fingal Development Plan such as the delivery of the Fosterstown Link Road; the integration of the BusConnects, Metro and Fosterstown Link Road; and connectivity with permitted and proposed developments (F22A/0687, ABP-314253-22, ABP-307011-20 and ABP-313331-22). The Board should note that certain works that the NTA require for the delivery of the BusConnects scheme are on lands in the ownership of Clondev Properties Limited and MKN Investments Limited lands (F22A/0687, ABP-314253-

- 22, and ABP-307011-20 refers). The NTA state that they will continue to engage with the relevant local authorities and developers with regards to future schemes but note that temporary or permanent access to development lands is a matter for the local authority. I consider this approach to be acceptable.
- 7.5.121. There is general concern in a number of submissions about the potential adverse impact this development may have on the existing traffic congestion in the area and that cut-through traffic will increase during construction works over the duration of the multi-year build of the three large projects proposed (two BusConnects corridors and Metrolink) and that, once works are completed, new traffic flow patterns can create cut through routes. Observers have then requested a review of traffic management in the district as part of the wider design of the BusConnects and Metrolink projects.
- 7.5.122. Similarly, questions are raised within submissions regarding the traffic modelling carried out for the Proposed Scheme. It is submitted that traffic numbers recorded during lockdown are flawed and are not a true reflection and it is also asserted that defective data is a feature of the proposal and cites trip generators not mentioned such as Santry Stadium, Tolka Park, Croke Park, approved residential development, possible future residential development, and schools in the area as well as population increase. One of the Observers could not find main attractors/ trip generators in Appendix B of the Preliminary Design Report.
- 7.5.123. The NTA highlight that Section 3.2.1 of Appendix A6.2 Traffic Modelling Report sets out the multi-tiered transport modelling approach that has been adopted. It explains that there are four tiers of transport modelling which have been used in the design development and to assess the Proposed Scheme. I am satisfied that all committed development has been included in traffic modelling. The Transport Impact Assessment appended to the EIAR focuses on the movement of people rather than the movement of vehicles and I have concluded in the EIA that the assessment approach is robust and appropriate for modelling the future impacts of the Proposed Scheme. I consider that the information presented in the EIAR, and associated appendices gives a good representation of existing and future people movement scenarios along the corridor for the opening year and into the future.

- 7.5.124. A number of other specific issues have been raised in submissions relating to private car use such as a request that the traffic lights on Shantalla Road opposite the park should be sequenced with lights at Santry Bypass Junction to improve traffic movement; concern that the bus has to move into the car lane in the manoeuvre to cross Shantalla Bridge and this will prevail under the Proposed Scheme; and a request for a new sign for 'No Overtaking/ Single Line Traffic Only' on Collins Avenue West.
- 7.5.125. The NTA has confirmed that the signal staging plans at the Swords Road (R132)/ Larkhill Road/ Shanrath Road junction and Shantalla Road (R132) junction (over the bridge) are proposed to be synchronised to avoid blocking back of traffic flows in both the directions. The NTA state that the introduction of a cycle lane along Collins Avenue West results in a narrower traffic lane on the approach to the Swords Road slip road and the slip road to the N1, and it is anticipated that this will encourage slower vehicle speeds and will discourage vehicles from overtaking at this location. Consequently, I am satisfied that no new sign is required at this location.
- 7.5.126. Another suggestion such as the opportunity to make Church Avenue and Ormond Road one-way I consider to be outside the scope of this assessment as they do not form part of the Proposed Scheme. This and other road traffic/ safety issues would be matters for the relevant road authorities, Dublin City Council and Fingal County Council, to consider.
- 7.5.127. In general, I consider that the impacts on private car users have been kept to a minimum and this is perhaps indicative of the time when the Proposed Scheme was designed. Notwithstanding, I do not consider that the lack of curtailment of the private car in no way represents grounds for refusing the Proposed Scheme. I consider that the proposed bus, cycle and pedestrian infrastructure will be of a quality to encourage a modal shift away from the private car and this should satisfy what is essentially the main of objective of the BusConnects programme. Given the urgency of climate change, I consider that the Proposed Scheme as presented will go a long way towards the promotion of compact growth and sustainable movement.

7.6. Impact on residential amenity

- 7.6.1. A scheme of this nature has the potential to impact on residential amenity, most notably through its construction phase. The effects of noise, air quality and construction traffic are assessed in the EIA and appropriate mitigation measures are put forward to minimise impacts on population and human health. It is concluded that the overall impact of the Proposed Scheme will be adverse and short term during the construction phase and generally positive during the operational phase. Benefits to residential amenity will occur from improved air quality and noise standards, and from a reduction in community severance.
- 7.6.2. Clearly, the most significant impact on residential amenity will be the permanent acquisition of residential land for the operation of the Proposed Scheme and temporary acquisition of residential land during construction. The proposal will therefore impact on the affected landowners. In addition, the Proposed Scheme will impact on existing access arrangements along the CBC.
- 7.6.3. 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 significantly improve the current situation in terms of these emissions.
- 7.6.4. I am satisfied therefore that no significant long-term impacts are expected 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

7.6.5. Third parties have raised concerns in relation to the removal of front boundaries and moving the traffic lanes closer to these properties, particularly in Santry village, than at present and this increases the perceived loss of privacy. Another concern is raised about the proposed bus stop on Dorset Street Lower on how it affects the privacy of the residents of the houses at this location.

- 7.6.6. I consider that the houses in Santry village 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. I am satisfied that individual properties along the route will remain adequately set back from the public footpath so as not to significantly impact on the privacy of residents beyond what would be considered acceptable in such an urban environment.
- 7.6.7. I empathise with the occupants of the houses on Dorset Street Lower where idling buses increase the perceived loss of privacy at first floor level. However, I consider that the setback of these houses to be typical of houses in an urban environment and, again, are adequately set back from the public footpath so as not to significantly impact on the privacy of residents. As noted elsewhere in this report, I consider that the presence of a bus stop will contribute to street safety by introducing more passive surveillance.
- 7.6.8. 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. The NTA also confirms that reinstatement of property frontage including boundary walls, gates, railings, driveway, footpath and landscaping will be on a like for like basis and detailed works accommodation plans will be prepared. This is illustrated in Photomontage 32 accompanying the Landscape and Visual Assessment chapter of the EIAR.
- 7.6.9. 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.
- 7.6.10. It is also contended that the Proposed Scheme will cause the destruction of the natural streetscape in Santry Village and the removal of trees/ hedging will impact carbon sequestration and that BusConnects does not address the greater needs of

- the area, which is regeneration. Concerns are raised that works/ land acquisition on the western side of the Swords Road would eliminate the need for lands to be acquired from the gardens of residents on the west side of the Swords Road. It is contended that the four stated underpinning principles of the NTA are being ignored for Santry Village and Róisín Shortall TD believes that the plan represents a missed opportunity to enhance the streetscape in Santry Village and Whitehall to address the under provision of green spaces and trees.
- 7.6.11. The improvement of permeability and access to sustainable modes of transport and increasing active travel 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.
- 7.6.12. I consider that the proposed road widening in Santry village will not give rise to significant impacts on adjoining residential amenity during the operational phase of the Proposed Scheme.
- 7.6.13. The NTA confirm that road closures and diversions that will need to be carried out during the construction phase will take into consideration the impact on road users, residents, and businesses, and will be in consultation with the local authority and An Garda Síochána. Access will be maintained for emergency vehicles along the Proposed Scheme throughout the construction phase. As noted, boundaries will be reinstated on a like for like basis. From a residential amenity perspective, I consider that the lands to be temporarily and permanently acquired will have no significant impact on the residents of the properties in question.
- 7.6.14. On balance, I consider that the Proposed Scheme will have positive impacts on residential amenity through the general improvement to the street environment.

Residential areas along the CBC will then become healthier and better places to live. This substantially outweighs the negative impacts of the Proposed Scheme which will mostly be short term and concentrated in the construction phase. Over time, as landscaping matures, any adverse impacts during the operational phase will become less perceptible.

7.7. Ecological impacts

- 7.7.1. The ecological impacts of the proposed scheme are addressed in the Biodiversity section of the EIA in Section 9.6 below. In addition, the Appropriate Assessment in Section 8 addresses the effects of the proposal on European Sites. Potential impacts on biodiversity could occur from vegetation and tree removal; construction and earthworks; drainage and additional silt/ pollutant release into drainage network; lighting during construction and operation; noise and vibration; and invasive species.
- 7.7.2. However, it is concluded in the EIA that, subject to conditions, no significant direct, indirect or cumulative adverse effects on water quality, habitats and species are likely to arise. Mitigation measures will be put in place to protect the ecological integrity of the site during the construction phase. It has also been ascertained in the Appropriate Assessment that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of any European site in the zone of influence, in view of these sites' Conservation Objectives.
- 7.7.3. The main issues raised in submissions relating to biodiversity concerns the loss of trees and vegetation. A Tree Schedule in the Arboricultural report submitted as part of the EIAR (A17.1 Aboricultural Impact Assessment, Chapter 17, EIAR Volume 4 (Part 4) refers). The proposal will require the removal of 180 individual trees, 19 tree groups or parts of tree groups and 9 hedges or parts of hedges. I note that a total of 27 trees, groups of trees or hedges are recommended to be removed and replaced irrespective of the proposal due to physiological or structural decline.
- 7.7.4. There are a number of broad and specific concerns and observations throughout the submissions in relation to the removal/ loss of trees. Michelle Bannon & Ranjith Techeil are concerned about the environmental impact with the loss mature trees and green space. Similarly, Donal O'Brolcáin is concerned about the removal of the

number of individual trees, groups of trees and hedgerows. Deirdre & Aidan O'Callaghan and Jerry & Lorraine Crowley request clarification on trees to be removed near the Port Tunnel as these were planted to provide screening to residents and protection from the noise and dust generated by the operation of the tunnel. There is a request that trees to be removed between Whitehall Church and Whitehall Junction, and between Whitehall Junction and Gaeltacht Park should be replaced and that further trees should be planted outside of 219 Swords Roads and through Santry village. Similarly, Róisín Shortall T.D. believes that the plan represents a missed opportunity to enhance the streetscape in Santry Village and Whitehall to address the under provision of green spaces and trees and Karen Wade contends that the scheme threatens almost every public green space in Santry.

- 7.7.5. In relation to the area near the Port Tunnel, the NTA have responded by stating that trees will be replaced in the majority of cases and associated negative effects will be largely negated over the long-term as the replacement planting matures. I note the area of screening to be removed and I am satisfied that given the extent of planting that occurred at this location and the amount of semi-mature trees/ vegetation to be retained that there will be no significant impact on the ecological value of this area and that the residential amenity of the houses to the west will not be compromised.
- 7.7.6. The public realm works proposed for Santry village are annotated on the Landscape General Arrangement drawings (Sheet no.'s 16 23 refer) that show the area between the junctions of the Swords Road with Northwood Avenue and Larkhill Road/ Shanrath Road. I note that there are trees to be removed opposite the entrance to Clonliffe Harriers A.C. (4 no.), Coolock Lane (4 no.), in the central median and on both sides of the street at Santry Villas (11 no.), to the south of Santry Avenue (9 no.), at the AIB (3 no.), at Magenta Hall (6 no.), to the north of the junction with Lorcan Road (5 no.), and at the junction with Shanrath Road (2 no.) with some crown lift at this location also.
- 7.7.7. The trees/ hedgerows to be removed will be compensated for through the planting of street trees and hedgerow. These are illustrated on the Landscape General Arrangement drawings accompanying the application. The new planting will comprise of:
 - 91 street trees,

- 1,160m² woodland trees,
- 758m of proposed hedgerow,
- 14479m² of proposed species rich grassland,
- 1789m² of proposed ornamental planting,
- 1159m² of proposed native planting; and
- 31,460m² of proposed amenity grass planting.

I consider that any clearance of trees and shrubs during the main bird breeding season from March to August inclusive should be avoided and I recommend that, if the Board is minded to approve the Proposed Scheme, that a condition be attached to any grant of permission requiring this.

- 7.7.8. The entire length of the pedestrian area on the street from Northwood Avenue to Larkhill Road/ Shanrath Road is proposed to be paved with significantly enhanced areas and proposed planting at Coolock Lane, Santry Avenue, along the street at Magenta Hall, and Lorcan Road. I note that the general approach to the Proposed Scheme near Santry Demesne was to limit the extent of the works and to protect and retain the existing character of this area and the village. I am satisfied that this has been done to the extent that is possible under a scheme that has been designed for the provision of multi-modal transport infrastructure.
- 7.7.9. I note that the Tolka River is recognised as a salmonid system under significant ecological pressure largely as a result of urban siltation. The river also supports lamprey and brown trout populations in addition to other fish species and provides a particularly important nursery function for salmonid species throughout. The proposed development will include a comprehensive and integrated approach for achieving river protection during construction and operation, implemented through environmental construction management planning.
- 7.7.10. Overall, the impact of the proposed scheme on certain aspects of biodiversity is unavoidable. However, the proposed works will mostly occur within the existing built-up area and therefore any species would be habituated to human disturbance. Additional planting will compensate for vegetation removal, which will take place outside the bird nesting season. Measures will also be put in place to avoid mobilisation of sedimentary material during construction and to prevent the spread of

invasive species. There will be beneficial impacts on surface water quality due to the inclusion of SuDS measures.

7.8. Impacts on Built Heritage

- 7.8.1. Impacts on built heritage are addressed in detail under Section 9.9 of the EIA covering cultural heritage and the landscape. Most of the study area is located outside the northern suburbs of Dublin, which until the 20th century largely consisted of agricultural land. Surviving thatched vernacular houses of note, include two thatched cottages located opposite each other on the Swords Road at Collinstown (FCC RPS 604) and Dardistown (NIAH 1349004). The Proposed Scheme terminates at Parnell (originally Rutland) Square, one of the city's great Georgian squares, and its oldest. There is significant architectural heritage in Parnell Square with the Rotunda Hospital (DCC RPS 6419), the Gate and Ambassador Theatres (DCC RPS 1338), the Plunkett Cairns wing of the hospital (DCC 6419), and the Garden of Remembrance (NIAH 50010658). Other significant buildings on the square include Charlemont House, now the Hugh Lane Gallery (DCC RPS 6384) and the Abbey Presbyterian (Findlater's) Church (DCC RPS 6379).
- 7.8.2. Street furniture of note within the study area includes nineteenth and early twentieth century cast iron post boxes and lamp posts, granite kerbing, paving and coal holes on Parnell Square and a fountain on Cavendish Row (DCC RPS 1339). The Parnell Monument (DU018-425) is located at the junction of Cavendish Row and O'Connell Street Upper. It, along with the southern half of Parnell Square, is within the O'Connell Street Architectural Conservation Area.
- 7.8.3. Notwithstanding this, and as noted above, the Proposed Scheme does not contain many up-standing structures as such, apart from signage and bus shelters, and therefore most construction activity will affect the surface of the street only. Surface works, and in particular improvements to the public realm and the modal shift to active forms of travel, will allow for greater appreciation of the surrounding built heritage. Mitigation measures will nonetheless be implemented to protect adjoining heritage features. Works will be carried out in accordance with "Methodology for Works Affecting Sensitive and Historic Fabric" set out in Volume 4 of the EIAR.

- 7.8.4. In their submission, Fingal County Council (FCC) noted that the protected structures in the Fingal area were not annotated in Figure 16.1 of Volume 3 in the EIAR, but they provide a list of protected structures and historic landscapes adjacent to the route and within their functional area. In response to this, the NTA state that the error occurred in the Figure only, with the relevant features recorded on the Record of Protected Structures (RPS) being fully assessed within Chapter 16 (Architectural Heritage) in Volume 2 of the EIAR. I am satisfied that the architectural heritage impact assessment carried out by the applicant was comprehensive in this regard.
- 7.8.5. FCC make a number of observations on specific aspects of the built heritage. They state that alterations to the position of the milestone (RPS No.866) at Pinnock Hill fundamentally alters the significance of the protected structure as it severs the technical link between the measurement that its placement is marking.
 Consequently, they request that the position of the new bus stop is reconsidered and amended to avoid re-positioning of the historic milestone. On the day of my site inspection, I noted the position of the milestone adjacent to a 2m high block wall, a 1.8m high steel panel gate and road signage for the bus/ cycle lane. I consider that the milestone would need to be relocated irrespective of the provision of the bus stop. I also consider that placing the milestone in a prominent position and the removal of more modern structures and clutter at this location will attract a higher level of attention/ interest in this mile marker and the historical function associated with it.
- 7.8.6. FCC also request that trees to be removed at Castlemoate House (RPS No.611) are replaced with mature trees of sufficient depth and height to provide screening from a tall hangar on the airport lands. There is a wide belt of mature trees situated along the western boundary of the lands associated with this house, which runs as far as the Airport roundabout. It is clearly demonstrated in the Landscape General Arrangement drawing (Sheet No.'s 7 and 8 refer) that the NTA propose to remove a portion of this belt i.e., about 25%. Therefore, most of these mature trees will remain in place at this location and some native planting is proposed along the shared boundary of the Proposed Scheme and these lands. I am satisfied that the tall hangar will remain similarly well screened from all approach roads to the airport.
- 7.8.7. FCC also sought clarification on whether there are any proposed changes to the roadside boundary and vehicular entrance to Castlemoate House. The NTA have

- confirmed that the eastern boundary of Castlemoate House, the existing boundary stone wall will not be impacted by the Proposed Scheme. On the day of my site inspection, I noted that this entrance is not in use. I am satisfied that the impact at this location is limited to removal of some trees and that this will only be a portion of the total group of existing trees. Given the depth of the wooded area at this location, I am also satisfied that the retained trees will continue to provide visual screening of the hangar structures to the west.
- 7.8.8. FCC raise a concern about the impact that the Proposed Scheme would have on the thatched cottage (RPS No.604) at Collinstown and request that the proposal is redesigned to avoid impacting on the protected structure. The NTA have advised that land-take is proposed to accommodate segregated cycle tracks, widened footpaths and additional road space and that this will have a negative impact on the setting of the cottage. The NTA proposes to record the existing boundaries in position prior to the commencement of construction works. In particular, recording of all affected masonry, railings, gates, gate posts and capping stones to be removed along the front boundary of the thatched cottage will be undertaken by the architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee the labelling, taking down and reinstatement of the affected gates, railings, piers, and masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of the EIAR. I am satisfied that the works will not impact the thatched cottage however, it will have an impact on the historic setting of the building. I consider that the reinstatement of the existing roadside boundary will be done in an appropriate manner and, with the removal of the existing unkept griselinia hedge along this boundary, may enable a better public view and greater appreciation of this part of the built heritage of the area.
- 7.8.9. FCC also seek clarity on the proposal to 'cut back'/ demolish part of the demesne wall at Santry and whether this is limited to sections of the wall that have been previously amended. The NTA have confirmed that the construction of the Proposed Scheme is limited to the southern corner of Santry Demesne with associated removal of one mature Category C (low value) tree, three early mature trees and an impact on the existing (modern) wall/railing boundary which will be set back and reinstated. Photomontages are provided that demonstrate the impact on Santry Demesne

- (Views 8, 11, 13 and 17 of Figure 17.2, Volume 3 of the EIAR refer). I am satisfied that the works to the wall are proposed on a modern part of the demesne wall and the visual impact is limited to this and will be neutral, slight and long-term in nature.
- 7.8.10. Finally, JJ Breen (Magner's Pharmacy) is concerned about the structural integrity of the 'Old Swiss Cottage Building' during the works. I am satisfied that, given the limited extent of surface works, there would be no significant risk to the integrity of this building. The NTA have confirmed that the Magner's Pharmacy building is included within the group of 53 structures assessed ('Other Structures of Built Heritage Interest', Section 16.4.3.6 of Chapter 16) and there would be 'Indirect, Negative, Slight, Temporary' impacts as a result of the construction of the Proposed Scheme. I agree with this assessment.
- 7.8.11. Section 16.4.3.7 of Chapter 16 provides detail on the impact assessment on 'Street Furniture' during the Construction Phase with three locations identified where historic paving and surface treatments will be directly impacted. Mitigation for surfaces will include retention of the various kerb stones, cellar hatches and cellar lights in-situ, and their integration into the proposed new paving design. Reinstatement/ recording will be undertaken under the supervision of appropriate architectural heritage specialist. I consider these measures to be satisfactory for the protection of these heritage features.
- 7.8.12. There are also instances of historic post boxes and lamp posts along the CBC that will be recorded, labelled and reinstated in proximity to their pre-existing positions. The Marian statue at Our Lady's Park will also be recorded, labelled, and reinstated at the same or slightly different position in the park.
- 7.8.13. In general, I consider that the Proposed Scheme can be developed without incurring significant impacts on individual heritage structures along the CBC. In a wider sense, the Proposed Scheme will also present the opportunity to enhance the setting of the significant architectural heritage along the route. A better overall appreciation of the heritage value of the entire corridor will be gained through increased active travel, public transport usage and public realm improvements. High traffic volumes have the effect of dominating the streetscape to the detriment of the people on the street and their appreciation of heritage features. Reduced traffic volumes will allow people to view the streetscape in quieter and safer surroundings. It should also be

- noted that motorists on a street are focused primarily on the road in front of them. Fewer people in cars will also mean fewer people passing through unable to view their surroundings.
- 7.8.14. I am therefore satisfied that the proposed CBC will have a limited and acceptable impact on the built heritage of the corridor and immediate area.

7.9. Consultation

- 7.9.1. A number of submissions on the Proposed Scheme contend that the consultation process has been inadequate. It is submitted that the consultation process was grossly deficient and that there were inadequate timescales for submissions. Another observer was not aware of the second round of public consultation. An Observer queries allowing NTA an opportunity for a response / 'second go' to submissions. It is also suggested that all 12 schemes should have been submitted as one application. Brendan Heneghan contends that the Board should reject the application on the basis of an 'administrative discrepancy' where seven items were omitted from the original application and submitted on 6th July, when some members of the public may have made their submissions on the application already.
- 7.9.2. A number of observers requested that an oral hearing be undertaken. Following my recommendation, the Board decided that the holding of an oral hearing was not required in this case. It was decided that there is sufficient written evidence on file to enable an assessment of issues raised. The Board also decided to invite further submissions on the NTA's response to submissions received pursuant to Section 217B of the Planning and Development Act 2000, (as amended). It should be noted that the holding of hearings is a discretionary function of the Board.
- 7.9.3. A total of 17 submissions were received on the NTA's responses to the issues raised by prescribed bodies and observers within submissions. From a consultation perspective, some observers restated their request to the Board to hold an oral hearing. It is considered by certain parties that no detailed design is available of observers' properties and there will be no opportunity to engage with the NTA.
- 7.9.4. It is stated in one of the submissions that there was a lack of communication regarding the Proposed Scheme. From the outset, it should be noted that three rounds of non-statutory consultation were held, and a number of consultation tools

were used, including one to one meetings, a dedicated website, printed brochures, public information events, community forums, resident group meetings, digital channels, press and radio, outdoor advertising, and infographics. Design alternatives were examined during the different phases of public consultation and route alternatives were considered during the design development of the Proposed Scheme and informed by public consultation and survey data. The NTA intend to continue collaboration in advance of, and during, the subsequent construction stage. Construction works will therefore be carried in consultation with local residents.

- 7.9.5. Details of the consultation entered into by the applicant with Fingal County Council, Dublin City Council and other prescribed bodies as part of the preparation of the project are set out in Section 1.7 of the EIAR and the Public Consultation Report 2018-2022 which is a separate document.
- 7.9.6. The statutory process has made available for public review of all application information as set out in legislation, as well as allowing for submissions in relation to the proposals to the Board. 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.
- 7.9.7. In relation to the statutory process, I note the applicant erected 59 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.

- 7.9.8. 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.
- 7.9.9. 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.
- 7.9.10. Overall, I am satisfied that extensive public consultation and stakeholder engagement was undertaken. The applicant has clearly engaged with all third parties, residents, businesses, community groups and other organisations and has amended the scheme accordingly where it has been feasible to do so and in response to concerns raised. I am also satisfied with the level of clarity provided within application and statutory consultation documentation. 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.

7.10. Other issues raised in Submissions

7.10.1. This final section of the planning assessment addresses any other specific issues that were raised in submissions or that remain outstanding.

Modelling for Proposed Scheme

- 7.10.2. A number of issues have been raised in relation to the modelling on which the Proposed Scheme is predicated on. It 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.
- 7.10.3. 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.

- 7.10.4. The design of the scheme was an iterative process and responded to constraints and requirements that were added to the models over time. 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.
- 7.10.5. The proposed route was modelled for vehicle type, speed changes, junction layouts and crossing facilities. All results were refined and altered to produce the preferred route and associated junctions and signalling.
- 7.10.6. 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.
- 7.10.7. I am satisfied that the Proposed Scheme will provide an improved service in all aspects of the public bus service along it, and I am also satisfied that the applicant has utilised a detailed, robust and multi-faceted modelling approach to develop the Proposed Scheme.

Adequacy of Drawings

- 7.10.8. Donal O'Brolcáin also draws attention to what he considers out of date information on the General Arrangement Drawings, Volume 1, EIAR. Similarly, Karen Wade contends that works permitted and completed on a site at 1 Magenta Crescent, Santry appear to cause an obstacle to the expansion of the road at that location.
 - 7.11. The NTA responded by stating that the labels indicated on the General Arrangement drawings are included as high-level identifiers to aid with understanding the drawings and that not all developments or landmarks are depicted on the drawings. They also confirmed that there is no requirement to demolish the new build at 1 Magenta Crescent.

Noise and Air Quality

7.11.1. 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.

Operation of Dublin Airport

7.11.2. The DAA requests further consultation regarding the relocation of utilities facilitating the airport and part of the security fence and highlight the possible congregation of people within the Outer Public Safety Zone and associated policy for the protection of safety zones in the Fingal Development Plan 2023-2029. In their response to this submission, the NTA confirmed that the Critical Part of the Security Restricted Area Fence is not impacted by the Proposed Scheme and that no proposed bus stops are relocated within the Inner Public Safety Zones. I consider the NTA's response to be satisfactory.

Property Values

7.11.3. 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 along the Swords Road in Santry village. 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. The NTA confirm that local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by works. The issue of property devaluation is a matter for the arbitration process.

Temporary Accommodation

7.11.4. Alan & Fiona Fitzpatrick are concerned about the impact that the construction works associated with the Proposed Scheme would have on the health and safety of their family and state that they have been given no assistance in locating temporary accommodation during construction works. The NTA confirm that no road closures

are proposed in the vicinity of Seven Oaks for the duration of the works so access and egress from their home will not be impacted by the Proposed Scheme. I am satisfied that no health and safety issues will arise for the residents of Seven Oaks during the Construction Phase.

Maintenance Arrangements

7.11.5. One of the observers is unclear about the maintenance arrangements for the embankment areas between on Drumcondra Road Lower between Hollybank Road and Saint Alphonsus Road during the temporary acquisition period and the commencement of the Proposed Scheme. The NTA confirm that they will engage on the construction arrangements, the road maintenance arrangements during construction and the standard to which the Proposed Scheme will be completed prior to transfer back to the relevant local authority.

7.12. Suggested conditions by Prescribed Bodies

- 7.12.1. Throughout this report, I have referenced the requests of prescribed bodies for the inclusion of certain conditions on any grant of planning permission. In order to provide a level of clarity about these requested conditions, I will list and comment upon them hereunder.
- 7.12.2. TII consider that it would have been appropriate to include and record mitigation of potential impacts for the protection of national roads and light rail networks as part of Chapter 22 of the EIAR and the CEMP. Notwithstanding this, TII recommend conditions that address these matters entirely and these are:
 - Written agreement for plans and details of works on or in the vicinity of the national road network, long term maintenance agreements, Design Reports, written agreement of the CEMP, and written agreement of a Construction Traffic Management Plan.
 - Overhead Conductor System poles, written agreement of the CEMP, timing of works outside of Luas operational hours, written agreement of a Construction Traffic Management Plan, access and maintenance agreement with Luas operator/TII, and the requirement for a works permit under the Light Railway (Regulation of Works) Bye Laws 2004.

- A specific construction methodology approach, co-ordinated with TII and Luas operator to ensure the protection of the asset and minimal Luas service disruption in the area of proposed works at the junction of Parnell Street with Parnell Square East (Cavendish Row) and Parnell Square West.
- Specific mitigation and monitoring commitments for potential impact on the capacity and efficiency of the Luas infrastructure and service and that these are included in the proposed CEMP.
- 7.12.3. I am satisfied that all the above-mentioned conditions that the TII requested are reasonable, and sufficiently necessary, so as to recommend that a condition be attached to a grant of permission requiring a CEMP and CTMP, if the Board are minded to do so.
- 7.12.4. The Department reviewed the EIAR and is broadly in agreement with the findings in relation to Archaeology and Cultural Heritage and they recommend a condition be attached to any permission issued. This is a reasonable request and I recommend that, if the Board is minded to grant permission for the Proposed Scheme, such a condition be attached.
- 7.12.5. The daa requests that all obstacles on and adjacent to the aerodrome be illuminated with approved lighting sources and that a condition be attached to any grant of permission requiring consultation/approval by the daa. This is also a reasonable request and I recommend that, if the Board is minded to grant permission for the Proposed Scheme, such a condition be attached.
- 7.12.6. DCC have requested that a number of conditions be attached to a grant of permission, particularly in relation to the handover of the streets post-construction phase. I consider this to be a matter between the two parties and I do not consider it necessary to attach a condition to any grant of planning permission requiring a legal agreement for this. Other conditions relate to the standard that works are required to be completed to and generally addressed by proposed condition no.1 in relation to the completion of the works and condition no.2 regarding mitigation measures in the NIS and EIAR. I do recommend the inclusion of conditions in relation to archaeology, built heritage, water supply and drainage arrangements and the type of finishes/ materials for proposed pedestrian/ cycle bridge adjacent to Frank Flood Bridge.

8.0 Appropriate Assessment

8.1. Article 6(3) of the Habitats Directive

- 8.1.1. 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.

8.2. The Natura Impact Statement and Supplemental Information

- 8.2.1. The application is accompanied by an AA Screening report and an NIS (2023) 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.
- 8.2.2. 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.
- 8.2.3. A description of all baseline surveys is outlined within Section 4.6 of the NIS. The following is a list of surveys undertaken:
 - Habitats, Flora and Fauna surveys (which included Otter), June and August 2018, and a confirmatory survey was carried out in August 2020.
 - A desk study identified all hydrological crossing points and one waterbody that
 may be subject to significant disturbance. This crossing point is on the Tolka
 River adjacent to Frank Flood Bridge where the pedestrian/ cycle crossing is
 proposed.
 - This part of the site was surveyed in July 2022 as part of an aquatic survey and a broad habitat assessment was carried out at each of the proposed crossings.
 - Dedicated fisheries surveys were carried out, but the nearest European site designated for Annex II fish is c.30km distant from the Proposed Scheme.

- The suitability of water features and associated foraging, roosting, and nesting habitats, located within or directly adjacent to the Proposed Scheme, were assessed for Kingfisher potential in October 2020. This was reconfirmed in a March 2022 resurvey.
- A desk study was carried out to identify any potential suitable inland feeding and / or roosting sites for winter birds located within or directly adjacent to the Proposed Scheme, which included a review of recent aerial photography and known inland feeding sites for the SCI bird species light-bellied Brent goose Branta bernicla hrota (Scott Cawley Ltd 2017). A habitat suitability assessment was carried out in October 2020 to verify the suitability of potential inland feeding / roosting sites identified during the desk study. This was reconfirmed in a March 2022 resurvey.
- There were no suitable wintering bird sites which would be subject to habitat loss by to the Proposed Scheme and, as such, it was not deemed necessary to carry out wintering bird surveys.
- 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.
- 8.2.4. 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.
- 8.2.5. No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.
- 8.2.6. There were twelve areas of non-native invasive plant species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 identified within, or in close proximity to, the Proposed Scheme during field surveys. All twelve areas are located along the River Tolka in Drumcondra and the species recorded were Himalayan balsam *Impatiens* glandulifera and giant knotweed *Reynoutria sachalinensis*.
- 8.2.7. No signs of otter, an Annex II species, were recorded during surveys within the footprint of the Proposed Scheme.

- 8.2.8. 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.
- 8.2.9. The Proposed Scheme will connect to the existing surface water drainage system and seven watercourses: the Ward_040, Sluice_010, Mayne_010 (2 times), Santry_010 and Tolka_060, as well as Ringsend WwTP, before ultimately draining to Dublin Bay. The water bodies in the study area for the purposes of the assessment are Swords Glebe, River Gaybrook, River Sluice, River Mayne, Cuckoo Stream, River Santry, River Tolka, Tolka Estuary, Royal Canal and Liffey Estuary Upper.
- 8.2.10. There are twenty one European sites that are located downstream of waterbodies that are hydrologically connected to the Proposed Scheme. These European sites are: North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, North Bull Island SPA, Malahide Estuary SAC, Howth Head SAC, Rogerstown Estuary SAC, Rockabill to Dalkey Island SAC, Glenasmole Valley SAC, Ireland's Eye SAC, Wicklow Mountains SAC, Lambay Island SAC, Noth Bull Island SPA, South Dublin Bay and River Tolka SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Wicklow Mountains SPA, Rogerstown Estuary SPA, Howth Head Coast SPA, Dalkey Island SPA, Skerries Island SPA, Rockabill SPA, The Murrough SPA, and North West Irish Sea SPA.
- 8.2.11. There are thirteen SPAs designated for SCI species that are known to forage and/ or roost at inland sites across Dublin City and/ or utilise Dublin Bay. These include South Dublin Bay and River Tolka SPA, North Bull Island SPA, Dalkey Islands SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Howth Head Coast SPA, Lambay Island SPA, Malahide Estuary SPA, The Murrough SPA and North West Irish Sea SPA.
- 8.2.12. 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 c1.9km east of the Proposed Scheme.
- 8.2.13. 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.
- 8.2.14. 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.
- 8.2.15. 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.

8.3. Adequacy of information submitted by the applicant

- 8.3.1. 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 R132 Swords Road at Pinnock Hill roundabout to R132 Swords Road junction with the Naul Road, from the junction of to the junction with Marino Mart Fairview and also from the junction of the R132 Swords Road with Corballis Road South to the junction of the R132 Swords Road with Northwood Avenue, to Drumcondra Road Upper, to the Royal Canal, all in County Dublin within both Fingal County Council and Dublin City Council administrative areas.
- 8.3.2. I am satisfied that all possible European Sites that could in anyway be affected have been considered by the applicant.
- 8.3.3. 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.

8.4. Screening for Appropriate Assessment

- 8.4.1. 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).
- 8.4.2. The screening assessment undertaken on behalf of the applicant concluded that the potential for significant effects could not be ruled out for 20 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.
- 8.4.3. 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. There are four known inland wintering bird feeding sites within approximately 300m of the Proposed Scheme, namely Whitehall/ Pairc Imearta, Drumcondra/ Holy Cross College, All Hallows (DCU Campus) and Drumcondra / St. Patrick's College. 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.
- 8.4.4. 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 (based on applicants assessment with consideration added for North West Irish Sea SPA).

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 no potential for loss of <i>ex-situ</i> inland feeding sites used by SCI bird species.	No There are no European sites at risk of direct or <i>ex-situ</i> habitat loss effects.
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 off-site wastewater treatment plants	Yes There are European sites at risk of hydrological effects associated with the Proposed Scheme: Malahide Estuary SPA, Malahide Estuary SAC, North Dublin Bay SAC

South Dublin Bay SAC, South Dublin Bay and River Tolka SPA. North Bull Island SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Ireland's Eye SAC, Ireland's Eye SPA, Lambay Island SAC. Lambay Island SPA. Skerries Islands SPA. Dalkey Islands SPA, Rogerstown SPA. Rockabill SPA, The Murrough SPA, and North West Irish Sea SPA. Habitat degradation as a result of hydrogeological No There are no European sites at risk Groundwater-dependant habitats, and the species those of hydrogeological effects habitats support, in the local area that lie downgradient of the associated with the Proposed Proposed Scheme. Scheme Habitat degradation as a result of introducing/spreading Yes non-native invasive species: There are European sites at risk of Habitat areas within, adjacent to, and potentially downstream the introduction/spreading of nonof the Proposed Scheme native invasive species as a result of the Proposed Scheme: North Dublin Bay SAC. South Dublin Bay SAC. North Bull Island SPA. South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Malahide Estuary SAC, Malahide Estuary SPA, and

Air quality impacts:

Potentially up to 50m from the Proposed Scheme boundary and 500m from the Construction Compound at Construction phase, and up to 200 metres at Operation Phase

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 Proposed Scheme, taking into account the sensitivity of the qualifying interest species to disturbance effects

No

There are no European sites at risk of air quality impacts associated with the Proposed Scheme.

North West Irish Sea SPA.

Yes

There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the Proposed Scheme. However, there are ex-situ inland feeding sites which may be 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.
The Murrough SPA, and North West Irish Sea SPA.

8.5. Screening Determination (recommendation)

- 8.5.1. 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 following European sites:
 - North Dublin Bay SAC,
 - South Dublin Bay SAC,
 - Howth Head SAC,
 - Rockabill to Dalkey Island SAC,
 - Ireland's Eye SAC
 - Lambay Island SAC,
 - Baldoyle Bay SAC,
 - Malahide Estuary SAC,
 - Howth Head Coast SPA,
 - Dalkey Islands SPA,
 - Rockabill SPA,
 - North Bull Island SPA,
 - South Dublin Bay and River Tolka Estuary SPA,
 - Baldoyle Bay SPA,
 - Malahide Estuary SPA,
 - Rogerstown Estuary SPA,

- Skerries Islands SPA,
- Ireland's Eye SPA,
- Lambay Island SPA, and
- The Murrough SPA.
- 8.5.2. 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 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. 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, Ireland's Eye SAC, Lambay Island SAC, Malahide Estuary 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 are brought forward for inclusion in the AA. Having regard to the North-West Irish Sea cSPA I note that this was not considered by the applicant as it had not been designated at the time of application, however, having regard to the nature of the relevant SCI species and nature of the Proposed Scheme I have also concluded that there is potential for impacts to arise on the cSPA, and I have therefore carried it through for further consideration in Stage II.

8.6. Appropriate Assessment (recommendation)

8.6.1. 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.

- 8.6.2. 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.

8.7. Relevant European sites:

- 8.7.1. 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,
 - Ireland's Eye SAC
 - Malahide Estuary 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,
- The Murrough SPA, and
- North West Irish Sea cSPA.
- 8.7.2. 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 on European Sites.
- 8.7.3. I have also examined the Conservation Objectives Supporting Documents for these sites, available through the NPWS website (www.npws.ie).
- 8.7.4. Tables 2-10 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 Conserva	Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)				
	Summary of Appropriate As	ssessment			
Special	Conservation Objectives	Potential adverse	Mitigation		
Conservation Interest (SCI)	Targets and attributes (summary- inserted)	effects	measures		
Mudflats and sandflats not covered by seawater at low tide	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay SAC. Maintain the extent of the Mytilus edulis-dominated community. Conserve the high quality of the Mytilus edulis-dominated community, subject to natural processes. Conserve the communities of fine sand to sandy mud with	The release of contaminated surface water run-off or an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay.	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.		

Annual vegetation of drift lines	Pygospio elegans and Crangon crangon community complex; Fine sand with Spio martinensis community complex in a natural condition. Restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC in relation to habitat area, distribution, structure, and composition. Maintain the natural circulation of sediment and organic matter, without any physical obstructions. Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession. Maintain presence of sea rocket (Cakile maritima), sea sandwort (Honckenya peploides), prickly saltwort (Salsola kali) and oraches (Atriplex spp.)		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, and management of construction
Salicornia and other annuals colonising mud and sand	Restore the favourable conservation condition in relation to habitat area, distribution, structure, and composition. Maintain the range of coastal habitats and no significant expansion of common cordgrass.		related traffic. Implementation of SUDs when complete to control run off during the operation of the scheme. A temporary
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	To maintain the favourable conservation condition in relation to habitat area, extent/vegetation structure of habitat and physical structure /distribution	platform / por will be erecte within the Tol river channel facilitate construction of the pedestrial cycle bridge adjacent to F Flood Bridge platform / por will be locate immediately upstream of texisting bridge	construction of the pedestrian / cycle bridge
Mediterranean salt meadows (Juncetalia maritimi) Embryonic shifting dunes	To restore the favourable conservation condition in relation to habitat area, distribution, physical structure,		adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be

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Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	vegetation structure and composition.		undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice.
Fixed coastal dunes with herbaceous vegetation (grey dunes)			All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling
Humid dune slacks			and horizontal directional drilling will be carried out in accordance
Petalophyllum ralfsii (Petalwort)	To maintain the favourable conservation condition in relation to distribution of population, population size, habitat area, hydrological conditions, and vegetation structure.		with the requirements of the IFI, OPW or the local authority. Monitoring of alkalinity of the water will be carried out and a drilling Slurry Management Plan will be implemented.
		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. 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 preconstruction surveys and the implementation of an Invasive Species management plan.

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 Tolka 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)				
Qualifying Interest feature	Summary of Appropria 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, community extent/vegetation structure/distribution including Zostera dominated community and fine sands with Angulus tenuis	The release of contaminated surface water run-off or an accidental pollution event during construction or operation could affect surface water downstream in Dublin	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	
Annual vegetation of drift lines	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition	Bay.	fences, silt curtains, settlement lagoons and filter materials.	

		5
Salicornia and	Restore favourable	Provision of
other annuals	conservation condition in	exclusion zones
colonising mud and	relation to habitat area,	and barriers (e.g.
sand	distribution, physical	silt fences) between
	structure, vegetation structure	earthworks,
	and composition	stockpiles and
	•	temporary
Embryonic shifting	To restore the favourable	surfaces to
dunes	conservation condition in	prevent sediment
	relation to habitat area,	washing into the
	distribution, physical	existing drainage
	structure, vegetation structure	systems and
	and composition.	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,
		and management
		of construction
		related traffic.
		Implementation of
		SUDs when
		complete to
		control run off
		during the
		operation of the scheme.
		scrienie.
		A temporary
		platform / pontoon
		will be erected
		within the Tolka
		river channel to facilitate
		construction of
		the pedestrian /
		cycle bridge
		adjacent to Frank
		Flood Bridge. The
		platform / pontoon
		will be located
		immediately
		upstream of the
		existing bridge with works to be
		undertaken
		between 1/7 to
	I	201110011 1/1 10

30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice.

All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or the local authority. Monitoring of alkalinity of the water will be carried out and a drilling Slurry Management Plan will be implemented.

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 preconstruction surveys and the implementation of Invasive an **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 Tolka 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 availa	ble: Conserv	ationObjectives.rdl (np	ws.ie)
	Summary of Ap			
Special Conservation	Conservation Ob	-	Potential adverse	Mitigation
Interest (SCI)	Targets and	attributes	effects	measures
	(summary- inser	ted)		
Vegetated sea cliffs of the Atlantic and Baltic coasts	To maintain favou conservation concrelation to habitat distribution, physi structure, vegetat structure and con	dition in length, cal ion	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.

A temporary platform / pontoon will be erected within the Tolka river channel to facilitate construction of the pedestrian / cycle bridge adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice.

All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or the

			local authority. Monitoring of alkalinity of the water will be carried out and a drilling Slurry Management Plan will be implemented.
European dry heaths	To maintain favourable conservation condition in relation to habitat area, distribution, ecosystem function, diversity, and vegetation composition.	No. Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	None

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 Tolka 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	n Objectives available: Conser	vationObjectives.rdl (npws.ie	<u>)</u>
	Summary of Appropria	te Assessment	
Qualifying Interest Conservation Objectives Potential adverse Mitiga feature effects measu			
	Targets and attributes (summary- inserted)		
Reefs	To 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)
Harbour porpoise Phocoena phocoena	To maintain favourable conservation condition in relation to access to suitable habitat and prevention of disturbance by human activity.	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 of the intertidal /marine habitats which support harbour porpoise and fish prey species.	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.

A temporary platform / pontoon will be erected within the Tolka river channel to facilitate construction of the pedestrian/ cycle bridge adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice.

All in-channel works during the construction of the new pedestrian/ cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or

alkalinity of t water will be carried out a a drilling Slu Managemen Plan will be implemented

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 Tolka 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 SAC

Lambay Island SAC [000204] Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie) **Summary of Appropriate Assessment** Qualifying Interest **Conservation Objectives** Potential adverse Mitigation effects measures feature Targets and attributes (summary-inserted) Reefs To maintain favourable No pathway for conservation condition in impacts to occur on any habitats relation to habitat area. distribution, community associated with this complex and subtidal reef SAC as it is located community complex in a significant natural condition. distance from the proposed scheme on the far side of the Howth peninsula and separated by a large marine waterbody. Vegetated sea cliffs of To maintain favourable As Above the Atlantic and Baltic conservation condition in coast 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 Halichoerus grypus No restriction of species Pollution event Detailed pollution range by artificial barriers (Grey Seal) could potentially control measures to to site use; breeding, affect the quality of protect water moulting and resting haulthe intertidal quality are outlined out sites maintained in /marine habitats within section natural condition; and which support grey human activities should seal and harbour 7.1.4.1 and include occur at levels that do not seal. but are not limited adversely affect the to the use of silt population of species at the fences, silt curtains, settlement lagoons and filter materials. Phoca vitulina (Harbour No restriction of species As Above Seal) range by artificial barriers to site use; breeding, Provision of moulting and resting haulexclusion zones out sites maintained in

natural condition; and

and barriers (e.g.,

human activities should occur at levels that do not adversely affect the population of species at the 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.

A temporary platform / pontoon will be erected within the Tolka river channel to facilitate construction of the pedestrian / cycle bridge adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the

channel at short notice.

All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or the local authority.

Monitoring of alkalinity of the water will be carried out and a drilling Slurry Management Plan will be implemented.

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 Tolka 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)				
Ouglifying Interest	Summary of Appropria	ate Assessment Potential adverse	Mitigation magazines	
Qualifying Interest feature	Objectives Targets and attributes (summary- inserted)	effects	Mitigation measures	
Mudflats and sandflats not covered by seawater at low tide.	To 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	
Salicornia and other annuals colonising mud and sand	To maintain favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation composition and structure and no expansion of common cordgrass.		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	

Atlantic salt meadows As above and during the operation of (Glaucothe scheme. including maintenance Puccinellietalia of structure variation Provision of temporary maritimae) within sward and construction surface maintenance of over drainage and sediment 90% of area outside of control measures to be creeks vegetated. 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 Mediterranean salt during the operation of meadows (Juncetalia the scheme. maritimi) A temporary platform / pontoon will be erected within the Tolka river channel to facilitate construction of the pedestrian / cycle bridge adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice. All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or the local authority. Monitoring of alkalinity of the water will be carried out and a drilling Slurry

Management Plan will be implemented.

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 Tolka 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 Ireland's Eye SAC

Ireland's Eye SAC [002193]					
Detailed Conservation	Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)				
Qualifying Interest	Summary of Appropriate Assessment Qualifying Interest Conservation Potential adverse Mitigation measures				
feature	Objectives Targets and attributes (summary- inserted)	effects	mingation measures		
Perennial vegetation of stony banks.	To maintain favourable conservation condition in relation to habitat area, distribution, structure, and composition.	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 alone 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		
Vegetated sea cliffs of the Atlantic and Baltic coasts.	To maintain favourable conservation condition in relation to habitat area, distribution, physical structure, maintain the range of coastal habitats including transitional zones, vegetation height and cover.		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. 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.

A temporary platform / pontoon will be erected within the Tolka river channel to facilitate construction of the pedestrian / cycle bridge adjacent to Frank Flood Bridge. The platform / pontoon will be located immediately upstream of the existing bridge with works to be undertaken between 1/7 to 30/9 and the platform / pontoon designed so that it can be removed from the channel at short notice.

All in-channel works during the construction of the new pedestrian / cycle bridge including concrete piling and horizontal directional drilling will be carried out in accordance with the requirements of the IFI, OPW or the local authority.

Monitoring of alkalinity of the water will be carried out and a drilling Slurry Management Plan will be implemented.

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 Ireland's Eye 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 Tolka 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 Ireland's Eye 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 Ireland's Eye SAC.

Table 9: AA summary matrix for Malahide Estuary SAC

Malahide Estuary SAC [002193]			
Detailed Conservation	Objectives available: Co		(npws.ie)
	Summary of Appropria		I
Qualifying Interest	Conservation	Potential adverse	Mitigation measures
feature	Objectives	effects	
	Targets and		
	attributes (summary-		
NA Idada a Lagarita	inserted)	A constitution of the second of	Batalla Laulla Cara
Mudflats and sandflats	To maintain favourable	An accidental pollution	Detailed pollution
not covered by	conservation condition	event during	control measures to
seawater at low tide.	in relation to habitat	construction or	protect water quality
	area and community distribution.	operation could affect surface water	are outlined within section 7.1.4.1 and
	distribution.	downstream in the	include but are not
		Malahide Estuary. An	limited to the use of silt
		accidental pollution	fences, silt curtains,
		event of a sufficient	settlement lagoons
		magnitude, either	and filter materials.
		alone or cumulatively	and mor materiale.
		with other pollution	Provision of exclusion
		sources, could	zones and barriers
		potentially affect the	(e.g., silt fences)
		quality (vegetation	between earthworks,
		structure and	stockpiles and
		composition) and	temporary surfaces to
		area/distribution of	prevent sediment

Salicornia and other annuals colonising mud and sand	To maintain favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation composition and structure and no expansion of common cordgrass.	intertidal/coastal habitats.	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
Atlantic salt meadows	As above and		construction related traffic etc.
(Glauco- Puccinellietalia maritimae)	including maintenance of structure variation within sward and maintenance of over 90% of area outside of creeks vegetated.	The introduction and /	Implementation of SUDs when complete to control run off during the operation of the scheme. The mitigation
	Vegetation composition - maintain range of sub- communities with typical species listed in the Saltmarsh Monitoring Project	or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not	measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and
Mediterranean salt meadows (Juncetalia maritimi)		permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively	operation of the Proposed Scheme.
Shifting dunes along the shoreline with Ammophila arenaria (white dunes)		impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	
Fixed coastal dunes with herbaceous vegetation (grey dunes)			

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 Malahide Estuary 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 Malahide Estuary. No increase in existing runoff rates will occur and appropriate treatment will ensure run-off quality.

Based on the information provided, I am satisfied that adverse effects can be excluded for Malahide Estuary 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 Malahide Estuary SAC.

Table 10: 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, The Murrough SPA and North West Irish Sea cSPA.

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], The Murrough SPA [004186] and North West Irish Sea cSPA [004236].

Maintain or restore favourable conservation conditions

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 Potential adverse effects Mitigation measures **Targets** and attributes (summary) To maintain the favourable An accidental pollution event Detailed pollution control measures during construction could to protect water quality are outlined conservation condition affect surface water within section 7.1.4.1 and include species and wetland habitat. downstream in Dublin Bav. but are not limited to the use of silt An accidental pollution event fences, silt curtains, settlement of a sufficient magnitude, lagoons and filter materials. either alone or cumulatively with other pollution sources,

Long term population 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.

The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectares, other than that occurring from natural patterns of variation.

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.

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.

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.

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,

Baldoyle Bay SPA [004016]

Light-bellied Brent Goose, Shelduck, Ringed Plover, Golden Plover, Grey Plover, Bar-tailed Godwit, and Wetland and Waterbirds.

Summary of Appropriate assessment

Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
To maintain the favourable conservation condition of species and wetland habitat.	As above	As Above
Long term pop trend stable or increasing. No significant decrease in range, timing or intensity of use of areas by wintering waterbirds.		

The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 263ha, other than that occurring from natural patterns of variation.		
Dalkey Island SPA [004172]		
Roseate Tern, Common Tern, A	rtic Tern	
S	ummary of Appropriate asses	sment
Conservation Objectives	Potential adverse effects	Mitigation measures
Targets and attributes (summary)		
To maintain or restore the favourable conservation condition of the bird species.	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 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.
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	As Above	As above
favourable conservation		
condition of the Kittiwake.		

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 Potential adverse effects Mitigation measures **Targets** and attributes (summary) To maintain the favourable An accidental pollution event Detailed pollution control measures of sufficient magnitude could to protect water quality are outlined condition conservation affect the quality the of within section 7.1.4.1 and include species and wetland habitat. intertidal/coastal habitats that but are not limited to: the use of silt support the special fences, silt curtains, settlement conservation interest bird lagoons and filter materials. Long term population trends species of the SPA. This Provision of exclusion zones and could potentially affect the stable or increasing. barriers (e.g., silt fences) between use of habitat areas by birds earthworks, stockpiles and Distribution - no significant and have long-term effects temporary surfaces to prevent on the SPA populations. decrease in range, timing or sediment washing into the existing intensity of use of areas by drainage systems and hence the wintering waterbirds downstream receiving water environment. No decline in roosting or breeding colonies. Provision of temporary construction surface drainage and sediment Human activities should occur control measures to be in place before earthworks commence. at levels that do not adversely Fuels to be stored in bunded areas, affect breeding or roosting management of construction sites. related traffic etc. The permanent area occupied Implementation of SUDs when by the wetland habitat should complete to control run off during be stable and not significantly the operation of the scheme. less than the area of 2,192 hectares, other than that occurring from natural patterns See the mitigation measures The introduction of invasive of variation. described in Section 7.1.4.2 to species could result in the prevent the introduction and/or degradation of habitat spread of invasive species which supporting the SCI. includes the carrying out of preconstruction surveys and the

Uria aalge, Razorbill Alca torda.	, Herring Gull Larus argentatus,	implementation of an Invasive Species management plan. Kittiwake Rissa tridactyla, Guillemot ment	
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.	An accidental pollution event of sufficient magnitude could 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.	As Above	
Malahide Estuary SPA [004025	5]		
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	Potential adverse effects		
Targets and attributes (summary)	Potential adverse effects	Mitigation measures	
To maintain the favourable conservation condition of species and wetland habitat.	As above	As Above	
Long term population trend stable or increasing.			

No significant decrease in range, timing or intensity of use of areas.			
The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765 hectares, other than that occurring from natural patterns of variation.			
Rogerstown Estuary SPA [004	1015]		
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 and Waterbirds. Summary of Appropriate Assessment			
Conservation Objectives	Potential adverse effects	Mitigation measures	
Targets and attributes (summary)			
To maintain the favourable conservation condition of species and wetland habitat.	As Above	As Above	
Long term population trend stable or increasing			
No significant decrease in range, timing or intensity of use of areas.			
The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 646 hectares, other than that occurring from natural patterns of variation.			
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	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	
Lambay Island SPA [004069]			
Goose Anser answer, Lesser Bla Rissa tridactyla, Guillemot Uria a	ack-backed Gull Larus fuscus, He aalge, Razorbill Alca torda, Puffir		
	mmary of Appropriate Assess		
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	Potential adverse effects	Mitigation measures	
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures	
Targets and attributes (summary) To maintain the favourable conservation condition of bird species listed as Special Conservation Interests for this SPA.	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	As Above in relation to water quality protection.	
Targets and attributes (summary) To maintain the favourable conservation condition of bird species listed as Special Conservation Interests for this	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	As Above in relation to water quality	
Targets and attributes (summary) To maintain the favourable conservation condition of bird species listed as Special Conservation Interests for this SPA. Long term pop trend stable or	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	As Above in relation to water quality	

be no significant decline in		
these populations.		
The Murrough SPA [004186]		
Red-throated, Diver Gavia stell	ata, Greylag Goose Anser answe	r, Light Bellied Brent Goose Branta
bernicla hrota, Wigeon Anas Pe	enelope, Teal Anas crecca, Little	Tern Sterna albifrons, Wetland and
Waterbirds, Black-headed Gull	Chroicocephalus ridibundus, Her	ring Gull Larus argentatus
Conservation Objectives	Potential adverse effects	Mitigation measures
Targets and attributes		
(summary)		
To maintain or restore the	Similar concerns relating to	As outlined in previous tables in
favourable conservation	water quality and the impact to	relation to protection of water
condition of the bird species	habitats upon which the SCIs	quality.
listed as Special	rely, as outlined in previous	
Conservation Interests for	tables.	
this SPA.		
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.		
North West Irish Sea SPA [00	-	
·		a immer), Fulmar (Fulmarus glacialis),
		corax carbo), Shag (Phalacrocorax
aristotelis), Common Scoter (Melanitta nigra), Little Gull (Larus minutus), Black-headed Gull (Chroicocephalus ridibundus), Common Gull (Larus canus), Lesser Black-backed Gull (Larus fuscus),		
•	•	· ·
,	•	marinus), Kittiwake (Rissa tridactyla),
Roseate Tern (Sterna dougallii), Common Tern (Sterna hirundo), Arctic Tern (Sterna paradisaea), Little Tern (Sterna albifrons), Guillemot (Uria aalge), Razorbill (Alca torda), Puffin (Fratercula arctica)		
Terri (Sterria albirroris), Guilleri	iot (Offa aaige), Razorbiii (Alca to	rua), Pullir (Fratercula arctica)
Summary of Appropriate Assessment		
Conservation Objectives	Potential adverse effects	Mitigation measures
Targets and attributes	i Oteritiai auverse errects	mingation incasures
(summary)		
(Sullillary)		
To maintain or restore the	As Above	As Above
favourable conservation	V2 VDOVE	A3 ADUVE
condition of the bird species		
condition of the bild species		

listed as Special

Conservation Interests for	
this SPA.	

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 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 Tolka 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. 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.

8.8. Potential for Adverse effects

- 8.8.1. 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.
- 8.8.2. 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.
- 8.8.3. In addition to the foregoing, 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.

8.9. Noise & Vibration Disturbance

- 8.9.1. 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.
- 8.9.2. 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 otters 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.

8.10. Air Quality Deterioration

8.10.1. 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.

8.11. Habitat Loss and Fragmentation

8.11.1. As mentioned previously above the applicant identified four 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, The Murrough SPA and North West Irish Sea SPA. Species include light-bellied brent goose, golden plover, oystercatcher, lapwing, curlew, black-headed gull, lesser black-backed gull, and herring gull.

8.11.2. The Proposed Scheme will not result in the loss of any ex-situ foraging site, the Proposed Scheme runs alongside the Whitehall on the Santry Road. In addition, Drumcondra / Holy Cross College, All Hallows DCU Campus, and Drumcondra St. Patricks College are respectively 30, 160 and 190m from the Proposed Scheme. These sites will not be directly impacted and are all located adjacent to urban areas alongside long-established transport corridors or are of relatively high human presence. As such, it was not deemed necessary to carry out wintering bird surveys.

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

- 8.12.1. The Proposed Scheme is hydrologically connected to Dublin Bay via Malahide Estuary, Baldoyle Bay and Dublin Bay via eight watercourses, as well as Ringsend WwTP. Surface waters will also drain to Dublin Bay via existing drainage across the Proposed Scheme. Dublin Bay contains the following European sites: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Malahide Estuary SAC, Malahide Estuary SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SAC, Ireland's Eye SPA, Lambay Island SAC, Lambay Island SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, The Murrough SPA and North West Irish Sea SPA.
- 8.12.2. 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.
- 8.12.3. Therefore, a 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 would 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, Ireland's Eye SAC, Lambay Island SAC, Malahide Estuary 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, The Murrough SPA and North West Irish Sea SPA.

8.13. In-combination Effects

- 8.13.1. 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. Such plans and projects included any national, regional and local land use plans or any existing or proposed projects 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 have been individually considered for any potential in combination effects, these considerations are detailed in Table 38 of the NIS submitted.
- 8.13.2. 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.
- 8.13.3. The in-combination assessment within Section 9.1 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.
- 8.13.4. Mitigation measures detailed in Section 7 of the NIS and summarised within Table 11 below will ensure that no adverse effects on European sites integrity will arise from the implementation of the Proposed Scheme.
- 8.13.5. The implementation of, and adherence to, the policies and objectives of the relevant plans set out in Section 9.2 of the NIS 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.
- 8.13.6. 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.
- 8.13.7. 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, Ireland's Eye SAC, Lambay Island SAC, Malahide Estuary 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, The Murrough SPA and North West Irish Sea 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.

8.14. Mitigation Measures and Monitoring

8.14.1. 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 Ecological Clerk of Works will be employed to ensure that measures are

implemented as prescribed. A summary of mitigation measures is presented in Table 11 below.

Table 11: Summary of Mitigation Measures to avoid adverse effects on European Sites

Measures to protect surface water	Use of silt traps, silt fences, bunds for
quality and groundwater quality during	run off to collect in, good construction
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 on-site treatment
	for surface water runoff, use of
	settlement tanks/ponds and
	management of same. Monitoring of
	water bodies.
	Provision of temporary construction
	surface drainage and sediment control
	measures to be in place before
	earthworks commence.
	Fuels to be stored in bunded areas, and
	management of construction related
	traffic.
Measures to protect surface water	Sustainable urban drainage systems
quality during operation:	(SUDS) including bioretention areas
	and filtration drains water butts and
	permeable paving.
Measures to eradicate/control the	Preconstruction survey, Implementation
spread of non-native invasive species	of an Invasive species management
	plan and post construction monitoring
	programme.

8.15. Appropriate Assessment Conclusion: Integrity Test

- 8.15.1. 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 North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Ireland's Eye SAC, Lambay Island SAC, Malahide Estuary 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, The Murrough SPA and North West Irish Sea SPA, and that Appropriate Assessment was required in view of the conservation objectives of those sites.
- 8.15.2. 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 North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Ireland's Eye SAC, Lambay Island SAC, Malahide Estuary 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 The Murrough SPA, and North West Irish Sea SPA can be excluded with confidence in view of the conservation objectives of those sites.

8.15.3. My conclusion is based on the following:

- 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.
- Consideration of the conservation objectives and conservation status of qualifying interest species and habitats.
- A full assessment of risks to special conservation interest bird species and qualifying interest habitats and species.

- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.
- 8.15.4. 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.

9.0 Environmental Impact Assessment

9.1. Introduction

- 9.1.1. 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. The application documentation, in my opinion, has been prepared by competent and appropriate individuals in accordance with the relevant national and EU legislation. This EIA section of the report should, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment above.
- 9.1.2. 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.
- 9.1.3. 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 Fingal County Council, Dublin City 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 2018-2022 which is a separate document.

- 9.1.4. 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 Chapter 20.
- 9.1.5. The potential for 'flooding' is considered in Chapter 13 Water. I consider that the requirement to consider these factors under Article 3(2) is met.
- 9.1.6. 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.
- 9.1.7. It is important to note at the outset that the proposed development under consideration within this application does not cross international boundaries.

9.2. Alternatives

- 9.2.1. The consideration of Alternatives is documented within Chapter 3 of the EIAR submitted. I note that alternatives were considered at three levels, Strategic alternatives, route alternatives and design alternatives.
- 9.2.2. 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.
- 9.2.3. 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.

- 9.2.4. Heavy rail alternatives carry in excess of 10,000 people each direction each hour and was considered an unsuitable solution.
- 9.2.5. 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.
- 9.2.6. 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

- 9.2.7. 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 a 'spider's web' of route options were considered, and a sifting process ensued. These route options 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.
- 9.2.8. 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.
- 9.2.9. 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 alternatives considered and the detailed assessment and consideration of the final four routes and the emergence of the preferred route.

9.3. **Population and Human Health**

- 9.3.1. 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. The study area was informed by the CSO parish boundaries and are listed within section 10.2.1.1. of the EIAR. The 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.
- 9.3.2. 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.
- 9.3.3. 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.
- 9.3.4. Issues raised in this context within the submissions received, relate to accessibility to properties both residential and commercial. 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 some residences between 242-282 Swords Road.

Baseline conditions

9.3.5. 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 night-time 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 significantly 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

- 9.3.6. 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 off-site 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.
- 9.3.7. 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

9.3.8. 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.
- 9.3.9. Whilst I acknowledge that permanent 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.
- 9.3.10. 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

9.3.11. 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	Mitigation	Residual Impact
	Impact		
Traffic disruption	Negative, Slight and Temporary to Short-Term.	Implementation of a traffic management plan.	None
		(See S. 6.5 & Ap. A5.1 CEMP)	
Traffic collisions	Nanativa Madanata	A - Al 0	Nama
Tramic collisions	Negative, Moderate and temporary to Short-Term.	As Above & Implementation of measures to protect cyclists and pedestrians.	None
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.	Neutral	Measures to protect water quality and prevention of leaks and spills of	None
(Construction & operational phases)		hydrocarbons	
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

electrification of bus fleet.

9.4. Air Quality and Climate

9.4.1. 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

- 9.4.2. The key pollutants considered relevant to the proposed development are identified as:
 - Nitrogen Dioxide (NO₂)
 - Particulate Matter PM₁₀ and PM_{2.5}
 - Greenhouse gases Carbon Dioxide (CO₂)
- 9.4.3. 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 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.
- 9.4.4. For the purposes of the EIAR, the Proposed Scheme is examined in five sections to reflect the construction phases of the development. I note that Sections may be completed simultaneously and combined in certain areas.
 - Section 1: Pinnock Hill Junction to Airside Junction.
 - Section 2: Airside Junction to Northwood Avenue:
 - Section 2a: Airside Junction to Airport Roundabout;
 - Section 2b: Airport Roundabout to Old Airport Road; and

- Section 2c: Old Airport Road to Northwood Avenue.
- Section 3: Northwood Avenue to Shantalla Road:
 - Section 3a: Northwood Avenue to Omni Park Shopping Centre; and
 - Section 3b: Omni Park Shopping Centre to Shantalla Road.
- Section 4: Shantalla Road to Botanic Avenue:
 - o Section 4a: Shantalla Road to Griffith Avenue; and
 - Section 4b: Griffith Avenue to Botanic Avenue.
- Section 5: Botanic Avenue to Granby Row:
 - Section 5a: Botanic Avenue to North Fredrick Street;
 - Section 5b: North Fredrick Street to Granby Row; and
 - Section 5c: Parnell Square including North Frederick Street.

Potential Construction Impacts

- 9.4.5. 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.
- 9.4.6. 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 10,000m² and there may be more than 10 heavy earth moving vehicles active at any one time.
- 9.4.7. 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 there are no buildings being constructed as part of the works and the key construction activities after earthworks are construction of retaining walls and installation of the paving materials.
- 9.4.8. The magnitude of effects to ecological receptors and human health arising from construction works is low.

- Trackout movements medium impact, such activities may comprise between 10 and 50 HDV (heavy duty vehicles) outward movements in any one day during peak construction activity with surface material with a low potential for dust release.
- 9.4.9. The magnitude of effects to human health is considered to be medium and temporary and low in relation to ecological receptors.
- 9.4.10. Construction traffic 6 public roads are identified as required construction access routes where construction traffic will be permitted to travel along. An additional 36 HGV 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 and the corridor of the Proposed Scheme will be used for a large bulk of construction delivery vehicles along its route.
- 9.4.11. The potential air quality impacts associated with additional construction traffic is examined in relation to NO₂, PM₁₀, and PM_{2.5}. Modelled receptors are outlined in tables 2 to 7 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.

<u>Mitigation</u>

9.4.12. 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 at the Construction Compounds. Significant residual impacts are not expected to arise.

Potential Operational impacts

- 9.4.13. 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 NO₂ levels are expected to generally decrease during the operational phase in the design year of 2028 but to be negligible by design year 2043. It is stated that this is due to advancements in engine technology and the addition of a higher percentage of electric vehicles to 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.
- 9.4.14. 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 7.28 and 7.29 in which change in NO_x deposition relative to identified receptors (such as the Royal Canal pNHA, and Santry Demesne 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

- 9.4.15. No mitigation is proposed in relation to the operational phase of the proposed scheme and no residual impacts are expected.
- 9.4.16. 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.
- 9.4.17. 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

- 9.4.18. 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 Ireland's 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.
- 9.4.19. Impacts to climate are considered within section 8 of the EIAR and are considered in the context of GHG emissions relating to land use 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

- 9.4.20. 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.
- 9.4.21. The applicant states that the Proposed Scheme is estimated to result in total Construction Phase CO_{2eq}⁴ emissions of 8,396 tonnes embodied CO_{2eq} for materials over a 36-month period, equivalent to an annualised total of 0.007% of Ireland's non-ETS 2020 target and 0.047% of the 2030 Transport Emission Ceiling. The potential

⁴ Carbon Dioxide Equivalent

- impact to climate due to embodied carbon emissions during the Construction Phase, prior to mitigation, will be negative, minor and short term.
- 9.4.22. 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, minor and short term.
- 9.4.23. 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

- 9.4.24. 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 17.8% of the national GHG output, with cars accounting for 54% 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 2021.⁵
- 9.4.25. 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

⁵ P.29, Climate Action Plan 2023

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 4,990 and 5,870 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 1.87MtCO₂eq⁶ by 2025 and 3.79 MtCO₂eq by 2030 as set out in tables 15.4 and 15.5 of CAP 23.

- 9.4.26. In relation to impacts to sequestered carbon I note that some grassland will temporarily be removed to facilitate the Construction Compound. This will be negligible and not be a significant impact.
- 9.4.27. In summary of the foregoing, the applicant has stated that the magnitude of effects arising from the operation of the development will be positive, minor and permanent.
 I note no mitigation is required in relation to the operation or maintenance of the proposed development and no residual impacts arise.
- 9.4.28. 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 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.
- 9.4.29. 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.

⁶ Million Tons of Carbon Dioxide Equivalent

Conclusion

9.4.30. 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,	Reduce use of	Negative, Minor and
	Significant and	materials such as	Short-Term
	Short-Term	concrete and fuels	
		and reuse materials	
		where practicable	
Impacts arising from	Positive and long	None	None
operation and	term		
maintenance			

9.5. Noise and Vibration

9.5.1. 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

- 9.5.2. 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. An unattended survey (one week duration) was carried out at five locations between January and May 2019, and August to September 2020. Attended surveys were undertaken at 19 locations during October 2018, April 2019, June, September and October 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 9.21 to 9.25 of the EIAR outline the overall survey results in relation to each location.
- 9.5.3. Baseline data results identify road traffic as the dominant noise experienced along the route during both daytime and night-time hours. I note traffic noise levels reported along the Swords Road range between 55dB to 70dB between distances of 15 metres and 60 metres. 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 a point southeast of the R132 Drumcondra Road Upper/ Griffith Avenue junction, which has an average daytime noise level of 70dB. Overall, noise levels are high and generally exceed the upper limits for ambient noise levels for daytime and night-time hours.
- 9.5.4. I note that noise surveys were carried during COVID restrictions. The applicant has addressed the potential impact to baseline data gathered at this time and has reviewed long term noise monitoring locations based on long term noise monitoring data provided by DCC. Review of the DCC noise monitoring data has indicated that the overall difference in average noise levels between June and October of 2019 and 2020 are between 1dB to 2dB lower. It is stated that noise levels are likely to be 0.4dB to 1.5dB lower during the 2020 survey periods when compared to the same months during 2019 due to COVID-19 travel restrictions. This difference in levels is negligible in the overall context of describing the prevailing baseline noise environment.
- 9.5.5. 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

- 9.5.6. 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.
- 9.5.7. 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 Board's attention to tables 9.28 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 range between Negative, Moderate, Not Significant to Very Significant, on a temporary basis and over the short term during the daytime, weekend and evening periods in the absence of noise mitigation.
- 9.5.8. Construction traffic has also been modelled and it is expected that 360 HGV movements (180 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 Home Farm Road will experience the highest potential noise impacts.
- 9.5.9. 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 low-medium and 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.
- 9.5.10. 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.
- 9.5.11. I note from the information submitted that the magnitude of effects associated with this activity is stated as negative, slight to moderate and 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.
- 9.5.12. 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

- 9.5.13. 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.
- 9.5.14. 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.
- 9.5.15. Works will be carried out largely within daytime hours, however it will be necessary to carry out some works infrequently during night-time 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.
- 9.5.16. 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 be carried out during daytime hours and monitoring will ensure exceedance of upper limits do not arise.

- 9.5.17. Overall mitigation measures are expected to reduce noise levels by 10dB. The prevailing daytime baseline noise level is assumed as 65dB L_{Aeq,12 hr} and the evening baseline noise level as 63dB L_{Aeq,4hr}. 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 night-time and weekend hours whereby upper limit thresholds are lower at these times.
- 9.5.18. 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

- 9.5.19. Significant residual impacts remain during night-time and evening hours in relation to the majority of scheduled works within 20m of the works and in relation to road widening/ utility diversion works within 10m of the works.
- 9.5.20. 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, where 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.
- 9.5.21. 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. During the proposed Opening Year (2028), the NTA forecast is

for 94% of the city bus fleet to be electric vehicles (EVs) or hybrid electric vehicles (HEVs). For the Design Year (2043), the city bus fleet is forecast to be 100% electric.

Conclusion

9.5.22. 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 and urban realm landscaping	Daytime - Negative, moderate to significant, and temporary Evening and weekend - significant to very significant, and temporary.	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.	Daytime - based on distance to works - negative, moderate to significant and temporary. Evening and weekend - Negative, moderate to significant and temporary to Negative, not significant and temporary.
Road widening and utility diversion works	Daytime – Ranges relate to distance from works and range between negative, not significant to very	Yes. Refer to Section 9.5.1.1 for the range of noise mitigation measures which will be adopted at specific	<u>Daytime</u> - based on distance to works - negative, moderate to significant and temporary.

	significant, and temporary. Evening and weekend - Negative, not significant to very significant, and temporary during the evening and weekend periods	working areas to reduce noise impacts at NSLs.	Evening and weekend - Negative, moderate to significant and temporary to Negative, not significant and temporary.
Quiet Street treatment - Lorcan Road to Shanrath Road - Swords Road	Daytime period - at nearest distance - negative, significant to very significant, and temporary Evening & weekend — at nearest distance-negative, significant to very significant, and temporary.	Yes. As above.	Daytime - at nearest distance negative, slight to moderate and temporary. Evening & weekend - at nearest distance negative, moderate to significant and temporary.
Construction site compounds	Daytime – Negative, not significant and temporary at NSLs at distances greater than 40m from all construction site compounds. Potential exceedance of evening & weekend construction noise criteria (Negative, Moderate to Significant to Very Significant) without noise mitigation at Collins Avenue and	Yes. As above. The Construction Compounds are in close proximity to NSLs and a strict noise control policy relating to materials handling will be applied. Noisy items of plant will be sited away from noise sensitive boundaries.	Daytime - Negative, not significant and temporary. Night-time - Negative, not significant and temporary.

	Frank Flood Bridge		
	compounds.		
	Night-time & weekend		
	- Negative, not		
	significant and		
	temporary at NSLs at		
	distances greater than		
	40m from all		
	construction site		
	compounds.		
	Potential exceedance		
	of evening & weekend		
	construction noise		
	criteria (Negative,		
	Moderate to		
	Significant to Very		
	Significant) without		
	noise mitigation at		
	Collins Avenue and		
	Frank Flood Bridge		
	compounds.		
Boundary wall	Daytime Hours –	Yes.	Daytime - Negative,
Bored piling	Range based on	Refer to Section	not significant and
	distance is negative,	9.5.1.1 for the range of	temporary.
	moderate to	noise mitigation	Night-time – Negative,
	significant, and	measures which will	not significant and
	temporary at varying	be adopted at specific	temporary.
	distances.	working areas to	, ,
	Evening and weekend	reduce noise impacts	
	periods –	at NSLs.	
	Range based on		
	distance is negative,		
	moderate, to very		
	significant, and		
	temporary at varying		
	distances.		

Retaining Wall	Daytime Hours –	Yes.	Daytime - Negative,
Retaining Wall Construction Works	Range based on distance is negative, moderate, significant to very significant, and temporary at varying distances. Evening and weekend periods — Range based on distance is negative, moderate, significant to very significant, and temporary at varying distances.	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.	Daytime - Negative, not significant and temporary. Night-time - Negative, not significant and temporary.
Construction vibration from general road works and construction activities	Negative, imperceptible to not significant and temporary.	A clear communication programme will be established by the NTA to inform adjacent building occupants in advance of any potential intrusive works which may give rise to vibration levels likely to result in significant effects. Activities capable of generating significant vibration effects with respect to human response (as per Table 9.14) will be restricted to daytime hours only. Appropriate vibration isolation shall be applied to plant (such	Negative, imperceptible to not significant and temporary.

Vibration in relation to groundbreaking activities Home Farm Road	Negative, slight to moderate, temporary effects.	as resilient mounts to pumps and generators), where required and where feasible. Yes. As above.	Negative, imperceptible to not significant and temporary. Negative, moderate – significant and
Clare Road Seven Oaks Hollybank Road	Moderate Moderate Moderate		Negative, slight - moderate and temporary.
Grace Park Manor	Low to medium		
All other roads in study area of 1km	Positive, imperceptible and temporary impact to negative, slight to moderate and temporary.		
	Operatio	nal Phase	
Opening Year (2028) traffic noise – Proposed Scheme	Direct, Positive, Imperceptible and Short to Medium-Term Impact to a Direct, Negative, Not Significant to Slight to Moderate and Short to Medium-Term	No	Direct, Positive, Imperceptible and Short to Medium-Term Impact to a Direct, Negative, Not Significant to Slight to Moderate and Short to Medium-Term
Opening Year (2028) traffic noise -	Indirect, Neutral, Imperceptible and	No	Indirect, Neutral, Imperceptible and

surrounding road	Short to Medium-term		Short to Medium-term
network	to Indirect, Negative,		to Indirect, Negative,
	Moderate, Short to		Moderate, Short to
	Medium-Term		Medium-Term
Design Year (2043)	Direct, Positive,	No	Direct, Positive,
traffic noise –	Imperceptible and		Imperceptible and
Proposed Scheme	long-term impact to		long-term impact to
	Direct, Negative, Not		Direct, Negative, Not
	Significant to Slight		Significant to Slight
	and Long-Term		and Long-Term
Design Year (2043)	Indirect, Positive,	No	Indirect, Positive,
traffic noise –	Imperceptible and		Imperceptible and
surrounding road	long-term Impact to		long-term Impact to
network	Indirect, Negative,		Indirect, Negative,
	Slight to Moderate and		Slight to Moderate and
	Long-Term Impact		Long-Term Impact
Operational Phase	Neutral, imperceptible,	No	Neutral, imperceptible,
Vibration	long-term		long-term
Bus stops – existing	Neutral, imperceptible,	No	Neutral, imperceptible,
location	long-term		long-term
Bus stops – new	Neutral, not significant,	No	Neutral, not significant,
locations	long-term		long-term

9.6. **Biodiversity**

9.6.1. 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

9.6.2. The lands within and adjacent to the development site are comprised of a variety of habitats, along with urban/suburban and townscape features. Commencing at the R132/ Swords Road/ Pinnock Hill junction in Swords, habitats include arable crops, amenity grassland, dry meadows and grassy verges and buildings and artificial surfaces. Mixed land-use extends south along the R132/ Swords Road comprising residential and commercial developments, agricultural lands dominated by mixed

- woodland, treeline / hedgerow, scrub and dry meadows and grassy verges, and roadside stretches of amenity grassland. At Dublin Airport, the Proposed Scheme is dominated by commercial buildings and artificial surfaces and amenity grassland largely associated with the airport. Immediately south of the airport between the aircraft hangers and the Quick Park facility, there is an approximately 500m stretch of habitat dominated by dry meadows and grassy verges present on both sides of the Swords Road and a discrete area of mixed broadleaved woodland.
- 9.6.3. South of the M50 motorway, the Proposed Scheme is dominated by commercial development and roadside amenity grassland associated with the Airways Industrial Estate. Scattered trees and parkland and dry meadows and grassy verge habitat types located within Santry Demesne pNHA and Morton Stadium form the western boundary of the Proposed Scheme as it extends southwards along the R132/ Swords Road through Santry, crossing the River Santry. The eastern boundary of the Proposed Scheme comprises residential and commercial developments, which continue from the River Santry through Whitehall and into Drumcondra at the proposed River Tolka Pedestrian/ Cycle Bridge crossing point, adjacent to the existing Frank Flood Bridge. From this location commercial properties dominate crossing the Royal Canal at Binns Bridge and approaches to the city centre along the R132/ Dorset Street where it terminates at Parnell Square East. Habitats frequently found in association with these developments include amenity grassland, hedgerows, treelines and flower beds and borders.
- 9.6.4. 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.
- 9.6.5. 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 from the 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.

- 9.6.6. 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 12.7 of the EIAR) and the marine environment of Dublin Bay.
- 9.6.7. 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.
- 9.6.8. Zol for other species are as follows:
 - Pygmy shrew c.100m from Proposed Scheme boundary.
 - Otters, badgers, stoat, and hedgehogs extends to greater distances and breeding sites as far as c.150m from boundary of scheme.
 - Bat roost c.200m but can be adjusted depending on species. Habitat severance could extend for several kilometres.
 - Breeding birds *ex-situ* impacts up to c.300m.
 - Amphibian species direct habitat loss/ severance and indirect impacts to water quality in wetland habitats.
 - Common lizard direct habitat loss/ severance and disturbance/ displacement effects in the immediate vicinity during construction.
- 9.6.9. Overall, it is clear that the determination of the zone of influence differs depending on the construction and operational activity.
- 9.6.10. 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.2km 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 (AA) section of this report and will not be repeated hereunder.
- 9.6.11. The closest nationally designated sites to the Proposed Scheme are the Royal Canal pNHA, which is crossed by the Proposed Scheme at Binns Bridge, and Santry

- Demesne pNHA, which borders the Proposed Scheme. All NHAs/ pNHAs within both the ZoI and the wider vicinity of the proposed scheme are listed within Table 12.9 of section 12.3.4.2 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.
- 9.6.12. 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, 2022 and 2023. Details of all surveys are outlined in section 12.2.3.2 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 Cuckoo Stream, the Mayne River and Santry River are not considered salmonoid rivers because of the presence of a number of impassable features to fish located toward the lower end of their systems. There are no records of invertebrates such as white clawed crayfish, freshwater molluscs or marsh fritillary in the study area.
- 9.6.13. 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 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

9.6.14. Bat surveys were carried out across the four seasons and at six transects within the footprint of the Proposed Scheme (see details in section 12.3.8.1 of EIAR). The transects were: CBC0002BT001 (Travelodge Dublin Airport North Swords hotel), CBC0002BT002 (Dardistown), CBC0002BT003 (Glen Dimplex), CBC0002BT004 (Santry Demesne), CBC0002BT005 (Ellenfield Park) and CBC0002BT006 (Frank)

Flood Bridge). Bat emergence and re-entry surveys were also conducted at the two RCSI cottages at the RCSI Sports Ground on Swords Road (CBC0002RI001), during Spring and Summer 2020. The following species recorded:

- Leisler's bat Nyctalus leisleri
- Common pipistrelle bat Pipistrellus
- Soprano pipistrelle bat Pipistrellus pygmaeus
- Unidentified Pipistrelle Species
- 9.6.15. Leisler's bat was recorded along four of the six transects surveyed between 2018 and 2020. A total of 43 recordings of Leisler's bat were identified at these locations between 2018 and 2020. One potential roost site for Leisler's bat was recorded during the surveys for the Proposed Scheme at the RCSI cottages. 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.
- 9.6.16. Common pipistrelle was recorded along four of the six transects surveyed between 2018 and 2020. Common pipistrelle bat activity was highest at Frank Flood Bridge.⁷ A total of 54 recordings of common pipistrelle bat were identified in these locations between 2018 and 2020. One potential roost site for common pipistrelle bat was recorded during the surveys for the Proposed Scheme at the RCSI cottages. The desk study found that common pipistrelle bats are known to occur across the Proposed Scheme.
- 9.6.17. Soprano pipistrelle was also recorded along four of the six transects surveyed between 2018 and 2020. A total of 21 recordings of soprano pipistrelle bat were identified. No roost sites for common pipistrelle bat were recorded during any of the surveys for the Proposed Scheme. The desk study found that soprano pipistrelle bats are known to occur across the Proposed Scheme.
- 9.6.18. Unidentified Pipistrelle Species were recorded along four of the six transects surveyed between 2018 and 2020. A total of 22 recordings of unidentified pipistrelle bats were captured in these locations. There was a total of 20 recordings during Summer 2018, 19 of which were captured at Frank Flood Bridge.

⁷ Please refer to Sheet Number 8 of 9, Drawing File Name: BCIDE-JAC-ENV_BD-0002_XX_00-DR-GG-0408, 12.8.1 Bat Survey Results: Bat Activity Survey Results, Volume 3, EIAR

- 9.6.19. There are no confirmed bat roosts located within the footprint of the Proposed Scheme. During the earlier stage of the surveys a number of trees or groups of trees having potential to support roosting bats (potential roosting features, PRFs) were identified. The majority were located outside the footprint of the Proposed Scheme and as such would not be impacted by the Proposed Scheme. Owing to design refinements and a modified footprint of the Proposed Scheme, PRFs within the Proposed Scheme were revisited in 2022.
- 9.6.20. The trees that are to be removed are listed in Table 12.11 and shown on Figure 12.8.2 in Volume 3 of the EIAR. This includes four London Plane trees along Drumcondra Road Upper between Griffith Avenue and Church Avenue. The Proposed Scheme will not result in the loss of any known breeding/ resting sites for any bat species, but it will result in the removal of potential roost sites in the form of the above mentioned PRFs. Therefore, in the absence of mitigation, there is potential for the felling of these trees to result in direct harm and pose a mortality risk to bats, should bats be present in the trees at the time of felling. This could result in a significant effect on the conservation status of bats at the local geographic level.
- 9.6.21. Similarly, two derelict cottages belonging to the Royal College of Surgeons will be demolished as part of the Proposed Scheme. The potential for bats to be roosting in these buildings at the time of building demolition cannot be ruled out and therefore, a precautionary approach has been adopted with regard this potential roost structure. Appropriate mitigation measures to ensure no direct harm comes to individual bats, should they be present, during demolition are included in Section 12.5.1.4.1. The loss of these structures, if they are indeed used by roosting bats, would be significant at the local geographic scale only, given the low number of bats likely to be roosting therein and the relatively open nature of the adjacent urban setting with few areas of large, wooded areas and considerable artificial lighting about.
- 9.6.22. 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 along the River Tolka at the Frank Flood Bridge (CBC0002BT006) and at Santry Demesne (CBC0002BT004), and that all parts of the Proposed Scheme which contain suitable habitat are likely to be within the core sustenance zone (CSZ) of at least one bat roost, considering the type of works

- proposed (e.g. upgrading of existing infrastructure for the most part), there is limited potential for the Proposed Scheme to act as a barrier to flight paths for bat species.
- 9.6.23. Removal of suitable habitat for foraging and/ or commuting bats (e.g. scattered trees and parkland, dry meadows and grassy verges, scrub, mixed broadleaved woodland and treelines/ hedgerows) within the footprint of the Proposed Scheme is calculated as 3.20ha on a permanent basis and 1.54ha on a temporary basis. Habitat removal will occur within a highly disturbed urban environment with low numbers of species records. The affected habitats are not considered to provide significant contributions to core sustenance zones of roosts located outside of the footprint of the Proposed Scheme. The effect of habitat fragmentation and barrier effect associated with the construction of the Proposed Scheme is therefore considered to be significant at the Local Geographic level.
- 9.6.24. In addition to mitigation proposals that may arise as result of the pre-construction survey (e.g., emergence surveys and confirmation of roost), it is proposed to install generalist/ self-cleaning bat boxes for each PRF that is confirmed to be removed
- 9.6.25. 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 91 street trees and 758m² of hedgerow.
- 9.6.26. An additional potential impact to bats arises from the introduction of artificial lighting within suitable habitat may result in avoidance behaviour by bats and could prevent bats from accessing foraging areas or roosts and/ or result in bats taking more circuitous routes to get to foraging areas and hence potentially depleting energy reserves and result in abandonment of nearby roosts. Given the urban setting of these proposed site compounds, it is considered that bats in the area would be habituated to some level of artificial lighting and the impact of increased artificial lighting at construction compounds is considered to be significant at the local level only.
- 9.6.27. It is stated that construction works will typically be undertaken during normal daylight working hours, and therefore the requirement for lighting to accommodate construction works during night-time, in many areas where existing light levels are

low, will be limited. However, owing to the importance of the Drumcondra Road, some night works will be required for some elements of the proposed Pedestrian and Cycle Bridge emplacement alongside the Frank Flood Bridge.

Mitigation in relation to Bats

- 9.6.28. 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.
- 9.6.29. 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

- 9.6.30. 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 AA 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* feeding grounds within 300m of the Proposed Scheme boundary. These sites have been surveyed as detailed within the AA above and no impacts of significance are expected to arise in relation to these bird species at these locations.
- 9.6.31. 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.
- 9.6.32. 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. Disturbance effects on breeding birds will most likely be of greater impact at the River Tolka in Drumcondra, than along the remainder of the Proposed Scheme. At this location, there may be temporary significant effects on breeding riparian birds at a local scale, until such a time that they have established new nesting sites. Overall, 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

9.6.33. Habitat degradation in relation to surface water quality has also been examined in detail within the AA 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

9.6.34. No protected plant species listed on the Flora (Protection) Order, 2022 were recorded within the footprint of the Proposed Scheme during field surveys. The desk study returned records of a total of seven species listed on the Flora (Protection) Order 2022 across the wider study area and are listed in Appendix A12.1 in Volume 4 of the EIAR. However, there is no potential for impacts on rare/ protected species, as a result of the operation of the Proposed Scheme.

Invasive Plant Species

9.6.35. There were three non-native invasive plant species listed on the Third Schedule of the Birds and Habitats Regulations identified along the Proposed Scheme, namely Himalayan balsam *Impatiens glandulifera*, Giant hogweed *Heracleum mantegazzianum* and Japanese knotweed *Reynoutaria japonica*. In total there are 12 locations of these non-native invasive plant species, many of which occur in proximity to each other. These are summarised in Table 12.10 of the EIAR and shown on Figures 12.6. In the absence of mitigation, there is potential for these species to spread or be introduced, during construction and/ or routine maintenance/ management works, to terrestrial habitat areas in European sites downstream.

9.6.36. 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

9.6.37. 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

- 9.6.38. The Board should note the summary of likely significant post-mitigation impacts for both the construction and operational phases of the Proposed Scheme are contained in Tables 12.19 and 12.20 of section 12.6 in the EIAR. In this regard, I draw the Board's attention to the assessment that residual impacts are for the most part expected not to be significant.
- 9.6.39. However, I note in relation to habitat loss, mortality risk, disturbance/ displacement all other breeding bird species (non-SCI) are expected to be impacted by a likely significant effect at the local geographic scale. I accept that the removal of vegetation and levels of disturbance can be identified has having a significant effect, but I consider the limited level of removal (with a replanting scheme) and the confinement of disturbance to a local level would result in insignificant overall impacts on bird species.
- 9.6.40. 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.

9.6.41. Therefore, 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	Likely significant effect	See CEMP: fuels	None of significance.
European sites	at the international	to be stored in	
	geographic scale	bunded areas, no	
		stockpiling near	
		watercourse,	
		implementation of	
		SUDs measures	
		and attenuation.	
Construction Phase on	Likely significant effect	Pre-construction	None of significance.
Local biodiversity	at the local and county	surveys,	
	geographic scale	protection of trees	
		and vegetation.	
On anotional Phase an	Libert similiant effect	landan satation of	None of similians
Operational Phase on	Likely significant effect	Implementation of	None of significance.
European Sites	at the international	SUDs measures	
	geographic scale	and attenuation.	

Operational phase on	Potential for Likely	Implementation of	None of significance.
Local biodiversity	significant effect at the	SUDs measures	
	local and national	and attenuation.	
	geographic scale	Directional	
		lighting, and	
		monitoring and	
		management of	
		invasive plant	
		species.	

9.7. **Water**

9.7.1. 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 Swords 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 most of the waterbodies encountered along the route range between poor and moderate, with the exception of the Mayne River which is under review. The Royal Canal Main Line and Liffey Estuary Upper have good status. No SUDs were identified within the existing drainage environment along the route.

Baseline Conditions

- 9.7.2. The waterbodies examined for the purpose of EIA for the Proposed Scheme include the following:
 - Ward 040,
 - Gaybrook_010,
 - Sluice_010,
 - Mayne_010,
 - Santry_010,
 - Tolka_060,
 - Tolka Estuary,

- · Royal Canal Main Line (Liffey and Dublin Bay), and
- Liffey Estuary Upper.
- There are no direct discharges to Gaybrook_010 identified from the drainage records 9.7.3. and, as a result, Gaybrook_010 is scoped out of the assessment. The Sluice_010 will be crossed by the Proposed Scheme at R132 Swords Roads, north of the Metropoint Business Park. Mayne_010 will be crossed by the Proposed Scheme at R132 Swords Roads, north of the M1 Turnapin. The Mayne_010 tributary will also be crossed by the Proposed Scheme at R132 Swords Road, south of Dublin Airport Terminal 2. The Santry_010 segment will be crossed by the Proposed Scheme at R132 Swords Road, north of Santry Demesne. The Tolka 060 segment will be crossed by the Proposed Scheme at Drumcondra, north-west of Holy Cross College. Its segment length is 3km and it flows directly into the Tolka Estuary approximately 500m after the point at which it will cross the Proposed Scheme. The Tolka Estuary is not directly crossed by the Proposed Scheme and surface water that drains from the route of the Proposed Scheme does not drain into it, however it is only 600m downstream of the crossing of the Tolka_060 and activities proposed at that location pose a risk to this water body also. The Royal Canal will be crossed by the Proposed Scheme at Binn Bridge in Drumcondra. The Proposed Scheme does not cross the Liffey Estuary Upper and there are no direct surface water discharges to it with only potential impacts on this water body during operation.
- 9.7.4. 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 AA has been carried out as outlined above and considers the impact to other EU legislation accordingly.

Potential Construction Impacts

9.7.5. 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 and that operational effects will be considered separately.

 Ward _40 – hydrological connection via surface water sewers; minimal intrusive works and low potential for impacts.

Magnitude of effects: Imperceptible significance.

Sluice_10 – potential for impacts such as increased runoff and sediment
loading to the water body from the proposed new cycle track and footpath and
narrowing of road to accommodate these works at Airside Junction to Airport
Roundabout; risk that during site preparation of construction compound SW1
to the north-east of the Cloghran roundabout that rainfall events onto exposed
soils could result in silty water runoff and spillages of contaminants such as
hydrocarbons from the site to surface water drains in the road could reach
surface water drains across land.

Magnitude of effects: Slight significance.

Mayne_010 – the water body is directly crossed by the Proposed Scheme as
it is culverted under the road; risk that during site preparation of construction
compound SW2 at Collinstown Cross that rainfall events onto exposed soils
could result in silty water runoff and spillages of contaminants such as
hydrocarbons from the site to surface water drains in the road could reach
surface water drains across land.

Magnitude of effects: Slight significance.

• Santry_10 – the water body is culverted under the existing route, and with the water body open upstream and downstream of this crossing, there is potential for sediment runoff from earth works; land take and earthworks due to the extension of bus and cycle tracks may lead to silty water runoff to storm drains; risk that during site preparation of construction compound SW3 at Coolock Lane that rainfall events onto exposed soils could result in silty water runoff and spillages of contaminants such as hydrocarbons from the site to surface water drains in the road could reach surface water drains across land.

Magnitude of effects: Slight significance.

 Tolka_060 – surface water sewers drain to the water body; risk that during site preparation of construction compound SW4 at Collins Avenue that rainfall events onto exposed soils could result in silty water runoff and spillages of contaminants such as hydrocarbons from the site to surface water drains in the road could reach surface water drains across land; potential impacts could arise from the installation of the piles, the new bridge alongside the existing Frank Flood Bridge and the construction of the scour protection where activities are both in-stream and near to stream activities; existing services under the river will be diverted and there is a risk that a leak from the new 'oil line' or existing cables could result in impacts on the water body; diverted services are to be installed under the river through drilled ducts and the drilling operation poses some risk to the water body in the event of a 'breakout' of the drilling muds used in the process; risk that during site preparation of construction compound SW3 at Coolock Lane that rainfall events onto exposed soils could result in silty water runoff and spillages of contaminants such as hydrocarbons could reach the water body across land and where access to the water body is required to facilitate construction.

Magnitude of effects: Profound.

 Tolka Estuary - oil pollution from the diversion of the cables could have downstream impacts on the Tolka Estuary, however there would be some dispersion and emulsification by the time it reached the estuary.

Magnitude of effects: **Moderate to very significant.**

 Royal Canal Main Line – no direct connections to the Royal Canal; the road slopes down from the bridge over the canal and so it is unlikely any overland flows would reach the canal.

Magnitude of effects: Imperceptible significance.

Potential Operational impacts

9.7.6. The potential impacts for the Operational Phase are related to water quality and hydromorphology only. 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 (attenuation tanks and swales) into the Proposed Scheme along the entirety of its length.

Ward _40 – increase in impermeable area of 1,739m² is proposed and will be
attenuated using an attenuation tank; no net increase in runoff rates, however
there would be an increase in overall volumes of surface water being
discharged.

Magnitude of effects: Imperceptible significance.

Sluice_10 – increase in impermeable area of 5,264m² is proposed which will
result in an increase in the rate and amount of runoff to the receiving
watercourse; swales and a dry detention basin are proposed to restrict runoff
rates.

Magnitude of effects: Imperceptible significance.

 Mayne_010 – increase in impermeable area of 4,065m² is proposed; runoff rates will be restricted to existing rates through the use of attenuation tanks and oversized pipes.

Magnitude of effects: Imperceptible significance.

Santry_10 – increase in impermeable area of 6,219m² is proposed; runoff
rates will be restricted through the use of oversized pipes and a dry detention
basin; no net increase in runoff rates but there would be an increase in overall
volumes of surface water being discharged.

Magnitude of effects: Imperceptible significance.

• Tolka_060 – increase in impermeable area of 4,340m² is proposed; Runoff rates will be restricted to existing rates largely through the use of oversized pipes; no net increase in runoff rates but there would be an increase in overall volumes of surface water being discharged; bank reprofiling and scour protection works at the Frank Flood Bridge have the potential for permanent impacts on the hydromorphology of the water body but given the existing nature of the water body in this location, where it is highly channelised, it would have a low sensitivity to change of this nature.

Magnitude of effects: Imperceptible significance.

 Royal Canal Main Line – no direct connections to the Royal Canal and therefore no pathway for pollutants or increased surface water runoff.

Magnitude of effects: N/A.

Liffey Estuary Upper – with increased impermeable area, there is potential
increased surface water to enter the combined sewer systems and result in
impacts as a result of increased frequency of operation of SWOs and volumes
of wastewater being discharged; increase in impermeable area is very small in
this section of the Proposed Scheme and attenuation is provided.

Magnitude of effects: Imperceptible significance.

- 9.7.7. 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 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.
- 9.7.8. Overall, I have considered the submissions and the contents of the application in relation to water and I 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

- 9.7.9. 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.
- 9.7.10. Pluvial Flooding There is a risk of pluvial flooding along the entire length of the proposed route. The Proposed Scheme will result in the creation of additional impermeable surfaces for local sections of road widening but SuDS measures have been included to ensure that there is no change in existing runoff rates as a

consequence of the scheme. This will ensure no increase in the risk of pluvial flooding as a result of the Proposed Scheme.

- 9.7.11. **Fluvial Flooding** The Proposed Scheme is at risk from fluvial flooding from:
 - Cuckoo Stream,
 - Mayne River,
 - Santry River and
 - River Tolka.
- 9.7.12. The Proposed Scheme will not affect any of the existing bridges or culverts on the Cuckoo Stream, Mayne River and Santry River where they cross the scheme and no works will be undertaken to change the level of the road or adjacent lands that will impact the floodplain and any associated storage for any of these watercourses. At the existing Frank Flood Bridge crossing of the River Tolka, a new bridge has been proposed upstream of the existing crossing (with the existing bridge retained). Qualitative and quantitative analysis completed for a Stage 3 Assessment carried out show that the proposed bridge will not impact on flood levels for the River Tolka because the soffit levels are higher than the existing soffit levels of Frank Flood Bridge.
- 9.7.13. Climate Change There will be an increased risk of fluvial flooding to the Proposed Scheme as a consequence of climate change, however the Proposed Scheme will not exacerbate the impacts of climate change on the risk of fluvial flooding. Results of a Stage 3 Detailed Risk Assessment at the Frank Flood Bridge over River Tolka due to the construction of a new bridge show that there will be no change in flood risk patterns or processes as consequence of the Proposed Scheme.

Conclusion

9.7.14. 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.
- 9.7.15. 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.
- 9.7.16. 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	Imperceptible -	A Surface Water	Short term during
run-off.	Profound	Management Plan	construction and
Increased sediment in run		(SWMP) has been	imperceptible.
off.		prepared (see	Permanent during
		CEMP) - A	operational phase
Anthropogenic sources		requirement for a	and imperceptible /
(fuel etc).		Pollution Incident	beneficial.
Increased scouring of		Response Plan;	benenolal.
watercourse.		Construction	
In-stream works altering		Compounds	
		management	
flow regimes etc. at Frank		including the	
Flood Bridge.		storage of fuels	
		and materials;	

control of sediment; use of concrete; management of vehicles and plant including refuelling and wheel wash facilities; and monitoring. Water will be diverted away from the working area at Frank Flood Bridge using sandbags and a silt fence will be installed; inchannel works will be carried out with relevant consents, good working machinery, minimum disturbance to river bed and bank, and reinstatement of banks to predevelopment conditions; monitoring of the alkalinity of water downstream by testing the PH levels will be implemented concurrently to the piling works to check for impacts

of concrete
'washout' or spills;
and a drilling
Slurry
Management Plan
will be
implemented.
·

9.8. Land, Soils, Geology and Hydrogeology

- 9.8.1. Section 14 of the EIAR submitted addresses lands, soils, geology and hydrogeology.
 Baseline Conditions
- 9.8.2. 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 agricultural and airport related areas along the route. 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.
- 9.8.3. The Proposed Scheme is predominantly underlain by made ground over deglacial landforms comprised of hummocky sands and gravels, a drumlin and a mega-scale glacial delineation. The topography of the Proposed Scheme is approximately 30mOD at Pinnock Hill, rising to 60mOD in the vicinity of Dublin Airport and Northwood Avenue, where it then falls to 0mOD to 10mOD at Botanic Avenue, and rises again to 10 to 20mOD up to Granby Avenue in the City Centre.
- 9.8.4. 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. The soils encountered within the study area are classed as topsoil, alluvium and made ground. Subsoils comprise till and gravel derived from limestone, made ground and alluvium near rivers.
- 9.8.5. The underlying bedrock of the study area is predominantly comprised of the Malahide Formation, the Lucan Formation, the Tober Collen Formation and Waulsortian Limestones. 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.
- 9.8.6. 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 and printing works along the route, all are outlined within table 14.25 of the EIAR.

Potential Construction Impacts

- 9.8.7. 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 materials on site to be spilled resulting in the
 pollution of the topsoil; materials that are stockpiled incorrectly can be
 exposed to erosion and weathering which reduces the quality of the resource;
 permanent damage of topsoil through waterlogging, sealing, washout of fines
 and erosion; and excavation and disposal of topsoil instead of its reuse or
 reinstatement.

Magnitude of effects: Slight.

 Excavation of potentially contaminated ground – exposure of locations of contamination and excavation of contaminated soil may potentially lead to a risk to the surrounding environment.

Magnitude of effects: Slight.

• Loss of future quarry or pit reserve – three historic quarries and two gravel pits within the study area and they have long been infilled.

Magnitude of effects: Imperceptible.

 Loss or damage of proportion of aquifer – minimal excavation into the limestone rock as part of the Proposed Scheme; potential pollutants from routine run-off during construction or mobilisation of pollution from the disturbance of contaminated ground during construction activities (particularly excavations) have the potential to alter the groundwater quality temporarily. Magnitude of effects: **Negligible to moderate.**

- Change to groundwater regime Localised pumping of excavations could lead to change in groundwater levels, but this will be limited.
 - Magnitude of effects: Imperceptible.
- Loss or damage of a groundwater dependant habitat groundwater dependent habitats may be potentially impacted through accidental contamination of the groundwater which supports them; a risk of pollutants entering the groundwater near pNHA as a result of spillages or accidents where mitigation measures are not implemented.

Magnitude of effects: Significant.

Potential Operational Impacts

- 9.8.8. 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 considered **negligible**, and the significance of the impact would be **imperceptible** on any of the land, soils, geology and hydrogeology.
- 9.8.9. 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.
- 9.8.10. 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	Slight	Prevention of	Imperceptible
topsoil		leaks and spills of	
		hydrocarbons and	
		other chemicals.	
Farancia	Oliver	I Constant	1
Excavation of	Slight	Licenced	Imperceptible
potentially		contractor will	
contaminated ground		remove and	
		dispose at	
		licenced facility if	
		encountered.	
		Dewatering in	
		such areas will be	
		carried out in	
		manner that	
		reduces	
		mobilisation of	
		contaminants.	
Loss of future quarry	Imperceptible	None	Imperceptible
or pit reserve			
Loss or damage of	Negligible - moderate	None	Imperceptible
proportion of aquifer			

Change to groundwater	Imperceptible	Prevention of	Imperceptible
regime		leaks and spills of	
		hydrocarbons and	
		other chemicals.	
Loss or damage of a	Significant	Prevention of	Imperceptible
groundwater		leaks and spills of	
dependant habitat		hydrocarbons and	
		other chemicals.	

9.9. Archaeology, Cultural Heritage and Architectural Heritage

9.9.1. Sections 15 and 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

- 9.9.2. 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.
- 9.9.3. For the purpose of this assessment, the scheme has been divided into five distinct sections i.e., Pinnock Hill to Airside Junction, Airside Junction to Northwood Avenue, Northwood Avenue to Shantalla Road, Shantalla Road to Botanic Avenue and Botanic Avenue to Granby Row.
- 9.9.4. One SMR site (DU011-154 structure) is located adjacent to the Pinnock Hill to Airside Junction section of the Proposed Scheme, in a greenfield area in Miltonsfields townland, south of Swords, and it is possible that further associated features may extend into the Proposed Scheme.
- 9.9.5. There are no recorded archaeological monuments located in the Airside Junction to Northwood Avenue section of the Proposed Scheme or within c. 50m of it but the full

- extent of the subsurface features was not determined and it is likely that the complex (particularly the field system) extends further towards the Proposed Scheme.
- 9.9.6. There are no recorded archaeological monuments in the Northwood Avenue to Shantalla Road or the Shantalla Road to Botanic Avenue sections of the Proposed Scheme.
- 9.9.7. On the Botanic Avenue to Granby Row section of the Proposed Scheme, the Parnell Monument (RMP DU018-425) is located c.10m from the terminus of the Proposed Scheme at Parnell Square East, sited on a traffic island at the northern end of O'Connell Street and surrounded by Luas tramlines and overhead wires. In addition to the Historic City of Dublin (RMP DU018-020), there is one recorded monument within this section of the Proposed Scheme and four within c.50m of it. The Proposed Scheme will enter the Historic City of Dublin ZAP (RMP DU018-020) at Dorset Street Upper and Frederick Street North. One recorded site, a burial ground (RMP DU018-020495), is located within the Proposed Scheme and within the Historic City of Dublin ZAP. There is, therefore, a large area of archaeological potential associated with this RMP. Two recorded sites are located in the city centre, but outside of the ZAP of the Historic City. These are the site of a house on Dorset Street Lower (RMP DU018-023) and the site of a well known as the 'Stone Well' on Hardwick Lane (RMP DU018-024). The other site is a brickworks on Parnell Street (RMP DU018-020506).
- 9.9.8. O'Connell Street and part of Parnell Square are designated as an ACA, while Parnell Square is a Conservation Area (CA). The ACA encompasses the south end of Parnell Square, Granby Row including the Gate Theatre and Rotunda Hospital. Three features in this area are protected structures: Rotunda Hospital (DCC RPS 6419-20), the Gate Theatre and Assembly Rooms (DCC RPS 1338) and the fountain on Cavendish Row (DCC RPS 1339). The stated aim of the ACA is 'to protect the rich architectural character and heritage of the O'Connell Street Area' (DCC 2001). It is of National importance, and High sensitivity. It interfaces with the study area on the south side of Parnell Square, along Parnell Street and at the northern end of O'Connell Street Upper.
- 9.9.9. Four protected structures namely, Parnell Monument (DU018-425), Cloughran Church (DU014-009001) (the ruined church is outside the study area, but the

- associated burial ground overlaps the study area in its southwestern corner), and the designed landscapes associated with Santry Demesne (DU014-030) and Belvedere House (DU018-012001), are also included in the RPS and overlap with the study area.
- 9.9.10. CAs are areas which, while not to be confused with ACAs, do afford some protection to the architectural heritage under the Dublin City Development Plan 2022 to 2028. The Proposed Scheme traverses five CAs:
 - St. Pappin's Church CA which comprises St. Pappin's Church, its grounds and the adjoining cemetery.
 - River Tolka CA which follows the course of the Tolka River.
 - Royal Canal CA which follows the course of the Royal Canal, its tow paths and associated walks.
 - Gardiner Street Upper CA.
 - Parnell Square CA which encompasses Parnell Square, Granby Row and part of Frederick Street North.
- 9.9.11. In addition to the four sites mentioned above in section 9.9.9, there are a further 202 Protected Structures or groups of Protected Structures (RPS sites) within the study area of the Proposed Scheme listed in both the Dublin City Development Plan 2022-2028 and the Fingal Development Plan 2023-2029. These include buildings, groups of buildings and structures of Regional and National Importance and Medium to High sensitivity. They range from modest vernacular cottages (FCC RPS 604) to the classical masterpiece of the Rotunda Hospital (DCC RPS 6420). There is a high concentration of Protected Structures within the Georgian City Core, inside the Royal Canal and especially around Parnell Square, with clusters of structures along Drumcondra Road, and more dispersed features along Swords Road. A complete list of the Protected Structures is provided in Appendix A.16.2 of the EIAR and their locations are shown on Figure 16.1, Volume 3 of the EIAR.

Potential Impacts in relation to Archaeology & Cultural Heritage

9.9.12. 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.
- 9.9.13. Features of a cultural heritage interest that are required to be removed on a temporary basis or for a short-term period, will be removed under archaeological supervision and in accordance with a method statement in consultation with the NTA and the relevant statutory authorities. This will protect the heritage asset from any adverse impacts and ensure that it is stored safely at an agreed location prior to its reinstatement.
- 9.9.14. 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

- 9.9.15. In relation to Architectural heritage there are 206 Protected Structures, or groups of Protected Structures (RPS sites) within the study area of the Proposed Scheme.
 - Potential Impacts in relation to Architectural Heritage
- 9.9.16. Potential direct impacts are anticipated where temporary land-take and setback of existing boundaries is required, and where items of street furniture require relocation to facilitate the widening of roads, cycle tracks or footpaths. Where a land-take is proposed, impacting on the boundary of an identified building or landscape, it is anticipated that the duration of impact will be Permanent, while the relocation of items of street furniture would be reversible, and where this is proposed, it is anticipated that the duration of impact will be Long-Term.
- 9.9.17. There is also potential for damage of sensitive fabric during construction and indirect visual impacts are anticipated where construction phase activities will adversely impact on the setting of protected structures/ sites.
- 9.9.18. Two locations were identified where there will be a direct Construction Phase impact on a Protected Structure, namely the temporary land-take at Old Stockhole Lane will temporarily block the lane, impacting on the setting of, and access to Cloughran Church (DU014-009001) and the removal of the boundary at a thatched cottage in Collinstown, Swords Road (FCC RPS 604) where a land-take is proposed to accommodate segregated cycle tracks, widened footpaths and additional road space will have a negative impact on the setting of the cottage.

- 9.9.19. 86 no. of the Protected Structures detailed in Appendix A.16.2 Inventory of Architectural Heritage Sites of the EIAR share a common boundary or front directly onto the Proposed Scheme, including Binns Bridge (DCC RPS 908) and the fountain on Cavendish Row (DCC RPS 1339). There is potential for damage of sensitive fabric during construction, the magnitude of which is considered Medium. The predicted impact of the construction works on the identified Protected Structures will be Indirect, Negative, Moderate and Temporary.
- 9.9.20. The magnitude of effects to the setting of the O'Connell Street and Environs ACA are expected to be Indirect Negative, Significant and Temporary. The whole of the area which is included in both the ACA and the study area is also designated as Parnell Square Conservation Area (CA). Within the CA, historic street surfaces will be directly impacted, and the 56 no. protected structures or groups of protected structures, one post box and three groups of lamp posts may be impacted indirectly during construction.
- 9.9.21. The River Tolka CA intersects with the study area at Frank Flood Bridge where it also takes in Our Lady's Park and, given the extent of construction works proposed in this CA, the magnitude of impact is predicted to be Direct, Negative, Moderate and Temporary. No direct impacts are predicted to the St. Pappin's Church CA, the Royal Canal CA, or the Gardiner Street Upper CA.
- 9.9.22. 44 no. NIAH structures or groups of NIAH structures were identified in the study area and there is potential for damage of sensitive fabric associated with these structures during construction. The predicted impact of the construction works on the identified NIAH Structures will be Indirect Negative, Moderate and Temporary.
- 9.9.23. The designed landscapes of Santry Demesne (DU014-030) where land take is proposed and Highpark Convent (NIAH 3238) where the proposed road widening will require the repositioning of an historic entrance will be impacted. The impact on the entrance to the Convent will be Direct, Negative, Moderate and Permanent.
- 9.9.24. The removal of cottages and setting back of boundaries at the following locations are noted:
 - Proposed removal of a pair of cottages at Dardistown/ RCSI cottages.

- Proposed land-take at the front boundary at St Canice's Terrace, 258 to 280
 Swords Road, Whitehall, Dublin 9.
- Proposed land-take along the boundaries of 186 Drumcondra Road Upper and 236 Griffith Avenue.

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 direct, negative, slight and permanent.

- 9.9.25. Eight post boxes, nine lamp posts or groups of lamp posts, two items of street furniture and three locations were identified where historic paving and surface treatments were identified in the study area and most will be directly impacted during the construction phase. The predicted Construction Phase Impact will range from Direct to Indirect Negative, Moderate to Significant and Temporary. The impact on the kerb alterations at the junction of Botanic Road and Drumcondra Road Lower, on both sides of the road between Frederick Lane and Parnell Square North and along Parnell Square East will be Long-Term.
- 9.9.26. 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 other buildings which, although not protected, provide a historical reference to the past.
- 9.9.27. Whilst no negative impacts of significance are expected as a result of the development, I note in the case of the removal of the boundary at a thatched cottage in Collinstown, Swords Road (FCC RPS 604) where a land-take is proposed to accommodate segregated cycle tracks, widened footpaths and additional road space will have a negative impact on the setting of the cottage. The applicant proposes to

- record the existing boundaries in position prior to the commencement of construction works.
- 9.9.28. The affected masonry, railings, gates, gate posts, and capping stones 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.
- 9.9.29. The other protected structures (86 no.), the ACA and the CAs 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. Such measures are commonplace in relation to works within the curtilage of a protected structure or historical building or street furniture. It is reasonable therefore to consider the magnitude of effects not to be significant in this instance.
- 9.9.30. 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.
- 9.9.31. Only one significant impact arises in relation to the operation of the development at the Frank Flood Bridge (NIAH 50120266), where the setting of the structure will be impacted by the provision of a new pedestrian and cycle bridge alongside the historic structure, to its west. The predicted Operational Phase impact will be Indirect, Negative, Significant and Permanent.

Mitigation

9.9.32. As outlined above, the applicant is to employ an Architectural Heritage Specialist to monitor works and to record all materials during removal and replacement. In particular, recording of all affected masonry, railings, gates, gate posts and capping stones to be removed along the front boundary of the thatched cottage in Collinstown, Swords Road (FCC RPS 604) will be undertaken by the architectural heritage specialist engaged by the appointed contractor. The architectural heritage specialist will oversee the labelling, taking down and reinstatement of the affected gates, railings, piers, and masonry. Works to historic fabric will be carried out in accordance with the methodology provided in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric in Volume 4 of the EIAR.

- 9.9.33. At Frank Flood Bridge, the affected masonry, balusters, capping stones, and lamps are to be labelled prior to their careful removal to safe storage and their reinstatement in the new position and The Statue of Our Lady (NIAH 50130158) will be temporarily removed to storage during the construction of the new bridge, for its protection, and reinstatement in a new position.
- 9.9.34. An archaeologist will also be employed during the proposed works to monitor all ground works at locations where archaeological material is known or suspected to be present. The Archaeologist will record and preserve material as appropriate and will determine measures for the protection of materials or features during the work period.

Conclusion

9.9.35. 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
Removal of the boundary at a thatched cottage in Collinstown, Swords Road (FCC RPS 604)	Negative, Significant Negative, Slight	Yes. Recording, labelling and reinstating at different location. To be undertaken by an architectural heritage specialist As above	Negative, Slight and Temporary Negative, Not
Old Stockhole Lane will temporarily block the lane, impacting on the setting of, and access to Cloughran Church (DU014-009001)	Temporary	As above	Significant and Temporary
Potential for damage of sensitive fabric during construction common boundary for sites that front directly onto the Proposed Scheme, including Binns Bridge (DCC RPS 908) and the fountain on Cavendish Row (DCC RPS 1339)	Negative, Moderate and Temporary	Yes. Recording, labelling to be undertaken by an architectural heritage specialist	Negative, Not Significant and Temporary

Works at Frank Flood	Negative, Significant	Yes.	Negative, Slight and
Bridge where it also	and Temporary	Recording,	Temporary
takes in Our Lady's Park		labelling and reinstating at different location. To be undertaken by an architectural	
		heritage specialist	
Post boxes, lamp posts, milestone, street furniture and historic paving	Negative, Moderate, Temporary	As Above	Negative, Not Significant and Temporary
Other Structures of Architectural Heritage Interest (all Sections) Refer to Tables 16.9 and 16.11	Negative, Slight, Temporary	As above	Negative, Not Significant and Temporary

9.10. Landscape, Townscape & Visual

9.10.1. 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 construction of a new cycle and pedestrian bridge over the River Tolka west of Frank Flood Bridge and connections through Our Lady's Park. All other impacts are considered to be of moderate magnitude.

Baseline Conditions

9.10.2. 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.
- 9.10.3. For the purpose of the visual and townscape assessment the proposed route has been divided into five sections as follows:
 - Pinnock Hill to Airside Junction,
 - Airside Junction to Northwood Avenue,
 - Northwood Avenue to Shantalla Road,
 - Shantalla Road to Botanic Avenue, and
 - Botanic Avenue to Granby Row.
- 9.10.4. Baseline conditions for each of the above sections are outlined in table 17.6 of the EIAR. In brief, the Pinnock Hill to Airside Junction section is dominated by the extent of road infrastructure and associated traffic and the road corridor is generally enclosed by dense young plantations. There is greenbelt between Swords and Dublin Airport and there is a tree preservation order at a group of trees to the northern side of Pinnock Hill Roundabout. There is a protected view to the east from the R132 Swords Road at Airside. There is a protected structure, milestone (RPS 0866), along this section of the Proposed Scheme 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 structure is present within this section of the scheme.
- 9.10.5. In relation to the Airside Junction to Northwood Avenue section, I note that this section of the proposed route is also dominated by the extent of road infrastructure and associated traffic and the road corridor is generally enclosed by adjacent trees, woodland planting and tall hedgerows in the northern section becoming more open in the vicinity of Dublin Airport and increasingly enclosed by development south of the airport lands. The 'Spirit of the Air' sculpture on the Airport Roundabout is a prominent landmark at the entrance to Dublin Airport. There is a greenbelt between Swords and Dublin Airport. There are no tree preservation orders or protected views in this section of the route. There are protected structures along this section.

- 9.10.6. The Northwood Avenue to Shantalla Road section is characterised by high quality historic parkland and mixed residential/ commercial buildings through Santry, and by residential areas south of Santry. There is major commercial/ retail development at Omni (Santry) Shopping Centre which is segregated from street by low walls and railings. Street tree planting and off-street tree planting (notably in Santry Demesne) are prominent features to either side of R132 Swords Road/ R104 Coolock Lane Junction. There is significant open space/park at Santry Demesne/ Park, which also includes the Morton Athletics Stadium. There are no protected views but there is a tree preservation order for a group of trees at Santry Demesne. There are also protected structures along this section.
- 9.10.7. The Shantalla Road to Botanic Avenue section of the route is comprised of inner-city suburbs with tree-lined streetscape to either side of inner-city village of Drumcondra. There is a transition from major dual carriageway at Whitehall to traditional city street with prominent mature street trees, bounded by high-quality residential properties, mature front gardens, historic boundary walls and railings. Ellenfield Park is present to the east of R132 Swords Road/ N1 National Road at Whitehall and there is a small park/ open space of Our Lady's Park within the River Tolka Conservation Area at Frank Flood (Drumcondra) Bridge. There are no tree preservation orders in this section of the route. There are also protected structures along this section, mainly limited to the southern end of the corridor.
- 9.10.8. Finally, the Botanic Avenue to Granby Row section transitions from inner-city suburbs with tree lined streetscapes, through to the historic City Centre. The townscape is characterised by a long straight city streetscape with prominent mature tree-lined sections and with high quality two-storey residential buildings set back with mature gardens. From Frederick Street North/ Parnell Square to Granby Row the streetscape character is of a historic City Centre street typically defined by four and five storey red brick Georgian terraces, punctuated by Findlater's Church and Spire on the corner of Parnell Square. Amenity designations in this section consist of the River Tolka CA, the Royal Canal CA, a residential CA on Drumcondra Road Lower and an ACA (O'Connell Street and Environs ACA) at southern end of Parnell Square. The Garden of Remembrance is also within the section at the northern side of Parnell Square. There are a significant number of protected structures along this section, particularly as the route approaches the City Centre.

Potential Impacts

- 9.10.9. The potential for impacts arises within both the construction and operational phase of the development. Within section 17.4.1 of the EIAR, the applicant 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, land take for the widening of surfaces, removal of trees and landscaping, establishment/ use of temporary construction compounds, and provision of additional areas for SUDS. The proposed construction compounds will be the most dominant change to the landscape and streetscape during the construction phase of the development.
- 9.10.10. It is also important note that the applicant has provided photomontages of the scheme (please refer to Figure 17.2 in Volume 3 of the EIAR) 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 removal of clutter at all the major junctions along the length of the Proposed Scheme and the loss of trees and vegetation, particularly at Frank Flood Bridge and the replacement of same with enhanced landscaping in Our Lady's Park.
- 9.10.11. In the interest of conciseness, I will examine the potential impacts relevant to each of the five sections of the scheme individually hereunder. However certain construction activities are common to all sections and will have a certain level of visual impact. 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 cannot be mitigated and are not considered to be significant given the temporary nature of the works.

Pinnock Hill to Airside Junction

9.10.12. 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. The most visible works will

involve the conversion of the existing Pinnock Hill Roundabout and Airside Junction to BusConnects Protected Junctions. Land acquisition from residential properties to south of the Pinnock Hill junction is required for revised local access with removal of section of trees/ woodland belt. 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 Negative, Slight/ Moderate, and Temporary/ Short-Term. It is of note that the operation of the scheme will not result in significant negative visual effects within this section of the route.

Airside Junction to Northwood Avenue

9.10.13. The Construction Phase involves demolition, excavation and construction works primarily within and to the road carriageway and junctions, verges, drainage features, utilities, with only limited impact on sections of road boundary and existing tree and other planting – most notably from Cloghran roundabout, and at Collinstown Cross to Northwood Avenue. There will be land acquisition and demolition of small commercial buildings to provide realigned access to the surrounding commercial units and demolition of two derelict cottages to facilitate cycle track and footway provision. The magnitude of effects arising from the development is therefore stated as being Negative, Slight/ Moderate, and Temporary/ Short-Term.

Northwood Avenue to Shantalla Road

9.10.14. 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 have an impact on open space at Coolock Lane with the introduction of a bus terminus and on Santry Demesne/ Park with the removal and setting back of an existing modern wall and railings and loss of one mature and three early mature trees in a visually prominent location. The magnitude of effects arising from the development is therefore stated as being Negative, Significant, and Temporary/ Short-Term.

Shantalla Road to Botanic Avenue

9.10.15. Similarly, the baseline environment of this section is of high sensitivity and construction of the Proposed Scheme involves changes across and along the existing road infrastructure through established residential/ mixed-use suburbs. The

Proposed Scheme includes for the construction of a new cycle and pedestrian bridge over the River Tolka west of Frank Flood Bridge and connections through Our Lady's Park. There will be changes to the streetscape character in some locations on this section, most notably through the loss of a substantial number of trees at the Church of the Holy Child. The magnitude of effects arising from the development is therefore stated as being Negative, Significant, and Temporary/ Short-Term.

Botanic Avenue to Granby Row

- 9.10.16. The baseline townscape is of high/very high sensitivity, but construction of the Proposed Scheme involves generally modest changes within the existing road corridor through this established city area. The works do involve removal of some street young tree planting in the medians on Drumcondra Road Lower and Dorset Street, either side of Binns Bridge which crosses over the Royal Canal. The magnitude of effects arising from the development is therefore stated as being Negative, Moderate/ Significant, and Temporary/ Short-Term.
- 9.10.17. With regard to the O'Connell Street and Environs ACA at the southern end of Parnell Square, I note there are very limited works to the road/ footpath corridor within the ACA and it is proposed to retain the existing footpath surfacing in this area. The magnitude of effects arising from the development is therefore stated as being Negative, Moderate, and Temporary/ Short-Term.
- 9.10.18. The River Tolka and Royal Canal corridors and Parnell Square are conservation areas; however, the Board should note that these are not Architectural Conservation Areas and as such consideration of same is in the context of the overall setting of this location. The construction of the Proposed Scheme will result in substantial changes at the River Tolka with provision of a new cycle/ pedestrian bridge west of Frank Flood Bridge. The cycle/ pedestrian link passes through Our Lady's Park and the magnitude of effects arising from the development is therefore stated as being Negative, Significant/ Very Significant and Temporary/ Short-Term.
- 9.10.19. There will be direct impacts on one protected structure, a thatched cottage in Collinstown, Swords Road (FCC RPS 604), where a land take is proposed to accommodate segregated cycle tracks, widened footpaths and carriageway widening. The boundary will be removed and reinstated like-for-like at a setback location and there will be some loss of private area to the front of the building. The

magnitude of effects on this protected structure is therefore stated as being Negative, Significant/ Very Significant and Temporary/ Short-Term.

- 9.10.20. There is a tree preservation order (TPO) on the mature trees within Santry Demesne/Park. The applicant has attempted to limit the impact to the south-east corner of the now public park with removal of three immature trees, and one mature Category C tree (low value). There is also a tree preservation objective on trees at Pinnock Hill Roundabout. Works will be limited to outside the designation but there remains some potential for accidental damage to rootzones. The magnitude of effects on this protected structure is therefore stated as being Negative, Slight/ Moderate and Temporary/ Short-Term.
- 9.10.21. Protected views are limited to east from R132 Swords Road at Airside, views east and west along the River Tolka, views east and west along Royal Canal, key vistas south from Parnell Square to O'Connell Street/ the Spire and views of the street within the Parnell Square CA. Generally, the works associated with the Proposed Scheme are within the road corridor and will not impact sensitive characteristics. However, the new cycle and pedestrian bridge over the River Tolka will impact on views from Frank Flood Bridge. The magnitude of effects on these protected views is assessed as being Negative, Slight/ Moderate and Temporary/ Short-Term.
- 9.10.22. Construction of the Proposed Scheme will require land acquisition from a significant number of residential properties along the Proposed Scheme and the direct impact to residential properties is considered to be Very Significant/ Profound impact visually but will be Temporary/ Short-Term in nature. The following properties contain mature front gardens and original boundaries, which will be removed and relocated as a result of the Proposed Scheme:
 - Milton Fields, Pinnock Hill (1 no.);
 - Nevinstown House / Lodge, 1 Orchard, & Hollytree House (3 no.);
 - Kilronan House (1 no.);
 - 1 Swords Road (1 no.);
 - The Thatch Cottage, Collinstown Cross (1 no.);
 - Dardistown House;

- Derryloam (1 no.);
- Marymount 1 no.)
- Carey House; (1 no.);
- Lima House (1 no.)
- Two cottages at Royal College of Surgeons Ireland sportsground (2 no.);
- No. 1 Magenta Crescent (1 no.);
- Nos. 304-296 (5 no.), even Nos. 282-276 (4 no.), even Nos. 270-258 (7 no.), even Nos. 248-244 (3 no.), odd Nos. 305 to 277 (15 no.), odd Nos. 269-249 (11 no.); and
- No. 188, No. 186 Swords Road and No. 237 Griffith Avenue (3 no.).
- 9.10.23. Other works will require land acquisition from non-residential properties (business, hotel and commercial, etc.), most notably from Collinstown Cross to Northwood Avenue and from several private (commercial) landings and four cellars between Botanic Avenue and Granby Row, which will be filled. It is also proposed to demolish three buildings (one commercial unit at Collinstown Cross Industrial Estate and two derelict cottages associated with the Royal College of Surgeons). The townscape/ streetscape and visual effect of the Construction Phase on these properties will be Negative, Significant, Temporary/ Short-Term.
- 9.10.24. The Proposed Scheme will require the removal of trees and vegetation along the dual carriageway from Pinnock Hill to the Airport Roundabout, areas of property acquisition from Collinstown Cross to Northwood Avenue and through Santry to Shantalla Road, as well as at Whitehall Church and along short, localised sections of Drumcondra Road Upper and Lower (median trees, some of which will be stored and reinstated where feasible). Tree removals and pruning have been limited to that which is necessary and unavoidable to allow the development proposal to be implemented (please refer to Tables 2 and 3 of the Arboricultural Impact Assessment, Appendix A17.1 of Volume 4 of the EIAR). A total of 27 trees are recommended for removal irrespective of the proposed development due to severe physiological or structural decline. The magnitude of effects in relation to the removal and replanting of trees and vegetation will be Negative, Moderate/ Significant and Temporary/ Short-Term.

- 9.10.25. Construction changes will occur over a period of 3 years and as such as mentioned above are for a short period of time. Impacts will therefore not be significant in the long term.
- 9.10.26. The operational phase of the development will result in impacts to the physical and visual character of the corridor of the existing roads/ streets; changes in traffic, pedestrian and cycle movements; modification of areas of private property/ gardens/ boundaries; and adjustments to other areas/ boundaries. These changes may be considered part and parcel of ongoing or regular changes that may be expected to occur, and do occur, from time to time in any urban streetscape environment. Over the long-term, the negative effects associated with the removal of mature trees along many sections of the Proposed Scheme will reduce with the growth of replacement and additional planting. There will be an overall improvement in streetscape character, over the long-term from Northwood Avenue to Granby Row due largely to the provision of an improved paving scheme across the majority of this section.
- 9.10.27. 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

- 9.10.28. In order to reduce the magnitude of effects to landscape, streetscape and townscape, it is proposed to protect trees and vegetation that is to be retained during construction through the use of protective fencing and to install services using appropriate techniques such trenchless/ broken trench/ continuous trench using air spade/ thrust boring, as required to protect tree roots and soil. The five proposed site compounds and facilities will be located outside of all root protection areas. All works will be carried out in accordance with a CEMP.
- 9.10.29. No mitigation or monitoring is proposed for the operational phase of the development.

Residual Impacts

9.10.30. 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 Scheme only in so far as positive effects between Northwood Avenue and Granby Row, including Residential Conservation Areas, as the Proposed Scheme provides for improvements in the urban realm.

Conclusion

9.10.31. 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 other proposed BusConnects 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					
Pinnock Hill to Airside	Negative, Slight /	Protect trees to	Negative, Slight /		
Junction	Moderate, and	lessen effects.	Moderate, and		
	Temporary / Short- Term	Prepare an inventory of boundary details and accesses,	Temporary / Short- Term		

		planting, paving, and	
		other features.	
		O a a a torrestia a consider	
		Construction works	
		will be managed by	
		the preparation of a	
		CEMP.	
Airside Junction to	Negative, Slight /	As above	Negative, Slight /
Northwood Avenue	Moderate, and		Moderate, and
	Temporary / Short-		Temporary / Short-
	Term		Term
Northwood Avenue to	Negative,	As above and	Negative, Significant,
Shantalla Road	Significant, and	maintain access to	and Temporary /
	Temporary / Short-	amenities and public	Short-Term
	Term	open spaces	
Shantalla Road to	Negative,	As above and	Negative, Significant,
Botanic Avenue	Significant, and	maintain access to	and Temporary /
	Temporary / Short-	amenities and public	Short-Term
	Term	open spaces	
Botanic Avenue to	Negative, Moderate	As above and	Negative, Moderate /
Granby Row	/ Significant, and	maintain access to	Significant, and
	Temporary / Short-	amenities and public	Temporary / Short-
	Term	open spaces	Term
	Operational	Phase	
Pinnock Hill to Airside	Negative, Slight /	None	Negative, Slight and
Junction	Moderate, and		Long-Term
	Temporary / Short-		
	Term		
Airside Junction to	Negative, Slight,	None	Neutral, Slight and
Northwood Avenue	and Temporary /		Long-Term
	Short-Term		
	Short reini		
Northwood Avenue to	Negative,	None	Positive Moderate
Shantalla Road	Moderate, and		Long-Term

	Temporary / Short-		
	Term		
Shantalla Road to	Negative,	None	Positive, Moderate
Botanic Avenue	Moderate, and		and Long-Term
	Temporary / Short-		
	Term		
Botanic Avenue to	Negative,	None	Positive, Moderate /
Granby Row	Moderate, and		Significant and Long-
	Temporary / Short-		Term
	Term		

9.11. Roads and Traffic

9.11.1. 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 five sections i.e., Pinnock Hill to Airside Junction, Airside Junction to Northwood Avenue, Northwood Avenue to Shantalla Road, Shantalla Road to Botanic Avenue, and Botanic Avenue to Granby Row.

Baseline Conditions

9.11.2. Overall cycling infrastructure provision on the corridor in its entirety consists of 34% cycle priority outbound (35% advisory cycle lane), with 23% inbound (26% advisory cycle lane). Bus services along the Proposed Scheme currently operate within a constrained and congested environment, with 72% priority on the corridor. Current deviation for bus journey times is 10 minutes, any increases in traffic levels will exacerbate bus time deviations. The following part of this report will outline the baseline conditions in relation to the relevant sections mentioned above.

Pinnock Hill to Airside Junction

- 9.11.3. This section commences south of Swords along the R132 Dublin Road at Pinnock Hill Roundabout for 150m. The route continues south along the R132 through the signalised junction at Airside for 650m.
- 9.11.4. Pedestrian facilities and street lighting are present on both sides of the Swords Road between Pinnock Hill Roundabout and Airside Junction. Street lighting columns are situated along both sides of the carriageway within close proximity to the footpaths.

- There is a signalised crossing facility across the northern, eastern, and western arms of Airside Junction and some uncontrolled crossing facilities are present along the R132 at Pinnock Hill Roundabout.
- 9.11.5. Between Pinnock Hill Roundabout and Airside Junction, there are combined bus and cycle lanes of approximately 3.5m width along both sides of the R132. 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.
- 9.11.6. Bus lanes are provided at sections along this part of the route in both directions. This section of the route contains 5 no. bus stops, two inbound and three outbound, with none indented from the carriageway. Shelters are provided at two of the stops and bus information is provided at 4 of the stops. The applicant has provided details of bus journeys and frequency within table 6.7 of the EIAR.
- 9.11.7. The speed limit along this section is 60kph. The number of traffic lanes varies widening at junctions to facilitate left turns however, the majority of the road is five lanes with northbound and southbound bus lanes in both directions within this section.
- 9.11.8. Junctions along this section of the route include:
 - Pinnock Hill four-arm Roundabout; and
 - Airside Junction four-arm signalised Junction.
- 9.11.9. There are 15 existing adjacent parking spaces located along the northbound side of the R836 Dublin Road.

Airside Junction to Northwood Avenue

- 9.11.10. This section is approximately 4.8km in length, beginning south of Airside Junction and continuing along the R132 to Cloghran Roundabout followed by Dublin Airport Roundabout. At the southern access to Dublin Airport, the route moves through the R132/ Corballis Road South Junction and continues under the M50 until terminating at the R132/ Northwood Avenue Junction.
- 9.11.11. Between Airside Junction and Cloghran Roundabout, there are footpaths on both sides of the R132. After this, there is no southbound footpath between Kilronan House to the Cloghran Roundabout and again from south of the Coachman's Inn to

the Airport Roundabout. Pedestrian facilities are available in both directions on the remainder of this section. There are street lighting columns situated along both sides of the R132 within close proximity to the footpaths. 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.

- 9.11.12. There is a mix of cycle facilities between Airside Junction and Cloghran Roundabout. Southbound provision ranges from a combined cycle and bus lane, an advisory cycle lane and a segregated pedestrian and cycle route. There are no dedicated cycle facilities travelling south from the Coachman's Inn on the south side of the Cloghran Roundabout to the Airport Roundabout. Between the R132/ Old Airport Road Junction and the R132/ Carlton Dublin Airport Hotel Junction, cycle facilities vary between an advisory cycle lane, a mandatory cycle lane, a shared cycle and bus lane and a shared/ segregated pedestrian and cycle facility. There are sections of advisory cycle lane, a combined cycle and bus lane and a shared/ segregated pedestrian and cycle facility between the R132/ Carlton Dublin Airport Hotel Junction and the R132/ Northwood Avenue Junction.
- 9.11.13. 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 22 bus stops along this section and 3 of these have shelters. Bus information is available at 15 of these. Bus service frequency is detailed in table 6.10 of the EIAR.
- 9.11.14. In terms of general traffic, the R132 Dublin Road, between Cloghran Roundabout and Dublin Airport Roundabout, is a dual carriageway with three lanes travelling in a northbound direction and two lanes travelling in a southbound direction. Between Dublin Airport Roundabout and Old Airport Road Junction, the road is a dual carriageway with two general traffic lanes and a bus lane on the nearside in each direction. Between the Old Airport Road Junction and Turnapin Lane Junction, the road is a two-way single carriageway with a general traffic lane and a bus lane in each direction and between Turnapin Lane Junction and Northwood Avenue Junction, it is a two-way single carriageway with a general traffic lane and either a bus lane or a cycle lane in each direction.
- 9.11.15. Junctions along this section of the route include:

- Swords Road/ Kettles Lane three-arm priority Junction,
- Cloghran four-arm Roundabout,
- Dublin Airport four-arm Roundabout,
- R132/ Corballis Road South four-arm signalised Junction,
- R132/ Old Airport Road four-arm signalised Junction,
- R132/ Turnapin Lane four-arm signalised Junction, and
- R132/ Northwood Avenue three-arm signalised Junction
- 9.11.16. All junction layouts are outlined in detail within the EIAR in order to clearly describe the current situation within the site of the proposed scheme.
- 9.11.17. Parking along this section of the road is at the following locations:
 - R132 Swords Road/ Old Stockhole Road 42 informal spaces and 78 adjacent spaces.
 - Paddy Shanahan Cars, Swords Road/ Old Airport Road 46 commercial vehicles parked for display.

Northwood Avenue to Shantalla Road

- 9.11.18. This part of the route passes through the R132/ Northwood Avenue Junction, the R132/ Coolock Lane Junction and the R132/ Santry Avenue Junction. At the R132/ Santry Avenue Junction, the route intersects with the R104 and continues along the R132 through to Shantalla Road Junction via the N1/ M50 bridge.
- 9.11.19. Pedestrian facilities and street lighting are present on both sides of the Swords Road and there are street lighting columns situated along both sides of the carriageway within close proximity to the footpaths. There are several controlled pedestrian crossings along this section of the route with some uncontrolled crossings also. The full details of all these crossings are included in Appendix A6.5.1 (Pedestrian Impact Assessment) in Volume 4 of the EIAR.
- 9.11.20. Within some parts of this section of the route, there are no cycle facilities present i.e., between the R132/ Shanrath Junction and the Shantalla Road Junction and between the R132/ Lorcan Road Junction and the R132/ Shanrath Junction via Lorcan Road, Lorcan Drive, and Shanrath Road. Along the remainder of this section,

there are varying types of cycle lanes provided such as a mix of combined cycle and bus lanes, advisory and mandatory cycle lanes. 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.

- 9.11.21. Bus lanes are provided at sections along this part of the route in both directions. There is no bus priority infrastructure in the northbound direction along R132 Swords Road between Shantalla Road and Northwood Avenue. This section of the route contains 10 no. bus stops, five inbound and five outbound, with only 1 indented from the carriageway. Shelters are provided at eight stops and bus information is provided at all of the stops. The applicant has provided details of bus journeys and frequency within table 6.13 of the EIAR.
- 9.11.22. The speed limit along this section is 50kph. The number of traffic lanes varies over the length of this section, widening at junctions to facilitate left turns however, the majority of the road is four lanes with northbound and southbound bus lanes in both directions within this section. Lorcan Road is a two-way single carriageway with one lane in each direction and subject to a 30km/h speed.
- 9.11.23. Junctions along this section of the route include:
 - R132/ R104 Coolock Lane four-arm signalised Junction,
 - R132/ R104 Santry Avenue four arm signalised Junction,
 - R132/ Lorcan Road four-arm signalised Junction,
 - R132/ Shanowen Road three-arm signalised Junction,
 - R132/ Shanrath Road five-arm signalised Junction, and
 - R132/ Shantalla Road three-arm priority Junction.
- 9.11.24. There are 180 existing adjacent parking/ loading spaces located within this section of the Proposed Scheme with Santry Park car park providing 50 of these.

Shantalla Road to Botanic Avenue

9.11.25. This section is approximately 2.5km in length, beginning at the Shantalla Road Junction along the R132 Swords Road. The route moves along the R132 through the R132/ Collins Avenue Junction, the R132/ Griffith Avenue Junction, the R132/ Richmond Road Junction before terminating on the approach to the R132/ Botanic Avenue Junction

- 9.11.26. Pedestrian facilities and street lighting are present for the most part on both sides of this section of the Swords Road. Footpaths on the northbound side of the R132 are discontinuous for a length of approximately 330m along the off-ramp from the old N1 single carriageway to Swords Road but there is a quiet parallel route along this length, through the residential area on the western side of the R132. There are several controlled pedestrian crossings along this section of the route with some uncontrolled crossings also. The full details of all these crossings are included in Appendix A6.5.1 (Pedestrian Impact Assessment) in Volume 4 of the EIAR.
- 9.11.27. Between the Swords Road slip road and the R132/ Collins Avenue Junction, cycle facilities are intermittent and in the vicinity of the R132/ Collins Avenue Junction cyclists are directed onto a quieter parallel route through the housing area along the western side of the R132. On the remainder of this section, there are a mixture of advisory cycle lanes, combined bus and cycle lanes, a pedestrian and cyclist segregated facility and on-street advisory cycle lanes. However, there are no southbound dedicated cycle facilities on the Drumcondra Bridge (Frank Flood Bridge) up to the R132/ Botanic Avenue Junction. There is no designated cycle hire scheme parking racks along this section of the route.
- 9.11.28. Bus lanes are provided at sections along this part of the route in both directions. This section of the route contains 19 no. bus stops, eleven inbound and eight outbound, with only 4 indented from the carriageway. Shelters are provided at seventeen of the stops and bus information is provided at eighteen of the stops. The applicant has provided details of bus journeys and frequency within table 6.16 of the EIAR.
- 9.11.29. The number of traffic lanes varies widening at junctions to facilitate left turns however, the majority of the road is four lanes with northbound and southbound bus lanes in both directions within this section. This section goes over the River Tolka, on Frank Flood Bridge. The road is subject to a speed limit of 50kph and varies in width between 12.0m (on bridge) and 17.0m (where cycle lanes are present).
- 9.11.30. Junctions along this section of the route include:

- R132 Swords Road/ R103 Collins Avenue Junction four-arm signalised Junction,
- R132 Swords Road/ R102 Griffith Avenue four-arm signalised Junction, and
- R132 Drumcondra Road Upper/ Richmond Road/ Millmount Avenue four-arm signalised Junction.
- 9.11.31. There are 268 existing adjacent parking /loading spaces on this section of the Proposed Scheme with adjacent parking from Church Avenue to Botanic Avenue providing 186 of these.

Botanic Avenue to Granby Row

- 9.11.32. This section is approximately 2.5km in length and runs along R132 Drumcondra Road Lower, R132 Dorset Street Lower, and Dorset Street Upper. It turns south down R132 Frederick Street North, R132 Parnell Square East, and R132 Cavendish Row and also comprises Parnell Square West and Granby Row.
- 9.11.33. Between Botanic Avenue and Granby Row, pedestrian facilities take the form of footpaths along both sides of the carriageway, with widths generally measuring between 2m and 3.5m. Similarly, along Frederick Street North, Parnell Square East, Cavendish Row, Parnell Square West, and Granby Row, footpaths are present on both sides of the carriageway, and range between 1.5m and 4.5m in width. There are several controlled pedestrian crossings along this section of the route with some uncontrolled crossings also.
- 9.11.34. Cycle facilities on this part of the route consist of a mix of advisory cycle lanes, combined bus and cycle lanes and cycle tracks. Between the R132/ North Circular Road Junction and the Dorset Street Upper/ Granby Row Junction, cycle provision is intermittent with some lengths where it is absent altogether and there are no dedicated cycle facilities between the R132/ Frederick Street North Junction and the Parnell Square East/ Gardiner Row Junction. There is a significant number of cycle parking stands on this section of the route and many more in the vicinity. There are also a significant number of designated cycle hire scheme stands in the of this section of the route.
- 9.11.35. Bus lanes are provided at sections along this part of the route in both directions. This section of the route contains 25 no. bus stops, eleven inbound and

- fourteen outbound, with only 6 indented from the carriageway. Shelters are provided at ten of the stops and bus information is provided at 24 of the stops. The applicant has provided details of bus journeys and frequency within table 6.19 of the EIAR.
- 9.11.36. The speed limit along this section is 50kph. The number of traffic lanes varies widening at junctions to facilitate left turns however, the majority of the road is four lanes with northbound and southbound bus lanes in both directions within this section. R132 Parnell Square West and Granby Row are subject to a speed limit of 30kph.
- 9.11.37. Junctions along this section of the route include:
 - R132 Drumcondra Road Lower/ Botanic Avenue/ Cian Park four-arm signalised Junction,
 - R132 Drumcondra Road Lower/ R131 Clonliffe Road three-arm signalised Junction,
 - R132 Drumcondra Road Lower/ Whitworth Place/ Whitworth Road four-arm signalised Junction,
 - R132 Dorset Street Lower/ Belvedere Road four-arm signalised Junction,
 - R132 Dorset Street Lower/ R101 North Circular Road Junction four-arm signalised Junction,
 - R132 Dorset Street Lower/ R802 Gardiner Street Upper four-arm signalised Junction,
 - R132 Dorset Street Lower/ Eccles Street/ Hardwicke Place four-arm signalised Junction,
 - R132 Dorset Street Upper/ Frederick Street North/ R135 Blessington Street four-arm signalised Junction,
 - Dorset Street Upper/ Granby Row/ R135 St. Mary's Place North four-arm signalised Junction,
 - R132 Parnell Square East/ Gardiner Row/ Parnell Square North four-arm signalised,

- R132 Cavendish Row/ R803 Parnell Street/ O'Connell Street Upper four-arm signalised Junction, and
- R132 Parnell Square West/ R803 Parnell Street three-arm signalised Junction.
- 9.11.38. There are 704 existing adjacent parking/ loading spaces located along the length of this section of the Proposed Scheme.

Potential Impacts

9.11.39. For the purpose of the assessment of potential impacts the applicant has also considered the proposed route in five sections (eleven sub-sections) as above. I will consider potential impacts in relation to individual modes 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

- 9.11.40. In relation to the full Proposed Scheme, construction traffic management measures are set out in Volume 2, Chapter 5 Construction, section 5.8 of the EIAR and within the CTMP set out in section 5.2 of the CEMP contained within Appendix III of the NIS. Holistically, the duration of the construction phase for the overall Proposed Scheme is estimated at approximately 36 months. Construction activities in individual sections will have shorter durations but, in order to achieve the overall programme duration, it will be necessary to work on more than one section/ subsection at any one time.
- 9.11.41. I note that the maximum number of HGVs in operation across the Proposed Scheme during peak haulage activities is expected to be 36 vehicles, per Table 5.6 of the CTMP. Therein, the applicant has identified haul routes as follows:
 - M1/ N1 and M50 Motorway,
 - R104 from J2 on the M50 to Coolock Lane,
 - R125 M2 to Swords, and
 - R132 Swords Road.
- 9.11.42. Given the length and varying nature of each subsection it is proposed to establish five construction compounds for the duration of the works. These are:

- Construction Compound SW1: Cloghran Roundabout,
- Construction Compound SW2: Collinstown Cross,
- Construction Compound SW3: Coolock Lane,
- Construction Compound SW4: Collins Avenue, and
- Construction Compound SW5: Drumcondra Bridge.
- 9.11.43. 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/ Moderate and Temporary. No further analysis is therefore carried out in this regard by the applicant, given the levels are significantly below the thresholds set out in TII's Guidelines for Traffic and Transport Assessments.
- 9.11.44. 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 and bus lanes may be temporarily closed, but access to bus stops will be retained in order ensure continuity in the service.
- 9.11.45. It is anticipated there will be 250 to 270 personnel directly employed across the Proposed Scheme, rising to 300 personnel at peak construction. Limited car parking will be allowed at the Construction Compounds as the use of vehicle-sharing, public transport, cycling and walking will be encouraged. Consequently, impacts arising from construction staff traffic are not expected to be significant.
- 9.11.46. 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

9.11.47. 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 6.24 and 6.26 for pedestrians and cyclists respectively. Similarly, bus infrastructure is examined in

relation to both the frequency of service to be provided and the infrastructure provided such as shelter, seating, accessible kerbs and indented drop off areas.

9.11.48. 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. 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

9.11.49. It is important to note at the outset that all impacts on pedestrian facilities within the five 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 6.29, 6.33, 6.38, 6.43 and 6.48 of the EIAR.

Cycle Infrastructure

9.11.50. 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. 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 significantly 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

- 9.11.51. It is proposed that there will be a total of 5, 20, 12, 19 and 24 bus stops along Sections 1 to 5 of the Proposed Scheme, respectively, providing for a total of 80 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.
- 9.11.52. 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.
- 9.11.53. 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 significantly improved to that available currently. Such improvements will have a positive and long-term impact for patrons.

Parking

9.11.54. 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 – Pinnock Hill Junction to Airside Junction

No impact on existing parking and loading.

Section 2 – Airside Junction to Northwood Avenue

13 informal parking spaces on the forecourt of The Coachman's Inn, to facilitate
the implementation of a cycle track along the R132 southbound link. 78
dedicated spaces remain to the side/ back of The Coachman's Inn.

Magnitude of effects: Negative, Slight and Long-term.

 14 spaces on the forecourt of Paddy Shanahan's Car Services, to facilitate the implementation of a cycle track along the R132 northbound link. 32 dedicated parking spaces at Paddy Shanahan's Car Services.

Magnitude of effects: Negative, Slight and Long-term.

Section 3 - Northwood Avenue to Shantalla Road

 7 commercial parking spaces at Trade Electric Group to facilitate the implementation of a footpath and cycle track. It may be possible to reconfigure the parking provision within the car park.

Magnitude of effects: Negative, Moderate and Long-term.

 5 informal parking spaces available in front of commercial sites at Schoolhouse Mews and two spaces at Magner's Pharmacy to facilitate the implementation of a cycle track and a bus lane. May be possible to relocate some of these spaces to the side street at Santry Villas/ Church Lane.

Magnitude of effects: **Negative**, **Moderate and Long-term**.

7 informal residential parking spaces close to the R132 Swords Road/
 Shanowen Road Junction to facilitate the implementation of a bus lane and footpath provision. Could be mitigated against by the parking facilities within the front gardens of the adjacent houses.

Magnitude of effects: Negative, Slight and Long-term.

 1 commercial parking space in the forecourt of retail premises south of the R132 Swords Road/ Shanowen Road Junction. 46 spaces remain.

Magnitude of effects: Negligible.

Section 4 – Shantalla Road to Botanic Avenue

- 2 'Pay and Display' spaces along the northbound side of R132 Swords Road, immediately south of the R132 Swords Road/ Iveragh Road Junction to facilitate the implementation of a bus stop island, footpath, and cycle track.
 May be mitigated by the availability of 17 parking spaces along Iveragh Road.
 Magnitude of effects: Negative, Slight and Long-term.
- 2 informal spaces along the northbound side of R132 Swords Road, immediately north of the R132 Swords Road / Iveragh Road Junction to facilitate the implementation of a bus stop island, footpath, and cycle track.
 May be mitigated by the availability of 17 parking spaces along Iveragh Road.

Magnitude of effects: **Negative**, **Slight and Long-term**.

Section 5 – Botanic Avenue to Granby Row Junction

 3 'Pay and Display' spaces along the northbound side R132 Drumcondra Road Lower to facilitate the implementation of a cycle track and footpath provision. 68 'Pay and Display' adjacent parking spaces along St Anne's Road and Grattan Parade.

Magnitude of effects: **Negative**, **Slight and Long-term**.

 2 Loading bays at St Alphonsus Road are to be removed to facilitate the implementation of a cycle track and footpath provision. It is proposed to add two of the loading bay spaces north of Whitworth Road.

Magnitude of effects: **Negligible.**

 15 'Pay and Display' spaces along Frederick Street to facilitate the implementation of a cycle track and footpath provision. May be mitigated due to the availability of 'Pay and Display' spaces along Hardwick Street, and the availability of informal parking 100m to the north along Blessington Street and Wellington Street Lower. Magnitude of effects: Negative, Moderate and Long-term.

 1 Disabled Permit Parking spaces on Frederick Street North to facilitate the implementation of a cycle track and footpath provision. May be mitigated due to the remaining availability of disabled permit parking spaces along Parnell Square North.

Magnitude of effects: Negative, Moderate and Long-term.

9.11.55. Overall, there will 58 parking spaces removed as a result of the Proposed Scheme over the 12km route. 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. The Proposed Scheme will also formalise the parking arrangements at these locations to improve the environment, particularly for pedestrians and cyclists. Further to this, the availability of equivalent types of parking along adjacent streets within 200m of these locations (and typically within 100m) will limit the overall impact of this loss of parking, which is considered to have a Negative, Moderate and Longterm effect. I am satisfied that no significant effects arise in this regard.

Summary of Infrastructure to be provided

- 9.11.56. 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 increase pedestrian crossings from 86 to 125 i.e., a 45% increase.
- 9.11.57. It will also provide 10.7km of inbound and outbound of segregated cycle facilities, increasing from 2.7km and 4.1km, respectively. Total cycle facilities (segregated and non-segregated) will be increased to 100% of the whole route. The proportion of the corridor with segregated facilities (including quiet street treatment) will increase from 48% to 100%.
- 9.11.58. With regard to buses, the Proposed Scheme will provide 11.3km inbound and 11.8km outbound of bus lanes across the corridor, which is an increased from 9.3km inbound and 8.0km outbound. In conjunction with signal-controlled bus priority, the proposed scheme will provide an increase of 39% in total of bus priority measures in both directions.

- 9.11.59. 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 inbound is seen in a 71% increase in people travelling via bus. In the year 2028 during the AM peak it is predicted that walking and cycling will see an increase of 39%. Private car use for the same year is predicted to decrease by 31%. The PM peak for the same year is predicted to have a similar modal shift with a 79% increase in the number of people travelling via bus and an increase of 54% of people walking and cycling outbound. The number of people using private car for their outbound journeys will see a reduction of 32%.
- 9.11.60. Modelled modal shifts for the year 2043 see a significant increase in people walking and cycling with a 55% increase in the AM peak hour and an 86% increase in the PM peak hour and a greater uptake of public transport with an additional 600 passengers in the AM per peak hour of 2028 and an additional 240 passengers in the AM per peak hour of 2043 year.
- 9.11.61. The overall magnitude of the foregoing 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.
- 9.11.62. 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.
- 9.11.63. 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

- 9.11.64. 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 and this has been carried out in accordance with TII's Traffic and Transport Assessment Guidelines.
- 9.11.65. The Board should note that the assessment of the Transport Modelling (please refer to Appendix A6.1, Sub Appendix Transport Modelling Report within Volume 4 (Part 2) of the EIAR) is contained within section 6.4.6.2.8 of the EIAR.
- 9.11.66. The assessment shows that during the 2028 Opening Year in the 'Do Minimum' versus 'Do Something' scenarios that there is a slight to profound reduction of between -129 and -1644 in general traffic flows along the direct study area during the AM Peak Hour. Similarly, there is a slight to significant reduction of between -161 and -986 in general traffic flows along the direct study area during the PM Peak Hour. This represents an anticipated impact on general traffic as Positive, Moderate to Significant and Long-Term.
- 9.11.67. The assessment also shows that during the 2028 Opening Year that there is a slight to significant traffic reduction within the indirect study area during the AM Peak Hour which varies between –101 and -797 in combined flows along the surrounding road links. There is also a slight to significant traffic reduction within the indirect study area during the PM Peak Hour which varies between –101 and -845 in combined flows along the surrounding road links. For both AM and PM, these reductions in general traffic flows have been determined as an overall **Positive**, **Moderate and Long-Term** on the indirect study area.
- 9.11.68. The Board should note that in both the AM and PM peak hour, traffic flows at national roads junctions are expected to be below the 5% threshold for assessment.
- 9.11.69. An analysis was also carried out on local and regional road junctions in the AM and PM for the 2028 Opening Year in the 'Do Minimum' versus 'Do Something' scenarios. I note that the majority of local and regional road junctions during both the AM and PM Peak Hours of the 2028 Opening Year are operating with a maximum V

/ C⁸ ratio of below 85% during both scenarios and that the impact of the Proposed Scheme is negligible at the majority of these road junctions. Tables 6.77 and 6.78 of the EIAR highlight a number of junctions in both the AM and PM Peak Hours for the 2028 Opening Year where the V / C ratio exceeds 100% in the Do Something scenario. However, a Negative, Moderate and Long-Term effect will only accrue to 5 of the 121 assessed junctions in the AM and a Negative, Slight and Long-Term effect will only accrue to 2 of the 145 assessed junctions in the PM.

- 9.11.70. The results of the analysis are similar for the impacts on local and regional road junctions in the AM and PM for the 2043 Design Year in the 'Do Minimum' versus 'Do Something' scenarios. A Negative, Moderate and Long-Term effect will only accrue to 3 of the 120 assessed junctions in the AM and a Negative, Moderate and Long-Term effect will only accrue to 1 of the 145 assessed junctions in the PM.
- 9.11.71. The redistribution of traffic during the 2028 AM and PM Peak Hours and during 2043 AM and PM Peak Hours raises no impacts assessed as significant or greater impact. Generally, traffic congestion that is outlined in the impact assessment is acceptable with regard to the urban location of the area and, consequently, the anticipated impact on general traffic during the Operational Phase will be Negative, Slight and Long-Term.
- 9.11.72. 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

9.11.73. 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

⁸ Volume over Capacity Ratio

- 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).
- 9.11.74. 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 authorities and will include measures to minimise the impacts associated with the Construction Phase upon the peak periods of the day.
- 9.11.75. No mitigation measures are proposed for the operation of the Proposed Scheme. Residual impacts remain as stated above and will not be significant.
- 9.11.76. 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	Negative, Slight to	Traffic Management	Negative, Slight and	
impacts road network	Moderate and	Plans	Temporary	
operation	Temporary			
Operational Phase				
Pedestrian Infrastructure	Positive, Moderate	None	Positive, Moderate to	
	to Significant and		Significant and Long-	
	Long-term		term	

Cycling Infrastructure	Positive, Slight to	None	Positive, Slight to
	Very Significant and		Very Significant and
	Long-term		Long-term
Bus Infrastructure	Positive, Slight to	None	Positive, Slight to
	Profound and Long-		Profound and Long-
	term		term
.Parking and Loading	.Negative, Slight	None	Negative, Slight and
	and Long-term		Long-term
People Movement	Positive, Very	None	Positive, Very
	Significant and		Significant and Long-
	Long-term		term
Bus Network Performance	Positive, Significant	None	Positive, Significant
Indicators	and Long-term		and Long-term
General Traffic Network	Negative, Slight	None	Negative, Slight and
Performance Indicators	and Long-term		Long term

9.12. Material Assets & Waste

9.12.1. 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 and encompasses Dublin and the Eastern-Midlands.

Material Assets

- 9.12.2. 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.
- 9.12.3. 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 the EIAR).
- 9.12.4. 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.
- 9.12.5. 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.
- 9.12.6. 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.
- 9.12.7. The magnitude of effects arising from infrastructure diversions will result in the worst-case potential impact of Negative, Moderate and Temporary. Impacts relating to each individual infrastructure element is outlined in Table 19.11 of the EIAR. Impacts arising to such infrastructure during the operational phase of the development relate to the use of electricity to power new traffic lights and street lighting. Overall effects are expected to be Negative, Imperceptible to Not Significant and Long-Term in this regard.
- 9.12.8. 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.

<u>Waste</u>

- 9.12.9. 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 local authorities.
- 9.12.10. It is important to note at the outset that impacts arising from waste are not deemed to be significant.
- 9.12.11. 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 56,500 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.
- 9.12.12. 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.

- 9.12.13. 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 2,250 tonnes which equates to 0.02% of the demolition waste in the Eastern Midlands Waste Region.

Magnitude of effects: Adverse, Not Significant and Short-Term.

 Excavation waste is outlined in table 18.9 of the EIAR and a total surplus material of 27,000 tonnes is expected to be generated from the development which is equivalent to 1.4% of the demolition waste management baseline in the Eastern Midlands Waste Region.

Magnitude of effects: 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.

Magnitude of effects: Adverse, Imperceptible and Short-Term.

- 9.12.14. 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 increase by approximately 6,000 tonnes due to an overall widening 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 Adverse, Not Significant and Long-Term.
- 9.12.15. 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.

Conclusion

9.12.16. 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	
Construction Phase				
Demolition waste	Adverse, Not Significant and Short-Term	Monitoring, auditing, and reusing waste	Adverse, 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	
Use of Imported Material	Neutral, Slight, and Long-Term	Source materials locally. Use registered quarries.	Negative, Slight, and Long-Term	
		4444		

Operational Phase			
C&D waste Municipal waste	Adverse, Not Significant and Long- Term Neutral and Long-	Reuse waste	Adverse, Not Significant and Long term Neutral and Long-
	Term		Term
Construction & operational phases of development:	Ranges between: No significant impact & Negative, Imperceptible, and Long-Term (for Electricity & Telecommunications)	Notification and liaison with utility providers.	Ranges between: No significant impact to Negative, Imperceptible, Moderate, and Temporary

9.13. Risk of Major Accidents and/ or Disaster

- 9.13.1. 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 no operational phase risks in relation to major accidents or disasters and will therefore not be considered further.
- 9.13.2. The applicant has identified potential impact of major accidents and/ or disasters from the Proposed Scheme during the construction phase. These include:
 - Risk of gas explosion due to the strike of a gas mains during excavation works,
 - Pollution event leading to environmental damage to watercourses or groundwater, particularly associated with the potential release of silt to the aquatic environment, and
 - Risk of spread of invasive species during construction works, particularly during site clearance works.

9.13.3. The design of the Proposed Scheme has been developed in compliance with the relevant design standards which include provisions to reduce the likelihood of risk events occurring (e.g., drainage systems have been designed to cater for increased rainfall events, etc.). A CEMP has been prepared and is included as Appendix A5.1 in Volume 4 of this EIAR.

Conclusion

9.13.4. I considered all of the written submissions made in relation to Major Accidents or Disasters and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts from Major Accidents or Disasters 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 from Major Accidents or Disasters 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 Risk of Major Accidents or Disasters – Summary of potential and residual effects.

Potential impacts during Construction Phase	Pre-Mitigation Risk	Mitigation	Post Mitigation Consequence & Risk
Risk of gas explosion.	Medium	See Section 9.5 and	Serious & Low
		Ap. A5.1 CEMP)	
Pollution event leading to environmental damage to watercourses or groundwater.	Medium	As above	Limited & Low
Risk of spread of invasive species.	Medium	As above	Serious & Low

9.14. Interactions between the Factors and Cumulative Impacts

- 9.14.1. 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 BusConnects routes, MetroLink, DART+ Coastal North projects in the context of the foregoing sections of the EIAR. MetroLink will run along the R132 in the Swords area and there will be interface between the two schemes at the Fosterstown station, which will be located on the east side of the R132 to the south of Pinnock Hill junction. It is envisaged that the Proposed Scheme will be constructed in advance of significant construction works on MetroLink. Development also considered in the context of cumulative development include but are not limited to the following:
 - Dublin Port Masterplan 2040: Works include construction of new quays and
 jetties, remediation of contamination on the bed of the basin, capital dredging
 to deepen the basin, infilling of the Basin at some berth locations and
 construction of a new river berth with a double tiered Ro-Ro ram and
 deepening of fairway and approach to Dublin port.
 - N2 Slane Bypass: 3.4km long bypass that runs from the east of Slane to the existing N2 at a location 500m north of McGruder's crossroads.
 - M11 Capacity Enhancement (Phase 1 & Phase 2) including Glen of the Downs tunnel.
 - Blanchardstown Regional Drainage Scheme.
 - North Dublin sewage plant (pipeline).
 - Water Supply Project Eastern and Midlands Region.
 - Greater Dublin Drainage Project.
 - Automated people mover (APM) Dublin Airport.
 - Eastern Bypass project.
 - O'Devaney Gardens Regeneration Programme: Development consists of 1,047 residential units across ten blocks up to 14 storeys tall.

- Belcamp Hall Residential Development: Residential development consisting of 2,718 residential units (2,233 no. apartments, 485 no. houses), 2 no. creches and all associated site works.
- 9.14.2. 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.
- 9.14.3. It is important to note at the outset that for the large part no significant cumulative impacts are expected.

Water, soils, geology and hydrogeology

9.14.4. Water, soils, geology and hydrogeology are examined as a group of receptors for the purpose of the consideration of cumulative effects. The proposed projects will result in the loss of a not significant quantity of soil and geology, but the cumulative loss is still considered small on a local scale. 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

- 9.14.5. In the consideration of cumulative traffic impacts the applicant in the first instance considered the cumulative impact of all 12 schemes and a 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.
- 9.14.6. In order to prevent such significant impacts from arising the applicant has stated that a number of routes will not be constructed concurrently with adjacent schemes to limit potential for significant adverse traffic, air quality and noise issues during the construction stage:

- Swords to City Centre Core Bus Corridor Scheme will not be constructed concurrently with the Ballymun/ Finglas to City Centre Core Bus Corridor Scheme.
- 9.14.7. 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. There may be a requirement for some localised temporary lane closures for short durations of the day or night but access for general traffic to existing residential and commercial units immediately adjacent to the Proposed Scheme will be accommodated throughout the Construction Phase as well as access for emergency vehicles. It is envisaged that the Proposed Scheme will be constructed in advance of significant construction works on MetroLink. It is for these reasons 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, Air Pollution and Climate

- 9.14.8. 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. The other planning applications and projects within 500 metres of the Proposed Scheme outlined in Figure 21.2 in Volume 3 of the EIAR were considered in this regard.
- 9.14.9. 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.
- 9.14.10. In terms of pollutants, I note that the applicant has outlined the cumulative construction phase impacts in terms of a percentage of the regional output in table 21.4 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.

9.14.11. Cumulative impacts in relation to climate are also considered within the EIAR in 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. I am satisfied that the proposed development as a whole will ultimately have a positive impact on climate and I am, therefore, also satisfied that significant long term adverse cumulative impacts will not arise.

Noise & Vibration

9.14.12. Cumulative impacts in relation to noise and vibration have been examined in the context of the proposed 12 routes and the developments listed in Figure 21.2 in Volume 3 of the EIAR. Within this there were 32 other projects identified with the 300m Zol of the Proposed Scheme which includes 14 DCC planning applications, 7 FCC planning applications, 5 SHDs, 1 LRD, and 3 other Major Projects (including MetroLink, Greater Dublin Drainage and the Greater Dublin Area Cycle Network Plan). Due to the distance between the Proposed Scheme and other Core Bus Corridor schemes cumulative impacts in relation to the other proposed routes are not expected. Such impacts range from Neutral, Imperceptible and Temporary to Negative, Slight to Moderate and 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

9.14.13. 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 plans for the scheme and the scheme is compliant with same.

- 9.14.14. I have already concluded within in-combination assessment carried out under the Appropriate Assessment in Section 8 of this planning report that there is no potential for adverse effects on the integrity of any European sites, to arise as a consequence of the Proposed Scheme in combination with any other plans or projects. I note that impacts on biodiversity will be no higher than the already predicted significant residual effects at the local geographic scale for the Proposed Scheme alone.
- 9.14.15. 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.

Archaeology and Built Heritage

9.14.16. 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, and no significant cumulative effect on below-grounds remains is anticipated. In terms of built heritage, no significant effects are expected, and mitigation measures will ensure the appropriate relocation of features such as boundaries and street furniture.

Landscape and Visual

- 9.14.17. 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.
- 9.14.18. For the MetroLink project, should the construction periods either overlap or follow on within a short timeframe with the Proposed Scheme, there is potential for localised, significant, temporary cumulative townscape/visual effects due to the parallel nature of this project and the northern end of the Proposed Scheme. However, these effects would be limited to any above ground works associated with construction of station access points for MetroLink.
- 9.14.19. 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

- 9.14.20. 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.
- 9.14.21. 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.
- 9.14.22. 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.
- 9.14.23. Similarly human health and biodiversity can interact with air quality, noise and 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.
- 9.14.24. I am satisfied that the proposals for the cycle network, the DART+ Coastal South project, MetroLink, the other 11 Core Bus Corridor schemes and the Proposed Scheme are complementary and could have a cumulative beneficial effect by encouraging active travel and increased use of public transport through offering a choice of routes. Due to the substantial size of overall population with the opportunity to benefit from the proposals, the effect is assessed as Positive, Very Significant and Long-Term for health.
- 9.14.25. 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.

- 9.14.26. 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, and a historic milepost. 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.
- 9.14.27. 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.

9.15. Reasoned Conclusion

- 9.15.1. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions from the planning authorities, 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 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** will arise from the operation of the proposed development and will have a significant positive effect on human health and population. This benefit will accrue due to the displacement of CO₂ from the atmosphere arising from a modal shift to cycling/ walking and 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 significantly 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 trees with roosting potential for bats. Such impacts are not considered significant and can adequately be mitigated for within the scheme. New trees will be planted in the vicinity to bolster existing treelines. 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 as much as possible. 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 night-time 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 night-time 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/ lane closures may arise, significant
 impacts arising from traffic can be ruled out.
- 9.15.2. 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.
- 9.15.3. 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.

10.0 Recommendation

I recommend that permission is granted subject to the following conditions.

11.0 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, and
- Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020).

National planning and regional and related policy, including:

- o the Climate Action Plan 2023,
- o the National Development Plan 2021-2030,
- Project Ireland 2040 National Planning Framework,
- the Greater Dublin Area Transport Strategy 2022-2042,
- Smarter Travel A Sustainable Transport Future: A New Transport Policy for Ireland 2009 – 2020,
- the Department of Transport National Sustainable Mobility Policy, 2022,
- the Design Manual for Urban Roads and Streets, 2019,
- o the Cycle Design Manual, 2023, and
- o other relevant guidance documents,

Regional and local level policy, including:

Regional Spatial Economic Strategy for the Eastern and Midlands Region

The local planning policy, including:

- o the Fingal County Development Plan 2023-2029,
- o the Dublin City Development Plan 2022-2028,

- o the Dublin City Biodiversity Action Plan 2021-2025,
- the nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity,
- the entirety of the documentation submitted by the National Transport
 Authority (applicant) in support of the proposed development, including the
 Environmental Impact Assessment Report and the Natura Impact Statement,
 and the range of mitigation and monitoring measures proposed,
- the submissions made to An Bord Pleanála in connection with the planning application,
- 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, and
- the report and recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment and environmental impact assessment.

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 – Stage 1:

The Board agreed with and adopted the screening assessment and conclusion carried out in the Inspector's report that the North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, North Bull Island SPA, Malahide Estuary SAC, Howth Head SAC, Rogerstown Estuary SAC, Rockabill to Dalkey Island SAC, Glenasmole Valley SAC, Ireland's Eye SAC, Wicklow Mountains SAC, Lambay Island SAC, Noth Bull Island SPA, South Dublin Bay and River Tolka SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Wicklow Mountains SPA, Rogerstown Estuary SPA, Howth Head Coast SPA, Dalkey Island SPA, Skerries Island SPA, Rockabill SPA, The

Murrough SPA and North West Irish Sea SPA are the European sites for which there is a likelihood of significant effects.

Appropriate Assessment – Stage 2:

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 North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, North Bull Island SPA, Malahide Estuary SAC, Howth Head SAC, Rogerstown Estuary SAC, Rockabill to Dalkey Island SAC, Glenasmole Valley SAC, Ireland's Eye SAC, Wicklow Mountains SAC, Lambay Island SAC, Noth Bull Island SPA, South Dublin Bay and River Tolka SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Wicklow Mountains SPA, Rogerstown Estuary SPA, Howth Head Coast SPA, Dalkey Island SPA, Skerries Island SPA, Rockabill SPA, The Murrough SPA and North West Irish Sea SPA, 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 North Dublin Bay SAC, South Dublin Bay SAC, Baldoyle Bay SAC, North Bull Island SPA, Malahide Estuary SAC, Howth Head SAC, Rogerstown Estuary SAC, Rockabill to Dalkey Island SAC, Glenasmole Valley SAC, Ireland's Eye SAC, Wicklow Mountains SAC, Lambay Island SAC, Noth Bull Island SPA, South Dublin Bay and River Tolka SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Wicklow Mountains SPA, Rogerstown Estuary SPA, Howth Head Coast SPA, Dalkey Island SPA, Skerries Island SPA, Rockabill SPA, The Murrough SPA and North West Irish Sea SPA

- i. Mitigation measures which are included as part of the current proposal,
- ii. Conservation Objectives 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 CO₂ from the atmosphere arising from a modal shift to cycling/ walking and 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 significantly 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 trees. Such impacts are not considered significant and can adequately be mitigated for within the scheme. 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 night-time 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 night-time 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.

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.

Proper Planning and Sustainable Development

The proposed road development would deliver a key component of the National Transport Authority's Bus Connects programme with the stated aim to improve bus services across the country. It would also provide safer infrastructure for pedestrians and cyclists and would deliver sustainable connectivity and integration with other transport services. The public realm along the bus corridor would also be improved.

The Board considered that the proposed road development, subject to compliance with the conditions set out below, would be in accordance with national, regional and local planning policies, including multiple policies and objectives set out in the Dublin City Development Plan 2022-2028 and the Fingal County Development Plan 2023-2029 and having regard to all relevant provisions, including zoning objectives, at or adjoining the overall scheme area. It is further considered that the need, justification and purpose of the proposed road development has been adequately demonstrated, that it is acceptable in terms of its likely effects on the environment and that an

approval for the proposed road development would be consistent with national climate ambitions and with the relevant provisions of the Climate Action Plan 2023 through the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets. The proposed road development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.0 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.

a) All mitigation and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.b) All mitigation, environmental commitments and monitoring measures identified in the EIAR shall be implemented in full as part of the proposed development.

Reason: In the interest of development control, public information, and clarity.

3. In accordance with the Environmental Impact Assessment Report, a suitably experienced and qualified ecologist will be appointed by the contractor. The ecologist will advise the contractor on ecological matters during construction, communicate all matters in a timely manner to the developer (National Transport Authority) and statutory authorities as appropriate, acquire any licences/consents required to conduct the work, and supervise and direct the ecological measures associated with the permitted scheme. Where appropriate, monitoring shall

undertaken by specialists. Monitoring schedules shall be included in Site Specific Habitats Protection and Re-instatement Method Statements.

Reason: In the interest of environmental protection.

4. Prior to commencement of development, the developer shall agree in writing with Dublin City Council the design and layout of additional pedestrian crossing facilities on Dorset Street following a Street Design Audit of this section of the route carried out in accordance with DMURS Advice Note 4.

Reason: In the interest of pedestrian safety and connectivity.

Prior to commencement of development, the developer shall agree in writing with Fingal County Council the final tie in point of the Proposed Scheme at the Fosterstown Link Road.

Reason: In the interest of orderly development.

6. Prior to commencement of development, the developer shall agree in writing with Dublin City Council the design and type of planting/ trees/ shrubs in lieu of the proposed treatment of 'poured concrete' in the central median immediately to the north of Richmond Road.

Reason: In the interest of visual amenity.

7. Prior to commencement of development, the developer shall agree in writing with Dublin City Council the details of the type of finishes/ materials for proposed pedestrian/ cycle bridge adjacent to Frank Flood Bridge.

Reason: In the interest of visual amenity.

8. Prior to commencement of development, the developer shall agree in writing with Fingal County Council appropriate signage/ controls on the southbound cycle track/ footpath immediately to the south of the Coachman's Inn to alert cyclists to cross to the western side of the carriageway in order to be able to proceed southwards on the proposed dual cycle track.

Reason: In the interest of pedestrian and cyclist safety.

 Prior to commencement of development, the finalised location of cycle parking stands throughout the scheme shall be agreed in writing with the respective planning authority.

Reason: In the interest of facilitating convenient and adequate bicycle parking.

10. Prior to commencement of development, the developer shall agree in writing with the respective planning authority details of the precise design and layout of pedestrian crossing facilities over cycle tracks at island bus stops on a case-bycase basis which shall be informed by the Cycle Design Manual (National Transport Authority, September 2023).

Reason: In the interest of pedestrian and cyclist safety.

11. Prior to the commencement of any works associated with the development hereby permitted, the developer shall submit a Construction Traffic Management Plan and a Construction Stage Mobility Management Plan for the construction phase of the development for the written agreement of the planning authority. The Construction Stage Mobility Management Plan shall promote the use of public transport, cycling and walking by personnel accessing and working on the construction site. The agreed Construction Traffic Management Plan and Construction Stage Mobility Management Plan shall be implemented in full during the course of construction of the development.

Reason: In the interest of traffic safety and promoting sustainable travel during the construction period.

12. In accordance with the Environmental Impact Assessment Report, all works to Protected Structures, and Structures of Cultural heritage interest shall be monitored and recorded by an Architectural Conservation Specialist, Reinstatement Method Statements shall be submitted to the planning authority to be held on file. The Architectural Conservation Specialist shall ensure adequate protection of the retained and historic fabric during the proposed works and across all preparatory and construction phases. Any features of new architectural heritage shall be made known to the Conservation Section of Dublin City Council and/ or Fingal County Council as soon as is practicably possible.

Reason: In the interest of environmental protection.

13. Noise monitoring shall be carried out during the construction phase of the proposed road development by the developer to ensure that construction noise threshold levels (LAeq, period) shall not exceed the levels set out in Table 9.7 (Construction Noise Threshold (CNT) levels for the proposed scheme) of Chapter 9 (Noise and Vibration) of the Environmental Impact Assessment Report. During the construction phase, noise monitoring shall be carried out at representative noise sensitive locations as the work progresses along the scheme to evaluate and inform the requirement and/or implementation of noise management measures. Noise monitoring shall be conducted in accordance with ISO 1996–1 (ISO 2016) and ISO 1996–2 (ISO 2017).

Reason: In the interest of management of construction noise and protection of adjoining amenities.

14. Drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the relevant planning authority for such works in respect of both the construction and operation phases of the proposed development.

Reason: In the interests of environmental protection and public health.

15. 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.

16. Prior to commencement of development, the developer, and/ or any agent acting on its behalf, shall prepare in consultation with the relevant statutory agencies,

an updated Construction Environmental Management Plan (CEMP), incorporating all mitigation measures indicated in the Natura Impact Statement and Environmental Impact Assessment Report and a demonstration of proposals to adhere to best practice and protocols.

The updated CEMP shall also include details of intended construction practice for the development, including hours of working, compound/works area lighting, noise management measures and surface water management proposals.

The construction of the development shall be constructed in accordance with the updated CEMP.

Reason: In the interests of protecting the environment, the landscape, the integrity of European Sites and sensitive receptors and in the interest of public health.

17. The developer shall monitor queuing time/ delays at each works location and record traffic flows on the local road network at locations to be agreed with the planning authority. Such monitoring information shall be provided in a report to the planning authority on a weekly basis.

Reason: In the interest of orderly development.

18. The developer shall monitor queuing time/ delays at each works location and record traffic flows on the local road network at locations to be agreed with the planning authority. Such monitoring information shall be provided in a report to the planning authority on a weekly basis.

Reason: In the interest of orderly development.

19. Prior to the replacement of trees, hedging and planting which is to be removed the National Transport Authority shall liaise with the relevant landowner with regard to the species, size and location of all replacement vegetation. The National Transport Authority shall also employ the services of an appropriately qualitied arboriculturist and Landscape Architect for the full duration of the proposed works to ensure landscaping and tree works are implemented appropriately.

Reason: In the interests of visual and residential amenity.

20. Tree protection measures for all existing trees shall be put in place prior to the commencement of development or phases of development.

Reason: In the interest of the protection of biodiversity.

21. All details of soft landscaping shall be submitted to the planning authority prior to implementation.

Reason: In the interest of orderly development.

22. Comprehensive details of the proposed public lighting system to serve the proposed scheme shall be submitted to and agreed in writing with the planning authority, prior to commencement of development.

Reason: In the interests of public safety and visual amenity.

- 23. 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 within the Environmental Impact Assessment Report 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.

24. Prior to the commencement of development, the applicant shall submit an

Invasive Species Management Plan to the planning 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 interests of nature conservation and mitigating ecological

damage associated with the development.

25. (a) Trees to be felled shall be examined prior to felling and demolition to

determine the presence of bat roosts. Any clearance works shall be in

accordance with the Transport Infrastructure Ireland Guidelines for the

Treatment of Bats During the Construction of National Road Schemes.

(b) No ground clearance shall be undertaken and no vegetation shall be cleared

from the 1st day of March to 31st day of August, unless otherwise agreed with the

planning authority.

Reason: In the interest of protection of local biodiversity.

I confirm that this report represents my professional planning assessment,

judgement and opinion on the matter assigned to me and that no person has

influenced or sought to influence, directly or indirectly, the exercise of my

professional judgement in an improper or inappropriate way.

Liam Bowe

Senior Planning Inspector

19th March 2024

Appendix 1

1. Alan & Fiona Fitzpatrick

- Objects to the temporary and permanent acquisition of their lands which appears surplus to the scheme requirements.
- Inadequate information on noise mitigation measures.
- Proximity to their house making it difficult to reside in and impacting privacy.
- Inadequate information on traffic calming measures.
- Request assurances regarding road closures and minimum disruption.
- Need clarification how the existing pedestrian entrance to Seven Oaks will be impacted.
- Concerned about health and safety of their family.
- Inadequate screening and planting proposed.
- Insufficient detail on boundary treatment, lighting, removal of trees and impact on services.
- Setback distances to buildings not clarified.
- Concerned about impact on the environment.
- Lack of communication regarding the Proposed Scheme.
- Given no assistance in locating temporary accommodation during construction works.
- No amount of money will adequately compensate them for the losses and damages to their home.
- Alternative route could have been selected.
- They may raise other legal, design and planning matters at an oral hearing.

2. Conor O'Scanaill, Scanaill Veterinary Surgeons

- There is a significant extent land of land acquisition for temporary use, for delivery of a new slip road, and for the construction of a new bus lane, cycle lane and bus stop.
- The proposal will reduce the number of access points to the property/ business from two to one, which will impact operational capacity.

- The change is predicted to result in a loss of five parking spaces for the business.
- The current on-site arrangement allows for the transfer of larger animals to the adjacent paddock.
- The removal of hedgerows will have implications for noise and the hospital's ability to treat horses.

3. Deirdre & Aidan O'Callaghan

- Requests clarification on trees to be removed near the Port Tunnel as these were planted to provide screening to residents.
- Request confirmation that the existing railing and wall between the Swords
 Road and Swords Road Slip Road will be retained.
- Trees to be removed between Whitehall Church and Whitehall Junction, and between Whitehall Junction and Gaeltacht Park should be replaced.
- Existing barriers/ guardrails at each side of Whitehall Junction should be replaced/ upgraded.
- Further trees should be planted outside of 219 Swords Roads and through the village itself.
- The footpath along the Swords Road Slip Road should be upgraded.
- Suggest that a light sequence at Santry Bypass Junction should include a dedicated turn for cyclists to encourage cyclists to use Shanrath Road.
- Traffic lights on Shantilla Road opposite the park should be sequenced with lights at Santry Bypass Junction to improve traffic movement.
- The paving area and wall at the Comet, and the area outside of the shops on the east side of the village should be upgraded.
- Existing barriers/ guardrails at each side of Santry Bypass Junction should be removed/ upgraded.
- The footpath on the lefthand side of the Shanowen Road and Santry Bypass Junction should be widened.
- The wall between Santry Bypass Junction, the Church and Whitehall Junction should be upgraded with stone facing.
- The new wall at Magenta Hall should be stone faced.

 Request a new sign for No Overtaking/ Single Line Traffic Only on Collins Avenue West.

4. Ian Croft

- Concerned about the potential adverse impact this development may have on the existing traffic congestion in the area.
- Objects to the proposed location of the bus terminus at an already challenging junction to navigate with a busy shop and new housing developments consented.

5. Iona & District Residents Association

- Believe that the living environment in the district has become increasingly unsafe due to a number of traffic-related issues on the streets.
- Concerned that cut-through traffic will increase during construction works
 over the duration of the multi-year build of the three large projects proposed
 (two BusConnects corridors and Metrolink) and that, once works are
 completed, new traffic flow patterns can create cut through routes.
- Request a review of traffic management in the district as part of the wider design of the BusConnects and Metrolink projects.
- Provides a map illustrating a number of through routes in the district taken by motorists.
- Concerned about pollution from vehicles.
- Cut through traffic turning off arterial roads cross bicycle lanes creating risks for cyclists.
- 30-40% of vehicles in the area exceed the speed limit of 30kph.
- Road signage is regularly ignored by motorists.
- Footpaths in the area are generally not wide enough and car parking on footpaths restricts their use for mobility impaired users.
- IDRA have brought their concerns to the attention of Dublin City Council and An Garda Síochána.
- Concerned that NTA traffic modelling is not accurate.
- Seeks a traffic management plan for Iona District for the duration of the BusConnects and Metrolink construction periods.

6. Jerry & Lorraine Crowley

- The trees and shrubs planted for the protection of residents from the noise and dust generated by the operation of the Port Tunnel have worked as mitigation measures.
- Oppose the removal of mature trees and shrubs to accommodate a cycle lane.
- Oppose the cycle lane on the road as many cyclists currently use the footpath and create a risk to pedestrians/ residents.
- Concerned that the cycle lane to be routed through shrubbery would create an opportunity for anti-social behaviour and illegal dumping.

7. J.J. Breen (Magner's Pharmacy):

- The proposed works will cause major disruption to businesses at Schoolhouse Mews.
- The proposed works are excessive in nature and too long in duration.
- The removal of car parking spaces to the front of Magner's Pharmacy and Eurohouse will threaten the survival of these businesses.
- The car parking spaces are needed for the loading and unloading of goods and to allow access to the pharmacy for people with limited mobility.
- Concerned about the structural integrity of the 'Old Swiss Cottage Building' during the works.

8. Juliana Boland & Others:

- Contend that there is a good bus service in operation at present and not sure
 of the necessity for the proposed works.
- Queries whether existing access to and parking arrangements at their property will be possible on a permanent basis during and after works.
- Queries type of boundary treatment and installation of a gate.
- Want no signage in the vicinity of their access.
- Do not want a bus stop directly opposite their properties.
- Queries times of construction activity.
- Want information about the treatment of surface water and utility services.
- Concerned about the costs involved in the arbitration process.

9. Karen Wade:

- Concerned about plans to widen the Swords Road passing through Santry via a series of CPO's.
- Contends that the scheme threatens almost every public green space in Santry.
- An expansion of the R132 would make it even more difficult to get around on foot in Santry village.
- Was not aware of the second round of public consultation.
- Works permitted and completed on a site at 1 Magenta Crescent, Santry appear to cause an obstacle to the expansion of the road at that location.

10. Kathleen McKee:

- Objects to the CPO and seeks information in relation to each and every purpose for which the CPO is made under the Housing Act, whether these purposes are wholly for purposes under the Housing Act, and whether the CPO is for the purposes of the NTA carrying out its functions under the Planning & Development Act, 2000 (as amended).
- Seeks each and every purpose that the land is required under the Planning & Development Act, 2000 (as amended), the Local Government Act, 2001 and the Dublin Transport Act, 2008.
- Seeks an indication of the basis upon which the extinguishment/ restriction of the public rights of way is to be carried out.
- Seeks information on the precise details of the construction, ancillary and consequential works.
- Seeks information on the precise development of the Lands.
- Requests an extension of time for furnishing the grounds of objection pending the receipt of replies to the above.
- Contends that the Notice is invalid.
- Contends that the NTA has acted ultra vires.
- Contends that the NTA has acted in abuse of its powers.
- Contends that the NTA's decision to issue the CPO is unreasonable and/ or irrational.

- Contends that the NTA has acted in breach of the constitutional rights of the landowners.
- Contends that the NTA has failed to consider the reasonable interests of the landowners.
- Contends that the NTA has failed to act in accordance with the principles of basic fairness of procedures and natural/constitutional justice.
- Contends that the NTA has failed to consider the possibility of achieving the proposed development by other means.
- Contends that the use of CPO powers by NTA for the proposed development is not an objective of the NTA.
- The potential of a private bargaining process has not been fully explored.
- Contends that the acquisition of land by the NTA is unfair and premature.
- The proposal will lead to increased traffic volumes and noise.
- The health effects of the proposed development have not been properly assessed.
- The proposed development will have a significant impact on the community in terms of health, security, general amenity and property value.
- Concerned about disruption during construction.
- The potential long-term impact on climate change has not been adequately assessed.
- The proposed development will result in a negative visual impact for residential property owners and road users.
- The proposed development will result in increased traffic congestion and operational problems on the road networks.

11. Kealy's of Cloghran:

- Concerned that the proposal will result in the creation of a long-term traffic hazard.
- Concerned that the proposal will render the existing staff/ coach parking to the front of their property unusable.
- Concerned about the lack of detail on the drawings in relation to the accessibility of the car park to the rear of their property and whether traffic

- accessing their property will have to queue on the Swords Road for cyclist priority at the junction.
- Concerned about the impact of the construction process on their business in the short-term and possible increase in noise levels in the long-term.
- Requests that the aesthetic quality of their property is in no way diminished as a result of the proposed scheme.
- Contend that the accessibility and noise impacts will lead to a loss of value to their and other properties.
- Request the NTA to engage directly to identify appropriate mitigation measures to prevent undue noise and access issues.

12. Lesley Henderson

Same submission as Kathleen McKee – see above.

13. Maxol

- Not clear how the NTA will achieve two-way general traffic and two bus lanes outside the existing petrol filling station or houses opposite without any land take.
- Operator requires a minimum of 4.25m to the back of the footpath to comply with safety regulations.
- Request that location of tanking and services be considered when finalising design detail.

14. Nesta Ltd.

- Directly accessed from the lands that the NTA proposes to acquire and is concerned that this may significantly and adversely affect vehicular access to their business.
- Considers that the Order would disproportionately impact on its property rights and will diminish the value of its property and business.
- Concerned that confirmation from NTA's representative stated that continued access will be maintained to businesses affected by the works, where practicable.

- Given the nature of their self-storage business, vehicular access needs to be maintained at all times.
- Considers that the interference with vehicular access for an unknown period would be contrary to the land use zoning and the proper planning and sustainable development of the area.
- Requests that the Board refuse to confirm the CPO or amend the Order such that it will not require the acquisition of Nesta's lands.

15. Patrick Fitzsimons & Parfit

- Considers that land being acquired is excessive.
- Drainage arrangements may negatively impact the retained property and parking areas.
- Inadequate information has been provided on noise mitigation measures from the intensive bus corridor.
- Insufficient detail regarding the post-construction access arrangements.
- Lack of detail regarding traffic management during construction.
- Lack of clarity about both the temporary and permanent boundary treatments.
- Concerned about the carbon footprint during construction and both the design of the scheme and route selection.
- Lack of clarity about the impact of the scheme on footpaths and cycle paths.
- Reserve the right to raise other matters in an oral hearing.

16. Stephen Hall

- Requests that the existing trees and green spaces be preserved along
 Drumcondra Road and at Our Lady's Park.
- Suggests additional tree planting and greening initiatives on Dorset Street at the corner of Richmond Road and Drumcondra Road, and at bus stops.
- Emphasises the importance of the design of the new pedestrian/ cycle bridge in Drumcondra.
- Urges the relevant authorities to expedite the process for the Swords to City
 Centre BusConnects plan.

- Encourages collaboration with DCC to enhance the public realm throughout the area.
- Requests that Parnell Square be made as safe as possible for cyclists and that the public realm be enhanced at this gateway to the city centre.

17. Tesco Ireland

- Request that any proposed alterations in the area of the service yard entrance to the Omni Shopping Centre are carefully considered and that the junction can continue to facilitate HGV access in a safe manner.
- Had requested at the Preferred Option stage that a portion of the parking outside of its Metro store on the Drumcondra Road be dedicated as a loading bay. Reiterates this request.
- Requests that detailed design of the footpath and cycle track at the Drumcondra Metro facilitates the movement of stock and goods to the premises.
- Request the inclusion of a designated loading bay on Dorset Street Lower and also that detailed design of the footpath and cycle track facilitates the movement of stock and goods to the premises.

18. Bob Laird

- Fully supports the need for this development.
- No indication of how buses are going to continue with reliable journey times north of Pinnock Hill to/ from Swords.
- Concerned that the proposed removal of bus stop no.3671 immediately to the north of the Airport Roundabout where the Swords and Airport bus routes meet will cause inconvenience and increased journey times for potential users.

19. Brendan Heneghan

- Resents having to pay numerous €50 fees to make submissions on a number of BusConnects applications.
- Submissions on one corridor are relevant on others:
 - Grossly deficient consultation process.

- Grossly inflated claims of time saving.
- Elimination of roundabouts with no explanation.
- Wholly inadequate modelling.
- Elimination of important left-turn slip roads.
- Moving of bus stops without notice.
- Widespread destruction of trees.
- Mishmash of bus gates/ operational times.
- Inadequate timescales for submissions.
- Queries allowing NTA an opportunity for a response/ 'second go' to submissions.
- All 12 schemes should have been submitted as one application.
- Minimal time savings on all schemes does not justify the amount of money that will be spent on the projects or the invasive measures in the outer suburbs.
- References the current no.16 bus route from Dublin Airport to Terenure as an example of a poor service.
- Contends that there has not been adequate consideration of alternatives
 as required by the Aarhus Convention and gives examples of diverting the
 A2 and A4 services at Coolock Lane onto the motorway.
- Queries whether the Metrolink development will remove the need for a speedy bus service from Swords.
- Suggests that the works between the junction of Coolock Lane and the flyover at Shantalla Road not be permitted and suggests as an alternative that the A5 service run through Santry.
- Contends that the Bórd should reject the application on the basis of an 'administrative discrepancy' where seven items were omitted from the original application and submitted on 6th July, when some members of the public may have made their submissions on the application already.

20. Oak View Residents Association

 Concerned that the proposal for the bus terminus opposite the Centra Supermarket on Coolock Lane would lead to further congestion.

- State that the imminent resubmission of a planning application for 30 plus apartments at this location will also exacerbate the parking constraints at this location.
- Includes photographs demonstrating parking at this location.

21. Residents of Griffith Downs

- Have a strong view that the permanent acquisition of a large portion of green area along the Swords Road, immediately outside of Griffith Downs, for the provision of a two-way cycle lane is unnecessary as there are two single cycle lanes already in use along this stretch of the route.
- Wish that the green space, that is maintained by the residents, be retained.
- Includes a photograph of green area affected.

22. Residents of Seven Oaks

- Object to the proposal for the provision of a two-way cycle lane between Seven Oaks and Griffith Downs as there are adequate cycle paths already in use along this stretch of the route.
- Do not wish to have their green area removed.
- State that they need an upgraded bus shelter with the removal of the metal railing positioned outside of the pedestrian entrance to Seven Oaks.

23. Leo McNamee

- Supports the BusConnects scheme but suggests the additional measure of closing St. Anne's Road to motor traffic, thereby removing a right turn onto the BusConnects route.
- States that closing the road would create an opportunity for public realm improvements in the form of a pocket park/ plaza (includes a photomontage demonstrating this).
- Contends that the road/ junction closure would have widespread local support.

24. All Hallows Area Association

- States that the residents of Griffith Avenue are concerned that the project includes a CPO to permanently acquire a large strip of mature green area along the Swords Road and for the change of use of this area.
- Highlight that there is a north-bound cycle lane opposite, a south-bound cycle lane along the outer wall of Griffith Downs and, therefore, adequate provision for cycling in this area.
- Support the upgrade of the area immediately around the bus stop outside of Seven Oaks/ Griffith Downs.

25. J. Murphy (Developments) Limited

- Relates to land zoned 'RA Residential Area' at Fosterstown North.
- States that a SHD application (An Bord Pleanála Ref.: 313331-22) on these lands under consideration at present.
- Welcomes and fully supports the provision of the Swords to City Centre Bus Corridor Scheme.
- Provides an overlay of the BusConnects proposals with the proposed SHD development in Appendix 1 and requests that the proposed temporary left in/ left out junction from/ to the R132 in the SHD development be considered in conjunction with the proposed bus route.
- Confirms that the pedestrian crossing referenced at this location in the BusConnects proposals to the Fosterstown Metro Station is facilitated within the SHD application and a separate submission has been made to this effect on the MetroLink application.

26. Michelle Bannon & Ranjith Techeil

- Oppose the construction of a new bus terminus and set of bus stops/ shelters on the green area in front of the Centra supermarket at Coolock Lane.
- Contend that the proposal would lead to further traffic congestion at this location.
- Concerned about pedestrian circulation in the parking area and the potential traffic hazard for pedestrians going to/ from the supermarket.

- Concerned about the environmental impact with the loss mature trees and green space.
- Concerned about buses running their engines in wintertime and consequent noise/ pollution impact.
- Suggest an alternative location for the bus terminus to the east of the Coolock/ Santry roundabout on undeveloped green space adjacent to the Centra Supermarket.

27. Róisín Shortall T.D.

- Expresses her continued support for the BusConnects project, which will reduce car dependency and improve city connectivity.
- States that ambitious public transport projects will always produce unintended consequences and unforeseen problems and some outstanding issues remain for some of her constituents.
- Believes that the plan represents a missed opportunity to enhance the streetscape in Santry Village and Whitehall to address the under provision of green spaces and trees.
- Requests that the toucan crossing proposed at Northwood Avenue be designed to facilitate safe access to/ from the proposed Santry River Greenway.
- States that the residents of Lorcan Road and Shanrath Road are concerned about these roads being used as 'quiet streets' and that more could be done to facilitate safe cycle lanes on the Swords Road through Santry Village.
- Given the existing issues with overnight parking at Coolock Lane, states
 that the residents of Oak View are concerned about the impact of the
 proposed bus terminus and construction compound at this location.
- Expresses regret that suggestions from local residents in relation to traffic improvements at the Omni Park Shopping Centre have not been facilitated.
- Concerned that the Santry Avenue approach to the Swords Road has been reduced to two lanes and that this may increase congestion here.

- Contends that there is poor usage of the cycle lane at the junction of Griffith Avenue and the Swords Road and that the Proposed Scheme has not addressed this.
- Concerned that inadequate consideration has been given to the needs of older people and those with a disability in the design of the Proposed Scheme. Acknowledges the addition of pedestrian crossings at the Comet Pub but disappointed that none has been proposed at Santry Close.

28. Brian O'Rourke

- Welcomes the planned investment in the local bus service but contends that there are a number of issues regarding pedestrian and cycle safety that need to be rectified.
- The proposed design of the Collins Avenue/ Swords Road junction is unsuitable for pedestrians due to the excessive width of the road and number of lanes that are required to be traversed.
- The width of the Swords Road and Drumcondra Road cycle lane is too narrow (1.7m) on an uphill section to allow for overtaking.
- Contends that cyclists should have priority at 5 junctions on the cycle lane between Clonliffe Road and Botanic Avenue, per the NTA's Cycling Design Manual (2023).
- Suggests the use of Dutch kerbs at house entrances along the route in order to avoid the provision of undulating footpaths.
- Considers the existing bus lane ineffective because of other vehicles
 using it and requests camera enforcement and the removal of taxis to
 ensure public transport is not delayed by cars.

29. Santry Forum

 Propose that the bus stop at the Larkhill Road junction be relocated to area of the Comet where a bus lay-by can be accommodated and not interfere with the flow of traffic from the Whitehall flyover.

- Propose that the bus stop at the Shanowen Road junction also be relocated to area of the Comet.
- Suggest that the bus stop area at Santry Holistic Clinic can accommodate a bus lay-by.
- Suggest that the bus stop at Santry Villas should not be considered and that the bus stop area adjacent to Magner's Pharmacy can accommodate a bus lay-by.
- Propose that the bank of earth adjacent to the footpath in front of Magenta Hall be removed to facilitate a bus lane and right-turning into Omni.
- Propose the removal of on-street parking as off-street parking is available to residents.
- State that the proposed bus stop at Shantalla Road, 15m from the flyover bridge, should not be considered.
- Suggest that there may be a need to take a small triangle shaped piece of land from a garden.
- Works / land acquisition on the western side of the Swords Road would eliminate the need for lands to be acquired from the gardens of residents on the west side of the Swords Road.

30. Donal O'Brolcáin

- Contends that the need is greater than the Proposed Scheme can meet.
- Contends that the NTA already decided that a bus based public transport service could not meet the demand on this corridor.
- Contends that defective data is a feature of the proposal and cites trip generators not mentioned such as Santry Stadium, Tolka Park, Croke Park, approved residential development, possible future residential development, and schools in the area.

- Could not find main attractors/ trip generators in Appendix B of the Preliminary Design Report and contends that the NTA are not up to date with recent developments.
- Draws attention to what is considered out of date information on the General Arrangement Drawings, Volume 1, EIAR.
- Concerned about the removal of the number of individual trees, groups of trees and hedgerows.
- Contends that the proposal shows a lack of awareness of recent developments in the Greater Dublin Area, such as population increase and planning permissions/ developments.

31. Greater Dorset Street Together Group

- Support the BusConnects Project and view it as a once in a lifetime opportunity to enhance Dorset Street.
- A key finding of the Greater Dorset Street Project was the disconnection between both sides of the street caused by the dedication of road space to a central median and private car users.
- States that the BusConnects design proposal has not taken on board any of their suggestions.
- Disagree with the conclusion that user safety will be affected negatively if the central median is removed.
- Want BusConnects to recognise Dorset Street as a multi-functional street.
- Contend that their proposal is validated by DMURS.
- Comments on the details contained in Map No.'s 34 and 35.
- Contend that the Proposed Scheme will have a harmful impact on structures of national importance on Parnell Square (Map 36).
- A copy of the public realm improvement plan, titled: 'Greater Dorset
 Street Together Project', is submitted.

32. District 7 Community Alliance

- Observation on behalf of the residents and businesses in the Broadstone, Mountjoy and Dorset Street areas.
- BusConnects presents an opportunity to reimagine Dorset Street as a living street rather than a multi-lane traffic corridor between the suburbs and the city centre.
- Concerned that the measures proposed will not succeed in meeting the aims of improving accessibility to jobs, education and social activities and improving the public realm on Dorset Street.
- Disappointed that there is no recognition of the DCC funded, communityled public realm improvement plan: Greater Dorset Street Together Plan.
- Contend that the central median that runs from Binn's Bridge to
 Blessington Street has no useful purpose and the removal of this is a
 core enhancement proposed in the Greater Dorset Street Together Plan.
- Highlight the extent of retail/ hospitality businesses between Dorset
 Street and North Circular Road and that the stretch does not contain a loading bay and none are included under the Proposed Scheme.
- One of the two accessible parking bays is proposed to be removed,
 which is stated as unacceptable given the proximity of Dorset Street to hospitals.
- Highlight the absence of a segregated cycle track on the city-bound side
 of the street between Blessington Street and Granby Row, and the
 absence of pedestrian/ cycling infrastructure on Parnell Square West/
 Granby Row.

- Contend that the right-turn ban onto Eccles Street will create traffic,
 noise and pollution issues for residents of North Circular Road, Berkeley
 Road and Wellington Street Lower.
- Outline aspects for consideration regarding the location / relocation of bus stops along the route.

33. Dublin Cycling Campaign

- Have been engaging with the NTA through all stages of this project and only wish to highlight some remaining design issues.
- State that 50-60% of cyclists in Dublin will only cycle if provided with high-quality safe and comfortable cycle routes.
- Contend that the proposed infrastructure will provide an environment that will attract a large number of the 50-60% cohort to use their bikes for more journeys, other than in the vicinity of Dublin Airport.
- Contend that cyclists and pedestrians will be forced to make numerous and complicated crossings of slip roads and main traffic roads at both airport junctions, the Cloghran Roundabout and the Corballis Road Junction, which prioritises the private car above vulnerable road users and public transport.
- Highlight a number of other junctions that have what is considered an
 inconsistent treatment for cyclists along the route of the Proposed
 Scheme namely, Northwood Avenue Junction, Santry Avenue Junction,
 Shanrath/ Shantalla Road Junction, Collins Avenue Junction, Griffith
 Avenue and other configurations at junctions towards the City Centre.
- Seeks clarity for right of ways for pedestrians and cyclists at exit points from industrial estates, business and leisure premises along the proposed route.
- Contend that any cycle track being constructed at less than 2m in width is not designed for future capacity and that it is possible to construct all cycle lanes along the proposed route to a minimum of 2m in width.

- Considers the chapters in the EIAR that cover human health to be inadequate and generalised.
- Highlight other issues:
 - Lack of clarity on the design of the 'Quiet Street',
 - Queries bus lane break at Quick Park location,
 - Queries function/ design of Yellow Junction Box on southbound lane to the north of Turnapin Lane Junction,
 - Missed opportunity to make Church Avenue and Ormond Road one-way and thus improve overall safety,
 - Lack of cycling infrastructure proposed for Dorset Street Lower,
 - Allowing general traffic onto North Fredrick Street compromises the functioning of the bus lanes,
 - Some design confusion at raised table crossings at side road junctions that needs to be clarified, and
 - Design clarity required for the Parnell Street junction and how all modes connect to on-going routes.

34. Deirdre & Pamela Scully

- Contend that the proposal to CPO part of their front garden will result in a health hazard (auric field disturbance) due to the proximity of buses and noise / air pollution and vibrations.
- Contend that the Proposed Scheme will cause the destruction of the natural streetscape in Santry Village and the removal of trees/ hedging will impact carbon sequestration.
- Contend that a one-way system would have reduced traffic congestion and cost a lot less money and request that the Board look again at the one-way option.
- Contend that the four stated underpinning principles of the NTA are being ignored for Santry Village.

- State that the bus has to move into the car lane in the manoeuvre to cross Shantalla Bridge and this will prevail under the Proposed Scheme.
- Deem the crown lifting required at Shanrath Road to facilitate a safe route for cycling to be unnecessary as they contend that cyclists will continue to use the pathway on the main road at this location to cycle through Santry Village.
- Suggests that buses use the existing motorway to shorten journey times to/ from Swords.

35. Clondev Properties Limited

- Confirms their support for the Proposed Scheme and contend that such high frequency public transport infrastructure is essential for the sustainable development of North Dublin.
- Wishes to ensure that in granting permission for the Proposed Scheme
 due regard is had to the permission issued for 82 apartments at
 Hollytree House, Fosterstown (F22A/0687 refers) and certain works that
 the NTA require for the delivery of the BusConnects scheme on Clondev
 lands.
- Similarly, Clondev is part beneficial owner of lands at Pinnock Hill where permission has been granted for 204 apartments under ABP-314253-22 and now request due regard is had to the permission issued and certain works that the NTA require for the delivery of the BusConnects scheme.
- Request that an oral hearing be held in respect of the application.

36. Dublin Commuter Coalition

- Support the BusConnects Core Bus Corridors project.
- Contends that the success of the Proposed Scheme relies on the legal usage of roads by drivers and are concerned that there are no proposals for enforcement cameras as part of the project.

- Believe all proposed bus lanes and bus gates should be operational 24/7.
- Contend that two-stage pedestrian crossings are contrary to the guidance contained in DMURS and should be omitted from the Proposed Scheme (cites relevant junctions).
- Contend that some tree and four-way junctions are missing pedestrian crossings entirely (cites relevant junctions).
- Request that the NTA use Protected Junction TL501 of the Cycle Design Manual (Dutch-style junctions) throughout the project.
- Concerned about the width of bus stop islands throughout the Proposed Scheme, which may bring bicycles into conflict with passengers boarding/ alighting buses.
- In relation to shared space between cyclists and pedestrians throughout the BusConnects Programme, contend that a compromise to retain space for car traffic is prioritised over segregated or safe integration of active travel modes e.g., at Shanrath Road and Swords Road junction.
- Requests the Board to consider the provision of bicycle parking along the route in line with the provisions of the Dublin City Development Plan 2022-2028.
- Highlights concerns about pedestrian and cyclist safety at South Corballis Road junction.
- Considers the Millmount Avenue junction to be incoherent and unsafe.
- Highlights the opportunity to remove the central median on Dorset Street to create a proper urban street and public realm.
- Requests that the proposed Dorset Street junctions are replaced with safe/ suitable Dutch-style junctions (per TL504 and TL501 of the Cycle Design Manual).

37. Carmel Sherry and Celine Byrne

- Concerned about the impact that the proposed pedestrian/ cycle bridge will have on Our Lady's Park both during the construction and operational phases of the Proposed Scheme.
- Suggests the re-location of accessible parking bay from Markey's shop/
 AlB on Drumcondra Road Lower to the end of Hollybank Road rather
 than the proposed re-location outside of Fagan's Pub on Botanic
 Avenue.
- Concerned that the proposal for a bus lane and re-location of bus stop 19 on Drumcondra Road Lower closer to the junction with Hollybank Road will make it more difficult for vehicular traffic exiting Hollybank Road.
- Considers that the re-location of bus stop 17 will improve traffic safety.
- Unclear about the maintenance arrangements for the embankment areas between on Drumcondra Road Lower between Hollybank Road and Saint Alphonsus Road during the temporary acquisition period and the commencement of the Proposed Scheme.
- Concerned that the introduction of no right-turn onto Eccles Street and the no left-turn onto Hardwicke Place from Dorset Street will restrict access to the Mater Hospital car park/ Mater Private Hospital and CHI Temple Street, respectively.
- Considers that some footpaths are proposed to be narrowed too much to facilitate cycle tracks and believes e-scooters should be directed away from shared footpaths and cycle lanes.
- States that cycle lanes should be clearly marked with a different colour/ texture than footpaths.

38. Iona and District Residents Association (2)

- Concerned about the impact that the proposed pedestrian/ cycle bridge will have on Our Lady's Park both during the construction and operational phases of the Proposed Scheme.
- Suggests the re-location of accessible parking bay from Markey's shop/
 AlB on Drumcondra Road Lower to the end of Hollybank Road rather
 than the proposed re-location outside of Fagan's Pub on Botanic
 Avenue.
- Concerned that the proposal for a bus lane and re-location of bus stop 19 on Drumcondra Road Lower closer to the junction with Hollybank Road will make it more difficult for vehicular traffic exiting Hollybank Road.
- Considers that the re-location of bus stop 17 will improve traffic safety.

Leo Street and District Residents Association & Lower Dorset Street Community Group

- Have pointed out to the NTA that there is no conflict between the Dorset
 Street Together Plan and the BusConnects scheme.
- Concerned that the BusConnects scheme will resemble a motorway running along Dorset Street.
- The current proposal for Dorset Street lacks loading bays to facilitate the safe delivery of goods to the businesses on the street. Contend that this can be facilitated by the removal of the central median.
- Concerned about the deterioration in air quality to 2028.
- State that the Mater Hospital has not been consulted on the BusConnects scheme and proposed changes to traffic flow.
- Highlight that the proposed bus stop on Dorset Street Lower affects the privacy of the residents of the houses at this location.
- Contend that BusConnects does not address the greater needs of the area, which is regeneration.

40. MKN Properties Limited

- Confirms their support for the Proposed Scheme and contend that such high frequency public transport infrastructure is essential for the sustainable development of North Dublin.
- Considers that the design of the Pinnock Hill Roundabout does not accord with the objective in the Development Plan for the delivery of the Fosterstown Link Road.
- Contends that there are incoherent/ missing elements to the integration of the BusConnects, Metro and Fosterstown Link Road.
- Request that an oral hearing be held in respect of the application.

41. MPM Residents Association

- Welcomes BusConnects in general and Swords scheme in particular.
- Requests that appropriate signage is in place for the routes to different parts of the Mater Hospital.
- Requests better enforcement of parking laws on Eccles Street.
- Seeks better traffic management at the area to the front of the Mater
 Private hospital and at Eccles Street/ Berkeley Road junction.
- Contend that changes on Dorset Street will divert traffic onto Mountjoy
 Street and Western Way and that traffic calming, public realm,
 pedestrian and cycling infrastructure improvements are needed on these streets.
- Contend that improvements for pedestrians are needed at the Parnell Square/ Granby Road junction and that the footpaths need to be widened both here and on Parnell Square.
- Fully support the plan for Dorset Street outlined by Dublin 7 Alliance in their submission.

42. Neasa Hourigan TD

- Contends that plans need to be put in place to combat illegal parking/ use on the bus lanes.
- Requests that appropriate care is taken when moving/ storing the statue in Our Lady's Park.
- Seeks clarity on accessing the Mater Hospital by car from Dorset Street when travelling inbound.
- Requests that sufficient loading bays are provided from Griffith Avenue to the city centre so that the bus/ cycle lanes are not blocked.
- Would like to see fully segregated paths for pedestrians and cyclists.
- Requests that the NTA carry out an accessibility audit of the Proposed Scheme.
- Requests that the NTA be made consider the removal of the central median on Dorset Street in favour of wider tree lined footpaths per the Greater Dorset Street Together Plan.
- Concerned that the modern design of the new pedestrian/ cycle bridge adjacent to Frank Flood Bridge is not in keeping with the prevalent architectural style of the area.
- Request that the BusConnects scheme does not prevent the implementation of a filtered permeability scheme on Richmond Road.
- Contends that the treatment of the path at the corner of Richmond Road and Frank Flood Bridge is unclear and seeks clarity on this.
- Unclear as to the treatment of the central medians proposed to the north
 of the Richmond Road junction and requests that these are planted with
 suitable trees/ shrubs.

43. MKN Investments Limited

 Confirms their support for the Proposed Scheme and contend that such high frequency public transport infrastructure is essential for the sustainable development of North Dublin.

- MKN is part owner of lands at Swords Road, Santry where permission
 has been granted for 324 apartments and an 81 aparthotel (Omni Living
 SHD) under ABP-307011-20 and requests that due regard is had to the
 permission issued and certain works that the NTA require for the delivery
 of the BusConnects scheme on lands owned by MKN and others.
- Request that an oral hearing be held in respect of the application.

44. O'Scanaill Veterinary Surgeons (2)

- Concerned about the extent of land acquisition for both temporary and permanent use for the delivery of a slip road, and about the construction of a bus lane, cycle lane and bus stop to the immediate north of the site.
- Contends that the BusConnect proposal will directly impact on the commercial viability of their business by compromising access, and the standard of healthcare that they provide.
- Concerns about the loss of 6 no. car parking spaces on their site and requirement for additional turning movements and associated hazards within the site.
- Concerned about the duration of the construction phase and the impact on their services for horses.
- Considers it reasonable that the NTA engage directly with them
 regarding mitigation measures or, otherwise, compensation will be
 sought to offset potential impacts of to the monetary value of their
 property.
- Includes a report in Appendix A prepared by Tent Engineering Ltd.
 outlining changes required during the construction and operational
 phases of the Metrolink Scheme that would facilitate the on-going
 operation of the veterinary practice.

45. Brendan Collins

- States that Collinstown Business Park accommodates 162 no.
 commercial tenants including logistics, vehicle storage, motor-home rental, coach services, tyre services, fuel services, civil engineering consultancy, window suppliers and upholstery.
- Contends that the subject site is operating lawfully under its historically permitted planning applications and includes aerial photography from 2002 to 2023 demonstrating the extent of development on the site.
- Contends that the temporary acquisition of land will compromise shortterm accessibility of Collinstown Business Park.
- Contends that the revised access arrangements will compromise the long-term accessibility of Collinstown Business Park.
- Confirms his support for the Proposed Scheme but considers that these impacts present a material rationale for seeking compensation.
- Lack of clarity for when the temporary land acquisition will begin or the length of time the land will be subject to temporary acquisition.
- Contends that the proposed works on his entrance are unnecessary in the context of achieving the wider objectives of the Proposed Scheme.
- Contends that the proposed works to the access arrangements to Collinstown Business Park will have a detrimental impact on traffic flow on the Swords Road.
- Reiterates that the subject site is operating lawfully with all existing commercial operations permitted in principle based on the 'General Employment' land use zoning objective in the Fingal Development Plan 2023-2029.
- Confirms willingness to engage with the NTA with the view of identifying appropriate mitigation measures or safeguarding the long-standing entrance/ exit arrangement at Collinstown Business Park.

46. Collinstown Caravans Limited

- Queries Fingal County Council's reason for refusing a recent planning application for renovations and extension to the house on the site (F23B/0034 refers) and outlines the intention to use this property for residential purposes.
- Contends that the house will be rendered inaccessible by the Proposed
 Scheme with no pedestrian or vehicular access to the Swords Road.
- Concerned about direct impacts on residential amenity in relation to visual, noise, light pollution, and vibrations for the Proposed Scheme.
- Confirms his support for the Proposed Scheme but considers that these impacts present a material rationale for seeking compensation.
- Brings attention to the contents of Appendix A of the submission prepared by Stephen Reid Consulting Traffic & Transportation Limited (SRC).
- Contends that there is a pre-1963 residential use with the extant building on the site.
- Confirms willingness to facilitate the provision of a left-in left-out entrance/ exit arrangement.
- Confirms willingness to engage with the NTA with the view of identifying appropriate mitigation measures or safeguarding the residential amenity of their property.
- SRC contend that the proposed temporary acquisition does not include reinstating the existing access arrangements and, therefore, conflicts with the principle of a temporary acquisition.

47. Brittney Bennett

- Supports the BusConnects scheme.
- Requests DCC, in conjunction with the NTA, to implement filtered permeability on Richmond Road as a fundamental part of the BusConnects scheme.

 Outlines concerns regarding the use of Richmond Road including cars mounting the footpath, HGVs and unlawful short-cuts, speeding, noise pollution and emissions/ air quality.