



An
Bord
Pleanála

Inspector's Report

ABP-314942-22 & ABP-314988-22

Development	BusConnects Lucan to City Centre Core Bus Corridor Scheme
Location	Lucan to Dublin City Centre
Planning Authorities	Dublin City Council and South Dublin County Council
Applicant(s)	National Transportation Authority
Type of Application	Approval under Section 51(2) of the Roads Act 1993 (as amended), and associated Compulsory Purchase Order.
Prescribed Bodies	<p>Prescribed bodies to which the details of the Proposed Scheme were circulated are listed in section 1.3 of Report. Prescribed bodies who have made submissions are:</p> <ol style="list-style-type: none">1. South Dublin County Council2. Dublin City Council3. Department of Housing, Local Government and Heritage (Development Applications Unit)
Observer(s) to Application:	Listed in Appendix I

Observers to CPO: Knockmaree Management Company CLG,
Torcross Unlimited Company
The Trustees of Hermitage Golf Club

Date of Site 2024/03/12 and 2024/03/14.

Inspection(s)

Inspector Jimmy Green

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1.0 Introduction

1.1. Overview

- 1.1.1. The National Transport Authority (NTA) has applied under the provisions of Section 51(2) of the Roads Act 1993 (as amended) (“the Roads Act”) to An Bord Pleanála (“the Board”) for approval in relation to the development of a sustainable transport corridor consisting of the Lucan to City Centre Core Bus Corridor (CBC) Scheme (“the Proposed Scheme”). The Proposed Scheme is intended to make alterations to the transportation infrastructure with the intention of providing more priority to bus traffic (thus improving reliability and punctuality of public transport while reducing journey times) as well as improving pedestrian and cycling facilities. The Proposed Scheme has an overall length of c. 9.7km and is one of 12 CBC schemes forming the BusConnects CBC programme for Dublin, a detailed description is provided in Section 3 of this report below.
- 1.1.2. This report considers two concurrent cases: ABP 314942-22 (the application for the Proposed Scheme) and ABP 314988-22 (the Compulsory Purchase Order (CPO) in support of the Proposed Scheme), the details of each are summarised below:
- Under **ABP-314942-22** the NTA has applied for approval for the Proposed Scheme from the Board under Section 51(2) of the Roads Act. The documentation accompanying this application includes an Environmental Impact Assessment Report (EIAR), and a Natura Impact Statement (NIS) – the latter in accordance Part XAB of the Planning and Development Act 2000 (as amended) (“the Planning Act”), and the former following completion of an EIA screening process by the Applicant. This application was submitted to the Board on the 21st October 2022. Seventy-eight third-party submissions and three submissions from prescribed bodies were received in relation to the Proposed Scheme, with a further 16 submissions received following the circulation of the NTA’s response to the submissions.
 - Under **ABP-314988-22** the NTA has sought confirmation of a Compulsory Purchase Order (CPO) which, if approved by the Board, will facilitate the development of the Proposed Scheme as set out above. The orders were made pursuant to the powers conferred on the NTA by the Housing Act 1966

(as amended), the Roads Act, the Planning and Development Act, 2000 (as amended), Local Government Act 2001 and the Dublin Transport Authority Act 2008 (as amended) combined with relevant updating and amending legislation. If confirmed the order will authorise the NTA to acquire compulsorily land and/or rights described in Parts I, II and III of the associated schedule and shown on the deposit maps received by the Board on the 28th of October 2022. The CPO, if approved will also authorise the NTA to temporarily acquire lands and rights for the purpose of constructing the Proposed Scheme. Three submissions were received from third parties during the first consultation period for the CPO with a further two submissions received following the circulation of the NTAs response to the initial submissions. (All of which are summarised, discussed, and set out in Section 5.4 of my report below)

- 1.1.3. The applicant entered into pre-application discussions with the Board (file reference ABP-309584-21 refers) in relation to the BusConnects programme. These were formally closed by the Board in their Direction and confirming letter issued in August 2021.

1.2. **Documentation**

1.2.1. **Application Documentation**

- 1.2.2. The application documentation for the Proposed Scheme includes the following:
- Copies of relevant statutory public notices and prescribed body notifications,
 - Environmental Impact Assessment Report and Appendices (four volumes),
 - AA Screening Report,
 - Natura Impact Statement,
 - Location mapping and design drawings,
 - Preferred Route Corridor Report,
 - Public Consultation Report,
 - Preliminary Design Report,

1.2.3. **CPO Documentation**

1.2.4. The documentation submitted in relation to the CPO includes the following:

- CPO Deposit Maps – setting out all the plots subject to temporary and permanent acquisition.
- The CPO Order and Schedule setting out -
 - Lands being permanently acquired (Schedule - Part I).
 - Lands being temporarily acquired (Schedule -Part II).
 - Description of public rights of way to be extinguished (Part III – Section A) – none are listed in this section.
 - Description of public rights of way to be restricted or otherwise interfered with (Part III – Section B).
 - Description of private rights to be acquired (Part IV – Section A).
 - Description of private rights to be restricted or otherwise interfered with (Part IV – Section B) – none are listed in this section.
 - Description of private rights to be temporarily restricted or otherwise interfered with (Part IV – Section C).
- Official Seal
- Newspaper notices.
- Copy of the type and form of notice sent to all Owners, Lessees and Occupiers of land referred to in the CPO and a list of all those to whom notices have been sent by registered post.
- Copy of site notices erected at specific locations along the CBC as shown on an enclosed map.

1.3. **Prescribed Bodies**

1.3.1. The applicants circulated details of the Proposed Scheme to the following prescribed bodies:

- The Minister for Housing, Local Government and Heritage,

- The Development Applications Unit (DAU) of the Department of Housing, Local Government and Heritage (DHLGH),
- The Minister of Tourism, Culture, Arts, Gaeltacht, Sports, and Media,
- Fáilte Ireland,
- An Taisce,
- The Environmental Protection Agency,
- The Heritage Council,
- An Comhairle Ealaíon – The Arts Council,
- Dublin City Council,
- Dun Laoghaire-Rathdown County Council,
- Fingal County Council,
- South Dublin County Council,
- Wicklow County Council,
- The Eastern and Midland Regional Assembly,
- The Minister of the Department Environment, Climate and Communications,
- The Minister of the Department of Transport,
- Inland Fisheries Ireland,
- Waterways Ireland,
- Coras Iompair Éireann (CIE),
- Transport Infrastructure Ireland,
- The Health Service Executive,
- Iarnród Éireann,
- The Commission for Railway Regulation,
- Irish Water,
- The Office of Public Works,
- Gas Networks Ireland

- ESB Networks,
- Eirgrid,
- Badger Watch Ireland
- Bat Conservation Ireland,
- Birdwatch Ireland, and
- Dublin Civic Trust,

2.0 Site Location

- 2.1. The Proposed Scheme extends along a corridor length of 9.7km commencing at junction 3 of the N4 Lucan Road/Bypass, and runs in an easterly direction towards the City Centre, it therefore incorporates works along the R136 Ballyowen Road, R835 Lucan Road, the N4 (passing the Liffey Valley Shopping Centre) as far as the M50 (junction 7), R148 (Palmerstown by-pass), Chapelizod by-pass, Con Colbert Road, and St. Johns Road West ending just prior to the Frank Sherwin Bridge east of Heuston Station. The Proposed Scheme also provides works to improve cycle facilitates along the Hermitage Road and Ballyowen Lane (to the N4), the Old Lucan Road (both east and west of the M50), through Palmerstown Village to the start of the R148 (Chapelizod by-pass) and on the R148 between Con Colbert Road and the end of the corridor (east of Heuston Station just prior to the Frank Sherwin bridge).
- 2.2. Overall, the site of the Proposed Scheme is located within an urbanised environment primarily along an existing busy transport corridor which already accommodates significant amounts of bus, cycle, and general traffic as well as a large number of pedestrian movements daily. There is a mix of uses along either side of the route including significant commercial, residential, institutional, enterprise and employment uses, as well as significant amenity/open space areas. There are a number of protected structures along and in the vicinity of the route which also runs through and adjacent to conservation areas identified in the Dublin City Development Plan.
- 2.3. The site is located within the functional area of Dublin City Council from east of Palmerstown Drive to its culmination point at Heuston Station just prior to Frank Sherwin bridge, and is in the functional area of South Dublin County Council (SDCC) for the remainder (from junction 3 of the N4 to Palmerstown Drive).

2.4. Four temporary construction compounds are proposed, north east of junction 2 of the N4 (LU1a), between the N4 and Old Lucan Road just north of the Liffey Valley Shopping Centre (LU1b), north of the Palmerstown Bypass between Kennelsfort Road and the Oval, and at the Liffey Gaels Park, south of the Chapelizod bypass. The total construction phase is stated to take approximately 24 months which will be broken up into phases for the provision of each of the sections of the Proposed Scheme.

3.0 Proposed Scheme Development Description

3.1. Overview

- 3.1.1. The Proposed Scheme constitutes the construction of the Lucan to City Centre Bus Corridor scheme which comprises a range of infrastructure improvements for pedestrians and cyclists, as well as providing bus priority measures along an overall corridor length of 9.7km.
- 3.1.2. In general, the Proposed Scheme provides upgrades to, and expansion/increase of, bus priority measures, cycling infrastructure and pedestrian facilities along the corridor. The measures being proposed include the provision of bus lanes, upgraded/relocated and additional bus stops, amendments to junctions, segregated cycle tracks, quiet street treatments, amendments to parking provisions (including reductions to and relocation of such areas), as well as improving pedestrian facilities (footpaths, the provision of a pedestrian bridge over the N4, signal crossings etc.), the provision/amendment of toucan crossings to facilitate pedestrian and cyclist movements and the provision of landscaping/public realm improvements.
- 3.1.3. Throughout the scheme, junction arrangements for general traffic are consolidated with turning radii reduced to slow traffic, left turning filter lanes omitted (to reduce unsafe conflicts between general traffic and cyclists/pedestrians), and specific junction crossing arrangements provided for pedestrians and cyclists. On minor junctions along the route raised table crossings are being provided to facilitate pedestrian and cyclist crossing movements.
- 3.1.4. The overall design approach for the Proposed Scheme, is set out in the Preliminary Design Guidance Booklet for BusConnect Core Bus Corridors which is included in the application documentation (Appendix A4.1 – BusConnects Preliminary Design Guidance Booklet [BPDG] of the EIA refers). Junctions within the entire BusConnects Core Bus Corridor programme have been categorised into 4 general types. Appendix A6.3 of the EIA specifically sets out the junction design adopted for each junction. For the Proposed Scheme, junction types 1, 2, and 3 are proposed (i.e. there are no type 4 junctions). These can be broadly described as follows:
- Junction Type 1: Both bus lanes are dedicated lanes up to the junction stop line and general straight ahead and left-turning traffic is restricted to one lane,

this junction type is selected where the volume of left-turning vehicles is greater than 100 PCUs an hour and where there is no space available for a dedicated left turning lane or pocket;

- Junction Type 2 – As per Junction Type 1 but with left turning traffic crossing the bus lane into a dedicated left turn lane in advance of the stop line, this junction type is selected where space is available for a left-turning lane/pocket and where high volumes of left-turning traffic can be controlled separately with existing traffic from side roads ;
- Junction Type 3 – 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, this junction type is selected where volume of left turning vehicles is less than 100 PCUs an hour and there is no space available for a dedicated left-turning lane/pocket.

3.1.5. All junction arrangements offer protection for cyclists (and pedestrians) with protected kerbing provided on the corner of junctions, tighter turning radii are also provided at all junctions to force left-turning vehicles to slow down more, and the kerbing and cycle lane arrangements require right-turning and straight-ahead cyclists to stay on the raised and segregated cycle track right up to the junction and will thus avoid traffic conflicts from weaving through lanes. There are differences in traffic management controls, with junctions differing the timing of when cyclists, buses and general traffic are released to proceed dependent on specific design requirements.

3.1.6. At bus stops it is generally proposed to provide bus shelters, and the stops are one of three typologies. There is a hierarchy in bus stop design options starting with the preferred “island bus stop”, followed by the “shared bus stop landing zone”, and then finally the “lay-by bus stop”, each of these are described with images in section 4.6.4.5 of the EIAR and section 11 of the Preliminary Design Guidance Booklet (Appendix A4.1 of the EIAR). The proposed bus stops on the Old Lucan Road in Palmerstown Village (East of Mill Lane) do not follow these typical typologies as they will not operate from a bus lane, with the inbound stop sharing some characteristics of an island bus stop due to the proximate cycle track, the outbound stop on the

southern side of the road does not. Traffic will have to stop or yield and go around buses at this location.

- Island bus stops feature the deflection of the cycle track behind the bus stop and any associated shelter which will be provided on a c. 3m wide island offering direct access and egress from buses. The deflected cycle track is ramped and narrowed to reduce speeds and marked/lit to highlight pedestrian activity. A pedestrian priority crossing point is provided with part-time signals to avoid cyclist/pedestrian conflicts for access to the bus stop area. Visually impaired pedestrians may call on part time signals within this arrangement, where necessary.
- In the shared bus stop landing zone arrangement the cycle track is again deflected behind the bus landing/access zone (but runs between the bus shelter/footpath area and the bus loading/offloading zone) with the same speed controls for cyclists augmented by corduroy tactile paving and additional narrowing of the track, and signage highlighting the presence of bus passenger traffic. There are no dedicated pedestrian priority signals in the shared bus stop landing zone although pedestrian priority is provided through design to allow crossing of the cycle track to a 1m wide dwell area where passengers can get on and off the bus.
- Lay-by bus stops are similar to island bus stops in terms of the arrangements between cycle tracks, bus shelter and bus access/egress, however, in this arrangement the bus pulls in off the carriageway/bus lane – such stops cater for buses with longer dwell times at a stop and allows other buses to continue past on the bus lane.

3.1.7. The Proposed Scheme provides for 'Quiet Street Treatment' along the link between Ballyowen Lane and the R136 Ballyowen Road, as well as at the access road to the Hermitage Golf Club. Quiet Street Treatment is provided as an option along an alternative cycle route when Core Bus Corridors (CBCs) roadway widths cannot facilitate cyclists without significant impact on bus priority. Should an alternative route be available along streets with minimal general traffic (other than residents) these can be provided as a viable alternative option and the relevant works involve

the provision of appropriate direction and advisory signage for all road users as well as road markings.

3.1.8. Signage throughout the Proposed Scheme will be in accordance with the Traffic Signs Manual. Additional signage will be provided throughout (including new gantry signage) to ensure new traffic arrangements and management is clear and will require the use of specifically designed signage to ensure that road users have clarity on the rights of way and yielding necessary to ensure satisfactory operation of the BusConnects system. Some bespoke signage will be necessary including the use left turn flashing amber arrows to ensure motorists turning left are aware of, and yield to, cyclists. Furthermore, one of the characteristics of the Proposed Scheme is that certain junction designs necessitate a ban on left turns from the bus lanes and accordingly “No Left Turn from Bus Lane” signage will be required (i.e. general traffic will not be allowed to filter into a bus lane to make a left turn, and taxi’s and buses wishing to do so will be required to move into the general lane when approaching type 1 junctions). All bus lanes within the Proposed Scheme will operate on a 24hr a day 7-day a week basis.

3.2. The proposed development generally provides for:

- Bus lanes, generally of 3m in width in areas with a speed limit <60kmph and 3.25m in areas with a speed limit of >60kph,
- General traffic lanes, as above – although 2.75m lanes are permissible on straight road sections with very low HGV traffic.
- Pedestrian paths have a desirable/preferred width of 2m, although a standard minimum width of 1.8m is considered acceptable, and a 1.2m width being considered appropriate at pinch points (i.e. over distances <2m long).
- Segregated cycle tracks, with a desirable/preferred width of 2m (one-way) and 3.25m (two-way) with an additional 0.5m buffer, a minimum standard width of 1.5m is considered acceptable and 1.2m being considered appropriate at pinch points (i.e., over distances <2m long), segregated by kerbing between the pedestrian paths and bus lanes/stops.

3.2.1. The overall design allows for deviations from the above widths over shorter sections to allow for specific physical constraints, e.g. to avoid extant buildings, protection/

avoidance of mature trees, traffic pedestrian safety, or reduce CPO/land take requirements.

3.2.2. Key elements proposed in the scheme include:

- The number of pedestrian signal crossings are proposed to increase by 40% from 20 to 28.
- The proportion of segregated cycle facilities are proposed to increase from 26% on the existing corridor to 95%.
- The proportion of the route having bus priority measures is proposed to increase from 72% on the existing corridor to 93%.

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

- Increase from 7.45km (existing) to 9.17km of inbound bus lane and from 6.4km (existing) to 8.6.km (proposed) of outbound bus lane. Thus, bus priority infrastructure and traffic management will be provided over a total of 17.77km (two-way).
- Increase of segregated cycling facilities from the existing 0.73km to 6.45km (inbound), and from 0.73km to 6.31km (outbound). There are also proposed changes to the non-segregated cycling facilities along the route which will be reduced from 0.8km to 0.28km inbound, and 1.5km to 0.4km outbound. Accordingly, overall cycling facilities (including quiet street treatment) will be increased from a total of 3.83km (both directions) to 13.42km.
- Provision of new / refurbished pedestrian facilities and footpaths along the scheme and associated ancillary works.
- Provision of junction upgrades and associated ancillary works.
- Provision of new/refurbished raised table crossings on side roads entry facilities.
- Reconfiguration of existing bus stops and relocation of others along the corridor which will have Real Time Passenger Information (RTPI), provision of shelter and seating.
- Provision of ancillary structures and retaining walls including:

- Replacement pedestrian and cyclist bridge over the N4 at Ballyowen Road (replacing the existing pedestrian only bridge at this location).
- Additional portal(/signage) gantry on approach to M50 junction, and relocation of another gantry.
- New pedestrian bridge over the N4 at Liffey Valley Shopping Centre.
- Widening of the Chapelizod Hill Road Bridge to accommodate new bus stops and laybys proposed on the R148 Chapelizod bypass at this location. Retaining walls, pedestrian steps and ramps are also proposed at this location to facilitate public access to the new bus stops on the Chapelizod by pass from the Chapelizod Hill Road.
- Retaining wall on eastbound verge of the N4 adjacent to Hermitage Golf Club (c. 306m long).
- Retaining wall on westbound verge of the N4 beside Abbot Pharmaceuticals (c. 130m long).
- Retaining wall on westbound verge (c. 68m long) and eastbound verge (c.38m long) of Chapelizod by-pass.
- Retaining wall on eastbound verge (c. 83m long) of N4 and junction 2 off-slip beside Hermitage Medical Clinic
- Public realm works including landscaping, planting, street furniture, street lighting, retaining walls, boundary walls, and sustainable urban drainage measures.
- Roads associated earthworks including excavation of unacceptable material, importation of material, temporary storage of materials.
- Provision of road pavement, signing, lining and ancillary works.
- Provision of fencing, access and boundary treatment works.
- Construction of accommodation works including boundary treatment and ancillary grading and landscaping works together with all associated ancillary

and consequential works. Landscaping and ancillary works include the removal of c. 2,183m of hedgerow and c. 2,420m of treeline¹.

3.3. The construction phase for the Proposed Scheme is anticipated to take approximately 24 months to complete with the entirety of the Proposed Scheme split up into 13 different sections. It will be constructed based on individual sectional completions that will individually have shorter durations with approximate active construction durations each ranging from between 1 to 18 months. To meet the overall 24-month timeframe will require more than one section being worked on at any given time, however, the programme provides for separation between sections under construction to minimise disruption.

3.3.1. For ease of discussion (and to be consistent with the route descriptions provided in the submitted EIAR) the description of the Proposed Scheme has been split into 3 separate sections both for the purposes of my assessment and within the submitted EIAR:

- Section 1: N4 Junction 3 to M50 Junction 7 – N4 Lucan Road,
- Section 2: M50 Junction 7 to R148 Con Colbert Road – R148 Palmerstown bypass and Chapelizod bypass; and
- Section 3: R148 Con Colbert Road to City Centre – St. Johns Road West,

These are described further below.

3.4. **Section 1: N4 Junction 3 to M50 Junction 7 – N4 Lucan Road**

3.4.1. This portion of the scheme includes upgrades to the following junctions:

- R136 Ballyowen Road / R835 Lucan Road.
- R136 Ballyowen Road / N4 Junction 3.
- R136 Ballyowen Road / Hermitage Road.
- N4 Junction 2; and
- N4 / M50 Interchange (Junction 7)

¹ Table 12.15 of the EIAR refers.

- 3.4.2. The Proposed Scheme commences at the N4 junction 3, with the existing lane configuration being retained on the R136 (Ballyowen Road) bridge over the N4, alterations at this location include omission of the left turning filter lane on the west bound off-ramp, the provision of a new 2-way segregated cycle lane incorporating a new cycle and pedestrian bridge (to replace the existing pedestrian bridge which is to be demolished) on the east side of the R136. Left turning slip lanes will also be removed from the R136/R835 Lucan Road junction and a minor relocation (including reconfiguration) of the bus stop at this location will also be carried out. A bus lane and two-way cycle track is to be provided on the Lucan Road to the roundabout serving the Lucan Retail Park with the bus lane progressing onto the eastbound on-slip of the N4.
- 3.4.3. The west bound off-slip from the N4 will be widened to provide for a dedicated bus lane which will require land-take from commercial property's car park, a retaining wall will also be provided at this location. The N4 itself will maintain the existing bus and general traffic lanes.
- 3.4.4. Hermitage Road will be provided as a quiet street and connected to Ballyowen Lane via a pedestrian priority quiet cycleway link. This, in conjunction with the two-way cycle track to the northern side of the N4 negates the need to provide a separate cycle track on the southern side of the N4. The works, including the two-way cycle track along the northern side of the N4 will necessitate land take from the Hermitage Golf Club, and it is also proposed to provide a retaining wall and 15m high golf netting along the frontage of the Golf Club at this location. The existing foot and cycle bridge over the N4 in the vicinity of Mount Andrew Court is to be retained.
- 3.4.5. The two-way cycle track will continue along the northern side of the N4 necessitating further land-take from the Hermitage Clinic where a further retaining wall will be required. The two-way cycle track will continue along the eastbound off ramp at Junction 2 of the N4 and will move to the south side of the Old Lucan Road east of the Fontill Road (R113) roundabout. Here the cycle track will be accommodated within the existing road corridor of the Old Lucan Road, with general traffic lanes reduced in width and calmed to reflect the proposed 30kmph traffic speed limit.
- 3.4.6. Bus stops in the vicinity of the Liffey Valley Shopping Centre (LVSC) are to be moved by approximately 150m, provided in laybys and lengthened. This

arrangement will require land take from the southern side of the N4 adjacent to the car park for the Liffey Valley Office Campus. A new pedestrian only footbridge is also proposed (approx. 195-200m west of the existing cycle the pedestrian/cycle bridge which is to be retained) to serve the locations of the new bus stops. Additional land take from the Liffey Valley Shopping Centre will be required to facilitate the ramps to the new footbridge. The existing foot/cycle bridge over the N4 at this location is to be retained. The ramp and steps from the existing footbridge to the existing bus stop outbound on the N4 at this location will be removed as that bus stop is being relocated.

3.4.7. Lane re-designation is proposed on the eastbound approach between junction 2 and the M50 interchange with traffic being separated out earlier for the M50 and Palmerstown bypass (R148). New portal gantry signage is incorporated to aid motorists in this regard. On the M50 interchange two general traffic lanes and a continuous bus lane is proposed in both directions.

3.4.8. The cycling infrastructure provisions from the Lucan Retail Park running east initially propose a quiet street along the public road to the Hermitage Golf Club, and then a two way segregated track is provided along the northern side of the N4, and its off ramp for Junction 2, before switching to the southern side of the Old Lucan Road (which will be traffic calmed – including the provision of a 61.5m chicane requiring vehicular traffic to yield for each other to pass) and joining the existing east-bound two-way cycle track in the vicinity of the existing pedestrian/cycle bridge (to the Liffey Valley Shopping Centre). Land take is required from the Hermitage Golf Club, Sureweld and the Hermitage Clinic to facilitate these works.

3.4.9. The following are the deviations from the standard widths within this section:

- Cycle track 1.5m wide (2m desirable, but 1.5m an acceptable minimum) along outbound on the N4 retaining the existing cycling facilities between chainage A420 and A650 – an alternative route is provided along Ballyowen Lane and Hermitage Road which will be provided with quiet street treatment.
- The M50 pedestrian/cycle bridge (and access ramps) have cycle tracks varying from 1.5-2.5m (falling below the 2.65m desirable standard) and footpath widths of 1.6-2.2m (1.8m acceptable minimum standard). The

application documentation states that bringing these deviations up to standard would require significant works to the existing pedestrian/cycle bridge and that it is proposed to retain this infrastructure item in place.

- Ballyowen Road footpath reduced to 1.5-1.8m for a length of approximately 5m at chainage B225 due to constraints on either side of the carriageway.

3.4.10. Bus lanes are provided throughout this section with the exception of approximately 250m inbound on the on-slip for junction 2 due to facilitate merging and acknowledging the constraint of the Deadman's Inn, and outbound for approximately 600m between the service road for St. Loman's Hospital and the N4 off ramp.

3.4.11. Five out of the eight bus stops proposed along this section are layby bus stops with two of the others being inline and one island type, all are proposed to have bus shelters at their locations.

3.4.12. In relation to parking and loading the provision of the two-way cycle track will result in the removal of all informal parking on the southern side of the Old Lucan Road with the exception of 14 spaces to the east. This results in the loss of approximately 108 car parking spaces with approximately 51 no. remaining.

3.4.13. While the route is already a significant transport corridor at this location, the most significant changes in this section in terms of public realm are along the frontage of the Hermitage Golf Club (as well as an existing dwelling on this frontage, and at Sureweld) where the Proposed Scheme will result in tree felling, route widening and provision of a retaining wall and safety netting, route widening and the provision of a retaining wall will also arise at the Hermitage Clinic. The provision of a new pedestrian bridge, and it's associated ramps over the N4 at the Liffey Valley Shopping Centre will also be a significant addition to the public realm.

3.5. Section 2: M50 Junction 7 to R148 Con Colbert Road – R148 Palmerstown bypass and Chapelizod bypass.

3.5.1. There are three significant junctions along this section of the route:

- R148 Palmerstown by-pass / Kennelsfort Road,
- Old Lucan Road / Kennelsfort Road Lower,
- R148 Palmerstown bypass / the Oval

- 3.5.2. A continuous bus lane is provided inbound and outbound between the M50 interchange and the Kennelsfort Road junction, two inbound general traffic lanes are provided while one is proposed outbound. At the Kennelsfort Road and Oval junctions left turning slip lanes are to be omitted with a left turning ban proposed out of Kennelsfort Road Lower (turning inbound towards the City Centre). Traffic wishing to turn east towards the City Centre from Palmerstown will have to travel along the Old Lucan road through the village and then make the turn east at the Oval junction, which is proposed to have a new west/out-bound, bus-only right turn into the village, and have the existing U-turn lane/facility just east of the junction removed.
- 3.5.3. Existing bus-stops adjacent to the Oval and Kennelsfort Road junctions are proposed to be lengthened and provided as lay-by bus stops served by contiguous bus lanes, along the R148 (Palmerstown bypass). Two bus stops in Palmerstown village on Kennelsfort Road Lower are to be removed and new bus stops provided in the Old Lucan Road west of Mill Lane. The existing bus stop on the R148 to the rear of Palmerstown Drive is to be removed. A temporary construction compound (LU2) is also proposed north of the R148 between the Kennelsfort Road and Oval junctions.
- 3.5.4. Continuous bus lanes and two general traffic lanes in each direction will be maintained between the Oval and the R833 Con Colbert Road junctions, existing signalling will be maintained from the Kylemore Road west-bound on-slip, and new layby bus stops are proposed on the bypass on the Chapelizod Hill bridge which is to be widened, with accessibility ramping and associated retaining structures provided on each side to make the transition between levels from Chapelizod Hill Road up to the bypass. Speed limits along the bus lanes on the Chapelizod bypass are proposed to be reduced from 80 to 60kmph.
- 3.5.5. In relation to cycling infrastructure along this section a segregated 2-way cycle track is proposed along the north side of the Old Lucan Road, from the M50 overbridge, through Palmerstown village to reach the existing pedestrian priority zone at the start of the Chapelizod bypass, ending at a new toucan crossing on the R112 Lucan Road entering Chapelizod Village where the Proposed Scheme will tie into the existing network. A two-way cycle track is also being proposed on the eastern side of the Kennelfort Road, requiring land-take from the frontage of the Palmerstown Lodge Hotel, this cycle track extends across the Palmerstown bypass at the junction to tie in with the existing network at a new Toucan Crossing on Kennelsfort Road Upper.

- 3.5.6. There is one deviation below the standard infrastructure widths in this section at chainage A3675 the footpath is 1.7-1.8m wide for an extent of approximately 5m to facilitate previously consented road arrangements at Palmerstown Lodge.
- 3.5.7. An inbound and outbound bus lane and two general traffic lanes are provided throughout this section along the R148 Palmerstown and Chapelizod by-passes, (with a break for inbound traffic to filter across to the old Lucan Road to access Chapelizod), no bus lanes are provided through Palmerstown village.
- 3.5.8. Four inbound and four outbound bus stops are proposed, of which 6 are of the lay-by configuration with the other two being those provided inline in Palmerstown Village, one outbound stop (at Palmerstown Drive is to be omitted and not replaced).
- 3.5.9. The Proposed Scheme will result in the loss of car parking (three paid parking spaces and an accessible space) from Kennelsfort Road Lower, parking (including another accessible space) will also be lost in its entirety from the northern portion of the Old Lucan Road in Palmerstown due to the provision of a 2-way cycle track through the village. Existing parallel parking along the southern side of this road is to be made perpendicular to provide additional parking along the southern portion. The EIAR states that all of the 108 informal car parking spaces available between the M50 and Kennelsfort Road lower – along the northern side of the Old Lucan Road will be removed. There are 62 permit/pay and display bays/spaces currently in place on the Old Lucan Road between Kennelsfort Road Lower and the Palmerstown bypass, (29 no. on northern side and the remainder on the south). The 29 spaces on the northern side are proposed to be removed with that on the southern side to be reconfigured to perpendicular parking to provide an additional 15 spaces (with 2 no. accessible spaces being retained but slightly relocated), resulting in a net loss of 15 spaces in this area.
- 3.5.10. In terms of landscape and public realm in this section the Proposed Scheme continues to follow the route of the existing significant transport corridor with the alterations to cater for the new bus stops and infrastructure on the Chapelizod by-pass at the Chapelizod Hill Road representing perhaps the most significant change in terms of amenity area. The works including accessibility ramps, bridge widening, and retention structures will require land take at this location and a number of trees will be lost to facilitate construction. The provision of a two-way cycle track through

Palmerstown will also represent a change as will the widening of footpaths in the village.

3.6. Section 3: R148 Con Colbert Road to City Centre – St. Johns Road West,

3.6.1. There are eight significant junctions along this section of the route:

- R148 Chapelizod bypass / R833 & R148 Con Colbert Road
- R148 Con Colbert Road / R839 Memorial Road.
- R148 Con Colbert Road / R111 South Circular Road.
- R148 St John's Road West / R111 South Circular Road.
- R148 St John's Road West / Heuston South Quarter.
- R148 St John's Road West / Military Road.
- R148 St John's Road West / Heuston Station; and
- R148 St John's Road West / Victoria Quay (Frank Sherwin Bridge).

3.6.2. The left turning slip lane from the R833 Con Colbert Road onto the R148 is proposed to be omitted and this junction provided with an inbound and outbound cycle lane, and a temporary construction compound (LU3) is also proposed proximate to this location at the Liffey Gaels GAA club, at the junction with the Con Colbert Road. The Proposed Scheme provides for two options for integrating with the R833 at this junction which will allow the project to either tie in with the existing R833 as is or with any new infrastructure which may be in place arising from the Liffey Valley to City Centre BusConnects corridor (recently granted permission by An Bord Pleanála under ABP 314056-22).

3.6.3. The existing bus lane and two lanes for general traffic inbound and outbound are to be retained between the R833 and R111 South Circular Road, albeit carriageways are narrowed slightly to accommodate an inbound and outbound cycle track.

3.6.4. The junction between the R148 and Memorial Road proposes to move the pedestrian crossing from the west to the east and contains two options which will cater for the existing one-way arrangements on Memorial Road, or alternatively cater for Memorial Road being 2-way (allowing for a right hand turn pocket off the R148) which is proposed under the Liffey Valley BusConnects Scheme.

- 3.6.5. At the R111 sought Circular Road junction all left turning slip lanes are to be omitted, cycle tracks provided throughout and a small right turning pocket northbound from the R111. The R111 is to be widened to the west to facilitate the provision of the cycling tracks.
- 3.6.6. The left turn slip lane is proposed to be removed at the Heuston South Quarter (HSQ) junction with the R148, which will also have toucan crossings provided at this location and at the junction with Military Road.
- 3.6.7. One bus lane and one general traffic lane is proposed inbound from the R111 South Circular Road to the end of the Proposed Scheme at Heuston Station. The same provisions are proposed outbound except that two general traffic lanes are accommodated for approximately 220m on the R148 outbound approach to the R111 junction. An outbound and inbound segregated cycle track is also provided along the entire length of St. Johns Road West (R148). Taxi queuing lanes and a taxi rank are maintained adjacent to Heuston Station, and lengthened bus stops and bus laybys provided both inbound and outbound along its southern façade. These works require land acquisition from Dr. Steevens' Hospital. Two raised toucan crossings are also proposed across St. Johns Road West to the south of Heuston Station and this location (from the Military Road Junction to the end of the Proposed Scheme) is also proposed to have a 30km/h speed limit due to the significant pedestrian movements at this location.
- 3.6.8. The following are the deviations from the standard widths within this section:
- Con Colbert Road cycle track width reduced to 1.5m (from a standard of 1.75m at this location) between chainage A7800 and A7900 (approximately 100m) to avoid incursion into the National War Memorial Park.
 - Con Colbert Road footway width reduced to 1.4m (from 1.8m standard) for c. 6m at chainage 7880 inbound to accommodate right turn for cyclists, and to 1.65m outbound between chainage 7850 to 7900 to accommodate cycle track.
 - Right turn cycle track on R111 reduced 1.2-1.4m (below 1.5m standard) at chainage A8475 due to limited space available at junction, additional concrete protections to be put in place.

- R148 St. Johns Road West, outbound cycle track width reduced to 1.5m (below 1.75m standard) at chainage A8500-A8550 and A8625-A8700 due to limited road space available.
- R148 St. Johns Road West – HSQ straight on and right turning carriageway reduced to 2.8-2.9m in width (3.0m standard) at Chainage A9000-A9060 to maintain trees and respect existing retaining structures.
- R148 St. Johns Road West inbound footway reduced to 1.2-1.6m in width (1.8m standard) at Chainage of approx. A9100-A9250 to maintain trees.
- R148 St. Johns Road West inbound footway reduced to 1.7m in width (1.8m standard) at Chainage A9307-A9320 to accommodate waiting area for right turning cyclists.

3.6.9. Full bus priority is provided through section 3 with bus lanes throughout. The inbound and outbound bus stops at Heuston station are effectively island bus stops which are provided at laybys with the remainder of the bus stops in this section being of the island bus stop typology.

3.6.10. A fully segregated cycle track is proposed throughout this section (single cycle track both inbound and outbound along the north and south of the route).

3.6.11. In relation to car parking and loading, 8 no. existing parking spaces on the south side of the R148 outside the Eir building are to be removed and one EV charging point opposite Heuston Station is proposed to be relocated to the frontage of the Eir building. The c. 20 space taxi rank/queue to on the R148 east of the HSQ junction is proposed to be removed.

3.6.12. In relation to the public realm the more sensitive areas along this section of the route include the interaction along the Irish National War Memorial where pedestrian connectivity is to be enhanced, and additional tree planting is proposed along the central median. The interface at Heuston Station and Dr. Steeven's Hospital is also proposed to be subject to changes through the provision of revised public realm elements, paving, relocation of heritage features, provision of additional planting and amendments to the formal garden area along the frontage of Dr. Steevens' Hospital.

3.6.13. The Proposed Scheme will require land acquisition from Dr. Steevens' Hospital (HSE) and Eir Head Office along this section.

3.7. Integration with the Liffey Valley Core BusConnects Corridor

- 3.7.1. The Proposed Scheme interacts with the Liffey Valley to City Centre CBC which was granted consent by the Board in December 2023 (ABP-314056-22), and will tie in with elements of that project at Con Colbert Road and Military Road. The application documentation states that it is not envisaged that both schemes would be constructed at once. The Proposed Scheme provides options at both these locations which will allow it to integrate with either the existing infrastructure in place or any new infrastructure proposed under the Liffey Valley scheme. The temporary construction compound at the Liffey Gaels is intended to be used for the Liffey Valley Scheme and the Proposed Scheme. There is a further overlap at the junction with the Circular Road where the Liffey Valley Scheme provides for a right-hand turn onto St. John Road West from the northbound South Circular Road within the extent of the existing infrastructure. This turn is also designed into the Proposed Scheme.

3.8. Drainage

- 3.8.1. The surface water drainage system for the Proposed Scheme will ultimately all discharge to the River Liffey. The Proposed Scheme will result in a net increase in the impermeable area discharging to the Liffey. The drainage incorporated within the Proposed Scheme has been designed to ensure any net increases in run off will be attenuated (through use of filter drains, swales, tree pits, oversized pipes, bio retention areas, silt traps, and attenuation features) accordingly there will be no net increase in surface water flow discharged to these receptors.

3.9. Construction

- 3.9.1. The construction phase is estimated to last for 24 months and will be carried out in phases along the corridor, in this regard the Board is referred to table 5.2 of the EIAR which sets out the proposed phases, and duration of the construction programme over the total of 13 different sections of the route. The programme and location of works has been designed to provide as much separation between sections under construction as possible at any given time.

3.10. Operational Phase

3.10.1. The primary characteristics of the operational phase will be the presence and operation of the relevant road network which should experience significant modal shift both in terms of methods of transport chosen (i.e. increased bus, pedestrian, cycle, e-cycle, and e-scooter traffic, combined with reduced use of the private car traffic), as well as updates in transport/vehicle technology using the route. There will also be additional lighting provided as well as ongoing traffic management and routine maintenance. It is stated that following provision of the routes maintenance and operations will be transferred to the relevant local authorities.

4.0 Planning Policy Context

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

4.1.1. 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 vehicle,
- making sustainable alternative solutions available to the public & businesses,
- supporting digitalisation & automation, and
- improving connectivity & access.

4.2. The Climate Act 2021

4.2.1. The Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act, 2021), commits Ireland to a legally binding 51% reduction in overall greenhouse gas emissions by 2030 and to achieving net zero emissions by 2050. As part of its functions the Board must, in so far as practicable, perform its functions in a manner that is consistent with the most recent approved climate action plan, the most recent approved national long term climate action strategy, the national adaptation framework, sectoral plans, furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State².

4.3. Climate Action Plan 2023/2024

4.3.1. At time of reporting, the Climate Action Plan 2023 (CAP23) remains in place, although the Board should note that the Climate Action Plan 2024 (CAP24) has been published and that the public consultation phase recently closed (April 5th, 2024). CAP23 sets out a roadmap to halve emissions by 2030 and reach net zero by 2050 and is the first to implement carbon budgets and sectoral emissions ceilings that

² Section 15(1) of the Climate Action and Low Carbon Development Act 2015 (as amended) refers.

were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings were approved by Government in July 2022 for a number of sectors which included a 50% reduction in transport emissions.

- 4.3.2. CAP24 builds upon CAP23 by refining and updating the measures and actions required to deliver carbon budgets and sectoral emissions ceilings that were introduced under the Climate Action and Low Carbon Development (Amendment) Act, 2021. Sector emission ceilings approved in July 2022 related to the electricity, transport, built environment – residential, built environment – commercial, industry, agricultural and other (F-gases, waste & petroleum refining) sectors. Reflecting the continuing volatility for Land Use, Land Use Change and Forestry (LULUCF) baseline emissions to 2030 and beyond, CAP24 puts in place ambitious activity targets for the sector reflecting an EU-type approach.
- 4.3.3. 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. For transport, CAP23 reframed the previous pathway outlined in CAP21 under the Avoid-Shift-Improve Framework to achieve a net zero decarbonisation pathway. This hierarchical framework has been applied again in CAP24 to prioritise actions to reduce or avoid the need to travel; shift to more environmentally friendly modes; and improve the energy efficiency of vehicle technology.
- 4.3.4. Road space reallocation is a measure outlined under both ‘avoid’ and ‘shift’ to promote active travel and modal shift to public transport. Road space reallocation and a sustainable approach to parking policy are considered to form key measures to both reduce unsustainable private car demand and enhance placemaking, supporting improvements in the accessibility and air quality of our urban spaces. A National Demand Management Strategy will consider measures for addressing car parking provision and management. The Design Manual for Urban Roads and Streets is the principal design standard for all urban roads and further work is underway in relation to guidance and advice notices for local authorities with regard to the reallocation of street-space and landscaping. This includes the issuing of Statutory Guidelines in accordance with Section 38 of the Road Traffic Act 1994, as amended, on traffic calming measures in respect of public roads under the charge of

Local Authorities. The provision of safe and accessible walking and cycling infrastructure is also recognised as being key to encouraging modal ‘shift’ away from the private car.

- 4.3.5. Cap 2024 states that ‘Significant investment in new public transport infrastructure is required to deliver on our carbon emissions reduction targets, and to provide people with the sustainable alternatives to private car usage’. BusConnects is referenced as a major public transport project that is being progressed through major milestones and is referenced directly in both the CAP24 and CAP23 Annex of Actions as an action to reduce total vehicle kilometres and fuel usage and increase sustainable transport trips. CAP24 notes that the BusConnects Dublin programme has significantly advanced with significant uplift in passenger numbers and the lodgement of Core Bus Corridor infrastructure planning applications to the Board.

4.4. National Development Plan 2021-2030

- 4.4.1. The National Development Plan 2021-2030 (NDP) sets out the Governments overarching investment strategy and budget for the period 2021-2030. The NDP 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.
- 4.4.2. 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 of Irelands major cities.
- 4.4.3. Over the NDP period approximately €360 million per annum will be invested in walking and cycling infrastructure in cities, towns, and villages across the country.
- 4.4.4. 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. The NDP notes 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.

4.4.5. The NDP states that there will be significant progress made on delivering BusConnects over the lifetime of the Plan with the construction of Core Bus Corridors expected to be substantially complete in all five cities by 2030.

4.5. **National Planning Framework Project Ireland 2040**

4.5.1. The NPF provides policies, actions, and investment to deliver the 10 National Strategic Outcomes (NSOs) and priorities of the National Development Plan. These include compact growth, enhanced regional accessibility, sustainable mobility and transition to a low carbon and climate resilient society.

4.5.2. 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.

4.5.3. It is recognised with respect to sustainable mobility that Dublin 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 NPF encourages the expansion of attractive public transport alternatives to car transport to reduce congestion and emissions and enable the transport sector to cater for the demands associated with longer term population and employment growth in a sustainable manner.

4.5.4. NSO 4 of the NPF recognises that 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. NSO 4 supports the delivery of 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, the DART Expansion Programme, and BusConnects in Dublin as well as key bus-based projects in the other cities and towns. Furthermore

NSO 4 provides support to develop a comprehensive network of safe cycling routes in metropolitan areas to address travel needs.

4.6. National Investment Framework for Transportation in Ireland, 2021.

- 4.6.1. The National Investment Framework for Transportation in Ireland, 2021 (NIFTI) is the strategic framework for future investment decision making in land transport to facilitate the NPF and support climate change policies. The four investment priorities under the NIFTI are decarbonisation, protection and renewal, mobility of people and goods in urban areas, and enhanced regional and rural connectivity. 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 issue 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.
- 4.6.2. Within the cities, frequent and reliable public transport of sufficient capacity and high-quality active travel infrastructure can incentivise people to travel using sustainable modes rather than by car.
- 4.6.3. 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.

4.7. National Sustainable Mobility Policy

- 4.7.1. This Policy sets out a strategic framework to 2030 for active travel and public transport journeys to help Ireland meet its climate obligations with a target to deliver at least 500,000 additional daily active travel and public transport journeys. An Action Plan for sustainable mobility to 2025 is included, which aims to provide safe, green, accessible, and efficient alternatives to car journeys. Action 23 is the commencement of delivery of BusConnects CBC infrastructure works.
- 4.7.2. Safe and green mobility is supported in the Policy by:

- Continuing to protect and maintain the safety of existing walking, cycling and public transport networks and ensuring that new sustainable mobility infrastructure meets the highest safety standards.
- Developing pedestrian enhancement plans and cycle network plans to guide investment in new active travel infrastructure and retrofitting of existing infrastructure.
- Expanding 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.
- Rebalancing transport movement in metropolitan areas and other urban centres away from the private car and towards active travel and public transport.

4.8. Regional Spatial Economic Strategy for the Eastern and Midlands Region

4.8.1. The Regional Spatial Economic Strategy for the Eastern and Midlands Region (RSES) sets out the strategic plan and investment framework for the region which consists of counties Longford, Westmeath, Offaly, Laois, Louth, Meath, Kildare, Wicklow, Fingal, and Dublin and all their constituent local authorities.

4.8.2. Chapter 5 of the RSES refers to the 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 sets out the guiding principles for the growth of the Dublin Metropolitan Area and includes “Integrated Transport and Land use” which covers a range of issues from focusing growth along existing and proposed high quality public transport corridors to supporting the delivery of BusConnects and other public transport programmes. Regional Policy Objective (RPO) 5.2 refers, which states:

“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.”

- 4.8.3. RPO 5.3 is also relevant which states: “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”.
- 4.8.4. Section 5.6 of the RSES ‘Integrated Land use and Transportation’ references the key transport infrastructure investments in the metropolitan area as set out in national policy which includes ... “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’ of the RSES also references that bus infrastructure and services will be delivered through BusConnects (Section 8.4 refers), while RPO 8.18 also references BusConnects as supporting improved access to Dublin Airport.

4.9. Transport Strategy for the Greater Dublin Area 2022-2042

- 4.9.1. The 2022-2042 Transport Strategy sets out a framework for investment in transport infrastructure and services in the Greater Dublin Area (GDA) up to 2042. The Transport Strategy recognises a wide range of challenges for transport underpinned by climate change; the Covid 19 pandemic; servicing the legacy development patterns; revitalising city and town centres; transforming the urban environment; ensuring universal access; serving rural development; improving health and equality; fostering economic development; and delivering transport schemes.
- 4.9.2. The overall aim of the Transport Strategy is “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.”
- 4.9.3. Chapters 10, 11 and 12 of the Transport Strategy address walking, accessibility, and the public realm; cycling and personal mobility vehicles; and public transport respectively, and these sections relate both directly and indirectly to the proposed BusConnects programme.

4.9.4. Chapter 12 sets out the strategy for an overall public transport system for the region, central to which is the delivery of a comprehensive bus network, based on enhanced level of service and much greater on-street priority. Section 12.2.2 of the Transport Strategy notes that BusConnects Dublin comprises a range of elements including approximately 230km of radial bus priority and 200km of cycle routes, a new bus service network, new bus stops and shelters, low/zero emissions bus fleet, new park and ride interchanges, and a revised fare structure. The Proposed 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. Key elements of the Cycle Network Plan will also be delivered along these corridors. The following measures in the Transport Strategy relate to the roll out of BusConnects:

- 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.
- 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.
- 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:
 - Increase frequencies on the BusConnects orbital and local bus services; and
 - Providing bus priority measures at locations on the routes where delays to services are identified.

4.9.5. A new Dublin area bus service network will be arranged on the basis on spines radiating from the city centre, orbitals around the city, other city bound routes, local routes, peak only services, and express routes. Periodic review will take place to implement appropriate additions or adjustments to the overall bus system.

4.9.6. With respect to walking, accessibility, and the public realm, it is recognised in the Transport Strategy that better urban design and placemaking will encourage more people to walk, cycle or use public transport. Specific measures are outlined 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 of the Transport Strategy refer). Furthermore, measure PLAN16 seeks the reallocation of road space to prioritise walking, cycling and public transport use and the placemaking functions of the urban street network. Other specific measures relating to walking, accessibility and public realm include Measure WALK2 – Improved Footpaths; Measure WALK4 – Improved Junctions; Measure WALK6 – Crossing Points; Measure WALK8 – Traffic-Free Streets and Pedestrianisation; and Measure WALK9 – regarding those with disabilities or mobility impairments.

4.9.7. In terms of cycling and personalised mobility vehicles, it is the intention of the NTA and the local authorities to deliver a safe, comprehensive, attractive, and legible cycle network in accordance with the updated Greater Dublin Area Cycle Network (Measure CYC1 of the Transport Strategy refers). It is noted that some of the cycle provision included in BusConnects schemes examines the appropriateness of emerging international approaches to design standards. As the number of cyclists grows, the requirement to ensure that cyclists can travel unimpeded along their entire journey becomes critical and this needs to be reflected in how cycle infrastructure and other traffic is managed. This is reflected in the Transport Strategy through Measure CYC2 – Cycle Infrastructure Design; Measure CYC3 – Extended Hours of Operation of Cycle Infrastructure; and Measure CYC4 – Maintenance of Cycle Infrastructure.

4.9.8. Chapter 17 provides the outcomes and how the Strategy contributes to an enhanced natural and built environment (consolidated development, public realm and placemaking, reduced impacts of traffic, improved air quality and noise levels); how the Strategy leads to more connected communities and better quality of life (enhanced community interaction, high quality public transport coverage); how the Strategy contributes to a strong and sustainable economy; and how the Strategy fosters an inclusive transport system (equality, health and access to jobs).

4.10. Greater Dublin Area Cycle Network Plan

- 4.10.1. The Greater Dublin Area Cycle Network Plan 2013 consisted of the urban network, inter-urban network, and green route network for each of the seven local authority areas comprising the Greater Dublin Area (GDA) (i.e., DCC, DLRCC, South Dublin, Fingal, Meath, Kildare, and Wicklow County Councils). The key goal of the Cycle Network Plan was to ensure that a cycling culture is developed to an extent that by 2020, 10% of all journeys will be by bike via a high quality and extensive cycle route network. A higher cycling modal share in urban areas is required to compensate for rural areas.
- 4.10.2. Two primary cycle routes were identified along the proposed scheme (Cycle Routes 13 and 13A). There are also a number of secondary, (other primary) and greenway cycle routes which connect with/traverse the Proposed Scheme and which will use junctions that will be subject to works, these routes include 13E/N5, SO3/Dodder Greenway, N10 Grand Canal Greenway/SO1/N10, and C7.
- 4.10.3. The updated Greater Dublin Area Cycle Network was published along with the Greater Dublin Area Transport Strategy, 2022-2042. It is stated in the Strategy that “while the 2013 Plan has provided a robust framework for such investment to date, evolutions in cycle policy, design guidance and urban form since its publication have prompted an update of the network. This review has ensured that the network proposed is fit for purpose and takes account of the needs of the full spectrum of users and trip types. The revised GDA Cycle Network forms part of the Transport Strategy and is published in full alongside this report.” The primary and secondary routes within the updated network plan remain consistent with those of the 2013 plan in relation to the Lucan to City Centre Core BusConnects route, however, a number of additional feeder cycle routes have also been identified and minor amendments to cycling routes (for example in the vicinity of Palmerstown).

4.11. Cycle Design Manual, September 2023

- 4.11.1. The Cycle Design Manual 2023 replaced the previous 2011 National Cycle Manual and draws on the experience of cycle infrastructure development over the past decade and international best practice to help deliver safe cycle facilities for people

of all ages and abilities. The Manual is intended as a live document that will be updated to reflect emerging best practice.

- 4.11.2. Chapter 2 of the Manual sets out the five main requirements (safety, coherence, directness, comfort, and attractiveness) that designs should fulfil to cater for existing cyclists and to attract new cyclists to the network. Key design principles include a network approach, segregation, and inclusive mobility. Information is also provided on the types of cycle vehicles, cycle links, appropriate facilities, and width calculations.
- 4.11.3. Chapter 3 of the Manual addresses cycle network planning, as well as the planning of cycling in private developments and public infrastructure projects. Designing for cycling is covered in Chapter 4,
- 4.11.4. The Manual makes a single reference to BusConnects under protected junctions, where it is noted that a small number of such junctions have been implemented in Ireland and many more are currently being planned under active travel schemes around the country and on BusConnects corridors in Dublin and regional cities. The Manual anticipates that the continued rollout of protected junctions will improve junction consistency and coherence on the cycle network.

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

- 4.12.1. 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 promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport.
 - The promotion of multi-functional, place-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.

4.12.2. 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.

4.13. **South Dublin County Development Plan, 2022-2028**

4.13.1. Approximately 4.6 kilometres of the Proposed Scheme corridor, from its eastern commencement at junction 3 of the N4, to the R112 Lucan Road turnoff to Chapelizod Village from the N4, lies within the functional area of South Dublin County Council (SDCC). The South Dublin County Council Development Plan 2022-2028 (SDCC CDP) was made in June 2022.

4.13.2. The plan includes a vision for the County’s growing communities, places, housing, jobs, sustainable transport and the delivery of services in a manner which promotes climate action and efficient patterns of land use. Sustainable movement is covered under Chapter 7 of the SDCC CDP where the aim is to increase the number of people walking, cycling and using public transport and to reduce the need for car journeys, resulting in a more active and healthy community, a more attractive public realm, safer streets, less congestion, reduced carbon emissions, better air quality, quieter neighbourhoods and a positive climate impact.

4.13.3. It is an overarching transport and movement policy (SM1) to “...*promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high-quality sustainable transport and movement network for people and goods.*” The following objectives are also listed under this policy:

“SM1 Objective 1: *To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the County Development Plan, in line with the County mode share targets of 15% Walk; 10% Cycle; 20% Bus; 5% Rail; and 50% Private (Car / Van / HGV / Motorcycle).*

SM1 Objective 2: *To ensure consistency with the NTAs Transport Strategy for the Greater Dublin Area (2016 -2035) as updated to 2042, as required by RPO 8.4 of the RSES.*

SM1 Objective 3: *To support the delivery of key sustainable transport projects including DART and Luas expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network in accordance with RPO 5.2 of the RSES / MASP.*

SM1 Objective 4: *To ensure that future development is 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 and attractive street environment for pedestrians and cyclists, in accordance with RPO 5.3 of the RSES / MASP.*

SM1 Objective 6: *To safeguard the County’s strategic road network and to improve the local road and street network in a manner that will better utilise existing road space and encourage a transition towards more sustainable modes of transport.”*

4.13.4. South Dublin County Council’s policy on walking and cycling (SM2) seeks to... *“re-balance movement priorities towards sustainable modes of travel by prioritising the development of walking and cycling facilities and encouraging a shift to active travel for people of all ages and abilities, in line with the County targets.”* The following relevant objectives are also listed under this policy:

SM2 Objective 4: *To ensure that connectivity for pedestrians and cyclists is maximised and walking and cycling distances are reduced in existing built-up areas, by removing barriers to movement and providing active travel facilities in order to increase access to local shops, schools, public transport services and other amenities through filtered permeability, while also taking account of existing patterns of anti-social behaviour in the removal of such barriers with due consideration of consultation with local residents where need is evident or expressed.*

SM2 Objective 5: *To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the*

Design Manual for Urban Roads and Streets (2013; updated 2019) so that the movement of pedestrians and cyclists is prioritised within a safe and comfortable environment for a wide range of ages, abilities and journey types.

SM2 Objective 9: *To work with the NTA to review the feasibility of implementing additional cycling facilities within the major urban and recreational areas of the County.*

SM2 Objective 16: *To ensure that all streets and street networks are designed in accordance with the principles, approaches and standards contained in the National Disability Inclusion Strategy (NDIS) 2017-2022.*

SM2 Objective 17: *To support bike parking provision at villages, centres, parks and any other areas of interest, as well as near public transport nodes to support multi-modal transport options.*

4.13.5. Section 7.4 of the SDCC CDP notes that currently approximately 20% of trips originating in South Dublin County are taken by public transport, breaking down to 17% by bus and 3% rail, the target (as set out in section 7.6 of the plan) is to increase this to 20% by bus and 5% by rail over the lifetime of the plan. It is recognised within the SDCC CDP that transition to public transport will be aided by BusConnects.

4.13.6. South Dublin County Council's policy "SM3 Public Transport – General" seeks to "Promote a significant shift from car-based travel to public transport in line with County targets and facilitate the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network." The following relevant objectives are also listed under this policy:

'SM3 Objective 2: *To facilitate and secure the implementation of major public transport projects as identified within the NTA's Transport Strategy for the Greater Dublin Area (2016-2035) as updated to 2042, or any superseding document, including BusConnects, the DART expansion programme along the Kildare route, the opening of the new rail station at Kishogue and the Luas to Lucan.*

SM3 Objective 3: *To ensure that future development is planned in such a manner as to facilitate a significant shift to public transport use through pursuing compact growth policies, consolidating development around existing and planned public transport routes and interchanges, and maximising access to existing and planned public transport services throughout the network.*

SM3 Objective 4: *To optimise accessibility to public transport, increase catchment and maximise permeability through the creation of new and upgrading of existing walking and cycling routes linking to public transport stops.*

SM3 Objective 5: *To facilitate an interlinked network that maximises the efficiency of existing services, reduces overall journey times and facilitates easy exchanges between modes and routes.*

SM3 Objective 9: *To ensure that all new public transport corridors are designed to enhance the County's green infrastructure network by ensuring adequate replacement and additional planting of native species and pollinators and to ensure that SuDS approaches are used to deal with surface water run-off.*

SM3 Objective 10: *To work with the relevant transport agencies to ensure that all public transport proposals have regard to pertaining environmental conditions and sensitivities including biodiversity, protected species and designated sites and incorporate appropriate avoidance and mitigation measures as part of any environmental assessments.'*

4.13.7. Section 7.6.1 of the SDCC CDP refers specifically to BusConnects noting that it is the NTA programme for improvement of bus services in Dublin, setting out its key elements which includes the provision of continuous bus priority and safe cycling facilities, as well as more user friendly ticketing/payment systems and improved bus waiting facilities. Policy SM3: Public Transport – Bus includes the following relevant objectives:

SM3 Objective 11: *To facilitate the delivery of the BusConnects Core Bus Corridors and seek additional bus corridor and orbital routes to serve the County by securing and maintaining any required route reservations and to*

ensure the BusConnects Corridors do not adversely affect the village life and livelihoods of any of our County Villages.

SM3 Objective 17: *To work with the NTA and other state agencies to facilitate the delivery of the Kennelsfort Road-R148 grade separated junction or an equivalent solution to maximise the efficacy of the BusConnects Project.*

SM3 Objective 18: *To liaise with bus service providers where new bus stop infrastructure is proposed in order to ensure facilities such as shelters and bins are included, where appropriate.'*

4.13.8. In relation to SM3 Objective 17 above it should also be noted that table 7.5 of the SDCC CDP lists the upgrade of the Kennelsfort Road/R148 junction as an element of a six year road programme subject to appropriate funding and consultation with the TII. The description of the proposed upgrade from table 7.5 is to *'Support the provision of a grade separated junction, or an equivalent solution to be initiated during the first two years of the 2022 to 2028 County Development Plan, to enhance the efficiency of the junction, particularly for buses on the N4 / Lucan Road QBC, to ensure safe crossing facilities are provided for all users and to reconnect the Heritage Village of Palmerstown with the newer residential areas of the community. The Council shall work with the NTA and other state agencies to facilitate such delivery.'*

4.13.9. In relation to the public transport interchanges SM3 Policy 24 refers and includes an object to *'support and facilitate the development of multi-modal transport interchanges at Tallaght Town Centre and Liffey Valley.'*

4.13.10. There is an appreciation in the plan that the design of streets has a major influence on quality of life and that streets should not just be corridors for traffic, but rather should be places in which people want to live and spend time.

4.13.11. Policy SM5: Street and Road Design seeks to *"Ensure that streets and roads within the County are designed to balance the needs of all road users and promote placemaking, sustainable movement and road safety providing a street environment that prioritises active travel and public transport."* The following objectives under this policy are of relevance:

‘SM5 Objective 1: To ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment that promotes active travel modes and public transport.

SM5 Objective 2: To design new streets and roads within urban areas in accordance with the principles, approaches and standards contained within the Design Manual for Urban Roads and Streets (2013; updated 2019).

SM5 Objective 5: To design new roads and streets to incorporate green infrastructure elements such as planting of native trees, hedgerows and pollinator species in medians and on roadside verges, as appropriate to the location.’

4.13.12. The Proposed Scheme also runs by, and borders, an Architectural Conservation Area (ACA) within the functional area of SDCC. This ACA is identified as “Woodfarm Cottages 1-8 and Red Cow Cottages”, and is located at Palmerstown Upper. The ACA is identified as two terraces of eight, two storey structures...”. Policy NCBH20 refers to ACAs and states that Council policy is to “Preserve and enhance the historic character and visual setting of Architectural Conservation Areas and carefully consider any proposals for development that would affect the special value of such areas”. Towards this end further objectives are stated under this policy including objective 1 - to avoid the removal of distinctive contributing features, objective 2 - prohibit demolition of structures, objective 3 - ensure new development within or adjacent to an ACA preserves the character and visual setting, including streetscapes, objective 4 - promote rehabilitation, objective 5 - reduce and prevent visual and urban clutter within ACAs including signage and traffic management, objective 6 - promote positive place making, as well as objective 8 – to ensure that planning applications within or adjacent to ACAs contain an Architectural Impact Assessment and Design Rationale.

4.13.13. The Proposed Scheme also runs by several protected structures in the functional Area of SDCC, and accordingly the provisions of Policy NCBH19 (to conserve and protect buildings, structures and sites contained in the RPS) is relevant, along with its associated objectives, particularly NCBH19 objectives 1-6 which provide for inter alia, protection of structures and their surroundings, ensure

development is sympathetic to structures, support rehabilitation and alternative uses, consideration of zoning provisions and prohibit demolition.

4.13.14. The Proposed Scheme runs along an existing transport corridor which travels through land uses that are zoned as follows: RW – to provide for retail warehousing, RES – to protect and/or improve residential amenity, OS – To preserve and provide for open space and amenity, HA – LV To protect and enhance the outstanding natural character amenity of the Liffey Valley, MRC – to protect, improve and provide for the future development of a major retail centre, VC - to protect, improve and provide for the future development of village centres. The Proposed Scheme also runs adjacent to the Liffey Valley Special Amenity Area Order (1990), east of Palmerstown Village, and runs alongside a number of items on the RPS and a protected view/prospect at Fonthill. The Proposed Scheme also runs adjacent to and bordering the area of a Tree Preservation Order in the townland of Quarryvale and Brooklawn, in the vicinity of Kings Hospital School.

4.14. Dublin City Development Plan 2022-2028

4.14.1. Approximately 5.1km of the Proposed Scheme is within the functional area of Dublin City Council (DCC) from the R112 Lucan Road turnoff to Chapelizod through to its easternmost extent at Frank Sherwin Bridge just east of Heuston Station. The main strategic approach of the Dublin City Development Plan 2022-2028³ (DCDP) is to develop a city that is low carbon, sustainable and climate resilient. Chapter 8 of the DCDP relates to sustainable movement and transport, and 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. Towards this end Objective SMTO01 states: *“To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the development plan, in line with the city mode share targets of 26% walking/cycling/micro mobility; 57% public transport (bus/rail/Luas); and 17% private (car/van/HGV/motorcycle)”*.

³ Adopted on the 2nd of November 2022, came into effect 14th December 2022.

- 4.14.2. Table 8.1 of the DCDP sets out current and target mode share with cycling expected to increase by 7% by 2028 and public transport (bus, rail, and Luas) 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, and accordingly the impact of public transport infrastructure projects on modal share is more likely to come into fruition during the lifespan of the following City plan.
- 4.14.3. 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. In this regard SMT22 - Key Sustainable Transport Projects, *seeks “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”*. Furthermore, Map J of the DCDP identifies the route of the Proposed Scheme as both Proposed Bus Connects Radial Core Bus Corridor” and “Bus Connects Spines (high frequency on existing road network, delivery timeframe 2021-2024).
- 4.14.4. Section 8.5.3 of the DCDP notes the importance of reducing car dominance and that encouraging walking, cycling and use of public transport as sustainable travel modes requires improving the attractiveness of the environment and public realm within the city and urban villages. It is recognised that there are opportunities for developing the public realm around the City and in the urban villages where new public transport proposals are being developed. The following policies are relevant in this regard:

- Policy SMT12 – Pedestrians and Public Realm: To enhance the attractiveness and liveability of the city through the continued reallocation of space to pedestrians and public realm to provide a safe and comfortable street environment for pedestrians of all ages and abilities.
- Policy SMT13 – Urban Villages and the 15-Minute City: To support the role of the urban villages in contributing to the 15-minute city through improvement of connectivity in particular for active travel and facilitating the delivery of public transport infrastructure and services, and public realm enhancement.
- Policy SMT14 City Centre Road Space: To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes, and the private car, in particular, where there are intersections between DART, Luas and Metrolink and with the existing and proposed bus network.

4.14.5. The DCDP acknowledges that kerbside space is being continually reduced in favour of transport infrastructure and public realm improvements, and as such, there is very limited capacity on street to meet the servicing requirements of developments. Policy SMT15 – ‘Last-Mile’ Delivery seeks to *“...achieve a significant reduction in the number of motorised delivery vehicles in the City through supporting and promoting the use of the ‘last-mile’ delivery through the development of micro hubs and distribution centres.”*

4.14.6. In terms of walking, cycling and active travel, it is a policy of the DCDP (SMT16) *“to prioritise the development of safe and connected walking and cycling facilities and prioritise a shift to active travel for people of all ages and abilities, in line with the city’s mode share targets.”* Furthermore, in relation to integration of active travel with public transport, Policy SMT19 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.”*

4.14.7. Other transport policies of relevance to the proposed scheme include the following:

SMT25 – On-Street Parking: “To manage on-street car parking to serve the needs of the city alongside the needs of residents, visitors, businesses, kerbside activity and accessible parking requirements, and to facilitate the re-organisation and loss of spaces to serve sustainable development targets

such as in relation to, sustainable transport provision, greening initiatives, sustainable urban drainage, access to new developments, or public realm improvements.”

SMT33 – Design Manual for Urban Roads and Streets: “To design new streets and roads within urban areas in accordance with the principles, approaches and standards contained within the Design Manual for Urban Roads and Streets (DMURS) and to carry out upgrade works to existing road and street networks in accordance with these standards where feasible.

SMT34 – Street and Road Design: 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.

4.14.8. The Proposed Scheme passes to the south of the Chapelizod and Environs ACA, and its most proximate works are those proposed on Chapelizod Hill Road (overpass widening and ramp/steps access). It also runs adjacent and through areas that have been designated as “red-lined” or “red-hatched” conservation areas in the DCDP from the east of Chapelizod to its culmination south of Frank Sherwin Bridge. These areas do not have a statutory basis in the same manner as protected structures or ACAs; however, they are recognised within the DCDP as areas that have conservation merit and importance which warrant protection through policy application. Policy BHA9 refers to development in such conservation areas and requires, inter-alia that development in such areas must contribute positively and take opportunities to enhance and protect the character and appearance of the area and its setting wherever possible. BHA10 presumes against demolition or substantial loss of a structure that contributes to the character of a conservation area.

4.14.9. The proposed scheme passes a number of protected structures, Policy BHA2 of the DCDP relates to development of protected structures and requires that development will conserve and enhance protected structures and their curtilage, and inter-alia:

- Protect structures included on the RPS from any works that would negatively impact their special character and appearance,

- Ensure that any modification affecting a protected structure and/or its setting is sensitively sited and designed and is appropriate in terms of the proposed scale, mass, height, density, layout, and materials.
- Ensure that the form and structural integrity of the protected structure is retained.
- Protect and retain important elements of built heritage including historic gardens, stone walls, entrance gates and piers etc.
- Ensure historic landscapes, gardens, and trees (in good condition) associated with the protected structures are protected from inappropriate development.

4.14.10. The Proposed Scheme runs along the existing road over a site on the SMR record (DU018-029 – 16th/17th century house), under the south carriageway of the Chapelizod by-pass, and also passes through DU018-020 Historic City of Dublin from the Con Colbert Road to its eastern endpoint.

4.14.11. While the majority of proposed works are within and along the existing public road where there is no specific zoning provided in the DCDP the Proposed Scheme runs adjacent to lands that have been zoned: Z1 (sustainable residential neighbourhoods), Z5 (City Centre), Z6 (employment/enterprise), Z9 (Amenity / Open Space / Green Network), Z10 Inner Suburban and Inner City Sustainable Mixed-uses, and Z15 (Community and Social Infrastructure) under the DCDP.

4.14.12. Kilmainham Inchicore Development Strategy (KIDS) is a non-statutory strategy funded by the Urban Regeneration and Development Fund (URDF) which identifies a number of potential projects including the enhancement of Kilmainham and Inchicore villages, the Camac River Greenway and a Greening Strategy. It is stated that the implementation of the KIDS will improve connections between Kilmainham and Inchicore villages, strengthen the quality of the public realm and enhance the landscape character of the area which in turn will act as a catalyst for the urban regeneration of the area. It is an objective of Dublin City Council (CSO13) *“to seek funding under Call 3 of the URDF for the planning, detailed design and construction of the Kilmainham and Inchicore Development Strategy projects.”*

4.14.13. The Proposed Scheme passes within or alongside some Strategic Development and Regeneration Areas: SDRA 7 – Heuston and Environs, SDRA 9 -

Emmet Road, SDRA 14 – St. James Medical Campus & Environs, SDRA 15 – Liberties and Newmarket Square

4.15. **Draft Dublin City Centre Transport Plan**

4.15.1. In September 2023 Dublin City Council in partnership with the National Transportation Authority published the Draft Dublin City Centre Transport Plan 2023. Key initiatives outlined in the draft plan include:

- Removing 2 out of every 3 cars in the city centre which don't have a destination there.
- Implementing traffic management measures that prioritise pedestrians, public transport, and cyclists.

The Draft Plan acknowledges that the roll out of BusConnects and other public transportation projects over its lifetime will provide a major increase in public transport capacity as well as enabling buses to reach the city centre without undue delay. A critical element of the Draft Plan is to ensure that BusConnects can operate an efficient, reliable, and punctual service within the City Centre.

4.16. **Ecological Designations**

4.16.1. Full details of the relevant SACs and SPAs are discussed in Section 10 (Appropriate Assessment) of this report, however, for ease, the closest Natura 2000 sites are the Rye Water Valley/Carlton SAC which is c.4.2km west and upstream of the Proposed Scheme. The closest Natura 2000 site with a direct hydrological connection to the Proposed Scheme is the South Dublin Bay and River Tolka Estuary SPA, which is located c. 4.4km distant (although it should be noted that this is straight-line and not hydrological distance).

4.16.2. Table 4.1 below sets out the European and nationally designated sites most proximate (i.e. within 10km of the Proposed Scheme).

Table 4.1 Distances to Ecologically designated sites

Site Name	Site Code	Approximate Distance (closest point to Proposed Scheme)
Liffey Valley pNHA	000128	Immediately north with slight overlap along the Chapelizod bypass
Santry Demesne pNHA	000178	6.3km north
Dolphins, Dublin Docks pNHA	000201	6.2km east
North Dublin Bay pNHA	000206	4km east
South Dublin Bay pNHA	000210	5.3km east
Dodder Valley pNHA	000991	5.9km south
Boosterstown Marsh pNHA	001205	7.1km south-east
Glenasmole Valley pNHA	001209	9.6km south
Lugmore Glen pNHA	001212	9.1km south
Rye Water Valley / Carton pNHA	001398	4.1km west
Fitzsimon's Wood pNHA	001753	9.2km south-east
Royal Canal pNHA	002103	2.2km north
Grand Canal pNHA	002104	650m south
Rye Water Valley / Carton SAC	001398	4.1km west
North Dublin Bay SAC	000206	7.4km east
South Dublin Bay SAC	000210	5.3km east
Glenasmole Valley SAC	001209	9.6km south
North Bull Island SPA	004006	7.4km north-east
South Dublin Bay and River Tolka Estuary SPA	004024	4.3km east
North-West Irish Sea cSPA	004236	9.4km east

4.17. Planning History

4.17.1. The route of the Proposed Scheme runs along the urban road/street network for in excess of 9 kilometres, accordingly there are a significant number, and wide range of planning applications along the route and in the vicinity of the site. I consider the permissions/consents that have been built or are currently under construction to form part of the baseline/receiving environment within which the Proposed Scheme is to

be provided. It is not intended to list all the consented/permitted applications and permissions here as this is neither necessary nor would it contribute to clarity, in this regard the Board should note that the applicant has provided a detailed list of the planning history along the route of the Proposed Scheme – Sub appendix 2 “Planning History” of the Planning Report provided as Appendix 2.1 of the EIA. I have noted this submitted planning history and, in the section, below have focused on the more significant, relevant, and recent planning applications along the route. In this regard I note that the Board have recently granted permission for the Liffey Valley to City Centre Core Bus Corridor Scheme and its associated CPO (ABP-314056-22 and 314091-22) which has an overall length of 9.2km and runs from Fonthill Road to High Street in Dublin, and interacts with the Proposed Scheme at Con Colbert Road and Memorial Road.

4.17.2. Both Local Authorities within whose functional area the Proposed Scheme is located (South Dublin County Council – SDCC and Dublin City Council) have made submissions. DCC have referenced the following planning history in their submission⁴:

- **ABP 313320-20**, permission granted by ABP for a Strategic Housing Development (SHD) in November 2022, for 839 apartments, creche and associated works. Permission is located on the grounds of the former De la Salle National School on the Ballyfermot Road to the south of the Proposed Scheme.
- **ABP-306569-20**: SHD development granted in May 2020 for 321 build to rent units at 42A Parkgate Street, D8 – on the northern side of the Liffey north of Hueston Station and the culmination point of the Proposed Scheme. Application was for 481 units, but the decision omitted a block (160 no. units) from the scheme. A subsequent application on this site **ABP-310567-21** was granted permission by the Board in October 2021 for a further 198 units on this site in conjunction with those permitted in the previous application.
- **ABP-311591-21**: Permission granted by ABP in March 2022 for a build to rent scheme. The application was for 399 units; however, the decision reduced the

⁴ Section 2.1 of the DCC submission of the 17th April 2023 refers

number of dwelling units through the omission of two floors from two blocks and the reassignment of the floorspace of one unit to amenity facilities.

- **DCC 2869/17, ABP PL29S.248958**, permission granted for 171 apartments at the Faulkner Industries Factory, Chapelizod Hill Road. This application was subject to a number of amendment applications including 3221/18, 343/21, 3134/22 and 4727/23.

4.17.3. Other planning applications of note along the proposed route within the functional area of South Dublin County Council include:

- **SD17A/0251** (ABP-301426-18) – Notification of decision issued by SDCC for a 4-storey multistorey car park on the grounds of the Hermitage Clinic, on appeal the application was withdrawn and hence no consent in place.
- **SD19A/0320** (ABP-306251-19) – permission granted for a new bus interchange facility at Liffey Valley Shopping Centre, amendments were also permitted under SD21A/0291.
- **ABP 307092-20** – permission granted for a Strategic Housing Development on Kennelsfort Road Lower constituting the demolition of existing structures and provision of 250 no. build-to-rent apartments.
- **ABP 307596-20** – Permission granted for a 53 bedroom boutique Hotel to replace the existing 29 bedroom guesthouse (Palmerstown Lodge) at 20/22 Kennelsfort Road Lower.
- **S01A/0539** – Permission for a medical clinic 306 car parking spaces and all associated works (Hermitage Clinic) granted permission under PL06S.128044 in 2002. Numerous extension and ancillary applications lodged and granted including SD09A/0011 relating to provision of 77 no. additional car parking spaces.

4.18. Environmental Impact Assessment Screening.

4.18.1. Section 50(1)(a) of the Roads Act, 1993 sets out the forms of road development that require the preparation of an EIAR. This includes the construction of a motorway, busway, or service area, and any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an

existing public road. Article 8 of the Roads Regulations, 1994 (as amended) sets out the prescribed types of proposed road for the above purposes and includes the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area, or the construction of a new bridge or tunnel which would be 100 metres or more in length.

- 4.18.2. The Proposed Scheme neither meets nor exceeds the thresholds under Section 50 or Article 8, nor does the project fall under the list of projects identified in Annex I of the EIA Directive. Notwithstanding this however a determination was made by the BusConnects Programme Board of the NTA on the 9th of August 2021, that an EIA was required. In this regard it was noted that the Proposed Scheme would be likely to have significant effects on the environment. An Environmental Impact Assessment Report (EIAR) has therefore been prepared on behalf of National Transport Authority for the Proposed Scheme.
- 4.18.3. In relation to the need for an EIA I note the characteristics of the Proposed Scheme (in particular it's size and design, the use of natural resources, potential for pollution and nuisances, cumulative interactions), it's location proximate to densely populated areas, and areas of cultural and historical value, the type and nature of potential impacts (including their nature, intensity, complexity, probability, cumulation of impacts, and possibility of reducing impacts) and I concur with the determination that an EIA should be provided with the application documentation.
- 4.18.4. Directive 2014/52/EU amending the 2011 EIA Directive was transposed into Irish legislation on 1st September 2018 under the European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018. This application for approval was received by the Board on 21st October 2022 and is assessed under the provisions of the new Directive.

5.0 Submissions

5.1. Proposed Scheme Submissions

- 5.1.1. Three submissions have been made by prescribed bodies (Dublin City Council – ‘DCC’, South Dublin County Council – ‘SDCC’ and the Development Applications Unit of the Department of Housing, Local Government and Heritage). Section 5.2 below provides a summary of the submissions from the relevant prescribed bodies and each submission is followed by the Applicant’s (NTA’s) responses to the issues raised by the relevant prescribed body.

5.2. Prescribed Bodies

5.2.1. Dublin City Council

- 5.2.2. The Proposed Scheme is within the functional area of Dublin City Council (DCC) from the junction between the R148 (Chapelizod Bypass) and R112 (Lucan Road) to its terminating point at the Frank Sherwin Bridge.

- 5.2.3. The Board should note that Dublin City Council (DCC) initially missed the deadline for submissions from prescribed bodies. In response to a written request from the Board under section 217B(1)(a) of the Planning and Development Act (‘the Act’) seeking observations, a submission was received from DCC on the 20th of March, however, this submission did not refer to the Proposed Scheme but to the Liffey Valley Core BusConnects Corridor. Following a further request from the Board, DCC lodged their submission in relation to the Proposed Scheme on the 17th of April 2023, and its contents are summarised below.

- 5.2.4. This submission Dublin City Councils submission provides a description of the proposed development and notes that the parts of the proposal within their functional area which includes the following public roads and associated junctions:

- R148 Chapelizod bypass,
- R148 Con Colbert Road,
- R148 St. Johns Road West, and
- Victoria Quay (Frank Sherwin Bridge)

5.2.5. The submission goes on to reference the relevant policy documents considered relevant by DCC including the Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly (2019-2031), the Dublin City Development Plan 2022-2028, and the Kilmainham Inchicore Development Strategy (non-statutory plan). The submission also contains a number of DCC departmental and divisional reports, which are summarised below:

5.2.5.1. DCC Planning Assessment:

- The Proposed Scheme will contribute to and support the continued improved integration of transport with land use planning and the delivery of improved high-capacity Core Bus Corridors will enable and support the delivery of both residential and economic development opportunities.
- DCC notes that it is not the competent authority but states that the submitted EIAR is comprehensive and that it points generally to the development having a negligible impact on the existing environment.
- The submitted NIS is generally considered satisfactory, there is considered to be sufficient distance between the intended route and natura sites which combined with the avoidance, design, and mitigation measures set out in the NIS will ensure that any impacts on the conservation objectives will be avoided.
- For the most part the Proposed Scheme is situated along the public road and as such there is no specific zoning in place, although the zoning from the current Dublin City Development Plan (2022-2028) along the proposed route includes Z1 (residential), Z4 (district centres), Z5 (city centre), Z6 (employment/enterprise), Z9 (open space) and Z10 (mixed uses), and notes that the secondary elements of the Proposed Scheme are “public service installations”.
- The route of the Proposed Scheme traverses the Zone of Archaeological Constraint for the recorded monument DU018-020 (Historic City) (from Con Colbert Road) and is within the Zone of Archaeological interest in the current City Development Plan.
- The secondary elements of the Proposed Scheme (e.g. bus shelters, stops and real time information signage) are considered to be public service installations.

Overall DCC considers that the Proposed Scheme is compatible and consistent with the zoning objectives for the area.

- The Proposed Scheme will not have any excessive or undue impacts on the amenities of the area, and once complete will create attractive, functional, and accessible places for people along the core bus and cycle facilities and will enhance amenities.

5.2.5.2. DCC Forward Planning Department

- The Proposed Scheme is supported by the high-level policies in place in the current City Development Plan particularly those in Chapter 8 which relate to inter alia sustainable transport, modal shift, integrated public transport and efficient interchanges between modes.

5.2.5.3. Environment and Transport Department

- Department is supportive of the improvements to bus and cycling infrastructure proposed and the Proposed Scheme aligns with the policies expressed in the current City Development Plan.
- DCC recognises that the Bus is the most important mode of transport in Dublin, in 2019 it represented 65% of all public transport trips in the Dublin area.
- The increased bus priority and improved cycling infrastructure afforded within the BusConnects project is to be welcomed.

5.2.5.4. Traffic Division

- Traffic Division is supportive of the Proposed Scheme, and notes that DCC will use its adaptive traffic control system to enable the corridor to perform optimally using real time data with signals being running multiple sets of timings across the day rather than one fixed set.
- Notes the straightforward design of the Proposed Scheme within the DCC area, however, is disappointed that the reduction in private car journeys (4% and 6% in AM and PM peaks respectively) is low in comparison with other corridors, they hope that this can be improved in the detailed design stage.

- Deployment of camera-based bus lane enforcement will be required before the full benefit of the scheme can be achieved.
- The Traffic Division continues by making direct comments on specific locations.
- The Traffic Division notes that the NTA and its contractors are responsible for obtaining planning permission and construction of the Proposed Scheme.

5.2.5.5. Roads Division

- Pedestrian priority should be ensured throughout the scheme particularly at junctions, (incl. proposed cyclist slip lanes at Con Colbert/South Circular Road junction) and bus stops where potential for pedestrian/cyclist conflict could arise.
- Existing indented car parking at the front of Heuston South Quarter Development indicated as 'informal parking' which is proposed to be removed and two EV charging points provided are actually on private lands and therefore would require CPO.
- Location specific comments from the Roads Division include the following:
 - Sheet 17 of 31, recommends that the cycle lane be moved to the outside of the footpath to reduce pedestrian/cyclist conflict where it is proposed to merge cycle track and footpath.
 - Sheet 20, accessibility issues at Chapelizod Hill Road for anyone who is mobility impaired to get to either of the bus stops.
 - Unclear what advantages are provided for cyclists at the proposed R833 Con Colbert Road / R148 Chapelizod by-pass road, with the removal of the left-turn slip road and requirement for cyclists to press a call button, would appear a better solution to retain existing island and left slip and let cyclists cross road with right turning traffic.
 - Sheet 26, concerns are raised that there are not sufficient widths available to maintain minimum lane widths, it is also questioned whether there is sufficient additional width to accommodate two island bus stops. The Roads Division also queries why a straight through pedestrian crossing is not proposed as this is the preference in DMURS (the Proposed Scheme shows a staggered pedestrian crossing at this location and the reasoning

behind this is unclear). It is also unclear how pedestrian priority over the cycle track will be ensured at the proposed bus stop locations.

- Sheet 27, concerns are raised as to whether there is sufficient width to achieve minimum lane widths.
- Sheet 28, (Con Colbert/South Circular/St Johns Road junction) and sheet 29 concerns raised regarding the achievement of minimum widths.
- Sheet 31, the requirement for a raised ramped toucan crossing is questioned as this will be signalized it is not considered necessary to have it ramped. The justification for the small pocket of green space and bus shelter set back from bus stop island at frontage of Dr. Steevens hospital is questioned. The widths of footpaths both North and South of St. John's Road West in the vicinity of Hueston Station are requested to be increased and cycle track reduced to enhance pedestrian safety/service.

5.2.5.6. **Environmental Protection Division:**

- The proposed scheme must comply with the Greater Dublin Regional Code of practice for drainage works version 6.0, and the principles of sustainable drainage systems (SuDs) should be integrated throughout. Certain drainage infrastructure within the Proposed Scheme is not accepted by DCC e.g. slot drains and hybrid gullies, the use of narrow profile gullies is welcomed.
- Detailed drainage design to be agreed in writing with DCC and infrastructure surveyed and installed in accordance with DCC requirements.
- The proposed development must be designed so as not to increase the risk of flooding to any adjacent or nearby area. Pluvial flood risk shall be assessed at all locations along the route.
- Addition detailed drainage comments include management of runoff should be evaluated throughout the scheme and further explanation provided in relation to bridge runoff.
- Lists areas where additional tree pits and a pond/swale could potentially be considered, and additional details of drainage design measures are sought in certain locations.

- The provision of trees is queried on HSE lands in vicinity of Dr Steevens' Hospital due to potential of protected cultural status.

5.2.5.7. **Water Framework Directive**

- Proposed Scheme traverses two river catchments – Camac and Liffey, developer should provide evidence-based assessment of the impact on the water quality status of both rivers including ecological and chemical status.

5.2.5.8. **Archaeology Section**

- The Archaeology Section of DCC generally concurs with the findings of the archaeological assessment contained in the EIAR and supports the proposed mitigation measures therein. Over and above these the Archaeology Section also recommends that monitoring be undertaken in the vicinity of Recorded Monument DU018-029 (House) where road widening is proposed, as well as during the removal of a strip of land to the front of the landscaped grounds at the site of Steevens' Hospital (DU18-020).

5.2.5.9. **Conservation Section**

- The Conservation Section recommends that all mature and historic trees and in particular those in close proximity to protected structures, in ACAs and conservation areas be retained and protected as far as practically possible. Where such trees must be removed it is recommended that they are replaced with new semi mature trees to DCC satisfaction.
- Adequate protection to be provided to protected structures, and heritage features along the route during construction.
- Do not consider that adequate assessment of impact has been applied to the impact of land take on Dr. Steevens' Hospital grounds, the works will negatively affect the character and setting of the Hospital, as will the proposed bus shelter as it will visually interrupt views towards the garden and building façade from the north.

- All works proximate to heritage features should be supervised by a conservation professional, and where heritage street furniture is to be relocated additional details are to be provided.
- Requests alternative finishes to cycle lanes where they run proximate to protected structures and within ACAs, additional signage should be kept to a minimum at such locations and similarly bus stop locations and materials should be appropriate.
- The potential for impacts on 1-4 St. Laurence's Cottages (which are on the NIAH), Chapelizod Hill Road, should be mitigated by adequate protection of the ironwork railings and oversight.
- Removal of trees and construction of ramps at Chapelizod Hill Road to facilitate access to new bus stops on the route will adversely alter the setting of houses on this road and alter the areas visual character.

5.2.5.10. **City Architect Division**

- Welcomes the objectives of the Proposed Scheme.
- Specific comments in relation to proposed public realm relate to areas on a different Core BusConnects Corridor (Liffey Valley to City Centre – ABP-314056-22).
- Advertisements should not generally be permitted on bus stops proposed in ACAs or in areas of Special Planning Control Schemes designated in the City Plan.
- A full palette of street furniture and confirmation of their proposed locations is required, and whether there will be differences between local authority areas or specific urban villages.
- Where property boundaries are to be set back those existing should be assessed for their architectural and cultural value and potential for reuse.
- A strategy for works to private landings should be adopted for consistency.
- Existing village signage should be retained.

5.2.5.11. **Parks Department**

- Tree protection measures to be put in place prior to commencement of development phases, 3 year maintenance contract of landscaping and planting required, and agreement of the local authority will be required to ensure that planting facilitates maintenance.

5.2.5.12. **Dublin City Council Conclusion**

- Welcomes and supports the Lucan to City Centre Core Bus Corridor Scheme as it will ensure the delivery of several key policies and objectives of the Dublin City Development Plan.
- DCC state that the proposed scheme “... will provide an upgraded and expanded bus network and quality of service together with better quality cycling and pedestrian facilities ... this will promote modal shift from the private car to more sustainable forms of transport..... ultimately contributing to the creation of a greener and more sustainable city.”
- DCC are also satisfied that the proposed scheme generally accords with European national and local policy requirements as well as being consistent with the current Dublin City Development Plan.
- The DCC submission concludes by providing a number of suggested conditions that could be attached in the event of favourable consideration, including the following:
 - Conditions relating to the nature of the handover agreement of the corridor between the NTA and DCC following the works.
 - All transport management equipment (including signaling) shall be to the relevant DC specifications.
 - Existing condition records shall be provided to DCC prior to the commencement of any works including drawings distinguishing between heritage footways and new footways and kerbing, as well as drawings demarcating private landings at the detailed design stage.
 - Final design details of all junctions, carriageways, islands, buildouts, signals and footways to be agreed with DCC prior to construction.

- All works including reinstatement to comply with “Construction Standards for Roads and Street works in Dublin City Council”, samples of new natural stone curbs flags and sets to be used to be supplied to DCC for agreement.
- Pedestrian priority to be ensured throughout the scheme through signage and physical design measures.
- The Proposed Scheme shall ensure that principles of universal design are adhered to, and accessibility requirements are met throughout.
- Alterations to curbside parking spaces and loading and signage shall be agreed with the planning authority and all signage and road markings to comply with the traffic signs manual.
- Some recommended conditions relate to the construction period and require works to be in accordance with DCC standards adequate reinstatement storage and reuse of antique setts or heritage elements.
- DCC also recommend that the NTA undertake an awareness education and behavioural change program to educate road users on the proposed scheme in particular in relation to interactions between pedestrians and cyclists.
- Other recommended conditions relate to installation and operation of public lighting, the incorporation of sustainable drainage systems, compliance with the Greater Dublin Regional Code of Practice for Drainage Works version 6.0, agreement with DCC of the detailed drainage design prior to commencement of construction, confirmation that's the proposed scheme will not cause the deterioration of the status of any waterbodies, the reduction of flood risk along the route, and the provision of as built drawings of all drainage works upon completion.
- Works to be carried out having regard to a construction management plan which must be agreed with DCC prior to commencement.
- Conditions relating to archaeological monitoring of works the appointment of a project archaeologist, the provision of appropriate archaeological reporting and investigation.
- All works to be designed and supervised by an architectural conservation expert who will ensure adequate protections are put in place for historic and

heritage fabric during the construction phase. Any works in relation to heritage features to be subject to the written approval of the planning authority in advance and should additional heritage fabric be identified appropriate monitoring reuse or protections applied with agreement.

- The DCC conservation section recommends the following specific measures/changes to the Proposed Scheme:
 - the redesign of the proposed scheme to ensure the protection and retention of Dr. Steevens' hospital lawn.
 - The provision of alternative locations for the proposed bus shelters to the north of Dr. Steevens' hospital and to the south of the Irish War Memorial gardens to be provided for the written agreement of the planning authority.
 - Details of the methodology and new locations of the cast iron post box and two heritage lamp posts proposed to be moved to be agreed with the planning authority.
 - Rationalisation of all signage across the route.
 - Provision of alternative high quality cycle lane surface in lieu of red tarmacadam within ACAs and proximate to protected structures.
- The DCC City Architects Department recommends the following specific measures/changes to the Proposed Scheme:
 - The provision of detailed drawings and specifications of the proposed urban realm improvements identified at (a) Chapelizod Hill Road (new stairs and access ramps), (b) St. Johns Road West (interface with Heuston Station and Dr. Steevens' Hospital), and (d) Palmerstown Village, Old Lucan Road, and Kennelsfort Road Lower⁵, for the written agreement of the planning authority prior to commencement.

Full details of the design and type of bus shelters for each location, the siting of utility cabinets and above ground utilities, the extent of existing

⁵ The Board should note that Palmerstown Village, the Old Lucan Road and Kennelsfort Road Lower are not within the functional area of DCC. While they are on the route of the Proposed Scheme these areas are within the functional area of South Dublin County Council.

hard landscape to be retained, pallet of street furniture and their locations, boundary treatments, raised table side road entry treatments, details of treatment of private landing areas, to be agreed with the planning authority prior to commencement.

- All historic fabric to be recorded and retained in accordance with best conservation practice details to be agreed in advance with the planning authority.
- Village signage treatment to be incorporated.
- Application of the per cent for art scheme.
- o Conditions relating to the adequate protection of existing trees realistic assessment of provision of additional planting clarity in relation to the quantity of compensatory planting along the route, monitoring of landscaping works by project arboriculturalist and landscape architect, all of which to be subject to agreement with the planning authority.

5.2.6. NTA Response to DCC Submission

5.2.6.1. In response to the DCC submission the applicants noted the general support of the Council for the scheme and the statements of compliance with the development and regional plans. For the majority of the responses the applicant referred to the content of the submitted EIAR and confirmed that design approaches at referenced locations were in accordance with DMURs or required due to other local constraints, other points of note clarified include:

- The Traffic Signal and Road Markings drawings (Vol. 3 of EIAR) provide additional detail on road signage and speed limits than shown on the general arrangement drawings.
- The Proposed Scheme shows less of a reduction in car journeys when compared to other BusConnects routes as there is already being significant bus priority infrastructure on this route, there are fewer signalised junctions when compared with other routes and the nature of the existing corridor.
- In relation to the South Circular Road junction the existing two lanes for general traffic on the Con Colbert Road between the eastern end of R148 and

R111 are necessary as shown on forecasting and the maximum space has been provided for pedestrians, bus passengers and cyclists given the site constraints (Memorial Garden to the north and rail line to the south).

- The measures to ensure pedestrian priority and safety at bus stops have been developed in consultation with representative mobility groups and provides a range of safety measures including deflection and narrowing of cycle lanes, provision of yellow bar markings, as well as pedestrian priority crossing signalling and tactile paving.
- The physical separation of cycle tracks from vehicle lanes as well as signal controls will ensure safety for cyclists at junctions, in this regard left turning vehicles will be held at the junction while a cycling crossing stage is on.
- NTA confirms its assertion that the lands on which the EV vehicle charging points are located are in fact within the ownership of DCC (since 1974).
- In relation to footpath widths in the vicinity of Heuston Station the NTA confirm that the stations portico will be available for pedestrian use and footpath widths have been maximised given the other constraints in the vicinity.
- In relation to the accessibility of bus stops at Chapelizod Hill Road the NTA acknowledges that these are not accessible for wheelchair users due to (a) the difference in overall levels between the bus stops and Chapelizod Hill Road, and (b) the existing gradient of the Chapelizod Hill Road leading up to the proposed ramped access to the bus stops being in excess of the minimum suitable gradient. NTA state that they are satisfied that the proposed steps and ramps at this location provide the optimum arrangement to maximise the accessibility of the C Spine bus services to residents of Chapelizod given the existing topographical constraints.
- NTA clarifies that additional surveys on location and condition of surface water sewers will be undertaken in advance of construction documentation.
- In relation to conservation the NTA states that Proposed Scheme is consistent with the relevant conservation policies of the DCDP 2022 which was adopted after the current application was lodged.

- In relation to conditions proposed by DCC the NTA consider that that issues raised have been dealt with in full within the application documentation and additional bespoke conditions are not required.

5.2.7. South Dublin County Council

5.2.7.1. South Dublin County Council (SDCC) made their submission to the Proposed Scheme in January 2023. From the outset SDCC state that they are broadly supportive of the proposal and are *“of the view that it aligns with the policies of the County Development Plan (2022-2028).”* Furthermore, SDCC note that the majority of their concerns have been addressed through the consultation process that has been conducted to date by the NTA with the various stakeholders in their functional area.

5.2.7.2. Development Management Comments.

- The SDCC Development Plan 2022-2028 is generally in favour of the principle of the proposed scheme with supportive policy context as follows: Policy SM1 (promoting ease of movement), SM1 Objective 1 (transition to more sustainable travel modes), Policy SM3 (supporting modal shift to public transport), SM3 Objective 1 (achieve mode share of 30% bus), SM3 Objective 11 (facilitate delivery of BusConnects), SM3 Objective 12 (expansion of bus network), SM3 Objective 17 (facilitate delivery of grade separated junction or equivalent at Kennelsfort Road-R148 junction), and SM3 Objective 18 (liaison with bus service providers).
- The Proposed Scheme is welcomed as it will support more efficient and intensive use of brownfield serviced urban sites, sustainable and vibrant communities and housing delivery.
- SDCC consider that given the limited land take proposed and the routing of the Proposed Scheme along existing major roadways an appropriate balance has been struck between servicing local communities and not adversely affecting residential amenities.
- SDCC considers that issues such as tree loss and loss of carriageways dedicated to cars are decisively outweighed by improved sustainable transport

opportunities, enhancement of the public realm and opportunities to accommodate higher density developments.

5.2.7.3. Active Travel Section Comments

- Set out a number of targeted/specific design comments and queries in relation to the overall scheme within their functional area.

5.2.7.4. Traffic and Transportation Section Comments

The Traffic and Transportation Sections comments review the scheme in sections as follows.

Section 1: N4 junction 3 to M50 Junction 7 – Lucan Road

- Requests that the proposed scheme be extended westwards to include Lucan Village.
- Supports the reinstatement of a right turn onto the western slip road onto the N4, the removal of left slip lanes off the R136 (Ballyowen) onto the R835 (Lucan) Road.
- Welcomes the relocation of bus stops and associated infrastructure changes on the N4 near Liffey Valley (increasing their length and segregating them from the N4 carriageway) as well as the provision of the new pedestrian only footbridge.
- Supports the provision of a segregated two-way cycle track on the northern side of the N4 between the entrance to the Hermitage Golf Club and N4 Junction 2.
- Notes that land acquisition is required and that appropriate mitigation measures adopted for trees lost.

Section 2: M50 Junction 7 to R148 Con Colbert Road – R148 Palmerstown and Chapelizod bypass

- Supports the upgrade works proposed at the R148/Kennelsfort Rd, Old Lucan Road/Kennelsfort Road Lower, and R148/The Oval Junctions, in this regard the submissions states: *“SDCC supports the removal of the left turning slip lanes and the removal of the left turn out of Kennelsfort Road onto the R148 bypass to facilitate pedestrian and cycle movements and safer bus stop operations at this location.”*

- The traffic section requests (a) assurance that the proposed scheme will not delay the delivery of the Lucan Luas extension, and (b) further discussions in relation to the land parcels required to facilitate the proposed scheme.

The traffic and transport section concludes that the proposed scheme supports the GDA Transport Strategy and many of the sustainable movement policies in the SDCC Development Plan as well as moving towards targets set out in Climate Action Plans. The Traffic Section requires that all works be carried out in an appropriate manner in accordance with detailed Construction Management and Traffic Management Plans which should be agreed in advance with SDCC.

5.2.7.5. Roads Maintenance Section Comments

Requests that:

- No kerb integrated drainage is included in the scheme as these are difficult to keep clean, are prone to cracking and are difficult to replace at isolated sections.
- Colour bound servicing be omitted or used sparingly throughout the design as these are difficult to procure in small quantities for maintenance purposes.

5.2.7.6. Economic Development Section Comments

The section is in favour of the project and states it will assist with any relevant land agreements and access permissions. The section also reviews each plot from the CPO where SDCC were notified as an interested party and makes comments on each in relation to its zoning and ownership. Existing services within relevant holdings are also referenced and additional information is requested in relation to any impacts on the design of affected services and utilities.

5.2.7.7. **Summary/Conclusion**

SDCC states it is broadly satisfied with the planning proposal and are of the view that it aligns with the provisions of its 2022-2028 Development Plan. The main aspects raised by SDCC Planning, Traffic, Active Travel and Maintenance teams can be summarised as follows:

- It is requested that the scheme be expanded westward to include Lucan village.
- The Proposed Scheme is aligned with SDCC County Development Plan policy.
- Active travel team have raised some minor design details which SDCC would like to be addressed if it is possible to do so.
- Maintenance team requests that certain material selections are restricted where possible to aid future repairs and upkeep.
- The provision and agreement of Construction and Traffic management plans.
- Requests confirmation that the proposed scheme will not negatively impact on timing or delivery of the Lucan Luas extension.
- Invites further discussion in relation to the exact parcels of land identified to facilitate delivery of the Proposed Scheme.

5.2.8. NTA Response to SDCC Submission

5.2.8.1. In response to the SDCC submission the applicants noted the general support of the council for the Proposed Scheme. In response the NTA referred to and reiterated various parts of the application documentation and confirmed that design approaches at referenced locations were in accordance with DMURs or required due to other local constraints, other points of note clarified included the following:

- In relation to expansion of the route to include Lucan, this was ruled out as west of Ballyowen Road there was a three-way split of future services.
- In relation to the detailed design comments supplied by the Active Travel Section, it was noted that these are not material to the design intent of the Proposed Scheme and would be considered at the detailed design stage.
- The Proposed Scheme will not impinge on the delivery of the Luas Lucan line.

5.2.9. Department of Housing, Local Government and Heritage (Development Applications Unit)

5.2.9.1. The Development Applications Unit (DAU) of the Department of Housing, Local Government and Heritage (DHLGH) has provided comments in relation to Nature Conservation and Archaeology.

5.2.9.2. The DAU's comments in relation to Nature Conservation can be summarised as follows:

- It is acknowledged that without mitigation there is potential for water quality impacts on downstream Natura 2000 sites to arise particularly from pollutants mobilised during the construction phase due to the presence of hydrological linkages. The submitted NIS has concluded that impacts could potentially arise on a large number of Natura 2000 sites, however, the DAU considers that due to distance and dilution effects (and taking the precautionary principle into account) that only a small minority of the sites listed in the NIS would actually be vulnerable to adverse effects, namely the sites within Dublin Bay including the South Dublin Bay SAC, North Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA.
- The Department accepts that the mitigation measures set out in the NIS in relation to construction should prevent any negative impacts on European sites originating from the proposed scheme.
- The mitigation measures to avoid impacts on downstream Natura sites should also prevent any negative impacts on fish species inhabiting the Liffey, including salmon, eel and lamprey.
- The use of the Liffey Gaels playing fields by Brent Geese where it is proposed to have a construction compound is noted, and there is accordingly the possibility of negative ex-situ effects on SCI bird species for the south Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, and Baldoyle SPA. As only small numbers of Brent geese appear to be using this area for foraging and as there are alternative feeding grounds available, negative impacts on this species are unlikely to arise from the temporary construction compound. Notwithstanding this, additional surveys should be required prior to commencement of construction and in the event of favourable consideration a condition should be imposed to ensure the reinstatement of the playing pitches.

- Significant tree and hedgerow removal is proposed with the loss of approx. 3.3 ha of mixed broad-leaved woodland proposed as well as 2,183m of hedgerows, and 2,420 of treelines (including c.218 trees from the southern boundary of the Hermitage Golf Club). The EIAR acknowledges that many of the trees are likely to be used for nesting, however, no nesting survey has been carried out and accordingly clearance of trees or woody vegetation should only be permitted outside the nesting period.
- In relation to bats and the survey reports it is recommended that the felling of relevant trees (which display roost features) should only be carried out under the supervision of a licenced bat handler and that bat boxes and other bat mitigatory measures outlined in the EIAR be applied.
- Further Badger surveys are required in the vicinity of proposed construction compound LU2 (along the Palmerstown Bypass) prior to a decision issuing in relation to this proposed development as a sett was previously identified by the NPWS approximately 12 years ago and badgers were reported/recorded in the vicinity and are loyal to their locations. If badgers are proven to be present a badger conservation plan will be required.
- In the event of favourable consideration, the DHLGH has also provided the wording of conditions it recommends being attached in relation to:
 - A finalised CEMP being provided to incorporate all mitigation measures set out in the NIS and EIAR.
 - Restoration/reinstatement of construction compound LU 3 (Liffey Valley Gaels pitches) following construction.
 - No woody vegetation clearance during the nesting season.
 - Bat mitigatory measures set out in the EIAR to be implemented including provision of bat boxes, re-inspection of potential bat roost trees before felling, and any such felling to be under the supervision of a licenced bat handler.
 - Bat friendly lighting signed off by a bat specialist to be used during construction and operational phases.

5.2.9.3. In relation to archaeological requirements the DHLGH has listed four conditions which it recommends in the event of favourable consideration, their requirements can be summarised as follows:

- All mitigation measures in relation to archaeology and cultural heritage set out in chapter 15 of the EIAR to be implemented in full.
- All archaeological areas and mitigation measures to be set out in the CEMP.
- Project Archaeologist to be appointed to oversee and advice on the scheme throughout construction and design process.
- Report on archaeological monitoring including any investigative work to be submitted following works.

5.2.10. NTA Response to DHLGH Submission

5.2.10.1. The NTA response to the DHLGH submission referred to the mitigation measures set out within the EIAR and included the following clarifications:

- Reference is made to the mitigation measures set out in Section 12.5.1.5.2.1 of the EIAR in relation to the use of the Liffey Gaels grounds for a construction compound, and reinstatement of the grounds is reaffirmed.
- In relation to tree clearance the mitigation measures set out in the biodiversity section of the EIAR are again referenced, these commit to vegetation removal outside the bird breeding season and where this is not practicable advance surveys for bird presence will be made and where nests are present clearance will not commence.
- In relation to potential badger activity near construction compound LU2 the applicants conducted an additional walk over survey in March 2023 which confirmed the findings of the original surveys, and no badger activity was recorded within the footprint, hence the relevant badger mitigation set out in the EIAR remains appropriate and the optimal approach.
- The applicant noted the DHLGH submission in relation to archaeology recommendations and acknowledged that these were consistent with the measures and mitigation incorporated into the submitted EIAR.

5.3. Third Party Observations/Submissions

5.3.1. There were a total of 78 no. third-party submissions and observations lodged in relation to the Proposed Scheme in the initial statutory period. These submissions

were lodged by a mixture of third-parties, corporate entities, clubs, volunteer groups, clubs, and individuals. These submissions are all listed and summarised in **Appendix 1** of this report, and all relevant points raised have been reviewed and have been considered throughout the assessment of the Proposed Scheme where necessary. Four of the 78 initial third party submissions made in relation to the Proposed Scheme referenced an oral hearing. In the interests of clarity and conciseness I refer the Board to Appendix 1 to review a summary of the main issues raised in each of the individual submissions lodged.

5.3.2. The main relevant themes raised throughout the various submissions have been summarised below, followed by a summary of the applicant's response to these main issues (submissions were circulated to the applicant for comment in February and April 2023). The applicant responded to the circulated submissions in May 2023. The NTAs comments on the submissions were circulated to all the third parties who were in turn invited to comment and a further 16 valid submissions were made at this stage. The additional submission responses were from Alan McQuaid, Aisling Curley, Brendan Higgins (and others), Chapelizod Residents Association, Geraldine Fagan (and others), Grainne Ni Mhuiri (and others), Guss O'Connell, Riversdale Riverview Old Lucan Road Residents Group, Sean Treanor, Terance Clement Shaw, The Fitzgerald Group, Torcross Unlimited Company, Trustees of Hermitage Golf Club, Margaret Cosgrove, Mary and David Ong, and Palmerstown Meitheal Tidy Towns. The responses submitted by third parties to the NTAs consideration of the initial submissions broadly raise issues consistent with the original submissions, state that the applicant's response does not address the specific concerns that had been raised, noted that no amendments had been made by the NTA to address concerns and that the decision not to hold an oral hearing was not appropriate⁶. The responses from third parties to the NTA's comments on their initial submissions are also summarised in Appendix I. Four of the initial submissions lodged, sought or referenced an oral hearing, and 4 no. of the additional 16 subsequent submissions raised queries in relation to a hearing.

⁶ In this regard the Board should note that in circulating and cross-circulating submissions all parties had been erroneously informed in correspondence from the Board that an Oral Hearing was not to be held, when this determination had not yet been made, and hence this was raised as a concern by third parties.

- 5.3.3. The section below provides a high-level summary of the most frequently/commonly raised themes/issues from the third-party submissions that have been received. It is not intended in this section to list all the issues raised in the submissions that were lodged (these are summarised in Appendix I) and the responses made individually, all submissions have been reviewed and considered in preparing this report and recommendation. Where relevant specific points which merit individual discussion have been raised in the submissions, these have been brought into the overall assessment of the Proposed Scheme set out throughout this report (Planning Assessment, EIA, and/or AA).
- 5.3.4. All submissions have been reviewed and new issues raised are listed, however, significant repetition is avoided where issues have been raised in prior submissions. The primary and most common issues raised in the third-party submissions are set out below.
- Sixty-nine of the 78 no. initial submissions raised issues in relation to the Palmerstown area, including the following:
 - Objections to the routing of the bus service through Palmerstown Village (i.e. the 26(/80) bus route along the Old Lucan Road and Kennelsfort Road Lower through the village) as this is unnecessary and is a degradation of the service, as is the removal of the 18 service from the village (and associated removal of bus stops from the west side of the village along the Old Lucan road).
 - The locations of bus stops at Palmerstown are inappropriate (Provision of new inbound and outbound bus stops in Palmerstown Village on the Old Lucan Road, removal of bus stop on R148 to rear of Palmerstown Drive, and provision of new bus stops on R148 near the Oval).
 - Adverse traffic impacts arising from the Proposed Scheme due to:
 - Removal of left turn slip lanes at Kennelsfort Road junction and at the Oval.
 - Proposal to remove the left turn from Kennelsfort Road Lower inbound.
 - The Development Plan objective to provide grade separation at the Kennelsfort Road Upper/Lower junction with the R148.
 - Removal of U-turn facility on R148 Palmerstown by-pass (turning from out-bound to in-bound) at the Oval and its replacement with a right turning bus lane into the village.

- The geometry of the Proposed Scheme at the link from the R148 to the Old Lucan Road (into Palmerstown Village) will not accommodate HGV's, commercial traffic and/or bus volumes.
- Adverse impact from increased bus traffic through the village, affecting community, amenities and events.
- Loss of car parking throughout the village.
- The need for a two-way cycle track through the village is questioned, as objectors state that cyclists will stay on the R148 as it offers a more direct route and alternatives are suggested.
- It is claimed that the existing cycle/pedestrian bridge over the M50 is deficient in width.
- The pedestrian crossing on the R148 at the east side of the Kennelsfort road junction is not needed as there is a pedestrian overpass and the removal would allow the reinstatement of left turns inbound from Kennelsfort Road Lower.
- The provision of the pedestrian crossings on the R148 west of the Oval will require more circuitous walking routes for pedestrians and require additional roads to be crossed.
- In relation to construction and operational practices in the Palmerstown area concerns are raised in relation to noise and air pollution.
- Adverse impacts from the proposed LU2 temporary construction compound (particularly in relation to ecology- bats and badgers, loss of trees), drainage and general disturbance.
- Adverse impact on heritage features in Palmerstown village including on Wood farm and Red Cow Cottages, impacts on community events, visual impacts and loss of amenity potentially leading to property devaluation and community impact.
- Concerns raised querying the costs return period of the Proposed Scheme and the extent of any cost/benefit analysis that may have been carried out.
- A suggested alternative of providing an additional link behind the Applegreen service station along the old Lucan Road to the Chapelizod by-pass would alleviate congestion on the Oval junction.

- Nine of the 78 no. third party submissions raised concerns in relation to the proposed accessibility ramps and steps from Chapelizod Hill Road to the proposed new bus stops on the Chapelizod Bypass, this element was also referenced as part of other submissions relating to Chapelizod. The following were the primary concerns in relation to these elements:
 - Requested that the bus services be brought into and through Chapelizod as a better alternative.
 - Proposed access ramps from Chapelizod Hill Road to the new bus stops are not in accordance with Part M of the Building Regulations and are not appropriate for wheelchair users.
 - Chapelizod Hill Road is not accessible in its own right for those who are mobility impaired due to the steepness of the existing road.
 - Ramps and accessibility works are visually obtrusive and will have an adverse impact on privacy, amenity and value of property in the vicinity, result in an inappropriate loss of trees and adversely affect residential amenities in the vicinity.
 - Construction and operational activities will give rise to adverse impacts on residential amenity at this location, and there will be a loss of privacy in the operational phase.
- Other issues raised by third parties include advocating for enforcement of traffic rules, requesting clarity for the hours of operation of the bus lanes, clarity on the provision of bicycle parking provision, querying the overall junction design approach and potential impacts on individual properties including the Hermitage Golf Club, Hermitage Medical Clinic, Knockmaree Apartments (Chapelizod), and Palmerstown Lodge (dwelling whose current access arrangements will be altered by the removal of an existing U-turn facility at Palmerstown) have also been made.

5.3.5. Summary of NTA Response to Third Party Submissions/Objections

- 5.3.5.1. The response from the applicant in relation to the third-party submissions refers to, and reiterates statements from the EIAR and the associated application documentation, the response also includes the following clarifications.

- In relation to bus services the provision or removal of these services is not part of the Proposed Scheme. It is stated the Proposed Scheme has been designed to facilitate the final version of the Dublin Area Bus Network as published in 2019 (following public consultation), accordingly the decision on the routing of bus routes (such as the 26/80) and the removal of others (such as the 18) has already been made and committed to.
- In relation to the locations, and removal, of bus stops the criteria for bus stop locations was referenced (Section 4.6.4.5 of the EIAR).
- In relation to impacts on the ACA in Palmerstown the NTA state that the impacts have been considered and are negative, slight and long term as there will be localised improvements to the public realm and the proposed bus shelter outside the Red Cow Cottages will be outside of the ACA.
- In relation to the junction changes in Palmerstown the EIAR, DMURS, and the (then) draft Greater Dublin Area Transport Strategy are referenced, furthermore the applicant states that a grade separated junction at the Kennelsfort Roads junction is not required to achieve the objectives of the Proposed Scheme, and all junction arrangements have been subject to independent audit which did not raise any safety issues of significance in relation to the safety of the proposed alterations at the Palmerstown junctions. The applicant also confirmed that population and traffic increases have been factored into all modelling used as have recent significant planning consents.
- In relation to the cycle tracks being provided through Palmerstown the applicant notes that these form part of primary cycle route 6 of the GDA Cycle Network plan adopted by the NTA in 2014, and the two-way segregated cycle track represents the optimum solution to provide safe segregated infrastructure for cycling.
- The NTA also clarify that the Proposed Scheme will restrict cyclists (through signage and design) from the R148 Chapelizod by-pass as the cycle network plan shows route 6 access to the city centre being via Chapelizod village and the R109.
- In relation to the presence of badger at the location of the LU2 temporary compound a further walkover survey was undertaken at the location which

confirmed the findings of the EIAR. In relation to drainage at this location the NTA have stated that consultations with stakeholders have not identified the presence of an engineered soakaway and that the provisions of the Surface Water Management Plan (SWMP) will be applicable throughout the Proposed Scheme.

- In relation to property values and community impact the NTA states that the Proposed Scheme will greatly improve transport services in the area, and that the public realm will be improved, accordingly adverse impacts on amenity and property values are not anticipated. Furthermore, it is stated that the Proposed Scheme will not preclude any application for temporary local road closures to facilitate community events.
- In relation to cost/benefit analysis and environmental costs the NTA have stated that all reasonable alternatives and details of the multi-criteria analysis carried out have included consideration of economic costs and benefits. The NTA also clarified that the details of the cost of the Proposed Scheme have not yet been finalised due to ongoing inflation and need for final scheduling of the project, however, they refer to their BusConnects Preliminary Business Case website where it is noted that government granted Approval in Principle to allow consent applications to be lodged subsequent to the preliminary business case being submitted to the relevant Departments.
- The suggested alternative route to the Chapelizod bypass by using the Old Lucan Road to the rear of the Applegreen petrol station is neither necessary nor appropriate as it would lead to infringing on the Liffey Valley pNHA and Special Amenity Area Order, while also creating a traffic hazard due to proximity to other junctions.
- In relation to the access to the proposed new bus stops on the Chapelizod Hill Road the NTA have confirmed that the accessibility ramp access transitions a change in height of significantly above 2m which is the maximum permitted for wheelchair use for any series of ramps, furthermore it is acknowledged that the existing incline on Chapelizod Hill Road also exceeds the maximum gradient for wheelchair use. The proposed ramps have a gradient of 1:15 for

sections of 5m which complies with the building regulations for all users except wheelchair users.

- In relation to antisocial behaviour and overlooking from the new bus stops a 2m high solid wall is proposed along the boundary of the ramps addressing Knockmaree Apartments (the closest residential units affected), with a 1.25m solid parapet wall topped with a 0.55m stainless steel railing with infill woven mesh provided to the rear of the bus stop/shelters. In relation to noise impacts, the existing noise barriers in place will be retained or replaced in proximity to the new bus stop and the solid 1.2m high wall will also contribute to noise abatement.
- In relation to enforcement the applicant notes that while this is generally a matter for the Gardai, specific measures have been incorporated as appropriate within the Proposed Scheme such as advanced bus signal detection systems which will trigger green lights for authorised vehicles only.
- The applicant also clarifies that bus lanes along the Proposed Scheme will be operation 24hrs a day and 7 days a week.
- In relation to the provision of bicycle parking facilities the locations of proposed bike racks are shown on the Landscaping General Arrangement Drawings.

5.4. Third Party Objections to the CPO and Application

- 5.4.1. Three Objections have been received in relation to the CPO of lands, these parties have also made submissions to the application process and so where appropriate and to avoid repetition these are all dealt with and summarised hereunder in this section. The three submissions have all been made in relation to specific properties (the Knockmaree Residential Estate, the Hermitage Golf Club, and the Hermitage Clinic). The submissions received were circulated to the NTA and they were invited to respond. The NTAs response was in turn circulated to all third parties and two further responses were received (from the Trustees of the Hermitage Golf Club, and Torcross Unlimited Company [The Hermitage Clinic]). In this regard the Board may wish to note that a submissions made by Naomi Louisa O'Connell and Cuan Ó'Seireadáin, residents of Knockmaree Residential Estate reference the CPO,

however, they are focused on the adverse impacts of the Proposed Scheme on the amenities of the area, and the third parties are not listed on the CPO schedule, accordingly these submissions have been dealt with as submissions to the overall scheme referenced in 5.3 above, for the Boards reference the issues raised in the submissions are similar to those raised by the Knockmaree Management Company.

5.4.2. The Board should note that similar to the application process all parties to the CPO were erroneously informed in the correspondence that issued in June 2023 that a decision had been made to proceed to determine the current application without an oral hearing. No such decision had been made at that time and further correspondence confirming this issued to all parties on 8th August 2023. Ultimately, the Board considered that an Oral Hearing was not required in relation to the CPO in a decision dated 6th March 2024 and all relevant parties were informed of such in correspondence. All objections to the CPO, the relevant NTA response and further submissions from the third parties are summarised below:

5.4.3. **Knockmaree Management Company CLG (Compulsory Purchase Order)**

- Submission prepared by Marston Planning Consultancy on behalf of the Knockmaree Management Company (KMC) and references the proposed application as well as the CPO.
- Concerned solely with the impact the proposed scheme will have on the Knockmaree Residential Development (“the Estate”) in Chapelizod. Lands that form part of the Estate are subject to CPO (both permanent and temporary) to facilitate the proposed scheme, and specifically to accommodate the ramped (accessible/pedestrian) access to the bus stop on the inward leg of the Chapelizod Bypass from the Chapelizod Hill Road.
- The proposed pedestrian access to the bus stop is heavily engineered and provides 18 ramps to address the c. 10m height differential between the proposed new bus stop and the Chapelizod Hill Road.
- The height differential and steepness of the Chapelizod Hill Road means it is highly questionable as to how often the accessible ramps will be used and overall, the bus stop will be very difficult to transit for vulnerable users.

- The 26 bus offers a high frequency bus alternative which already exists in the village so the new bus stops will not give adequate or realistic service to local residents.
- The proposed works will result in the loss of mature trees, which have not been considered or surveyed in the submitted EIAR. No details of species quality or condition are provided nor are any details of the impact of the replacement of the mature trees with concrete ramps and railings on the biodiversity of the area and therefore the EIAR assessment is deeply flawed.
- There are no details of any proposed acoustic barriers between the new bus stops and the Estate. Furthermore, the works will necessitate significant cut and fill as well as the provision of large retaining wall structures.
- The proposed section (Drawing DR-CR-0015) provided shows the inability to provide adequate or sufficient tree planting between the works and Knockmaree. No detailed planting scheme is provided to confirm the height, girth and maturity of proposed tree planting, between the works and Knockmaree.
- The proposed ramping works are proposed within lands zoned as Z9 (Amenity/Open Space Lands/Green Network) within the Dublin City Development Plan 2022-2028. Furthermore, the works are immediately adjacent to the ACA and Conservation area on Chapelizod Hill road, accordingly the Proposed Scheme could contravene development plan provisions.
- The profound loss of trees will have a significant negative impact on the setting, visual and residential amenities of the Knockmaree development which will be compounded by the hard landscaping that is proposed (ramps, steps, retaining walls, and railings). This will only be mitigated in the medium to long term (from 7-60 years) and therefore table 17.8 findings from the EIAR conflict with the main body of the assessment.
- Arguments that the proposed development requires less land-take than previous publicly displayed options are misplaced as a previous iteration showing ramps to north of Chapelizod Hill Road were unlikely to comply with universal access and did not provide for a bus-stop lay-by.

- The EIAR noted that residents of Chapelizod Court raised concerns over the visual impact of an earlier design iteration (providing ramps to the north of Chapelizod Hill Road), and that the response from the applicant has been to move those visual impacts among other concerns to the south of the road to impact a greater number of properties and residents.
- Proposed development will have a significant adverse visual impact by replacing a mature sylvan landscape with hard landscaping.
- Residents' privacy will also be affected as those waiting at the bus stop will be able to look over and into properties.
- Existing trees help to attenuate traffic noise, proposed scheme will reduce the effectiveness of this and therefore have a significant adverse impact on residential amenity.
- Suggests an alternative solution be proposed such as the provision of a lift system to minimise impact.
- The proposed construction hours and activities will have a completely unacceptable impact on Knockmaree residents both in terms of noise and vibration arising. In relation to vibration a full structural survey of Knockmaree is requested to be undertaken in advance of any proximate works.
- Detailed noise surveys or assessment of the construction or operational noise in relation to Knockmaree have not been carried out. The construction hours sought in relation to piling and louder activities in the vicinity of Knockmaree are excessive (generally 7am – 7pm Mon-Fri and allowing additional works outside these times) and will give rise to significant adverse impacts, particularly with the recent increase in working from home activities.
- EIAR assessment on noise impacts from construction activities are broad and meaningless. Construction noise mitigation measures (such as 2.4m high screening along boundary) will have little effect on proximate works to Knockmaree which will occur at much higher levels.
- It is requested that works between chainage A5600 and A5900 should be conditioned to only occur between 8am and 6pm given the proximity to the Knockmaree residential development.

- Noise assessment does not adequately consider the noise attenuation provided by the extant compact trees in terms of the operational noise impacts on Knockmaree. Replacement of existing noise barriers is not sufficient for Knockmaree, increased acoustic screening can only be adequately achieved by relocating the bus stop a further distance away from this residential development and placing additional acoustic screens above the proposed 1.2m high boundary wall between chainage A5600 and A5900.
- Loss of trees and increase in traffic will result in reduction of air quality so the bus stop should be moved further away from the largest density of population.
- Raises concern that the Proposed Scheme may contravene the zoning provisions of the Development Plan.
- The material reduction in residential and visual amenity will result in a profound negative impact on property and property values in Knockmaree.

5.4.3.1. **NTA Response to Knockmaree Management Company**

- Reference is made to Section 3.4.4.5 of the EIAR in relation to the evolution of the design of the Proposed Scheme at this location.
- The height differential to be addressed between the Chapelizod Hill Road (CHR) and the proposed bus stops is approximately 5m on the southern side of the road, when compared to approximately 7m on the northern side of the road. Changing the ramped access from the north to south side of the CHR also facilitated a reduction in length of ramps from c. 177m to c. 138m, with a resultant reduction in overall area and land-take.
- It is acknowledged that the existing slope on CHR exceeds the relevant standards for wheelchair accessibility, however, the NTA states that the provision of steps alone would not be acceptable as people with child buggies etc. need to be catered for. The provision of a lift only alternative with steps is inappropriate as in the event of mechanical failure there is no alternative to steps.
- In relation to loss of trees the applicant refers to the Arboricultural Impact Assessment (AIA) and states that the trees have been accurately identified in the topographical survey and have therefore been identified.

- In relation to visual amenity, air quality, construction noise, ACA, conservation area, and vibration impacts the applicant refers to the relevant sections of the EIAR and the stated mitigation measures.
- The applicant acknowledges the Z9 zoning (To preserve, provide and improve recreational amenity and open space) and notes the lands subject to the works at this location is an embankment and does not serve as an area of recreational amenity to the community, furthermore a large portion of the habitat at this location will be retained thus avoiding complete fragmentation.
- In relation to loss of privacy the NTA refer to the 2m high block wall being provided to the boundary between Knockmaree and the ramp access, and the 1.25m wall topped with 0.55m fence/mesh being provided to the rear of the proposed bus stops in combination with the retained trees, and planting which will ensure that there will be no significant loss of privacy.
- In relation to operational noise the NTA refer to the walls referenced above, note that the existing noise barriers along the Chapelizod by-pass will be retained or replaced in the vicinity of the new bus stop, and note the impending electrification of the bus fleet which will remove internal combustion engine noise from buses in the area.
- The NTA do not consider that property values will be adversely affected, as the Proposed Scheme will in fact improve the public realm and connectivity of the area.

5.4.4. The Trustees of Hermitage Golf Club

- The submitted EIAR appears to not reflect the broad critical obligations to focus on setting out the significant effects both direct and indirect and mitigation measures where adverse effects are identified.
- Raises concerns regarding the extent to which the NTAs Transport Strategy for the Greater Dublin Area 2016 to 2035 is relied upon as the fundamental document guiding the scheme.
- Is concerned that there is no adequate description of the receiving environment, of the nature of the Hermitage Golf Club (HGC), its members,

the landscape (incl. its history) and a complete absence of knowledge as to the nature of the receiving environment in the EIAR.

- The absence of data in respect of the receiving environment and specifically that of Hermitage undermines the entire basis of the EIAR and renders any possible analysis of environmental effects impossible.
- The Hermitage has engaged extensively with the promoters of the scheme however, in their opinion only one option was being properly considered (that proposed) and as such adequate consideration of alternatives was not brought forward through the process.
- The level of cooperation provided by the Hermitage should not be considered as acceptance of the scheme as the proposals are devastating to the golf course and it will at a minimum require a complete re-design and additional land if it is to continue to function as a championship golf course.
- The cycleway and pedestrian way (which are of primary impact on the Hermitage) could be provided within the existing N4 corridor by reducing the speed limit to ≤60kph thereby allowing the traffic lanes to be reduced from 3.4m to 3.0m and facilitating the provision of a 2.4m corridor to accommodate a two-way cycle track without any land-take from the Hermitage.
- Another alternative that wasn't considered is the removal of one (or two) traffic lanes from the N4 this would facilitate modal shift, comply with the Climate Action Plan and assist in the 20% reduction in vehicle kilometres travelled.
- The lack of consideration of these alternatives is a clear breach of section 15 of the Climate Action and Local Carbon Development Act 2015, in that the Roads Authority failed to perform its functions in a manner consistent with the matters stated in section 15, including the most recent Climate Action Plan, the furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions.
- The lack of detail on the receiving environment, coupled with the failure to adequately consider alternatives which require the environmental reasons why the particular alternative was adopted, renders it impossible to properly identify the likely significant adverse effects or comply with the EIA Directive.

Accordingly, the EIAR is not fit for purpose, does not comply with the requirements of the EIA Directive, and cannot form the basis of an application under Section 51 of the Roads Act.

- The SDCC County Development Plan does not show an indicative alignment for either the BusConnects or cycle way at HGC's southern boundary or within the golf course. The land use zoning maps do include an orange and green dashed line to denote a cycle way proposal but there is none shown within proximity to the Hermitage's southern boundary at the N4. It is well established that for a major development to proceed it must be provided for in the statutory development plan⁷, the proposed scheme while referenced in the development plan has not been adequately afforded such status and accordingly it would be ultra vires for the Board to determine the matter.
- As the cycleway route has not been identified in the development plan granting the subject cycleway would constitute a material contravention in accordance with the principles set out in the AG(McGarry) v Sligo County Council [1989] I.L.R.M. 768. The Proposed Scheme would be contrary to the Development Plan provisions including zoning.
- It is difficult to identify any basis under the definitions in section 47 of the Roads Act that would allow the development of a cycle way as part of the proposed bus corridor scheme. It is submitted that subject development does not fall within the strict definition of a road scheme under section 47 of the Roads Act and accordingly the entire legal basis upon which the application is made is undermined.
- The submission questions the reliance on the 1966 Housing Act for purposes of compulsory purchase, as the NTA is involved (and not a local authority) and as it is a Roads Scheme the provisions of Section 49 of the Roads Act should be relied upon. The Roads Act provides for specific acquisition powers vested in the Roads Authority for road construction accordingly it is not appropriate to proceed under Section 76 and the Third Schedule of the Housing Act in relation to the current CPO.

⁷ Roughtan V Clare County Council [unreported, High Court, 18 December 1996]

- The Board should have a preliminary hearing in respect of the legal issues that have been raised in order to decide whether it is appropriate to proceed. In this regard it should be decided whether the NTA as a road authority is entitled to CPO lands under the housing legislation. The submission states it would be unacceptable and contrary to appropriate procedures in this case to proceed without first determining this matter, and if the Board are not inclined to carry out such a preliminary hearing, then it is requested that HGC are informed as soon as practicable so that they may argue their position without having the expense of engaging in an oral hearing.
- The EIAR is deficient in considering the impacts on Hermitage and little or no analysis has been conducted of the impact of the construction works or the operational works on the lands and on the operation of the facility. This exercise cannot be completed now, and any future oral hearing does not present an opportunity to amend any lacunae in the EIAR. The Board is urged to reject the application on the basis of the fundamental inadequacy of the EIAR, the Hermitage is a voluntary organisation who should not have the burden of identifying the effects/impacts which the proposed scheme will have on the golf course/club in the absence of detailed findings within the EIAR.
- Cumulative/In Combination effects have not been considered adequately or at all in the NIS, and there is a complete absence of detail in respect of how the proposed scheme is to be implemented, its sequencing and definitive findings. It is requested that the Board considers the application invalid and makes this determination in advance of the Hermitage having to engage a range of expertise at significant cost.
- Applicants await the Boards consideration of these preliminary matters regarding the EIAR and AA before they consider their options in terms of progressing any matters before the High Court. Should the Board consider that the application can proceed the submission states that they would then be entitled to elaborate on and furnish further particulars.
- The submission formally requests an Oral Hearing for both the application and CPO elements and requires that the application be determined in advance of the CPO, as well as referencing several procedural issues, presenting

significant legal argument in relation to both processes, including their timing, EIA and AA procedures and requests distinct preliminary inquiries.

5.4.4.1. NTA Response to Hermitage Golf Club

- In relation to reliance on the Greater Dublin Area Transport Strategy (GDATS) the applicant notes that this is a statutory strategy required under the Dublin Transport Authority Act, 2008, and notes the provisions of section 37J of the Planning Act which states that where a state authority or the Board is carrying out any relevant function in the GDA the transport strategy shall be a consideration material to the proper planning and sustainable development of the area. The Proposed Scheme is supported by a mix of 31 separate international, national, regional and eight local policies of which the GDATS is one, therefore undue reliance has not been placed on it.
- The submitted EIAR provides full and complete information of the likelihood of significant effects and has been compiled by suitable experts and the Hermitage Golf club has been described and assessed fully. The NTA goes on to list the references to the Hermitage from the EIAR.
- Primary Route 06 of the GDA cycle network plan (adopted in 2014) follows the route of the Proposed Scheme at this location, and chapter 3 of the EIAR provides a detailed review of the consideration of alternatives. The provision of a 2-way cycleway along the frontage of the Hermitage Golf Course:
 - Reduces the number of intersections with junctions/private accesses,
 - Satisfies the GDA cycling strategy in this area,
 - Provides a new link between Ballyowen Lane and Road with minimal detours, and
 - Eliminates the need for cyclists to use the shared area at junction 2 of the N4 westbound.
- The alternative of placing a two-way cycle track on the southern side of the road at this location was assessed and it required land acquisition from 23 residential properties, 2 commercial properties, tree loss and the provision of a new cycle crossing of the N4 proximate to the existing pedestrian bridge

and would therefore have significant additional impacts over the Proposed Scheme.

- The removal of a bus lane or a traffic lane were also considered as alternatives to accommodate the cycling infrastructure, with both options being discounted as it would be contrary to scheme objectives and road traffic demand respectfully. The N4 at this location has a strategic importance serving the N4 connection to Sligo, N5 to Castlebar/Westport and the M6 to Galway. Three general traffic lanes are required to accommodate the baseline traffic demand (4315 and 4735 vehicles per hour AM and PM peak respectively from automatic traffic counts in the vicinity – the generally accepted capacity for a single lane on a national road being c. 1600 to 1700 vehicles per hour). Even with the Proposed Scheme in effect the reductions in traffic flows on this link are not of sufficient significance to justify a lane removal.
- There would be operational, safety and enforcement issues associated with any proposed reduction in speed limits at this location requiring TII involvement, who did not request or raise speed limit (or reduction in lane widths) as a consideration during consultations.
- Speed limit and lane reductions would still necessitate land take at this location and would require significant additional works (drainage moving the median) for approximately 2 km.
- Land-take from the golf club has been minimised throughout the consultation period insofar as practicable, and the final design will result in the loss of the fewest number trees and comprises a continuous piled retaining wall that will be built entirely from the N4.
- The Proposed Scheme will provide the transport infrastructure required to deliver sustainable transport options that will supporter the key actions set out in CAP23.
- The NTA submits that the permanent and temporary land take from the frontage of the Hermitage Golf Club will not lead to the ‘complete destruction and obliteration of this facility’, as replanting will take place and the land take involved represents a small percentage of the overall lands at this location.

- In relation to development plan compliance the applicant notes that the provision of the BusConnects Core Bus Corridors are referenced throughout the SDCC development plan, and the SDCC submission on the application acknowledges that the Proposed Scheme aligns with the policies of the development plan, there can therefore be no suggestion that there was a failure to disclose the intention to carry out the Proposed Scheme. Furthermore, the location of the subject works within the High Amenity – Liffey Valley area has been fully assessed and considered within the EIAR.
- In relation to procedures the NTA has stated that it has powers to acquire lands by means of a CPO under Part XIV of the 2000 Act, accordingly there is no basis for a preliminary hearing, and the application is being processed through the appropriate system. The NTA have correctly made an application for approval of the Proposed Scheme under Section 51 of the Roads Act as it is a proposed road development subject to EIA.
- In relation to the NIS the NTA state that this is cognisant of the hydrological connectivity of the Proposed Scheme and has appropriately considered potential in-combination impacts.
- The NTA is satisfied that the extent of the CPO lands at the Hermitage Golf club is justified and have been clearly set out for a specific purpose.
- In relation to the timing of the application and CPO decision processes the NTA refer to section 51(7)(b) of the Roads Act which requires that where a proposed scheme and CPO are required for the same proposal then the Board must decide both at the same time.
- The NTA notes that the Board has all relevant information before it to make a decision on both cases and there is no question that further lands may be required by the NTA to carry out the Proposed Scheme or any associated mitigation measures.

5.4.4.2. Trustees of Hermitage Golf Club Comments on NTA Response

- Disagree with reviewing the CPO and application at the same time, as these are two separate processes with different assessment criteria. The Hermitage

requests the Board to reconsider holding an Oral Hearing due to the complexity of the issues involved.

- Questions are raised in relation to the persons listed as having an interest in the Hermitage lands within the CPO and that this points to an inadequate level of investigation throughout.
- Raises a number of procedural issues in terms of the ownership and schedules within the CPO, and states that mapping provided in the NTA response relating to land ownership is inaccurate.
- Queries why the original gate lodge has been omitted from assessments, and states that there is a lack of analysis of the impacts on a number of protected structures which lie within the curtilage of the Hermitage including the estate wall which is to be demolished.
- Concerned that the specific property rights to be extinguished in the CPO have not been identified.
- EIA has failed to assess the impact on the Hermitage, loss of trees, impact of safety netting (which is proposed on lands within the temporary land take for the CPO), the excessive amount of lands required within the CPO (both permanent and temporary) which overall will render the 16th hole unplayable. The CPO involves the lands between the 16th fairway and the boundary, this 'rough' is part of the 16th hole and its loss temporary or otherwise will render the 16th hole unplayable. Similarly, the location of the 7th and 17th holes t-boxes are too proximate to the proposed works areas, these will also be unplayable due to noise, dust and risks.
- Safety netting is proposed on lands outside the permanent land take area (proposed as temporary and handed back to the HGC) which is considered inappropriate.
- The Proposed Scheme is a busway for the purposes of Section 51 of the Roads Act and therefore should be considered under a different consent procedure.
- The Proposed Scheme has not been assessed against the current Climate Action Plan, and the traffic volumes that are being designed for are not

appropriate and do not necessitate the level of infrastructure proposed at the Hermitage lands.

- There has been no effective assessment of the Hermitage's proposed alternative to cater for the works proposed within the existing road corridor and it should be acceptable to propose alternative speed limits.
- Significant legal argument is presented stating that the Board cannot and should not determine whether or not to hold an Oral Hearing until such time as all submissions have been made. They have requested all details and letters from the Board in relation to the determination to not hold an Oral Hearing and are of the opinion that not holding a hearing is prejudicial to their clients' rights and constitutional protections. They note that there is conflict of evidence between the NTA and Hermitage positions that can only be resolved through an Oral Hearing.
- The NTA have not clarified the extent to which the requirements of the SEA of the Transport Strategy have been incorporated into the Proposed Scheme.
- If the scheme is subthreshold in terms of EIA as asserted by the NTA the information to determine significant effects has not been provided.
- The CPO process and application process are different, the Board does not have the information to properly conduct the type of assessment required for the purposes of section 49 of the Roads Act which is wholly different to that under section 51.
- The NTA response does not accurately show the full extent of the Hermitage landholdings and therefore level of impact and assessment of alternatives to provide the least impactful cannot be determined.
- The Proposed Scheme will adversely impact Hermitage House which is a protected structure and its attendant grounds, old gate lodge, landscape and demesne wall. These impacts have not been properly assessed nor impacts addressed. The works therefore constitute a material contravention of the SDCC Development Plan and accordingly the CPO should not be confirmed.
- The CPO does not contain full and complete information in relation to the potential impacts on the Hermitage Golf Club/Course, and therefore the CPO

cannot be confirmed. The application has failed to consider the importance of Hermitage Golf Club, and its standing as an internationally recognised championship standard course.

- The assessment contains no golfing expertise, the temporary acquisition of lands (/ 'rough') between the 16th fairway and existing road boundary will render the hole unplayable, resulting in the course being a 17-hole, non-championship course for at least the duration of construction activities, with no definitive construction period in place. The club will lose members and become unviable in this context as a 17-hole golf course will not draw visitors or members. The works will require the course to be completely redesigned which will have planning and environmental implications for the club.
- Dust, Noise and Vibration assessments do not consider the unique nature of the use of the Golf Club and its sensitivity and viability. Significant excavation and rock removal is required, along with tree removal. No details of the methodology for rock removal have been provided (i.e. whether blasting or ripping). Golf cannot be played with high levels of noise, and it appears that the golf course has not been identified or treated as a noise sensitive location.
- Hermitage has engaged consultants who have estimated that there will be an increase of 10dB in the operational noise effects from the Proposed Scheme, however, no noise attenuation has been incorporated and accordingly this proposal cannot be considered the “least bad” option in terms of confirming the CPO. Construction noise will be even more impactful given the nature of excavation and rock removal required.
- The submission includes additional written reports from environmental consultants (in relation to noise), consulting arborists (discussing tree felling) as well as from Golf Ireland (relating to the overall status and significance of the Hermitage Golf Club) and from a senior member of the European Institute of Golf Course Architects (in relation to a design analysis of the 16th hole).
- Reference to the EIAR does not provide the required detail for providing the least impactful approach on lands subject to CPO the procedures and assessment criteria are different. The Board must therefore either convene an oral hearing in relation to the CPO or alternatively refuse the application.

5.4.5. **Torcross Unlimited Company**

- Submission is made in relation to the land-take associated with the proposed development (plot no's 1010(1).1i, 1010(2).2i and 1013(1).1f) relating to lands along the frontage of the Hermitage Clinic and at the Fonthill Road/Old Lucan Road roundabout at the N4 Junction 2). The submission raises concerns in relation to the effects of the proposed scheme, implications for proper planning and sustainable development of the area and likely significant effects on European Sites.
- The extent of land-take set out for the Proposed Scheme is excessive, unnecessary and could detract from the delivery of Healthcare services by the Hermitage Clinic. The submission queries whether the effects on the clinic and alternatives to the size of the land-take have been adequately assessed in the EIAR. It is requested that further information be sought in this regard and Torcross be afforded the opportunity to make additional comments at that stage as the lack of these assessments has hampered their ability to engage.
- The land-take areas are between the Clinic and the N4, this is the general area of the site which has been ear-marked for expansion of medical services and are essential to it.
- The proposed scheme may be contrary to the zoning at this location and represent a material contravention of the Development Plan zoning and designation of a significant view to be protected/preserved. No before and after views of the project and its impact on this significant view are presented for consideration.
- The Clinic is a sensitive receptor and has raised concerns previously with the NTA in terms of any proposed works adjacent to the medical facility and their need to comply with the National Guidelines for the Prevention of Nosocomial Aspergillosis. The EIAR states that the NTA will liaise with the clinic in this regard, however, additional detail and confirmation on this is sought.
- There has been no consultation by the NTA and Torcross regarding the reinstatement/planting works to be carried out in relation to the retaining wall structure proposed along the clinic frontage with the N4 which is shown to be

over 8m on the clinic side and will involve the removal of a number of significant trees.

- The submission asks that the Proposed Scheme services the Clinic by bus and requests that additional information be requested in this regard, the nearest bus stop to the clinic is 500m distant which will be difficult for patients to undertake. Also, the routes to the bus stops are poor as there is a lack of pedestrian crossings across busy roads, better design is needed to facilitate patient access to the only acute hospital facility on the N4 corridor (incl. signage). The NTA is asked whether it would be willing to direct bus routes through the clinic site if a suitable bus stop location was identified.
- The NTA has failed to take account of/plan for the integration of the proposed scheme with Metro West, and this is a critical flaw which disregards policy SM3, Objective 13 of the adopted SDCC County Development plan.
- The clinic raises security concerns in relation to antisocial behaviour on part of the clinic property that is subject to CPO, as such any works should prevent unauthorised access to the wooded area along the frontage with the N4 and provide for adequate lighting.
- Existing access point to the facility should be retained for maintenance purposes.
- Torcross confirms that should further information be requested it wishes to have the opportunity to make a further submission and should the board hold an oral hearing that they wish to attend.

5.4.5.1. **NTA Response to Torcross**

- Having reviewed all relevant alternatives, the provision of a two-way cycle track along the northern extent of the N4 at this location and its associated land-take requirement is considered optimal to achieve the aims of the Proposed Scheme. Furthermore, a new TII standard produced in relation to hard shoulder bus priority measures necessitated amendment to the finalised Proposed Scheme at this location.
- In relation to development plan compliance the applicants state that impact on views has been fully assessed and note the SDCC submission which states

that they are of the view that the Proposed Scheme aligns with the development plan policies.

- The high amenity zoning does not put a moratorium on enhancing roads infrastructure at this location and the development plan contains a long-term high-capacity public transport route through this zoning, so the principle of such works is considered acceptable. Furthermore, all impacts (including those on views from this location) have been adequately assessed within the EIAR.
- The Proposed Scheme land-take will not impact on future expansion as it only occurs along the frontage of the landholding within an existing embankment and does not interfere with the location of existing or consented developments.
- In relation to Nosocomial Aspergillosis the NTA state that impacts/risk has been fully assessed and the EIAR contains mitigation measures in this regard.
- In relation to landscaping the provisions of the EIAR are referenced and clarification is provided in relation to the maximum height of the inside of the retaining wall facing the clinic which will vary from 4.5 - 5.0m, while it will be 2m high facing onto the road for security purposes.
- Servicing the clinic by bus is beyond the scope of the Proposed Scheme.
- In relation to interfacing with Metro West the NTA state that neither the Development Plan nor the Transport Strategy for the GDA 2022-2042, provide specific objectives for Metrowest indicating that it is not considered achievable up to 2042, and accordingly as plans firm in relation to that proposal it will need to demonstrate interface with the transport network in place at that time.

5.4.5.2. **Torcross comments on NTA Response**

- Requests that the Board reconsider its decision to not hold an oral hearing as the NTA submission has not addressed their concerns raised above this is not a case that can be dealt with adequately through written procedure.
- Torcross is of the opinion that the Proposed Scheme is too wide and that a 3.9m wide 2-way cycle track is neither required nor justified.

- Impact on protected view has not been addressed, nor has the impact of the land take on future expansion and the need for additional planting to mask views of the retaining feature.
- Works could have an adverse impact on clinic operations due to site conditions, level differences, and the sensitivity of receptors (Nosocomial Aspergillus). The NTA do not have a binding obligation to ensure works do not affect medical operations or procedures. The NTA have not committed to a timeframe for works or commitments for operations to ensure no impact on the Clinic.
- Reiterates that the proposed bus stops are too distant from the clinic to service the facility, there has been no consideration for interface with Metro West and there is no detail as to the soil depths to facilitate tree planting post construction.
- Torcross restates that it would like to be involved in any future Oral Hearing and re-engage again in the event of a Further Information Request.

6.0 Oral Hearing

The Board considered the documentation on hand and decided to determine both the Compulsory Purchase Order and Proposed Scheme case through written procedures. Accordingly, no oral hearing has been held for either case. I note that an initial letter issued to all parties in June 2023 erroneously informing them that the Board had made the decision to not hold an oral hearing had been made and inviting third parties to make further written submissions on the applicants responses to their initial submissions by the 10th of July at the latest (no such decision on an Oral Hearing had been made at that time). Sixteen responses to the NTAs comments were received by the Board. Further correspondence issued from the Board on the 8th of August to inform parties that a decision to hold an oral hearing had not yet been made. Ultimately, the Board did consider that an Oral Hearing was not required in relation to either the application or the CPO case as set out in the Board direction issued 6th March 2024 and correspondence confirming this was issued to all parties in March 2024.

7.0 Assessment

7.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, I refer to the issues raised by all parties, made either in the application documentation by the applicant, made to the Board in response to the application documentation, and submissions received following circulation of the applicant's response to submissions. There is an inevitable overlap between the various assessments being undertaken. In the interest of brevity, matters are generally not repeated but rather cross-referenced as appropriate.

8.0 Planning Assessment

8.1. Introduction

- 8.1.1. A substantial amount of information has been submitted to the Board in relation to this project throughout the application process. The planning assessment below has had regard to all the information provided, including the original application documentation, all submissions and observations lodged by third parties (including prescribed bodies), the response to the submissions lodged by the applicant and subsequent further third-party submissions following circulation of that response.
- 8.1.2. I have read all the documentation on file including the EIAR, NIS, planning report and supporting documentation 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 relevant Planning Authorities as well as the observations from the Department of Housing, Local Government and Heritage. Having regard to all the information that has been received, I consider that the key issues for consideration by the Board in this case are as follows:
- Policy Context / Principal of Proposed Scheme.
 - Justification and Need for the Proposed Scheme.
 - Route Selection/Alternatives for the Proposed Scheme.

- Project Design
- Biodiversity
- Residential Amenity
- Development Plan Compliance
- Impact on Individual Properties
- Cultural Heritage
- Consultation
- Process, Ownership and Legal Agreement
- Recommended Conditions

8.2. Policy Context / Principal of Proposed Scheme

- 8.2.1. The Proposed Scheme essentially constitutes the provision of additional infrastructure to facilitate improved public transport (bus lanes and bus priority measures), cycling (provision of segregated cycle tracks throughout and improved cycling safety measures at junctions) and pedestrian (public realm, footpaths, as well as an increased number of controlled pedestrian road crossings) movement. Overall, the Proposed Scheme aims to improve the reliability, efficiency, access, and availability of public transport while also improving other sustainable transport infrastructure (cycling and walking) along this established transport corridor. The Proposed Scheme forms one of a number of BusConnects infrastructure projects which are being proposed throughout several of the main radial transport arteries of Dublin. The infrastructure improvements associated with the Proposed Scheme will contribute towards the development of sustainable communities, as well as providing an economic stimulus from improved accessibility.
- 8.2.2. Section 4 of this report sets out in detail the overall policy context for the Proposed Scheme at national, regional and location level. In the interests of clarity, I note that some submissions have raised concerns that some of the application documentation refers to plans that have been updated since the application documentation has been lodged. In this regard the Board should note that the policy documentation

section (and the context for my consideration below) refers to and considers the Proposed Scheme under the current and relevant planning policy documentation.

- 8.2.3. At national level the Climate Action Plan 2024 (CAP24) builds on the previous 2023 Plan and confirms the carbon budgets for the transport sector (including a 20% reduction in total vehicle kilometres, 50% reduction in fuel usage and significant increases to sustainable transport trips and modal share), as well as maintaining and emphasising the avoid – shift – improve framework to achieve the set carbon budgets. Put simply these frameworks prioritise actions to avoid the need to travel; shift to more environmentally friendly modes and improve the energy efficiency of vehicle technology. The Board should note that at time of reporting the CAP23 remains in place and that CAP24 was open for public consultation from February 2024 until the 5th of April, I am satisfied that the Proposed Scheme complies with the provisions of both CAP23 and CAP24 as there is a broad policy consistency throughout both documents and their associated Annexes of Actions which both reference BusConnects as a mechanism for reducing total vehicle kilometres and fuel usage and increasing sustainable transport trips. The Board should therefore note the relevant Climate Action Plan in place at the decision date.
- 8.2.4. The Proposed Scheme (which forms part of the BusConnects programme) provides for road space/carriageway reallocation to prioritise more sustainable forms of travel. The reallocation of road space is a measure outlined in both CAP 23 and CAP24 under both ‘avoid’ and ‘shift’ to promote active travel and modal shift to public transport. The Proposed Scheme, prioritises public transportation and sustainable modes of travel throughout its design by improving footpaths, providing segregated cycle tracks, and reducing the amount of car parking spaces available along the route. The additional infrastructure being provided will increase the attractiveness of public transport (through improved reliability and efficiency), cycling and walking (through improved safety measures and networks), and while space is still provided for general traffic along the route, public transport is prioritised. BusConnects is also seen as a key action under the major public transport infrastructure programme to deliver abatement in transport emissions.
- 8.2.5. The National Development Plan (NDP) recognises BusConnects as one of the major regional investments for the Eastern and Midland Region and overall the project is identified as a strategic investment priority noting that it will overhaul the current bus

system in all of the relevant cities making journeys faster, predictable, and more reliable. 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. The NDP states that BusConnects will implement a network of 'next generation' bus corridors including segregated cycling facilities on the busiest routes to make journeys faster, predictable, and reliable.

- 8.2.6. The National Planning Framework recognises that Dublin is too heavily dependent on roads and private car-based transport, and National Strategic Outcome (NSO) 4 'Sustainable Mobility' seeks the expansion of '*...attractive public transport alternatives to car transportation to reduce congestion and emissions and to enable the transport sector to cater for the demands associated with longer-term population and employment growth in a sustainable manner...*'. In relation to population, the NPF targets a growth of 20-25% - an increase of 235,000 to 293,000 - to 2040 for Dublin City and suburbs. One of the measures identified in NSO4 to cater for the development of attractive public transport alternatives is to deliver BusConnects as a key public transport objective of the GDA transport strategy.
- 8.2.7. Other relevant NSO's from the National Planning Framework to which BusConnects will contribute include NSO 1 (Compact Growth) and NSO 8 (Transition to a Low Carbon and Climate Resilient Society) through facilitating the provision of higher densities along sufficiently serviced transport corridors, increasing accessibility, and contributing to the transition to more sustainable modes of travel through providing additional infrastructure to improve the attractiveness of public transport, cycling and walking. Furthermore, the provision of infrastructure which will increase accessibility, prioritise people movement, improve public transport, and pedestrian connectivity as well as the public realm as set out in the Proposed Scheme will also, in my view, contribute in a positive manner towards NSO 2 (regional accessibility), NSO 5 (strong economy), NSO 6 (international connectivity), NSO 10 (access to quality childcare, education and health services), and 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*".

- 8.2.8. At regional level, the Eastern & Midlands Regional Spatial and Economic Strategy (RSES) includes the Dublin MASP which seeks to focus growth along high-quality transport corridors, and specifically references the delivery of sustainable transport projects including BusConnects (Regional Policy Objective 5.2 refers – quoted previously in full in section 4.8.2 of this report above).
- 8.2.9. There are four objectives which have been developed to support the delivery of the overall aim of the Transport Strategy for the Greater Dublin Area, 2022-2042 these are to provide: an enhanced natural and built environment, connected communities and better quality of life, a strong sustainable economy, and an inclusive transport system. The Proposed Scheme will, in my opinion, contribute to all four of these objectives through improving bus priority, reliability and efficiency throughout the entire transport corridor, facilitating the movement of a higher number of people in a sustainable manner, improving cycling infrastructure both in terms of extent of network and safety, as well as improving the public realm and pedestrian facilities.
- 8.2.10. The cycle facilities proposed under the Proposed Scheme 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 Greater Dublin Area Cycle Network Plan (January 2023), which includes the identification of the urban cycle network at the Primary, Secondary and Feeder Levels, which have been identified along the Route of the Proposed Scheme as follows:
- R136 Ballyowen Road (overpass of the N4 at Junction 3) – Primary Radial Cycling Route.
 - Hermitage Road/Ballyowen Lane – Feeder Cycling Route.
 - R835 Lucan Road, Hermitage Golf Club access road – Secondary Cycling Route.
 - N4 (along frontage of Hermitage Golf Club, Sureweld, and Hermitage Clinic including the inbound slip to the Fonthill Road junction 2) – Primary Radial Cycling Route.
 - R113 Fonthill Road (between junction 2 roundabout and Lucan Road Roundabout at Hermitage Clinic) – Primary Orbital Cycling Route.

- Old Lucan Road, from Roundabout at Hermitage Clinic, past the Deadmans Inn, (including the existing foot/cycle bridge over the N4 to Liffey Valley Shopping Centre), along the N4 north-bound slip onto the M50, over the existing M50 pedestrian/cycle bridge, through Palmerstown West and East, to the rear of the existing Applegreen petrol station and onto the R112 Lucan Road slip into Chapelizod – Primary Radial Cycling Route.
- Kennelsfort Lower and Upper – Secondary Cycling Route.
- R148 Palmerstown Bypass (between the Oval and Kennelsfort Roads junctions) – Feeder Cycling Route.
- R148 Palmerstown Bypass from Old Lucan Road/Oval Junction to R112 Lucan Road slip into Chapelizod – Secondary Cycling Route.
- There are no cycling route designations along the Chapelizod by-pass up to its junction with the Con Colbert Road, however, from this point through the South Circular Road junction, along St. Johns Road West and to the termination of the Proposed Scheme prior to the Frank Sherwin Bridge is identified as a Secondary Cycling Route.

On review of the documentation submitted, in my opinion, the Proposed Scheme will facilitate the delivery of an improved and necessary cycling network through the provision of segregated cycle tracks, shared cycling facilities and quiet street treatment with safer junctions for cyclists along the entirety of the route where appropriate, and in accordance with the designated routes and hierarchy established in the cycle network plan. I also note that the preceding Greater Dublin Cycle Network Plan (NTA 2013) was broadly consistent with that of the current plan with the N4 from the Ballyowen junction through Palmerstown Village being designated as primary route 6 before turning off at the Chapelizod slip road and being designated as secondary route 6A from Con Colbert Road to the end point of the Proposed Scheme at Heuston Station.

8.2.11. The Proposed Scheme extends through the functional areas of both South Dublin County Council and Dublin City Council, sections 4.13 and 4.14 of my report above lists and summarises the range of policies and objectives from the relevant current plans of these local authorities.

- 8.2.12. The SDCC development plans overarching policy for transport and movement is SM1, - *“Promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high quality sustainable transport and movement network for people and goods.”* Other more targeted objectives in relation to this policy include SM1 (transition to more sustainable travel modes), SM2 (to ensure consistency with the NTA’s Transport Strategy for the GDA – which I note includes the Cycle Network provisions), SM3 (to support the provision of key sustainable transport projects including inter-alia BusConnects), SM4 (future development facilitates sustainable travel patterns), and SM6 (better utilise existing road space and encourage a transition towards more sustainable modes of transport). I also note the submission from SDCC in relation to the Proposed Scheme which supports the principal of the works and does not raise any issues in relation to its overall nature, need and policy support.
- 8.2.13. The Dublin City Development Plan 2022-2028 (DCDP) includes objective SMT001 which aims to achieve the transition to more sustainable travel modes including walking, cycling and public transport. The DCDP supports the provision of the BusConnects Core Bus Corridor projects (SMT22 of the DCDP refers – see section 4.14 above), which identifies BusConnects as one the key sustainable transport projects which are supported by the City Council. Furthermore, the DCDP supports the improvement of the public realm, pedestrian improvements, the development of the 15-minute city, and increased management of city centre road space to address the needs of pedestrians and cyclists (SMT 12, 13 and 14 refer). I also note that the DCC submission to this application did not raise any issues in relation to the principle of the Proposed Scheme.
- 8.2.14. I consider that the Proposed Scheme has significant policy support at national, regional, and local levels in the context of the relevant published and adopted plans and strategies. The policy documents at all levels have identified congestion and pollution as significant constraints in the context of being able to deliver sustainable development throughout Dublin and its wider hinterland, furthermore all policy documentation recognises, predicts, and indeed encourages the continued population and economic growth of the City. In my opinion in order to facilitate the sustainable development of Dublin, improve the facilities, amenities, accessibility, health and wellbeing of its residents, commuters and visitors, improvements to its

transport network in general and public transport network in particular, as well as improving cycling and pedestrian infrastructure is not only necessary but vital.

- 8.2.15. The Proposed Scheme provides significant bus priority infrastructure, improved pedestrian measures, while also creating a safe and segregated cycling track network at appropriate locations along this existing transport corridor. In doing so it will facilitate improved public transport reliability, access, and availability, while also improving cyclist and pedestrian safety, and making these sustainable modes of transport and people movement more attractive. The Proposed Scheme achieves this in conjunction with maintaining private vehicle access over the route, albeit I note that certain measures and traffic controls are being incorporated which will restrict some vehicle movements at certain locations.
- 8.2.16. A double-deck bus is 20 times more efficient at transporting people than a private car, with a bus typically carrying 60-70 passengers using the same amount of road space as 3 cars, making this option more attractive and reliable for passengers will improve accessibility and people movement while also reducing congestion and emissions. Similarly, car dependent traffic also takes up more room than cycling or pedestrian traffic and as such providing infrastructure and safety measure improvements for these modes of travel will also reduce congestion, increase people-moving efficiency and attractiveness of these modes which will ultimately increase the numbers of people using more sustainable means of travel.
- 8.2.17. The Proposed Scheme will result in an increase of 40% in pedestrian signal crossings, an increase from 26% to 95% in segregated cycling facilities along the route. It will also result in 93% (an increase from the existing 72%) of the route having bus priority measures predominantly through the provision of bus lanes.
- 8.2.18. The modelling carried out as part of the application process shows that in the 2028 AM peak hour the Proposed Scheme will result in an increase of 24% in the number of people travelling by bus, an increase of 56% in the number of people walking and cycling and a reduction of 4% in the number of people travelling by car along the route. I consider the modelling carried out is robust, based on accurate data and reaches reasonable conclusions. These are significant improvements that will reduce the amount of congestion along this existing transport corridor and provide a

mechanism whereby the predicted population and economic growth for Dublin can be sustainably managed in terms of traffic and transport demands.

8.2.19. In consideration of the above, I am of the opinion that the Proposed Scheme is comprehensively supported by the relevant planning policy context, and furthermore it will address congestion throughout the route by improving public transport, cycling and pedestrian infrastructure and contribute towards reducing emissions. In providing infrastructural upgrades for pedestrians, cyclists, and bus traffic the attractiveness of these more sustainable modes of travel will be increased from their current levels which will encourage their use. The improved safety measures for cyclists (segregated cycle tracks) and pedestrians (improved quality of footpaths and increased number of controlled crossings over carriageways) will also lead to increased participation in these modes. I also note that capacity for private cars is retained throughout the route that some turning restrictions, and car parking space losses will also be applicable for that mode of transport. In my opinion this is appropriate as it facilitates the prioritisation and improvement of the most sustainable modes of transport available along this corridor and provides for the optimum use of the available street space. Accordingly, I consider that the principle of the Proposed Scheme is acceptable and consistent with the provisions of the relevant planning policy context.

8.3. Justification and Need for the Proposed Scheme

- 8.3.1. In relation to the justification of the proposed scheme, I point to the significant traffic congestion which arises throughout Dublin as is acknowledged in all relevant policy documentation and the detailed traffic modelling that has been undertaken within the application documentation. This congestion results in adverse impacts on, air quality, public health, population wellbeing, the amenities of the area concerned and the economy. The NPF notes that the population of the Greater Dublin area is to increase by 25% by 2040, which will give rise to significant additional traffic and travel demands over and above that currently being experienced.
- 8.3.2. The submitted EIAR provides modelling of future traffic in both the 'Do Minimum' - (which allows for the provision of other GDA transport strategy improvements – such as roll out of the DART+ programme, and cycle network plan - but not the Proposed

Scheme, or any other BusConnects Core Bus Corridor infrastructure works), and ‘Do Something’ scenarios which incorporates the Proposed Scheme, the other core bus corridor infrastructure works as well as the other GDA transport strategy improvements. The modelling carried out shows a consistent increase in the travel demands associated with both a growing population and economy and highlights the significant improvements throughout in the ‘do something (DS)’ scenario when compared to the ‘do minimum’ (DM) scenario. Positive impacts are predicted in relation to pedestrian, cycling and bus infrastructure. Very significant positive and long-term impacts are predicted from the modelling in terms of bus network performance (journey times and bus reliability) with total bus journey time being reduced by up to 19% during the AM and PM peak hours in 2028 and 2043.

8.3.3. Currently the existing transport corridor suffers from a deficient cycling network with only 26% of the route having segregated cycling facilities in place. This is inadequate, inappropriate, and unsustainable along such a significant transport corridor. All relevant policy documentation points to the need to encourage and improve cycling facilities throughout urban areas and the benefits (in terms of both health and people movement) that arise. The Proposed Scheme provides segregated cycling tracks along 95% of the corridor at locations and routes that have been identified as primary, secondary and feeder routes for cycling within the GDA Cycle Network which forms part of the GDA transport strategy. In my opinion, it is neither sustainable nor appropriate to argue, as set out in some submissions, that the provision of cycle tracks and cycling facilities along the route of the Proposed Scheme is inappropriate or unnecessary. Furthermore, I acknowledge and accept that the preferred and safest approach for cycling facilities is as a segregated track (and not a shared facility with a bus lane) and that the provision of such infrastructure represents the safest form for all road users and will encourage more people to use this sustainable and healthy mode of transport.

8.3.4. Having regard to the above, I consider that the Proposed Scheme is entirely justified in terms of providing for improved public transportation, cycling and pedestrian network while also enhancing the public realm where practicable. In the interests of clarity, I wish to state that I consider the timing and modelling of the relevant traffic surveys to be appropriate and robust. The Proposed Scheme offers the best opportunity to address congestion and ensure the transport requirements over the

medium and long term can be catered for. Furthermore, the Green House Gas (GHG) emission savings potentially facilitated by the Proposed Scheme equates to the removal of approximately 2,180 and 3,460 car trips per weekday from the road network in 2028 and 2043 respectively, further justifying the works in terms of climate change.

8.4. Route Selection/Alternatives for the Proposed Scheme

- 8.4.1. In relation to alternatives, in general these have been dealt with in a comprehensive manner in section 9.4 of this report in the context of the EIA of the Proposed Scheme. Notwithstanding this, and my assessment above that the principle of the Proposed Scheme considering the planning policy context and its justification in terms of the current and future transportation requirements of the corridor area as being acceptable, further consideration is merited in relation to the specific route selection and design approach adopted for certain locations. Of note in this regard (and the locations which have been the focus of a significant number of third-party submissions) are Palmerstown and Chapelizod. Submissions have been made in relation to the specific design of certain elements of the Proposed Scheme, however, third party concerns about the actual route of the Proposed Scheme are focused on these two villages. Generally, concern is raised in relation to Palmerstown due to the routing of buses (and infrastructure) through Palmerstown East (i.e. that part of the village/street from the Kennelsfort Road junction with the Old Lucan Road towards the east) as well as the routing of a two-way segregated cycling lane throughout the village. In relation to Chapelizod submissions have been made seeking that the Proposed Route should be brought in through the village, over the Liffey and into the City Centre via the Chapelizod Road (R109).
- 8.4.2. Broadly, in relation to the bus route issues raised I note that the Proposed Scheme has been designed to facilitate the Dublin Area Bus Network Redesign (DABNR). The DABNR was launched by the NTA in 2017, to review the existing bus network and the radial Core bus Network identified in the GDA Transport Strategy, and its output was open to public comment in August 2018 and October 2019. The NTA published the final version of the DABNR in 2019 and the application documentation notes that over 72,000 submissions were considered in its design. The decision in relation to the routing and location of the bus services/routes has therefore already

been made (in 2019) following significant public consultation and the current Proposed Scheme is providing the infrastructure to better improve the efficiency and services in relation to these routes, and it does not have any role in deciding the bus routes or services themselves.

- 8.4.3. Specifically in relation to the Proposed Scheme the relevant bus services from the DABNR 2019 are the no.'s 26/80⁸, and no. 52 radial routes, as well as the C spine routes (C1, C2, C3, and C4). The C-spine routes all run along the N4, Palmerstown Bypass, Chapelizod Bypass, Con Colbert Road, and St. Johns Road West to Heuston Station as does the no. 52 radial route. The 26/80 radial route runs from the City Centre, out the Chapelizod Road, through Chapelizod, (crossing the Liffey), up onto the Chapelizod by-pass (at the Kylemore Road west-bound on slip), from where it turns into Palmerstown East (at the Oval/Applegreen junction), turning south onto Kennelsfort Road Lower/Upper before turning west and north into Liffey Valley.
- 8.4.4. These are the routes that are being developed and supported in order to improve bus services along the corridor. Chapelizod is being supported through the development of the 26/80 route as well as providing access to the C spine on the Chapelizod Bypass, and in relation to Palmerstown East the decision to route the 26/80 through this area has already been made following public consultation. I note that of the submissions lodged in relation to the Proposed Scheme a significant portion have referenced the lack of justification for the routing of the 26/80 through Palmerstown, however, the Proposed Scheme has been designed to improve infrastructure along the already chosen routes, and therefore I consider that the Proposed Scheme is appropriate at this location. I also note that third party concerns have been raised in relation to the no. 18 route from west Palmerstown. This route is not referenced in the DABNR, and accordingly the decision to discontinue this route has already been made. The Proposed Scheme is not proposing to retain any of the bus stops along the Old Lucan Road west of Kennelsfort Road Lower which previously facilitated this no. 18 route.
- 8.4.5. Further, in relation to Palmerstown I note several submissions have been made objecting to the routing of a two-way segregated cycle track through the village with alternative routings being suggested. In this regard I note that improved cycling

⁸ This route is referred to as both the 26 and 80 in submissions.

infrastructure is needed to improve safety for cyclists and avoid conflicts between cyclists, pedestrians and vehicular traffic. I accept that segregated cycle tracks represent the safest infrastructure for cyclists, and that the Proposed Scheme will alter traffic patterns in Palmerstown Village. I note that the routing of the proposed cycling infrastructure through Palmerstown Village (from the M50 pedestrian/cycle bridge crossing to the Applegreen petrol station) broadly follows the route set out in the Cycle Network Plan for the GDA 2013, and matches the primary cycle route set out for this area in the 2022 Greater Dublin Area Cycle Network Plan. Accordingly, I consider both the cycling route and cycling infrastructure proposed at this location to be appropriate and in accordance with the proper planning and sustainable development of the area, as it will reduce conflict between route users, enhance safety for cyclists, improve the attractiveness of cycling and provide additional connectivity for Palmerstown village.

- 8.4.6. Some concerns have been raised in relation to the Proposed Scheme in Palmerstown arising from the turning requirements of commercial vehicles and particularly larger articulated vehicles servicing existing commercial/industrial businesses in the village and its immediate surrounds although also referencing vehicles/trailers accessing the rear accesses of Red Cow and Woodfarm cottages. In this regard the 90° bend on the Old Lucan Road, junction turning radii in general combined with the widening of footpaths in the village is referenced. In this regard I note that reducing junction turning radii is consistent with the requirements of DMURS as it improves pedestrian and cyclist safety and naturally reduce traffic speeds. DMURS states that a maximum corner radii of 6m should be applied as this will generally allow larger vehicles to turn corners without crossing the centre line of the intersecting road. DMURS also notes that crossing the centre line of intersecting roads is acceptable when turning into/or between Local or lightly trafficked link streets as keeping vehicle speeds low is of higher priority. I am satisfied that the Old Lucan Road (30kmph speed limit) satisfies the DMURS requirements. The applicant has also confirmed that swept path analysis has been undertaken and that the existing levels of accessibility for HGV traffic will be maintained at this location. I am therefore satisfied that the Proposed Scheme has been designed in an appropriate manner through Palmerstown Village.

8.4.7. In relation to Chapelizod, I note certain submissions have sought the routing of the main bus corridor through the village, across the Liffey and into the City Centre via the Chapelizod Road (R109). This is the route that the 26/80 will follow and it has therefore been identified for service investment and improvement as part of the DABNR, albeit I note that this has been identified as a radial route and not one of the main spine routes. This alternative route to the City Centre was considered under design option CZ01 within subsection 3 of the route (details of which are set out in Section 3.3.2.3 of the EIAR). This option was not considered optimal in comparison to others assessed due to the level of potential impact on protected structures and monuments, number of trees required to be removed, potential hydrological impacts due to proximity to the River Liffey, need for route widening in residential areas, loss of on-street parking, and route safety.

8.4.8. I have considered the potential constraints and merits of the alternative routes available and accept the findings of the alternatives assessment within the EIAR, in that the route selected is optimal and represents the path of least environmental impact. Accordingly, I am satisfied that the Proposed Scheme presents the optimal route and that the works proposed are necessary to improve bus services and make sustainable transport modes safer and more attractive.

8.5. **Project Design**

8.5.1. Section 3 of my report above has set out a detailed description of the overall project design including an overview of junction, bus stop, signage, infrastructure, and overall route design by section. In general, I consider the overall design of the Proposed Scheme to be appropriate in terms of the lane widths, speed limits, junction and bus stop designs, however, several submissions have been lodged in relation to specific infrastructure design elements, some of which require further discussion as set out below.

8.5.2. **Bus Stops**

8.5.2.1. The provision of bus stops throughout the scheme is critical to its overall successful function. Concerns have been raised in relation to the locations and designs of the bus stop infrastructure proposed.

8.5.2.2. In relation to the location of bus stops, the overall approach has been to ensure that they are located close to local facilities, have an approximate spacing of 400m (suburban) and 250m (urban centres), are close to the nearest junction/pedestrian crossing, located downstream of a junction rather than upstream, have sufficient space for associated infrastructure (shelter, waiting area, Real Time Passenger Information [RTPI] displays, boarding and waiting areas, cycle tracks and footpaths etc.), and consider the potential for interchanges with other transport routes. The primary considerations in locating bus stops includes minimising the walking distance between interchange stops and to ensure stops are located proximate to pedestrian crossings to ensure safety of access. In general, in relation to the location of bus stops I am satisfied that the above approach (as outlined in section 4.6.4.5 of the submitted EIAR) has been adopted insofar as is practicable, however, having regard to the nature of the Proposed Scheme there is a need to consider the locations of existing bus stops, characteristics of the various locations and constraints that are in place along the route that may necessitate a deviation from the preferred approach. The rationalisation of bus stops has led to some stops being retained, others relocated, and some being omitted.

8.5.2.3. Overall, I am satisfied that the locations of bus stops along both the inbound and outbound sections of the route are at appropriate locations to provide for the needs of the local population and the wider travelling public, and I do not consider that any require relocation.

8.5.2.4. The removal of the bus stop to the rear of Palmerstown Drive (on the R148 Palmerstown Bypass), has attracted significant third-party submissions as it is perceived as a degradation of service provision. The NTA have stated that the removal of this stop is necessitated as it is not paired with an inbound stop, it is not located within 100m of a pedestrian crossing, and a lay-by stop (which is preferred due to the volume of services at this location) cannot be provided without land-take from residential rear gardens at this location. The bus stops at the Oval are approximately 250m from the Palmerstown Drive bus stop. I note these factors and primarily as this stop is an anomaly with no twinned outbound stop and considering the fact that an in-line stop at this location will prolong bus journeys and a layby stop cannot be provided without the need to take land from private residential back

gardens I consider the omission of this stop to be appropriate, in keeping with the requirements of proper planning and sustainable development of the area and will contribute to the efficiency of the public transportation network. I do note that this may mean longer access routes to the stop for those on Palmerstown Drive, however, on balance the requirements of overall safety and network efficiency offset this minor impact as there are both inbound and outbound bus stops available in the vicinity.

8.5.2.5. Section 3.1.6 above has set out the overall design approach for bus stops and whether an island-, shared landing zone-, lay-by, or inline-, bus stop is being proposed. While some concerns have been raised by third parties in relation to the safety of the bus stop designs due to the potential for conflicts between cyclists and bus users, I am satisfied that the measures proposed, which include deflection of cyclists behind the bus stop, narrowing of the cycle track, LED warning studs, the inclusion of speed controls including ramping the cycle track up, cycle track road markings as well as pedestrian push button controls for cycle signalling (island bus stops) all combine to maximise pedestrian and cyclist safety. I also note that the design of bus stops has been informed by carrying out traffic safety and accessibility audits to ensure safety for all users and that vulnerable users of services (including wheelchair users) are adequately protected. I am also satisfied that provisions have been made for the visually impaired using tactile paving and the provision of signal call buttons for crossing cycle tracks to provide a safe and accessible environment. On review of the detailed design of the proposed bus stops, I am satisfied that the applicant has had regard to the requirements of the mobility and visually impaired and that the bus stops have taken adequate and appropriate measures to ensure accessibility and safety for all users, including cyclists, bus passengers and pedestrians.

8.5.3. **Chapelizod By Pass Bus Stops - Accessibility**

8.5.3.1. Notwithstanding my consideration immediately above regarding the design of bus stops, their general suitability and the appropriate nature of the routes selected. A further issue arises in relation to the proposed provision of the bus stops on the Chapelizod Bypass (CB) at the proposed bridge widening over the Chapelizod Hill

Road (CHR). At this location there is an approximate 5m change in levels between the CHR and the CB which needs to be transitioned in order to access the bus stops for the C-Spine routes on the bypass. The Proposed Scheme deals with this transition through the provision of a series of ramps (and alternative steps) from the CHR to the CB on each side of the bypass from the CHR. This 5m change in levels is significantly in excess of the 2m maximum permitted for wheelchair use for any series of ramps under the Building Regulations. The Board should also note that the Knockmaree Management Company and several residents of the Knockmaree residential development from which lands are subject to CPO to accommodate the provision of the access ramps have made submissions objecting to the impacts arising from the provision of these stops and the ramps required to access the inbound bus stop.

8.5.3.2. The applicant has acknowledged in their response to submissions that the access ramps do not satisfy the building regulations requirements for wheelchair access due to the extent of the level change to be transitioned while noting that the proposed ramps are appropriate for those with child buggies or those with restricted mobility. The Board should also note that slope of the Chapelizod Hill Road (CHR) from the village centre to the location of the proposed access ramps is also in excess of the building regulations provisions and is therefore unsuitable for wheelchair use (a fact is acknowledged by third parties and the applicant). This presents an accessibility issue for the inbound and outbound bus stops on the Chapelizod Bypass for which the Board should be aware of the following options:

(1) Omission of the Chapelizod by-pass bus stops.

The omission of the bus stops on the bypass would render Chapelizod and its surrounds unserved by the C-spine routes on the bus network and deprive a large portion of population of Chapelizod access to this service, thus leading to over-reliance and continued overcrowding on the alternative service through the village (the 80/26 route). Accordingly, I do not consider this to be a viable alternative nor to be in the interests of proper planning and sustainable development.

(2) Provision of bus stops at an alternative location for Chapelizod Village.

In my opinion there are no viable alternative locations to provide access to bus stops on the C-spine route from Chapelizod village. Where potential alternative viable interactions exist (at St. Laurence's Road and Kylemore Road) the issue of the discrepancy in levels to be transitioned to meet the bypass remain (or is exacerbated) and both options are much more remote from the village centre to the extent that the distances to be walked would render the option unattractive for the majority of potential service users. In this regard if the crossroads on the western side of the Liffey Bridge in Chapelizod is taken as the village centre, the CHR overpass where the proposed bus stops are is c. 80m south east and centrally located, the St. Laurence Road overpass is c. 550m south east, and the Kylemore Road overpass is located c. 650m to the north west. The two alternatives are therefore too remote from the centre of Chapelizod to render them effective.

(3) Provision of an alternative means of access.

Alternatives to the proposed ramps were considered with the ramping initially being proposed on the northern side of the CHR adjacent to Chapelizod Court. This proposal was abandoned in favour of the current proposal, the reasoning behind the alteration being that the differences in levels were lower on the southern side (reduced to a 5m difference from the 7m difference on the northern side), which lead to an overall reduction in the length of ramps required (from 177m to 138m) with an associated reduction in associated works and land take.

A further alternative that was suggested by third parties and the applicants own Accessibility Audit (Appendix I of the Preliminary Design Report, included as supplementary information for the application) is the provision of a lift at this location. The applicant's own accessibility audit states that the ramp leading to the eastbound stop will be too long to meet the relevant standards and that a lift would be the only accessible solution, in this regard, however, the audit also noted that gradients on CHR remain in excess of good practice standards. Furthermore, the applicant has clarified that to ensure service provision in the event of mechanical failure of the lift the ramps would still have to be installed.

While the Board may, in its decision pursue any of the courses outlined above, in my opinion the Proposed Scheme as presented provides the most robust and optimal means of providing an improved bus service to the population of Chapelizod. My reasoning in this regard is as follows:

- Chapelizod is a significant population centre along the corridor which must be afforded connection onto the C-Spine bus services, not to do so would represent a significant disservice to the community and reduce the effectiveness of the bus service network. I have previously set out that the route selection of the proposed Scheme is optimal and, in my opinion, it is in the interests of proper planning and sustainable development to provide connectivity from the C-spine route to Chapelizod. Accordingly, I consider that it is not appropriate to simply omit these stops (inbound and outbound) from the Proposed Scheme.
- CHR represents the optimal location for a bus stop interface for the village as it is most proximate to the village centre and its population. Furthermore, while I note that the difference in levels between the bypass and CHR, the alternative locations (St. Laurence's Road and Kylemore Road) have similar or greater level discrepancies and are remote from the centres of Chapelizod.
- I accept that the current arrangements for wheelchair access do not meet the requirements of the building regulations, however, in my opinion the provision of a lift at this location (which would have to be provided in conjunction with the ramps and steps to ensure mechanical failure would not restrict access) would have a detrimental impact given that the existing Chapelizod Hill Road has gradients that present at a minimum difficulty, if not, an outright impediment and/or hazard to wheelchair users. In this regard I consider it inappropriate to require the provision of a lift at this location as that would (a) encourage/facilitate wheelchair users having to transit a treacherous incline to reach services/village centre, and (b) become an unused and underutilised piece of infrastructure as wheelchair users for which it was designed would effectively be precluded from accessing it given the existing gradient on CHR.

- I note that providing a wider range of bus services availability to Chapelizod (though access to the C-spine) will improve the accessibility of bus services to all. The Proposed Scheme will facilitate access for the general population as well as those with more minor mobility issues and those with children's buggies to services on the C-spine route. This increase in capacity of, and access to, the spine route will result in further increased available capacity and more space/easier access for wheelchair users on the bus services which will continue to go through Chapelizod (i.e. the 26/80 route) which has been identified within (and will be retained by) the Dublin Area Bus Network Redesign (2019) and accordingly I consider that accessibility will be improved for all bus service users from the Proposed Scheme.

8.5.3.3. While I consider that the Proposed Scheme represents the optimum solution in terms of environmental impacts, service provision, and community, it is not a perfect solution, as the bus stops at Chapelizod will not meet the accessibility standards for wheelchairs. Accordingly, I recommend that timetable information and literature made available for any routes using this stop make the unsuitable conditions clear and advise wheelchair users of the alternative services that are available to access Chapelizod without having to negotiate inappropriate inclines arising from the existing topography.

8.5.4. **Junction Design**

8.5.4.1. A summary of the overall junction design approach adopted has been set out in section 3.1.3 – 3.1.5 previously above, in general the approach is to limit left turning filter lanes and provide segregated, delineated, and controlled crossings for cyclists and pedestrians. Certain submissions have raised concern that the Proposed Scheme does not go far enough to protect cyclists and that alternatives such as “Dutch-style” junction design at junctions should be provided. In simple terms due to the established urban environment through which the Proposed Scheme runs and other environmental constraints, the space is not available within the existing corridor to cater for such interventions without significant impacts at each of the junctions and to provide such solutions would give rise to significant adverse impacts on population, landholdings, as well as the built and natural environment. I note,

however, that the junctions proposed within the Proposed Scheme provide protection for pedestrians and cyclists and have been informed by international best practice.

8.5.4.2. The Proposed Scheme provides for a bespoke junction design at each of the junction locations within the existing constraints arising from this urban environment while also adhering to a set of general principles to improve safety and movements for all users – buses, cyclists, pedestrians, and general traffic. The junction typologies within the Proposed Scheme are described in the BusConnects Preliminary Design Booklet, with each specific junction described in the Junction Design Report (Appendix A6.3 of the EIAR).

8.5.4.3. Junction designs throughout the Proposed Scheme have been informed by the Design Manual for Urban Roads (DMURS), in particular with regard to the hierarchy of users (with pedestrians being afforded the highest priority, then cyclists then public transport with private vehicles at the bottom of the user hierarchy) and the requirements of providing safe crossing points for pedestrians and cyclists while facilitating traffic movements. Junctions provide for protected cyclist loitering areas and generally provide for delineated segregated crossing points dedicated to cyclists with separate pedestrian crossing points generally in place. In some instances toucan crossings are provided (where carriageway crossing facilities are shared between pedestrians and cyclists). I am generally satisfied that the junction designs adopted throughout the scheme achieve an appropriate balance between junction efficiency while also achieving appropriate safety standards for all users and in particular increasing safety and infrastructure provisions at junctions for pedestrians and cyclists.

8.5.4.4. The proposed junction designs incorporated throughout the Proposed Scheme generally provide for deflection of the cycle track at junctions to provide a protection kerb/buffer between cyclists and vehicular traffic. The radius and design of the kerbing requires vehicles to carry out a tighter turning manoeuvre to complete a left turn which effectively will force them to slow down prior to and during the turn. At signalised junctions the design layout also keeps straight-ahead and right-turning cyclists on the raised-adjacent cycle track as far as the junction, generally avoiding any cyclist-vehicle conflict which may arise from cyclists weaving and merging lanes

on the approach to junctions. The design of the protection kerbing incorporated at junctions also restricts cyclists from crossing over to the centre of a junction to turn right and thus they will be directed to cross via the designated crossing points thus improving their safety at such locations. I note that at certain locations and junctions the Proposed Scheme incorporates shared facilities/spaces for pedestrians and cyclists, this approach is adopted when there are local constraints in place that do not allow for separation/segregation (which is the preference). I note that the Cycle Design Manual 2023 considers such facilities to be appropriate in certain contexts including along busy national roads where pedestrian flows are low, and at signal controlled junctions (or Toucan Crossings) in constrained environments. I am satisfied that the Proposed Scheme only provides for shared facilities where there are other constraints in place and that signage and road/pavement markings are provided where necessary to ensure adequate safety provisions for all users.

8.5.4.5. Signalling is also used to improve safety where possible, so that staggered signalling will be used to highlight and assert the presence of cyclists for potentially left turning vehicles (this is particularly important in situations where left turning traffic will be coming from a more central lane and crossing a bus lane).

8.5.4.6. In relation to pedestrian crossings, I am satisfied that the proposals have been designed to ensure pedestrian safety at all junctions. The Proposed Scheme provides additional signalised pedestrian crossings along the route (increasing from 20 no. to 28 no.) which are designed in an appropriate and safe manner with two-stage crossings generally provided where crossing distances will be in excess of 19m. I note that DMURS states that in general designers should provide crossings on all arms of a junction and these have not been provided at all junctions in the Proposed Scheme (of particular note in this regard are the Palmerstown and Memorial Road junctions as well as the entrance to HSQ). There is justification for any arms of junctions which do not have pedestrian crossings such as there being no immediate desire line for pedestrians identified, the need to optimise junction operation for all users, to enhance accessibility of bus stops or to provide for other junction specific requirements. I note, however, that in all situations a safe pedestrian route through all junctions is provided, albeit signalised crossings of all arms of every junction is not catered for. For clarity, I am satisfied that appropriate and safe

signalised pedestrian crossings have been provided throughout the Proposed Scheme and an appropriate balance has been achieved between the overall traffic flow requirements and junction efficiency while ensuring safety for all users.

8.5.4.7. As stated above I am satisfied with the overall design approach adopted within the Proposed Scheme in relation to junctions. I note, however, that concerns have been raised in relation to the design of a number of specific junctions. Junctions of particular note in this regard are:

- Kennelsfort Road junction with Palmerstown Bypass.
- Junction at the Oval (Palmerstown).
- South Circular Road Junction.

Kennelsfort Road Junction with Palmerstown Bypass

8.5.4.8. In relation to the Kennelsfort Roads Junction with the Palmerstown Bypass concerns raised by third parties include removal of left turn slips, removal of the left turn (towards the City) from Kennelsfort Road Lower - concerns of duplication of service for pedestrian crossings and the need for a grade separated junction at this location.

- In relation to the removal of left turn slip lanes I am satisfied that the approach adopted is in accordance with DMURS, the Greater Dublin Area Transport Strategy and will enhance safety for all users while ensuring junction efficiency.
- In considering the removal of the left turn from Kennelsfort Road towards the City Centre, I note that traffic from the Palmerstown will retain the ability to turn left from the Old Lucan Road towards the City Centre at the Oval Junction (adjacent to the Applegreen service station). The removal of the left turn from Kennelsfort Road Lower has been proposed to facilitate the new (pedestrian) signalised crossings on the eastern arm of the junction, the two-way cycle track, and to serve the enhanced bus stops on this arm. I consider that the pedestrian and cyclist crossings are appropriate and justified at this location as these are sustainable modes of transport which will increase the connectivity of the village centre and the cycling route at this location has

been identified as a secondary route in the Greater Dublin Area Cycle Network Plan. I consider the proposed pedestrian crossing to be a more direct and convenient crossing for pedestrians than the existing overbridge and will be more accessible and easier to negotiate for more vulnerable pedestrians. I also note that the Proposed Scheme has been subject to traffic safety audits and modelling and that the design of the proposed junction has been optimised to provide enhanced safety and efficiency for all users. Accordingly, I am satisfied that the junction as designed is appropriate and in accordance with the proper planning and sustainability of the area. The Board should also note that the SDCC submission supports the removal of the left turn out of Kennelsfort Road.

- A number of submissions have raised concerns that there is a reduction in general traffic lane provision outbound from the Kennelsfort junction (towards the M50). However, two lanes continue to be provided outbound towards the M50 albeit a dedicated bus lane is provided with earlier segregation for southbound traffic onto the M50. This represents a change on this leg of the route, however, I am satisfied that the design of this leg of the junction represents an efficient use of this space that will continue to prioritise public transport at this junction, and that the safety audit did not raise any concerns in this regard.
- In relation to the need to provide a grade separated junction at this location I note the provisions of the SDCC development plan SM3 objective 17 *“To work with the NTA and other state agencies to facilitate the delivery of the Kennelsfort Road-R148 grade separated junction or an equivalent solution to maximise the efficacy of the BusConnects Project”*. The SDCC submission in relation to the Proposed Scheme did not raise any issues with the design of the junction at this location nor compliance with development plan requirements. This junction is located on a key radial route into the City Centre from the M50 with significant transport demands from all travel modes. The junction design report included as Appendix A6.3 of the EIAR notes that the key design rationale for this junction was to enhance bus priority whilst retaining and enhancing capacity for general traffic. I am satisfied on the basis of the information provided and traffic modelling undertaken that the

competing demands of general traffic, bus priority, providing additional village centre connectivity, and enhancing facilities for sustainable modes of travel have been achieved through the junction arrangements proposed and that a grade separated junction is not necessitated to ensure efficacy of this BusConnects Scheme at this location. I therefore consider the Proposed Scheme to be compliant with the Development Plan objectives at this location and consistent with the proper planning and sustainable development of the area.

Junction at the Oval

8.5.4.9. In relation to the Oval junction a number of concerns are raised in relation to the removal of the left turn slips exiting and entering the Oval, the provision of the right turning bus lane into the Old Lucan Road, location of pedestrian crossings, as well as the removal of the existing U-turning facility and the impacts these changes would have on traffic congestion, access and safety.

- As noted previously in the discussion above and in section 9.13.7.5 below the removal of left turning slips is consistent with the requirements of DMURS, the GDA transport strategy, and is supported in the submission on file from SDCC. I also note that the exit from the Oval will continue to have a dedicated left turning lane albeit with a tighter turning circle in the interests of enhancing traffic safety for all users at this location.
- In relation to the removal of the left turning lane into the Oval I note that this turning movement will still be permitted and facilitated by the proposed scheme, however, it will not be allowed from the dedicated bus lane and must instead be made from the general traffic lane inside the bus lane. Concerns have been raised in relation to the potential for conflict and accidents with pedestrians and/or cyclists. In this regard I note that the indicative traffic signalling at this location will ensure conflicts do not arise as westbound general traffic will not be on green at the same time as pedestrians or buses. Furthermore, I note that the road safety audit did not raise any issues for this junction in relation to the turning movements. The audit did note that junction capacity may be affected, however, the applicants have confirmed that

junction capacity analysis has been undertaken to ensure appropriate capacity following the removal of slip lanes throughout the Proposed Scheme.

- Pedestrian crossing locations have been provided on three of the four arms of this junction and have been informed by the location of the revised bus stop arrangements. I am satisfied that these are the optimal locations for pedestrian crossings and that they will ensure safety and connectivity to bus services and the village centre.
- A bus-only right turn off the R148 into Palmerstown village is also proposed at this junction. This is required to service the 26/80 route which, as set out in the Dublin Area Bus Redesign 2019, is to be provided through Palmerstown Village. The preliminary traffic audit has not returned any safety concerns in this regard. At present the arm of the junction turning onto the Old Lucan Road is exit only onto the R148. Under the Proposed Scheme an additional lane will be provided to allow bus only access off the R148, with signage and signalling restricting general traffic access. Two-lane egress from this arm will still be permitted facilitating right turns onto the R148 as well as straight ahead (access to the Oval) and left turns towards the City Centre. The widening of the road at this location is to be facilitated by land take from the Applegreen petrol station.
- I also note that the changes to this junction are proposing the omission/removal of the existing U-turn available from westbound to eastbound via the central median on the R148. This issue is raised as a specific concern by the Palmerston Lodge property owners in a submission as it offers the most direct means of accessing their property by private car when approaching from the east (i.e. outbound). In response to this issue the applicants have stated that this U-turning facility cannot be maintained or provided elsewhere along the R148 due to safety issues, and instead they refer to alternative turning routes (either through Palmerstown Village or by turning at the Oval) which would represent additional driving distances ranging from c. 100 to 900m. Having regard to the overall benefits of the Proposed Scheme in terms of improving public transport and providing better pedestrian and cycling facilities, on balance, I consider that the removal of

the U-turn facility is justified and appropriate, and while there will be an impact on the existing access arrangements for Palmerstown Lodge I do not believe that these will be of such significance to merit refusal or alteration of the scheme.

- Concerns have also been raised in terms of traffic safety during school drop-offs for those using the Oval junction due to the proximity to local schools. In this regard I note that an additional controlled pedestrian crossing is proposed over the Oval arm of this junction and that accessibility by bus to this area will be improved. Furthermore, safety audits have not returned any significant issue of concern in relation to the junction.

In relation to the above I consider that the revised junction arrangements at the Oval are appropriate, safe, will improve facilities and service for all users and are therefore in accordance with the Proper Planning and Sustainability of the area.

South Circular Road Junction

8.5.4.10. In relation to the South Circular Road Junction a submission was lodged stating that an opportunity has been missed to engage more with all stakeholders to provide a significant re-design and re-engineering of this junction. At this junction I note constraints are in place from the rail tracks running underneath, existing dwellings, and proximate properties, as well as significant archaeological and cultural heritage features in the grounds and vicinity of the Royal Hospital Kilmainham. The existing junction at this location is complex and provides poor service for pedestrians and cyclists. The Proposed Scheme consolidates traffic movement and improves pedestrian and cycling infrastructure and safety by omitting left turning slip roads, providing cycle lanes, reducing the number of general traffic lanes and amending the traffic signal-controlled regime. Thus, allowing cyclists to be segregated from traffic both in terms of space and signal timing. I consider that the Proposed Scheme is appropriate at this location and will enhance safety for all users.

8.5.4.11. On review of the junction design approaches and the evolution of the junction designs set out in the application documentation, I am satisfied that the design and arrangements provided at junctions are appropriate to ensure pedestrian, cyclist and

vehicular safety while also working within the urban constraints present along the route to minimise impacts arising.

8.5.5. Cycle track and Pedestrian footpath widths.

8.5.5.1. Segregated cycle track widths and pedestrian paths throughout the Proposed Scheme are reduced in width at certain locations to account for local constraints and/or existing otherwise well-functioning infrastructure. These deviations from the preferred widths have been set out previously in sections 3.4.9, 3.5.6, and 3.6.8 of my report above. In all instances reductions from the preferred widths are over relatively short distances and are being provided to either use or tie in with existing retained infrastructure, to reduce land take requirements, minimise impacts on items of heritage interest, or facilitate other scheme requirements. I note that the minimum of 1.2m (accessibility standard) is maintained for pinch points on footpaths at all locations. Having regard to the context and nature of the Proposed Scheme, I consider these deviations to be acceptable and note that footpaths will continue to meet accessibility standards throughout. I am satisfied that any deviations from the optimal infrastructure widths are appropriate and will not give rise to significant adverse effects.

8.5.6. Car Parking

8.5.6.1. The reduction of car parking spaces along the route of the Proposed Scheme is raised as a concern in a number of third-party submissions. The focus of concerns raised is that the loss in car parking will restrict access to certain locations and that this will have an adverse impact on the commercial viability of premises and impact on the availability of, and access to, services particularly with reference to Palmerstown Village. I note the Proposed Scheme does necessitate a reduction in car parking along the route, with section 1 having a net reduction of over 100 spaces (all of which are informal and unmarked spaces on the Old Lucan Road between the N4 junction 2 and the entrance to Kings Hospital School), Section 2 a net reduction of approximately 124 car parking spaces (from the Old Lucan Road and Kennelsfort Road Lower in Palmerstown Village), and Section 3 a net reduction of approximately 33 no. spaces (from St. Johns Road West including a loss of 20 no. taxi queuing

spaces west of Heuston Station). I note the following in relation to the loss of car parking spaces:

- The Proposed Scheme will not result in any private residence losing on-site car parking where this is in place.
- The parking being lost in Section 1 is all informal parking along the Old Lucan Road proximate to existing bus stops on the N4 and the Liffey Valley Shopping Centre pedestrian overpass. The Deadmans Inn (commercial property) and the Kings Hospital School which are both in the vicinity have their own off-street car parking available. Similarly, all dwellings in the vicinity (several of which are protected structures) have their own driveways and off-street car parking.
- The loss of car parking spaces in Palmerstown Village consists of approximately 106 informal car parking spaces from Palmerstown West (i.e. the Old Lucan Road between Kennelsfort Road Lower and the M50 side of the village), 2 no. permit/pay and display spaces from Kennelsfort Road Lower, and 15 no. from the Old Lucan Road east of the Kennelsfort Road junction. The majority of these spaces are being removed to accommodate the two-way cycle track through the village.
- Of the Residential units fronting onto the Old Lucan Road in Palmerstown West, all but one have off-street car parking within their own site in place/available. Furthermore, the applicant has confirmed that existing informal parking along the south side of the Old Lucan Road west of St. Philomena's Church is to be retained.
- Off-street private car parks in place within Palmerstown include facilities at Aldi, St. Philomena's Church, Palmerstown Business Park, Palmerstown House Pub, Palmerstown Parish Centre, Palmerstown Lodge Hotel, Palmers Gate (recently constructed SHD development), Millbrook Apartments, and the former Ulsterbank. I acknowledge that these are private car parking facilities, however, I note that they are present and available for use by existing relevant residents and commercial customers and staff.
- Accessible car parking is being relocated within Palmerstown and existing car parking along the southern side of the Old Lucan Road is being

redesigned/orientated (from parallel to perpendicular) to maximise the number of car parking spaces available.

- The car parking being lost along St. Johns Road West, includes the loss of 20 no. taxi queuing spaces, however, a significant taxi queuing facility will remain in place. Furthermore, two public EV charging points that are to be removed to facilitate the provision of bus stops are being relocated further west along St. Johns Road West.

The Proposed Scheme will constitute a change to the existing parking regime that is in place along the route. The changes in availability of parking provisions will be felt most in Palmerstown, however, the proposed scheme will also improve accessibility of the village through more sustainable modes of transport than the private car. The changes are being proposed to improve bus, cycling and pedestrian access through the provision of better infrastructure while also enhancing the public realm. This will improve connectivity for the village. As stated above, within Palmerstown provision is still made for the private car parking along the public road (at both Palmerstown East and West) albeit this will be in a reduced capacity. The applicant has confirmed that existing informal parking currently available on the southern side of the Old Lucan Road will continue to be permitted, however, due to its informal nature this is not readily apparent within the application documentation and drawings. Accordingly, In the event of favourable consideration of the Proposed Development, I consider it appropriate to ensure this provision remains through attaching an appropriate condition.

8.5.6.2. I note that throughout, the Proposed Scheme prioritises sustainable means of transport (bus, pedestrians and cyclists) however, the needs of the private car continue to be catered for. I also note that all relevant policy documentation advocates for the prioritisation of public transport over the private car as this represents the most sustainable and efficient means of moving people around any urban environment. I consider that the Proposed Scheme, as designed, successfully balances the need to prioritise public transport, cycling and pedestrian infrastructure while also accommodating the private car within the network. I acknowledge that certain inconveniences will arise from the Scheme for the private car in terms of the removal of left turning filter lanes, the reduction in car parking spaces, and restricted

turning/access at certain locations. The Proposed Scheme, however, should not be misconstrued as being 'anti-car', as it continues to cater for and accommodate the private car. While car parking will be reduced along the scheme, it is still retained where practicable at suitable locations. Accordingly, while acknowledging that there is a loss of car parking, I do not consider this loss to be of such significance or adverse impact to merit any changes, omission or refusal of the Proposed Scheme given the overall wider benefits arising in terms of improved bus, walking, and cycling infrastructure the wider benefits of increasing people movement, maximising the use of available space and emissions reductions.

8.5.7. **Compatibility with other Planning Permissions along the route.**

8.5.8. The Proposed Scheme has been designed in the context of the junction arrangements and access points/infrastructure that is/was in place at the time of the application. I have reviewed the planning history along the route and that set out within the application, and I am satisfied that the Proposed Scheme can incorporate any updated junction arrangements should and as they arise in the context of any future or recently consented permissions. Furthermore, I note that the applicants do not (and cannot) have control over if and when consented projects are implemented and so it would be inappropriate, unnecessary, and unworkable to require the current application documentation to be updated in the event of a new development proposal being consented or lodged given the extent, location, nature, and scale of the subject works. I note that appropriate options are provided within the application documentation in relation to interfaces with the BusConnects Liffey Valley Scheme (which will be implemented dependent on whether that project is in place in advance of the Proposed Scheme) at Con Colbert Road and Memorial Road. Accordingly, I consider that the Proposed Scheme will not prejudice any future development proposals along its route as it will in fact improve accessibility and upgrade bus infrastructure throughout.

8.6. **Biodiversity**

8.6.1. Some third-party submissions have raised concerns in relation to Biodiversity, and the majority of these refer to the loss of trees as being a significant concern, particularly at the location of the temporary construction compound at Palmerstown,

the frontage of the Hermitage Golf Course, the frontage of the Hermitage Clinic and at the location of the ramped access to the Chapelizod Bus Stops (between the Proposed Scheme and the Knockmaree residential development). Another issue that is frequently referenced in submissions is the presence of a badger sett in the vicinity of the temporary construction compound at LU2 (Palmerstown).

- 8.6.2. In relation to biodiversity the submission of the Development Applications Unit (DAU) noted the significant tree and hedgerow removal as well as the location of a previously recorded badger sett (in the vicinity of LU2) which should be subject to further investigation (the DAU recommended that further information be sought in this regard). The DAU also noted the appropriate nature of the mitigation measures set out in the NIS, EIAR and CEMP and recommended that these be applied in full in the event of favourable consideration, that any tree/hedgerow removal should be carried out outside the bird breeding season, and that in relation to the use of the Liffey Gaels grounds as a temporary construction compound (LU3) that additional bird surveying be carried out (prior to commencement of construction) and to ensure that the fields are reinstated after use.
- 8.6.3. Biodiversity and all related matters have been comprehensively considered in Section 9.8 of this report (Biodiversity Section of the EIA) with further relevant assessments and discussion in Sections 9.9 (Water), and 9.6 (Air and Climate). The potential for impacts to arise on European designated sites and species is comprehensively considered in Section 10 which sets out the Appropriate Assessment of the project. I do not intend to repeat or review these considerations in this section as they have been dealt with in full.
- 8.6.4. Potential impacts on biodiversity could arise from vegetation and tree removal; construction and earthworks; drainage and additional silt mobilisation and/or pollutant release into drainage networks; lighting during construction and operation; noise and vibration; and through facilitating the spread of invasive species. In relation to invasive species, I note the application documentation includes an Invasive Species Management Plan which will ensure adverse impacts from their spread will not arise.
- 8.6.5. From the outset in relation to Biodiversity I note that the Proposed Scheme relates to works along an existing paved, busy and significant transport corridor which include

new structures (pedestrian/cycle bridges, retaining walls etc.), revised/set-back boundaries, localised widening, and temporary construction compounds. All of these works occur along the existing route and where widening or boundary set backs are required these occur immediately adjacent to the existing transport corridor.

Accordingly, I consider that significant adverse impact on existing habitats in terms of fragmentation will not occur. Similarly, I am satisfied that the drainage arrangements set out within the application documentation will ensure that biodiversity and habitats will not be significantly impacted from runoff. I also note that air quality is a consideration, however, as set out in the EIA section of this report I do not consider that significant adverse impacts will arise from the Proposed Scheme in this regard given the fact that the works are to an existing significant and strategic transport corridor.

8.6.6. Trees

8.6.6.1. The loss of trees along the route represents a significant intervention in relation to biodiversity. The Arboricultural Impact Assessment (AIA) states that the Proposed Scheme will result in the loss of 196 individual trees, 16 full groups of trees, and 8 partial groups of trees. I note that the AIA does not seem to include or consider the 5 no. individual trees that are proposed to be removed to facilitate the LU2 construction compound at Palmerstown. In my view these are individual trees and accordingly I consider that a total of 201 individual trees are proposed to be removed. Notwithstanding the unsatisfactory use of “groups of trees” within the AIA in terms of quantifying overall numbers (for example the EIAR clarifies that it is proposed to remove approximately 218 trees alone from the frontages of the Hermitage Golf Club and Hermitage Clinic), I note that the trees to be removed are not subject to specific protections or ecological designations, however, they do contribute to biodiversity as well as the amenities of the areas in which they occur. The AIA classifies all trees and groups of trees that have the potential to be impacted and highlights the locations from which trees are proposed to be removed. Trees are proposed to be removed at various locations throughout and along the route corridor, however, the areas which I consider to be most affected by tree loss include:

- The frontage of Hermitage Golf Course

- The frontage of Hermitage Clinic,
- The Palmerstown Bypass in the vicinity of the proposed temporary construction compound LU2.
- Adjacent to the Proposed new bus stops on the Chapelizod by-pass near Knockmaree Apartments.

8.6.6.2. Overall, the Proposed Scheme will result in the permanent loss of 2,420m of treeline and 2,183m of hedgerows as well as the temporary loss of c. 85m of treeline and 50m of hedgerow. In mitigation of this loss, it is proposed to plant 479 trees and 281m of hedgerows. (The Board should note that the Proposed Scheme also incorporates the provision of 7,979m² of species rich grassland, 1,373m² of ornamental planting, 2,975m² of native planting and 14,531m² of amenity grassland planting.)

8.6.6.3. In terms of biodiversity, I am satisfied that the Proposed Scheme and its mitigation measures will ensure that significant adverse impacts will not arise from the loss of trees. Tree removal from the Hermitage Golf Course is focused on those along the boundary of the N4 which is proposed to be set back at this location. The removal of boundary trees is required at this location to facilitate the corridor widening required to accommodate the infrastructure to ensure efficient, effective and safe sustainable transport provisions at this location (i.e. two-way cycle track, footpath, bus and general traffic lanes). Furthermore, boundary trees need to be removed to facilitate the provision of the safety netting and retaining wall along the boundary. Replacement tree planting is proposed at this location to maintain the amenity setting. I note such planting will take time to establish and impacts will arise, however, as stated I do not consider these to be significant in terms of Biodiversity. Elsewhere in this report I recommend that the extent of the temporary land take area along the frontage of the Hermitage Golf Club be reduced, however, the primary reason for this is to minimise impacts on the amenity, functionality and operations of the golf course, although arising from this recommendation there will be a minor reduction in the number of trees lost as well as a reduction in the number of trees that will be provided as part of the landscaping scheme, this matter is discussed in more detail in Section 8.9 of this report below.

- 8.6.6.4. Tree removal from the frontage of the Hermitage Clinic is restricted to the front boundary where trees are proposed to be removed along the existing embankment to accommodate route widening and the provision of a retaining wall structure. A certain level of additional planting is proposed at this location as part of the landscaping for the Proposed Scheme, I consider the removal of trees at this location does not present significant biodiversity issues and I am satisfied that the replacement planting proposed will maintain the amenities and contribute to the future biodiversity of the area.
- 8.6.6.5. At the location of the LU2 construction compound at Palmerstown it is proposed to remove 5 no. semi-mature beech trees as detailed in the Landscaping plans submitted. I note that the AIA does not include consideration of the trees at this location, however, the landscaping plan shows that only 5 no. trees are to be removed (with the remaining 6 no. of this line are to be retained in place), a fact reconfirmed in the response to submissions document provided by the applicant. These trees are located within a grassed area adjacent to the Palmerstown Bypass which is backed onto by the rear boundaries of adjacent urban development. I note that following construction the proposed landscaping scheme will provide a total of 32 semi-mature trees at this location including 8 no. semi-mature maple along the line of the removed trees. I consider that the planting proposed at this location sufficiently mitigates the loss of trees, however, due to the ambiguity in the AIA in not considering this location, and the proximity of parts of the proposed construction compound to existing trees to be retained, and I consider it of merit to include a condition to ensure that the tree removal/replanting be carried out in strict accordance with the submitted landscaping scheme, and that the extent of this (and the other temporary compounds) be in accordance with the EIAR submitted in the interests of clarity, consistency and certainty.
- 8.6.6.6. It is proposed to remove approximately 40 no. trees from the eastern embankment between the Chapelizod Bypass and the Knockmaree apartments/Chapelizod Hill Road (these have not been quantified/characterised in the AIA, however, they are mapped and identified). The removal of these trees is required to facilitate the route widening and ramped access to the inbound bus stop on the Chapelizod Bypass from the Chapelizod Hill Road, the provision of which, as discussed previously

above, I consider to both be of merit and appropriate. In relation to this area I note that the works do not necessitate the removal of all trees from this location, that the trees to be removed are on an embankment and have been in place since the construction of the bypass, and that there will continue to be a level of planting at this location (i.e. the habitat will not be fragmented). Accordingly, I consider that the works at this location will not give rise to significant adverse impacts on biodiversity and the mitigation measures in terms timing and methodology of works are appropriate.

8.6.7. **Bats**

8.6.7.1. Five trees in the temporary land-take from the Hermitage Golf Club have potential roosting features (PRF) for bats. The EIAR notes that as these trees "...may be removed as part of the Proposed Scheme." The EIAR/CEMP provides for a range of mitigation measures in relation to bats which includes re-appraisal, pre-construction surveying, derogation and licencing for bat handling (if required), and provision of bat boxes, should it be necessary to remove any trees with PRF. I consider these mitigation measures to be appropriate.

8.6.8. **Birds**

8.6.8.1. In relation to birds and tree removal the application documentation states that where practical vegetation/trees will not be removed between 1st March and 31st August, and if this is not possible additional pre-construction surveys will take place. Similarly, the sports netting at the Hermitage Golf Club will be installed outside the same period to reduce collision risk for passerine birds.

8.6.8.2. The Proposed Scheme also incorporates a number of mitigatory measures in relation to wintering birds due to the potential impact that could arise from the use of the LU3 construction compound. I consider that the measures which relate to timing of the establishment of the compound, pre-construction surveying and extent/level of lighting to be appropriate and will ensure no significant impacts arise.

8.6.9. **Badger**

8.6.9.1. A number of submissions (including the DAU) have raised concerns in relation to the presence of a Badger Sett in the vicinity of the Proposed Construction Compound at Palmerstown (LU2). The application documentation states that no such set, nor Badger signs have been identified in the surveys carried out and further discussion in this regard is provided in section 9.8.10.2 of my report below. I accept that a Badger sett has been in place at this location historically (as evidenced in the submissions lodged and confirmed by the DAU), and I note the applicants response to this issue (which included carrying out an additional walkover survey to confirm original findings), extent of the proposed construction compound at this location (which is proposed to be restricted to the grassed area more proximate to the carriageway edge and not infringe on the wooded/scrub areas along the edges/boundary of this amenity/open space area). Having reviewed the application documentation, submissions lodged, and language used by the applicant in their response to submissions, I am satisfied that the temporary compound can be provided at this location provided that appropriate measures and conditions are put in place to ensure the protection of any potential badgers. In this regard I consider it appropriate to specify the extent of the temporary construction compound (to that set out in the EIAR) and the completion of pre-construction Badger surveys in advance of any work at this location and any associated badger conservation plan should one be necessary (as requested by the DAU).

8.6.9.2. In conclusion on biodiversity (and as set out in Sections 9.8, and 10 below) there will be some unavoidable impacts arising from the Proposed Scheme (such as the loss of trees). I note that all works are located within the urban/suburban environment and accordingly all local species will be habituated to a degree of human activities, construction, and general disturbance. The additional planting proposed will mitigate against the loss of trees along the route and the comprehensive suite of mitigation measures set out in the application documentation will ensure that the potential for impacts to arise will be minimised. The Proposed Scheme also incorporates SuDs measures within its drainage schemes and generally the drainage measures proposed will not give rise to adverse impact on receiving waters. In this regard I note that both Local Authorities have requested that drainage measures should satisfy their requirements, and I consider it appropriate to ensure this through the

provision of an appropriate condition in conjunction with the other conditions outlined previously above.

8.7. Residential Amenity

- 8.7.1. A project of the nature proposed will give rise to a wide range of impacts that could be potentially impact on residential amenity to various degrees. Given the location and nature of the works which are predominantly proposed along an existing significant transport corridor the majority of such impacts on residential amenities will arise during the construction phase from noise, dust, construction traffic, temporary traffic diversions, impact on services/utilities, and air quality, all of these matters have been considered in detail in the relevant EIA sections of this report below. In general, I am satisfied on the basis of the comprehensive suite of mitigation measures proposed throughout the submitted EIAR (including CEMP) and NIS that construction impacts will be minimised and managed insofar as is practicable and furthermore that they will be temporary in nature where they do arise.
- 8.7.2. I consider that the operational phase impacts that will arise for residential amenities will generally be positive through the provision of improved public transport infrastructure along the route, reductions in congestion, and the provision of increased connectivity throughout. The provision of additional safer cycling infrastructure and new pedestrian facilities including increased pedestrian crossings and public realm improvements will also give rise to improved residential amenities.
- 8.7.3. Where submissions have been made in relation to residential amenity, they frequently refer to the amenities of general areas through which the Proposed Scheme will run. In this regard I note the previous discussions set out above in relation to route selection at Palmerstown and Chapelizod. In relation to these areas - in the interests of completeness - I note that while the Proposed Scheme will result in changes, I do not consider that these changes will give rise to significant adverse impacts on residential amenity. The improved public transport, cycling and pedestrian infrastructure being proposed will be of benefit to all and the noise and air quality assessments set out in sections 9.6 and 9.7 below demonstrate that significant long term adverse impacts will not arise during construction or operational phases.

8.7.4. The main residential areas that interact with the Proposed Scheme are discussed individually below:

- Hermitage Road/Ballyowen Lane – The Proposed Scheme will provide quiet street treatment through this residential area, which requires minimal works (signage, road markings and widening of an existing pathway through an amenity space). I consider that this will not create significant adverse effects on residential amenity during the operational or construction phases.
- Old Lucan Road from N4 junction 2 to the entrance gates of Kings Hospital School. Dwellings at this location are generally set back off the road within their own sites with individual driveways. Some dwellings at this location are on the RPS. There will be effects during the construction period, these will be temporary and not have a significant adverse impact on residential amenity. For the operational phase the existing informal parking will be removed which will not adversely affect residents as all dwellings have their own driveways with off-street parking in place. Further, the provision of a two-way segregated cycle lane will be a significant service improvement. Pedestrian and cycling links to the Liffey Valley shopping centre will be improved and better bus connectivity provided during the operational phase. I consider that these will contribute to residential amenity and service availability in the area.
- In Palmerstown Village I note that no private residential properties will have their general means of access significantly altered (or experience land-take to facilitate the Proposed Scheme), although changes will arise from the provision of the two-way cycle track along the northern side of the Old Lucan Road and eastern side of Kennelsfort Road Lower. No private dwellings in Palmerstown will have their garden or boundary walls set back, although I note that permanent and temporary land take is required from the frontage of no.'s 20/22 Kennelsfort Road Lower (i.e. the frontage of Palmerstown Lodge Hotel). The hotel has an off-street parking area in place along its frontage with similar facilities granted under ABP-307596 (permission for a boutique hotel on this site). The application documentation acknowledges this, and the Proposed Scheme has been designed so that access arrangements for the hotel are accommodated. Informal car parking will be removed from the northern side of the Old Lucan Road, however, I do not consider that this will

have a significant adverse impact on residential amenities as parking will still be facilitated in the village (West of St. Philomena's Church on the southern side of the Lucan road) and through the provision of perpendicular parking along the southern side of the Old Lucan Road in the eastern part of the village (in the vicinity of Red Cow and Woodfarm Cottages). I note that the majority of dwellings in Palmerstown Village have their own driveways and therefore I consider that the loss in informal parking and alternative parking being provided will not significantly adversely impact residential amenities. I further note that access to the rear of Red Cow and Woodfarm Cottages will be maintained. Bus stops are also proposed in the eastern part of Palmerstown (West of Mill Lane), and concerns have been raised that these will impact residential amenity through inappropriate design interventions and potential anti-social behaviour. In this regard I note that the Proposed Scheme design provides widened footpaths in the vicinity of these proposed stops, this area is subject to passive surveillance, and elsewhere in this report I recommend that advertisement panels be omitted from the bus shelters at this location in the interests of reducing potential visual clutter. While I note there will be adverse effects in this area arising from the construction phase I note that these will be temporary, and the area will benefit from increased connectivity and an improved public realm and sustainable transport infrastructure that respects the established character of the area. Accordingly, I consider that residential amenities will not be adversely affected.

- In relation to the provision of bus stops outbound on the Palmerstown bypass (at the Oval and Kennelsfort Road Junction), I am satisfied that the proposed works which do require minor route widening to accommodate lay-by bus stops to facilitate traffic movements, will not encroach on private residential lands and will not reduce the amenity areas of any dwellings. I note that some existing planting will be removed at both locations. At the Kennelsfort Road junction there is significant separation distance between the works at the revised bus stop and the rear of properties and a significant amount of planting will be retained. At the Oval a grassed verge and planting will remain between the revised bus stop arrangements and rear boundary of dwellings with fencing provided at the rear of the footpath. I consider that the proposed

works will ensure the protection of established residential amenities at these locations.

- At Knockmaree Apartments and the Chapelizod Hill Road residential area I acknowledge that significant construction works are required which will involve the widening of the Chapelizod bypass (to accommodate new bus stops) and the provision of access ramps to transit the change in levels between Chapelizod Hill Road and the Bypass. Effects of the works will be experienced by the local residents; however, these effects will be temporary in nature. The Proposed Scheme will result in the removal of some (approximately 40 no.) but not all of the trees from the existing embankment to facilitate the ramped access to the proposed bus stops. As previously discussed above I consider these ramps to be appropriate and I consider it important that Chapelizod residents be afforded the opportunity to avail of services on the C-Spine to improve the connectivity of the area. I also consider the location of the bus stops on the bypass to be the optimal location for providing this connectivity. Submissions have been made stating that the works will have an adverse impact on residential amenities of the Knockmaree Apartments, arising from noise, overlooking (from the ramp access and bus stops), visual amenity, and air quality. I note that the Proposed Scheme will not significantly alter the nature or character of the Chapelizod bypass at this location beyond the widening, provision of bus stops and ramps, and that appropriate landscaping and planting is proposed in the vicinity of the ramps. Furthermore, I note that a 2m high wall is being provided along the boundary of the ramps addressing the Knockmaree boundary which will avoid overlooking arising. A 1.25m high wall with an additional 0.55m high steel fence with mesh infill is provided to the rear of the bus stops themselves to avoid overlooking of residential properties from that level. While I acknowledge that trees will be removed additional planting is provided, existing noise walls are to be replaced where necessary and new solid boundaries put in place. These features will change the character of the views, however, this is an overall suburban/urban environment, the proposed works represent an expansion of the existing transport route and visual impacts will lessen as the landscaping matures. In relation to noise and air

quality I consider that the proposed scheme will not significantly alter the existing characteristics of the Chapelizod bypass in this regard. Accordingly, I consider that significant long-term adverse impacts will not arise on the residential amenity of the Knockmaree Apartments or the Chapelizod Hill residential area. I note changes will occur, however, the overall benefits to the area through improved connectivity and access, as well as the maturing of the proposed landscaping will ensure that these changes do not give rise to significant adverse effects.

- At the South Circular Road junction there are more direct interactions with residential properties. This is a very busy and significant junction on the transportation network and the improvements proposed include the provision of dedicated cycle tracks, removal of left turning slips and changes to traffic management/signalling. During construction temporary impacts will be experienced, however, the operational phase will have a neutral impact on residential amenity at this location.

8.7.5. I am satisfied that the Proposed Scheme has taken all reasonable precautions to protect residential amenities of these areas and dwellings insofar as is practicable while still achieving the overall objective of providing much-needed improved infrastructure for public and sustainable modes of transport throughout the route. I do not consider that the Proposed Scheme (which essentially refurbishes, upgrades, improves and renews the existing transport infrastructure in place) alters the overall character of the roads and streets that it runs along and accordingly while I acknowledge that changes will occur, I do not consider that residential amenities will be significantly adversely affected in the medium to long term. In consideration of this matter I note that access to properties and services/utilities are to be managed throughout the construction phase to minimise adverse effects and that construction practices will be strictly controlled and mitigated through the provisions of the CEMP.

8.7.6. Overall, I consider that the Proposed Scheme will greatly improve connectivity, public transport, cycling and pedestrian infrastructure throughout and as such it will improve the overall amenity and attractiveness of properties along its length. In this regard I note that certain submissions have raised concerns that the Proposed Scheme will adversely affect property values. As the Scheme has been designed to reduce congestion, improve the transportation network, and sensitively improve the

public realm it will, in my opinion, contribute to and enhance the amenities of the areas in which it is situated. Accordingly, I am satisfied that the mitigation measures and design proposed will ensure significant adverse impacts on residential amenity and property values will not arise.

8.8. Development Plan Compliance

- 8.8.1. As set out in Section 8.2 above I am satisfied that the Proposed Scheme is in compliance with the relevant Development Plan provisions, and that the relevant plans contain significant policy support for the provision of the BusConnects projects (Section 4.13, 4.14 and 8.2 of this report refers). Submissions have been made raising concerns that the Proposed Scheme contravenes certain development plan provisions in terms of zoning, specific objectives and protection of views, having particular regard to the SDCC development plan. In this regard I note that SDCC did not raise any concerns in relation to any potential contravention of their plan and clarified that they were of the view that the Proposed Scheme aligns with the policies of the South Dublin County Development Plan 2022-2028.
- 8.8.2. In relation to zoning I note that the Proposed Scheme broadly runs along existing roads which are not subject to specific zoning provisions, however, at certain locations route widening is required. While the overlap of works from within the non-zoned transport corridors into zoned lands is minimal throughout, within the SDCC area this most notably occurs along the frontage of the Hermitage Golf Course, the Sureweld building and for a smaller portion of the Hermitage Clinic frontage on the lead up to the N4s inbound off-slip to junction 2. At these locations there is overlap into the HA–LV zoning whose objective is to protect and enhance the outstanding natural character and amenity of the Liffey Valley. I note that under this zoning objective a range of developments are open for consideration including agriculture, education, and public services (subject to acceptable landscape impact assessment). I also note that a longer list of uses are listed as being ‘not permitted’ such as advertisements, garden centres, hospitals, nursing homes, warehousing etc. I note that there is no definition of ‘public services’ in the SDCC development plan, although I am satisfied that the subject works which will improve public bus services, pedestrian links and cycling facilities do fall under that category. In this regard I also note that in their submission SDCC do not raise any concerns in relation to the

zoning provisions of the route, and while not relating to the provisions of the SDCC development plan my opinion concurs with that of DCC which notes that in its consideration the elements of the proposed scheme within its jurisdiction can be considered as “public service installations”. I must restate that the overlap of proposed works into the zoned areas is minor and along the boundaries of an existing significant public road corridor. I, therefore, do not consider the use to be inappropriate or non-compliant as the zoning objective does not preclude such works and an appropriate landscape impact assessment has been submitted (the EIAR refers). Notwithstanding my opinion, even if such proposed improvements to existing transportation linkages were considered to not be compliant with the zoning provisions, I note that the subject works constitute an improvement, minor expansion/widening, and intensification of sustainable transport solutions along an existing transport corridor and that such works are in accordance with the non-conforming uses provisions of the SDCC Development Plan which relate to expansion/intensification of authorised developments and state that such works are appropriate “..where the proposed development would not be detrimental to the amenities of the surrounding area and would accord with the principles of proper planning and sustainable development.” For clarity, I consider that the Proposed Scheme will not be detrimental to the amenities of the area and accords with proper planning and sustainable development in this regard. Furthermore, I note that the SDCC Development Plan goes on to state that “This includes the integration of land use and transport planning.” I have reviewed the locations of the bus shelters at this location (i.e. in the vicinity of Sureweld and Hermitage Clinic) and I am satisfied that both are located outside the HV-LV zoning and as such any advertisement panelling associated with these shelters would not be contrary to development plan zoning provisions. Accordingly for the reasons set out above I do not consider that the Proposed Scheme will contravene the Development Plan zoning provisions.

- 8.8.3. A third party concern has also been raised in relation to potential non-compliance with a SDCC Development Plan objective to protect and preserve a significant view from the N4 looking north to the Liffey Valley from along and in the vicinity of its overpass of the Fonthill Road as shown on Development Plan maps. Relevant policies and objectives in this regard are Policy NCBH15 “ Preserve views and prospects and the amenities of places and features of natural beauty or interest

including those located within and outside the County”, NCBH15 Objective 1 “ to protect, preserve and improve views and prospects of special amenity, historic or cultural value or interest including rural, river valley, mountain, hill, coastal, upland and urban views and prospects that are visible from prominent public places and to prevent development which would impede or interfere with Views and / or Prospects” and NCBH15 Objective 3 which requires a landscape/visual assessment to accompany applications for significant proposals that are likely to affect views and prospects.

8.8.4. In the first instance I consider that the submitted EIAR incorporates a sufficient landscape/visual assessment, and the application documentation drawings and details provide sufficient information to allow the Board to consider this matter in full. The lands at the Hermitage Clinic are at a lower level to the N4 at this location with the Fontill Road and eastbound slips off to, and on from, junction 2 sloping down and rising up respectively from, and to, the N4. As set out in the SDCC Development Plan the protected view extends for an approximate 650m length along the northern side of the N4 looking north. The Proposed Scheme will not alter the existing planting or existing roadside/edge planting for approximately 440m of the easternmost extent of the designated view (i.e. that area of mature planting in place between the N4 and its eastern-bound on and off slips for junction 2 to the Fonthill Road) and accordingly I am satisfied that there will be no impact on that portion of the view. The remaining 200m of the view (i.e. that area closest to the Hermitage clinic building and its western car park), will be subject to works, consisting of widening to accommodate a two-way segregated cycle track, setting back of the existing boundary walls, and provision of retaining wall structures. The submitted drawings clarify the height of the retaining walls varying from a retained height of less than 1.5m on the western section, rising to greater than 1.5m retained height as the level changes to be dealt with increase. The road edge and frontage of properties at this location is significantly planted, behind a modern construction natural stone wall. The existing wall is of sufficient height to block any available views north from the N4 to the west of the existing access to be retained (at chainage A1100 – approximately 30m of the designated view), and it reduces in height moving to the east from this gate where views north continue to be predominantly blocked by existing trees in place. From site inspection – which was

carried out at a time when the trees were not in leaf – glimpses towards open landscape to the north were available albeit they were over the existing car parking facilities and buildings of the Hermitage Clinic. The Proposed Scheme will involve the removal of trees from this edge of the road (following the construction of the retaining wall structures) and the provision of new planting.

8.8.5. Having reviewed this location in detail I consider that the Proposed Scheme works do not entail any significant changes for the majority of the extent of the view (i.e. 440m of the designated view will remain unchanged - with the only clear view provided north from this area being from at the overpass of the Fonthill Road while the lead in to this 'gap' view will remain restricted by the existing mature planting which will be unchanged should the Proposed Scheme be implemented). For the c. 200m westernmost extent of the development plan designated view alterations will arise. Retaining walls (of two varying heights) will be provided at a set-back location to allow the provision of cycling and pedestrian facilities, this will necessitate tree removal, and it is proposed to provide additional planting behind the retaining wall structures. I consider that these works are broadly in keeping with the character of the transport corridor at this location and the currently available views. Existing views to the north are currently obscured by the presence of existing mature planting and walls the Proposed Scheme will remove some of the trees, retain others and provide additional trees as part of the landscaping plan. The views from the N4 north may therefore be opened up a little more, albeit any gains may be offset against slightly higher new retaining walls. The Board may wish to take the opportunity to open up these views more by limiting the extent of new planting, however, I recommend that the landscaping scheme be retained as proposed to allow the character of the area to be retained more, further I recommend that the final design of the retaining wall structures and planting be agreed with the planning authority in recognition of the protected view and to ensure the walls are suitably finished to reflect the character of the existing walls. On the basis of the above analysis I consider that the Proposed Development will not conflict with the preservation of this view from the Development plan and that it is in keeping with the character and extent of the view in place as designated.

8.8.6. The issue of the interactions (or potential lack thereof) between the Proposed Scheme and the designated "Long Term High Capacity Public Transport (RPA

Preferred Route)” provided for in the SDCC plan running north from the N4 (just west of the Hermitage Clinic building and associated car parking), has also been raised in one third party submission. In relation to this issue I note the provision in the SDCC Development Plan and that the Proposed Scheme follows the existing road corridors at this location providing for an inbound bus stop in the vicinity. The development plan makes it clear that the ‘high capacity public transport’ route is a long-term preserve and in the absence of detailed plans, I am of the opinion that sufficient provision has been made for any future interactions, which will (as confirmed in the development plan designation) only arise in the longer term.

8.8.7. Another matter that arises in relation to development plan compliance that is raised in third party submissions is SM3 Objective 17 which relates to the upgrade of the existing Kennelsfort Road and R148 junction. Several third parties have stated that not providing a grade separated junction at this location contravenes the SDCC development plan, however, this is not the case. The wording of the objective and the six year road programme (table 7.5 of the development plan) have been set out in sections 4.13.6 and 4.13.8 of my report above. In all references to these the provision of a grade separated junction is not absolute with the option of an equivalent solution to maximise the efficacy of the BusConnects project also being provided for. Accordingly, I consider that the Proposed Development is compliant with these provisions.

8.8.8. Concerns are also raised in relation to compliance with the Dublin City Development Plan 2022-2028, in particular, in relation to the works proposed to provide accessible ramps and stairs to the bus stops on the Chapelizod bypass and their compliance with the zoning provisions and ACA designation in the vicinity of Chapelizod. In this regard I note that these works are proposed within the Z9 zoning the objective of which is “To preserve, provide and improve recreational amenity, open space and ecosystem services.” I also note that the provision of a public service installation is a use that is permissible within this zoning. Further, I note that the Proposed Scheme is providing an appropriate level of planting and landscaping at this location and that while the works are in the vicinity of the Chapelizod and Environs ACA at this location they are not located within it. Notwithstanding this, I consider that the design of the access ramps and stairs at this location respect the amenities and built

environment at this location and as set out previously above respect residential amenities.

- 8.8.9. In conclusion I am satisfied that the Proposed Scheme, its construction methods and mitigation measures is in compliance with the relevant requirements, objectives and policies of both the South Dublin County Council and Dublin City Development plans.

8.9. Impact on Individual Properties

- 8.9.1. In general, I am satisfied that the Proposed Scheme will not give rise to significant adverse impacts on individual properties along the route of the works. The works are predominantly proposed along roads and transport corridors, and the operational effects arising will not significantly adversely impact on properties along the route and will in fact improve connectivity and infrastructure for sustainable modes of transport. There are four properties, however, which will experience a larger degree of direct impacts from the Proposed Scheme, namely the Hermitage Golf Course, Hermitage Clinic, Knockmaree Apartments and Palmerstown Lodge. These have all made third party submissions and I consider it of merit to discuss the effects and impacts arising.

Hermitage Golf Course

- 8.9.2. The Hermitage Golf Course (HGC) has made third party submissions to both the application and CPO and raised concerns that the Proposed Scheme will give rise to significant adverse and unmerited impacts on the Golf Club in terms of its functionality, amenity and purpose. The Proposed Scheme requires the provision of quiet street treatment along the HGC access road, the set back of the HGC frontage to facilitate route widening which requires the provision of a retaining wall structure, the removal of a significant number of trees (218 no. as set out in the EIAR), along with planting approximately 117 standard sized trees and 80 no. heavy standard trees and the provision of a 130m length of 15m high sports netting (to prevent golf balls reaching traffic on the N4). The subject works require both permanent and temporary land take from the HGC and lands in the vicinity as follows:
- 3950.5m² (Permanent) – access road to the HGC (for quiet street treatment and landscaping).

- 103.2m² (Permanent) – at access road frontage for provision of cycle lanes and boundary set back.
- 1,670m² (Permanent) – from along site frontage, generally a 5m wide strip along the HGC frontage to provide for boundary set back, provision of cycle lanes, and footpath.
- 659.2m² (Temporary) – entrance to HGC alterations to facilitate Proposed Scheme.
- 11,489.5m² (Temporary) – lands between the 6th fairway and permanently acquired lands along the HGC frontage. Temporary land take is to facilitate works, (including provision sports netting) and landscaping. Width of the temporary land take varies from a width of c.51m to c.25m back from the northernmost line of the permanent land take.

8.9.3. The HGC has stated that the land take required is neither appropriate nor justified, and that the Proposed Scheme will have an adverse impact on the operations and functionality of the Golf Club. They have also submitted that the EIAR is deficient, the proposal is contrary to the Climate Action Plan, cycle route has not been mapped in the County Development plan, the incorrect process is being used, an oral hearing must be held, and that the AA is not sufficient. This report deals with the majority of these issues elsewhere, however, for clarity I wish to state that I consider that the EIAR and NIS submitted are sufficient to allow the Board to consider the Proposed Scheme in full, and a determination has already been made by the Board in relation to the Oral Hearing. As set out previously above, I am satisfied that the provision of two-way cycling facilities are appropriate at this location, and that the improvements to the transport corridor are in accordance with the requirements of proper planning and sustainable development. Furthermore, I consider that there are sufficient provisions, policies and objectives in the relevant development plan (refer to section 4.13 of my report above) which identify the need for, and support the provision of improved means of, sustainable transport infrastructure along this transport route. I am also satisfied that the extent and nature of the two-way cycle route to the north of the N4 is the optimum design response at this location and that it minimises impacts on third party lands, and in particular ensures private residential gardens are not impacted (a situation that would arise if the alternative of providing a cycle track

along the south of the N4). While I note the potential alternatives raised by the HGC in terms of reducing speed limits and reducing the number of traffic lanes along their frontage, in order to limit the extent of works (and land take required) along their frontage, I do not consider these to be viable alternatives due to the strategic significance of the N4 transport corridor and the levels of traffic that it is required to accommodate at this location, in this regard I consider that 3 no. general traffic lanes are required to cater for the volumes arising. For clarity I note that while the Proposed Scheme will result in a reduction in private car traffic along the route, this reduction is predicted to be 4-6% at peak in 2028 and while significant would not be of a sufficient scale to merit a reduction in general traffic lanes at this location given the strategic importance of the N4 transport link at this location as a link to the west and north west and the level of traffic using this road⁹. Furthermore, I consider that the extant speed limits and that the provision of sustainable transport infrastructure (segregated two-way cycle track and footpaths) are appropriate and justified at this location. Accordingly, I consider the need, and justification, for the extent of traffic infrastructure required at this location in terms of speed limits, numbers of traffic lanes, provision of pedestrian and two-way cycle lane to be entirely appropriate and in keeping with the development plan requirements as well as satisfying the needs of prioritising sustainable modes of transportation. Having regard to safety measures I also consider that the provision of the sports safety netting to be appropriate.

8.9.4. I note that concerns have also been raised in relation to potential adverse impacts arising from Noise and Vibration. In this regard, I note that the HGC has included in their submission a noise report highlighting concerns that a reduction in height of the existing boundary wall (when viewed from the golf course side) when considered in conjunction with the loss of trees will result in adverse impacts in terms of noise during the operation phase. In this regard the Proposed Scheme includes the provision of a wall along this boundary, as well as fencing and a further retaining wall. At its fullest extent I am satisfied that the retaining wall structure will be sufficient to ensure significant noise levels will not arise, however, the road level and golf club levels vary along this frontage, and accordingly in the interests of clarity for all I consider it appropriate to include a condition to ensure that the extent and height

⁹ As shown in table 5.2, figures for N4 west of Fonthill of Appendix A6.1 of EIAR, Transport Impact Assessment Report.

of the wall along this boundary remains consistent with that in place to ensure the existing screening of the road from the golf club is maintained to preserve its established amenity. I note that additional screen planting will be provided and will mature throughout the operational phase and that this will also contribute. Given the nature of the works and existing traffic on the N4 and on the basis of the application documentation submitted I am satisfied that adverse impacts will not arise from vibration during the operational phase. I do note that there will be noise disturbance at this location during the construction phase, however, this will be temporary in nature, managed and not present a significant adverse impact. For clarity while I note that the HGC submission raises concerns in relation to noise and vibration impacts at certain tee-off locations I do not consider that these impacts will be of significance due to the separation distances, as well as the established characteristics of the N4 at this location.

- 8.9.5. The HGC submission states that the EIAR has not fully considered the impacts on their operations and functionality, and I consider there to be merit in this argument. I note that the impact on the amenities of the HGC have been assessed in terms of noise, dust, and visual impact of the works and operational period, but I am of the opinion that there has been limited discussion in the application documentation in relation to the impact of the extent of the works on the operations and functionality of the golf course. Having considered the details submitted I am satisfied that the operations and functionality of the HGC will be subject to significant adverse impact should permission be granted for the works as currently proposed and that such impacts have not been justified. Of prime concern in this regard is that the 11,489.5m² of temporary land take proposed incorporates all of the land between the 6th fairway of the HGC and the N4 frontage. There is limited justification within the application documentation for the extent of this land take, and it is clear that the intent is to carry out significant re-planting at this location. For clarity I am fully satisfied that the extent of permanent land take along the HGC frontage is justified and necessary to facilitate the subject works. In this regard, I note that a retaining wall is required along this frontage once the front boundary has been set back (the HGC lands are higher than the N4 at this location) and the application documentation contains a specific construction methodology for the construction of this wall. It has also been confirmed that all construction activities for this wall and

the sports netting can be carried out from the N4 without having to use HGC lands. I also note that the landscaping drawings show a significant proportion of retained vegetation within the temporary land acquisition area and that extensive works have not been shown within this area, with the notable exception of the provision of the sports netting and associated foundations. I note that this area of temporary land take is used by the HGC as the 'rough' which runs along the side of the 6th fairway and accordingly contributes significantly to the operational and functional requirements of the golf course. From site inspection the trees in this area perform two functions with those along the southern boundary with the N4 very much operating as boundary/screening planting, while those in the remainder of this area having the dual purpose of offering screening while also being part of the design of the overall golf course offering obstacles and features to be negotiated when playing the 6th hole. The application documentation does not consider this matter in detail and does not demonstrate any consideration of the functional requirements of the golf course in providing or designing the landscaping scheme within this 'rough' area of the 6th hole beyond considering the boundary screening. The Proposed Scheme focuses on this area as an amenity corridor that must be replanted to preserve the visual amenity of the area which, while understandable given the scope of the overall project does not appear to respect nor consider the functional needs of the golf course in terms of the planting design and dual function of the trees in this area (i.e. set back from the frontage. I do not consider this issue to be of such significance to justify the refusal of the overall scheme or redesign of the transport infrastructure being proposed, however, I do recommend that conditions be imposed to limit the extent of lands being acquired temporarily to facilitate the construction of the scheme particularly given the commitments provided throughout the application documentation, and to limit the impact on the functionality of the golf course to ensure it can continue to operate throughout the construction phase. For clarity the Board should note that I consider construction impacts will still arise from works, but these will be temporary and not significant provided that the works areas are restricted to an area further set back from the edge of the fairway of the sixth hole. I consider that the works within the area of the permanent land take will not give rise to significant impacts and I am satisfied that all other works (landscaping, safety net construction and ancillary construction activities) should be restricted to occur within

15m of the northern (solid red line) site boundary line shown along the N4 frontage of the N4 from chainage A500 to A840 shown on general arrangement drawing BCIDA-ACM-GEO_GA-0006_XX_00-DR-CR-0003, Sheet 03 of 31, Rev. M01.

- 8.9.6. In summary, I consider the permanent land take requirements to be appropriate and justifiable to provide for the sustainable transport requirements of the area, however, the extent of the temporary land take area has not been justified in terms of the works required nor impact on the golf club's operations. Furthermore, I consider that the screening landscaping, safety netting and all associated and facilitating works required to accommodate the works along the site frontage within the temporary land take area can be provided within a narrower corridor, thus ensuring adverse wider ranging significant impacts will not arise on the operations of the golf course. This approach allows the provision of the necessary sustainable transport infrastructure required while also ensuring the operations and functionality of the golf course are not unduly or significantly adversely affected.

Hermitage Clinic

- 8.9.7. The Hermitage Clinic has made submissions in relation to the Proposed Development, regarding compliance with the development plan (particularly in relation to zoning and preservation of a protected view – discussed previously above) and impact on the operations and future development of the clinic.
- 8.9.8. In relation to operations and future development of the clinic I note that the Proposed Scheme necessitates works along a narrow band of the frontage of the clinic in the immediate vicinity of the N4, and its east bound off-slip to the Fonthill Road Roundabout. I also note that the existing clinic is set back significantly from the edge of the proposed works areas which will predominantly occur along the existing road edge and embankment areas. The clinic building is set back from the proposed works areas by distances varying from c.60 to 90m with car parking and planted areas on the intervening lands. The Proposed Scheme incorporates the following land take requirements from the Hermitage Clinic:
- 1,769.7m² (permanent), strip of land varying in width from c. 3m to 10m, to facilitate route widening, retaining walls and provision of cycle tracks and footpaths

- 1,400.7m² (temporary) to facilitate landscaping and ancillary works. The strip of temporary land take is north of the permanent land take and generally c. 5m in width with the exception of a 20m wide narrow corridor behind the existing (closed) access gate which is to be maintained.

8.9.9. The clinic's submission has stated that the Proposed Scheme will significantly impact the ability to accommodate further expansion of the clinic's facilities in the future. In planning terms, I do not accept this as accurate. The main clinic building is set back off the N4 at a lower level and within its own significant grounds. Between the clinic building and the N4 there is significant private clinic parking provided and then an embankment which rises up to the N4 boundary. I note that the clinic has previously applied for a multi-storey car parking in the area between the building and the road edge. That application although granted by the Local Authority was withdrawn from consideration by the Board during the appeal process prior to a decision issuing (SD17A/0251, ABO-301426-18 refers). Regardless of the outcome of that application, the extent of the Proposed Scheme does not overlap with its footprint. The Proposed Scheme represents an expansion and improvement of the existing transport infrastructure which is in place immediately south of the clinic and I consider that the works, which require an approximate 5m strip of permanent land take with an additional broadly similar strip of temporary acquisition required will not infringe on future development provisions for the clinic, given the nature of the use, its existing form, set-backs, nature of the existing topography and development plan provisions. I note that similar to all properties along the route there will be a degree of disturbance impacts from construction activities, however, these will not be significant and will be temporary.

8.9.10. In relation to impacts on clinic operations and the prevention of Nosocomial Aspergillosis, I note that the clinic has been identified as a sensitive receptor and commitments are made in the application documentation to ensure access and services/utilities will be maintained with impacts minimised through liaison. The submitted EIAR notes that the provisions of the National Guidelines for the prevention of Nosocomial Aspergillosis During Construction/Renovation Activities (2018) will be applicable for all works within 250m of hospitals and that dust minimisation measures, such as those outlined in the CEMP and EIAR (which include road cleaning, appropriate material management, and site hoarding), are a

fundamental requirement. Furthermore, I note that the application documentation commits to liaison with all affected properties and that specifically in relation to the Clinic there is a commitment for the contractor to liaise and inform the hospital of the proposed construction management arrangements which will facilitate the co-ordination of all requirements. I also note that the clinic has itself over the years proposed works (extensions and car parking etc.) within its own site and in closer proximity to the existing clinic building which demonstrates that such works can be carried out while ensuring protection of vulnerable patients/members of the public.

8.9.11. Accordingly, I consider that the Proposed Scheme is appropriate at this location and while impacts will arise during the construction phase I note that these will be temporary and not significant. I also consider that the mitigation measures proposed are appropriate and that any future proposed development of the clinic will not be adversely affected.

Palmerstown Lodge

8.9.12. The Proposed Scheme involves the removal of a U-turning facility on the Palmerstown Bypass, which will alter the means by which private vehicles can access Palmerstown Lodge (dwelling located on the R112 Lucan Road inbound access to Chapelizod). This will alter the means of access available to this dwelling by private vehicles approaching from the east and necessitate alternative routes being used which will require driving additional distances ranging from 100m to 900m. As stated previously, while this is an effect arising from the Proposed Scheme, I do not consider that this impact to be of such significance that would merit a refusal or alteration to the Scheme. Improvements to traffic movements, increased bus, cycle and pedestrian infrastructure and the overall benefits of the Proposed Scheme will enhance the amenities and connectivity of the area and the need to remove the existing U-turn facility arises from the needs of traffic safety and efficiency of junction operations. Accordingly, I consider the Proposed Scheme to be appropriate at this location.

Knockmaree Apartments

8.9.13. A number of submissions have been lodged by residents and the management company of the Knockmaree Apartments. I have dealt with the issues raised throughout this report and as noted previously in sections 8.5.3 (Chapelizod bus

stops) 8.6.5.6 (biodiversity – loss of trees), 8.7 (Residential Amenity) as well as throughout the relevant sections of the EIA section of this report. I note that the Proposed Scheme requires both temporary and permanent land take from the Knockmaree residential development, and that impacts will arise during construction, however, as referenced at the relevant sections of this report I consider that the works proposed in the vicinity of Knockmaree are justified, appropriate, and serve the needs of the community at large to improve sustainable transport options and improve accessibility. I consider that while impacts will arise that these will be temporary in nature and minimised insofar as is practicable through the implementation of the mitigation measures incorporated within the Proposed Scheme and its construction practices. Overall, the improvements in connectivity proposed will benefit all areas along the transport corridor and I do not consider that the Proposed Scheme merits refusal or alteration in relation to the nature of the impacts arising. Notwithstanding the above in the interests of clarity and orderly development I consider it appropriate to include a condition to ensure details of the retention/replacement/redesign of existing noise barriers at the new bus stop on the Chapelizod bypass are agreed by the Planning Authority.

8.10. Cultural / Architectural Heritage

8.10.1. Several submissions have raised concerns in relation to the potential adverse impact that the Proposed Scheme could have on various elements of the built heritage. The submitted EIAR and application documentation contains significant consideration and details of the potential impacts on heritage features (both architectural and archaeological) along the route of the Proposed Scheme. I have reviewed these impacts and considerations in detail in Section 9.11 (Archaeology, Cultural and Architectural Heritage) of this report below, identifying the elements of archaeological, architectural and heritage merit along the route, discussing the potential impacts on items of architectural heritage including the Record of Protected Structures (RPS), Architectural Conservation Areas (ACAs), development plan conservation areas, as well as other structures of architectural interest including street furniture. I have set out detailed conclusions in relation to the potential impacts on built heritage in section 9.11, and the discussion and detail set out in Section 9.12

(Landscape/Townscape and Visual) is also of relevance in relation to this matter as it also considers impact on streetscape.

- 8.10.2. I do not intend to repeat the description or consideration carried out in sections 9.11 or 9.12 here, however, I do note that the Proposed Scheme predominantly refers to works along and within an existing transport corridor and as such the majority of works will occur at road level and relate directly to the carriageways and footpaths, with the notable exceptions of boundary treatment setbacks, signage provision, bus shelters, retaining wall structures as well as new pedestrian/cycle bridges and bridge widening.
- 8.10.3. I consider that the Proposed Scheme due to its design, landscaping and nature of the proposed works will not give rise to significant adverse impacts on items of architectural heritage, the works being carried out to carriageways and at street level will not in my opinion impact the character of any of the areas through which the route extends as the nature of the route will remain consistent with that currently in place, i.e. it will remain a significant transport corridor which will facilitate vehicular, pedestrian and cyclist movements. I do note that the Proposed Scheme runs adjacent to areas that have significant heritage value in and of themselves, and passes by or near structures and buildings that are of architectural or heritage merit.
- 8.10.4. The Proposed Scheme runs through red-hatched conservation areas as set out in the DCC City Development plan, however, while noting junction changes, the provision of new cycling/bus/pedestrian infrastructure, and additional signage and structures I consider that the character of the existing transport route is not significantly altered nor does it adversely affect the established amenities of the conservation areas. Accordingly, I consider that the Proposed Development, its associated planting, and bus shelters can be accommodated without adverse visual or heritage impacts, however, in order to do so and minimise impacts in so far as is practicable I consider it appropriate to omit advertising panels from bus shelters at select locations, to ensure impacts on the heritage value of more sensitive areas are further minimised. In this regard I consider that the bus shelters at Heuston Station, Dr. Steevens Hospital and on the Old Lucan Road in Palmerstown village should have advertising panels omitted to reduce visual clutter. In relation to these locations I note that the former two are both within conservation areas designated in the City Plan with the bus stops/shelters located immediately adjacent to protected

structures. In relation to the bus stops in Palmerstown, I note that these are located on the street immediately adjacent to the Red Cow Cottages and Woodfarm Cottages ACA, and while generally the works present an opportunity to improve the streetscape at this location that the omission of advertising panels will contribute to the streetscape, maximise passive surveillance, and avoid visual clutter.

8.10.5. I note that the DCC submission to the application has raised concerns in relation to the proposed amendments along the St. Johns Road West frontage of Dr. Steevens Hospital, stating that it will affect the setting of the gardens and open views and setting of this protected structure and recommends that further assessment of the impacts should be carried out. I do not concur that the Proposed Scheme will give rise to significant adverse effects on heritage at this location. I note that the Proposed Scheme has been designed to ensure the retention of a significant tree, and that heritage features (such as lamp posts) are to be either retained or suitably relocated to accommodate the upgraded bus stops proposed at this location. I also note that one of the bus shelters has been off set to maintain views and dominance of the open garden area and that footpath widening and pavement improvements will present a sensitive and appropriate design response while also ensuring that sufficient and improved sustainable transport options are catered for. I acknowledge that the proposed works will have an impact on Dr. Steevens' Hospital and the location, however, I do not consider that the impact will be significant or detrimental, as the character of the protected structures (inclusive of Heuston Station) will be retained as will the character and open nature of Dr. Steevens' Hospital grounds in combination with the primacy of its elevation addressing St, Johns Road West. Furthermore, I am satisfied that the Proposed Scheme incorporates appropriate mitigatory provisions in terms of oversight, monitoring, and recording of works and features in the vicinity of heritage locations, albeit I recommend confirmation of this through the imposition of appropriate conditions.

8.10.6. A submission has also raised the potential impact on heritage features associated with the Hermitage Golf Course including its main club house and demesne setting as well as the existing dwelling within its grounds (Hermitage Lodge). I am satisfied that these features have been adequately considered within the EIAR and in the design of the proposed development does not significantly impact on these heritage features. The Hermitage clubhouse is noted as a protected structure and the historic

curtilage of the house is also noted. The existing boundary wall is proposed to be set back and the screening planting that is present is to be removed. I am satisfied that this existing boundary wall and boundary planting are not original features albeit I note their contribution to the overall amenity and setting of the Demense which is now in use as a Golf Course. I have noted elsewhere in this report that I consider the extent of the works area to be too large (referring to the extent of the land subject to temporary acquisition along this frontage) which I am recommending to be reduced, this will have the additional effect of reducing the amount of tree removal that can be carried out. I accept that the screening trees along the frontage will be removed and replanting occur and that the provision of safety netting will alter the setting of the structure and demesne, however, I do not consider that these will be significant impacts in terms of preserving the overall heritage value, setting and character of the demesne or protected structure. In relation to Hermitage Lodge/gate house (referenced in the EIAR as CBC006BTH018) I note that it is not a protected structure (although associated with the demesne) and that the Proposed Scheme will not significantly alter its setting or any original features as no land take is proposed from its site and its boundary and gate are not proposed to be altered. Accordingly, I consider that the Proposed Development will not give rise to significant adverse effects on these features and impacts have been appropriately considered within the overall design.

8.10.7. For clarity, in relation to potential impacts on the built environment, I consider that the design of the Proposed Scheme has given adequate consideration to all elements of heritage value throughout the design process, and I consider that the need for signage (including gantry signage) is appropriate as proposed and that it will not detract from the heritage value of structures or features in the vicinity or the wider streetscape. I am also satisfied that the pedestrian/cycle bridges proposed (and those to be retained) are appropriate and will not/do not detract from visual amenities.

8.10.8. I note in relation to the carrying out of works to and in the vicinity of heritage features that both SDCC and DCC generally consider that the mitigation and methodologies set out set out within the EIAR to be appropriate, however, it is requested that a condition be imposed requiring engagement and agreement with the local authority on the final works methodologies at the detailed design stage, the Applicant has

stated that the inclusion of a specific condition is not required in this regard as liaison will occur as a matter of course. Having regard to the nature and scale of the project, and the fact that the Local Authorities have specialist conservation and architectural sections with widespread and detailed local expertise and considering their development management and planning functions, I consider it appropriate that a condition be applied in relation to heritage features and works which will directly affect them in order to ensure the efficacy of the recording, preservation, protection, and reuse methodologies.

8.11. Consultation

8.11.1. Several third parties have raised concerns in relation to the public consultation process prior to and during the application process. In this regard I note that the majority of submissions acknowledge engagement with the process, however, dissatisfaction is expressed in relation to the outcome and/or the timing of changes to the Proposed Scheme, submissions also refer to concerns in relation to the lack of an oral hearing being made in relation to this proposal.

8.11.2. In relation to the consultation undertaken by the applicant prior to the Proposed Scheme being lodged with An Bord Pleanála, I note the following:

- Public consultations for the overall BusConnects Core Bus Corridors were held in November 2018 to March 2019, January to April 2019, and February to May 2019. These consultations included public information and a community forum meeting at the West County Hotel, Chapelizod.
- A second round of public consultation took place March-April 2020, this round of consultations was impacted by the COVID 19 restrictions, and so members of the public were asked to make written submissions as meetings could not be held.
- A third round of public consultation took place November to December 2020 which continued to be impacted by COVID 19 restrictions, with all information being made available virtually on-line, which resulted in over 200 submissions being received.

8.11.3. In relation to the above I refer the Board to the submitted EIAR, and the 'Preferred Route Option Report', in which the applicant reviews the range of submissions made in relation to each of the rounds of consultation and reviews how the various options

were considered to inform the emerging preferred route, preferred route and the overall design of the Proposed Scheme.

- 8.11.4. I note that some third-party submissions have raised dissatisfaction with the public consultation process in terms of the final outcome and timing of changes to what has ultimately become the Proposed Scheme while noting that a public engagement process has been undertaken. In this regard I can understand individuals and organisations being disappointed in the outcome of the design process in relation to the final route selection and proposed local design measures, however, I also consider that a significant level of public engagement and dissemination of information has been undertaken in advance of the current application process and I am satisfied that the public have been afforded every opportunity to engage with the overall process of the design of the scheme from the earliest opportunity.
- 8.11.5. In relation to holding an Oral Hearing, this matter is at the sole discretion of the Board under the provisions of the Planning and Development Act, 2000 (as amended), who, having considered the application documentation and the submissions lodged were satisfied that sufficient information was available to undertake the decision process without a hearing. I also note that all third parties were afforded the opportunity to make further submissions on the responses that the applicant had made in relation to the initial submissions.
- 8.11.6. As set out above, I am satisfied that a significant level of public consultation and engagement has been undertaken by the applicant from the earliest stages of the procedural process. From the submissions lodged it is acknowledged that the applicant has engaged with the public, all relevant third parties and other organisations and prescribed bodies. Alterations have been carried out to the Proposed Scheme throughout the engagement process and while I note that the final design has attracted further objections as part of the application, the design process has been influenced by the consultations held. I am also satisfied with the level of detail and clarity provided within the application documentation, that the statutory process complies with all relevant requirements, and that under the provisions of the Planning and Development Act, 2000 the holding of an oral hearing is at the discretion of the Board, and a determination on this matter has already been made.

8.11.7. In conclusion, I am satisfied that an appropriate level of public engagement has been carried out and that the relevant statutory processes have been adhered to in this regard.

8.12. Process, Ownership and Legal Agreement

8.12.1. Concerns have been raised that sufficient lands are not under the control of the applicant to provide mitigation measures, that the correct consenting process has not been undertaken by the applicant, questions raised in relation to ownership of areas where works are proposed and a legal agreement referenced in relation to the entrance to Shaws Tree Services at Palmerstown.

8.12.2. In relation to having sufficient land to provide for the mitigation measures proposed, I note the concurrent CPO under which a range of permanent and temporary land takes are set out. I am satisfied that the application delineates accurately both the extent of the land take provision and the extent of the works areas and furthermore I am satisfied that the application and CPO documentation provides for sufficient lands to accommodate the works and any relevant mitigation measures associated with the Proposed Scheme. Generally, I note that should lands be identified for works which are not under the control of the applicant or subject to appropriate acquisition that this would be a civil matter and appropriate remedies could be sought through legal means in the event of issues of land ownership arising.

8.12.3. Section 1 of this report sets out the legislative context for the application under section 51 of the Roads Act (with section 4.18 setting out the EIA screening process), and I am satisfied that the applicant (the NTA) has engaged with the consenting and CPO processes in an appropriate manner as framed by both the Roads Act and the Planning Act given the nature and description of the Proposed Scheme. Furthermore, I am satisfied that the NTA as the applicant in this case has the power to acquire lands through the CPO process, a function conferred to the NTA under section 44(6) of the Dublin Transport Authority Act, 2008 (as amended) and as set out under the relevant provisions of the Housing Act 1966 (as amended) and Part XIV of the Planning Act.

- 8.12.4. In relation to the timing of the decision making processes for the application and CPO I note that legislatively these must be made at the same time as set out under Section 51(7)(b) of the Roads Act.
- 8.12.5. One submission has been lodged relating to a legal agreement that is in place for the access arrangements to Shaws Tree Services at Palmerstown. The submission made relates inter alia to the access to this business (which is located to the rear of No. 1 St. Fintan's Terrace, Palmerstown and accessed off the arm of the Oval junction immediately west of the Appelgreen petrol station). The submission states that this arrangement was put in place many years ago and it represents the only means by which access can be made into this commercial premises which by its nature (tree services) requires larger equipment manoeuvring. The NTA in responding to this issue states that the access to Shaws Tree Services is maintained in the Proposed Scheme and SDCC did not include any reference to an existing legal agreement in their submission. In a further response the third party then made an additional submission reiterating their assertion of a legal arrangement being in place. In this regard I acknowledge that SDCC did not make reference any legal agreement, however, they did not comment on this matter directly and the fact that their submission does not reference a legal agreement at this location cannot be taken as confirmation that one does not exist. I also note that no formal evidence of any such agreement has been placed on the file.
- 8.12.6. The Proposed Scheme provides for route widening at this location with a bus-only access to the village from the Palmerstown Bypass to the village being provided. The two exiting lanes (from the village) on this arm of the junction that are currently in place are being maintained albeit they will be relocated slightly further to the east. Thus, access to Shaws will be maintained so that access and egress will be facilitated. I note that in order to access the Palmerstown Bypass to turn towards the city all exiting traffic from the yard will have to turn right at the yard exit as the facility to turn left onto the bypass at Kennelsfort Road will be removed, however, in my opinion this is a standard traffic management issue that the speed limits and design/operations of the junction can cater for. In relation to the extent of any legal agreement that may be in place at this location I note that while access is maintained under the Proposed Scheme should an issue arise in this regard that this is a civil matter between the relevant parties.

8.13. Recommended Conditions

- 8.13.1. I note in their submission DCC has included a list of recommended conditions, while the SDCC submission also references a number of suggested conditions including referencing construction and traffic management plans. The Board should note that the conditions suggested by both authorities did not raise any significant issues in relation to the routing or principle of the Proposed Scheme and instead focused on more detailed design, construction, drainage and hand-over issues.
- 8.13.2. A number of the conditions requested seek contractual agreements to be provided in terms of handover, management, and maintenance of the Proposed Scheme following construction. In relation to these items I am satisfied that the relevant legislative provisions are in place for the construction and handover of the roads infrastructure to render the attachment of such conditions unnecessary.
- 8.13.3. Other conditions are requested to ensure ongoing liaison, agreement, and engagement in relation to a number of detailed measures such as drainage, methodologies of conservation and recording and carrying out works around heritage items, traffic management, agreement on detailed design features, reinstatement works, standards to be adopted etc. I consider that such conditions requiring further liaison and agreement with the relevant location authority to be generally acceptable and in accordance with best practice, although I note that the applicant has stated that such liaison will occur as a matter of course and that additional specific conditions are not required, I consider that the imposition of such conditions on any consent that may issue would be appropriate in relation to certain issues and in the interests of proper planning and sustainable development, given the length and nature of the subject works and such conditions have been included in my recommendation below where relevant.

8.14. Conclusion on Proper Planning and Sustainable Development

- 8.14.1. Overall I am satisfied that the Proposed Scheme will deliver significant improvements to bus, cycling and pedestrian infrastructure, which will facilitate a reduction in traffic congestion, promotion in the use of sustainable modes of transport all while minimising impacts on the amenities of the area, residential population, heritage features, and biodiversity. I am of the opinion that the subject

works if implemented will encourage a significant modal shift from the private car towards sustainable travel modes into and out of the City. In this regard I have reviewed all submissions lodged and noted the concerns raised by third parties and while I acknowledge the issues raised and note that there will be a certain level of impact and inconvenience during the construction phase throughout, in combination with some changes and alterations during the operational phase, however, I consider that these impacts are not significant, nor significantly adverse, having regard to the overall benefits that will arise from the Proposed Scheme. I am satisfied that the application documentation is clear and demonstrates that the scheme has been designed to minimise impacts and that robust justification has been provided in relation to the various elements of the infrastructure proposed. Furthermore, I consider that the application documentation contains a comprehensive suite of mitigation measures which will minimise impacts where and as they arise. I consider that the Proposed Scheme has demonstrated that it will contribute to the reduction in emissions and improve the efficiency of people movement throughout the route of the Proposed Scheme. Accordingly, I am satisfied that the Proposed Scheme is in accordance with the proper planning and sustainable development of the area, subject to compliance with the mitigation measures set out and conditions attached in my recommendation below.

9.0 Environmental Impact Assessment

9.1. Introduction

- 9.1.1. The Environmental Impact Assessment Directive requires that projects that are likely to have significant effects on the environment must be suitably assessed prior to any consent decision being made. The applicant having carried out an EIA screening procedure considers that the Proposed Scheme is considered likely to have significant effects and accordingly an EIAR has been prepared.
- 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. 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 came into effect.

9.1.3. This section of my report comprises an Environmental Impact Assessment (EIA) of the Proposed Scheme. Some matters considered have been discussed previously above in the Planning Assessment section (above) and are also considered in the Appropriate Assessment section (further below) and accordingly this section should be read in conjunction with these other relevant sections as necessary.

9.2. EIAR Contents and Structure

9.2.1. The application documentation includes an EIAR which has been prepared on behalf of the NTA (the applicant) by an environmental team led by Jacobs Engineering.

9.2.2. The EIAR is presented in the grouped format across four separate volumes:

- Volume 1: Non-Technical Summary (NTS).
- Volume 2: Presents the main EIAR and discusses the Proposed Scheme over 23 separate chapters.
- Volume 3 contains drawings and large format images (Figures) that illustrate the information provided in Volume 2.
- Volume 4 contains the Appendices to the EIAR and is provided across four parts.

9.3. Compliance with Legislation

9.3.1. As is required under Article 3(1) of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, the EIAR describes and assesses the direct and indirect significant effects of the project on the following factors: (a) population and human health; (b) biodiversity with particular attention to the species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape. It also considers the interaction between the factors referred to in points (a) to (d). Article 3(2) includes a requirement that the expected effects derived from the vulnerability of the project to major accidents and/or disasters that are relevant to the project concerned are considered (with flooding considered under the provisions of chapter 13 'Water').

The application EIAR, in my opinion, has been prepared by competent and appropriate individuals in accordance with the relevant national and EU legislation.

- 9.3.2. Overall, 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 Proposed Scheme on the environment, taking into account current knowledge and methods of assessment. Additional pre-construction surveys will be required in order to provide up-to-date information in relation to invasive species, mammals (e.g. badgers and bats) and birds, however, such issues can be dealt with adequately by condition in the event of favourable consideration. Neither the Proposed Scheme, nor its predicted impacts, crosses international boundaries and thus no transboundary effects will arise.

9.4. **Consideration of Reasonable Alternatives**

- 9.4.1. The consideration of alternatives in relation to the Proposed Scheme is set out in Section 3 of the submitted EIAR. Alternatives were considered at three levels, strategic alternatives, route alternatives and design alternatives. Third party submissions have been lodged in relation to the design alternatives adopted, the majority of these such as seeking narrowing of carriageway widths to minimise land take requirements (for example at the HGC) and junction design alternatives (at the Kennelsfort Road junction on the Palmerstown by-pass) are localised issues, however, other submissions have raised the possibility of having the bus corridor run through Chapelizod village centre and onto the City Centre via the R109 on the north side of the Liffey.

9.4.2. **Strategic Alternatives**

- 9.4.3. In relation to strategic alternatives the provisions (and findings) of the Greater Dublin Transport Strategy and its associated Strategic Environmental Assessment (SEA) are considered.

- 9.4.4. The strategic alternatives considered include the 'do nothing' scenario, bus rapid transport (BRT), light rail, metro, heavy rail, demand management, and technological alternatives, these are summarised below:

- **Do Nothing**, currently the bus network is characterised by discontinuity resulting in buses and cyclists competing with general traffic for use of the carriageway for the majority of journeys. Pursuing a do-nothing strategy would exacerbate this problem and result in increasing delays and unreliable journey times as traffic congestion and associated greenhouse gas emissions continues and potentially grows while bus capacity would remain restricted. Similarly, cycling would continue to be unattractive to the majority as segregated infrastructure would be absent from the majority of the route. Furthermore, pedestrian facilities and the walking environment would not improve, thereby sustainable modes of transport (and their environmental improvements) would not be encouraged or prioritised. For these environmental considerations/reasons and in the face of rising congestion and emissions the do-nothing scenario was not considered as a viable alternative.
- **Bus Rapid Transport (BRT) Alternative:** Definitions of BRT range from a quality bus corridor to a fully segregated bus system. It is, however, intended that all of the core bus corridor infrastructure works, including the Proposed Scheme, will be developed to provide a BRT level of service albeit fully segregated bus lanes (i.e. continuous unbroken physical bus lane infrastructure which would have a larger land-take requirement with all associated additional biodiversity, heritage, air quality, noise and likely demolition impacts along the corridor) will not be provided. These environmental reasons were the primary considerations in not pursuing a BRT solution along the corridor, with the core bus lanes as proposed being capable of providing the required bus priority broadly within the existing transport corridors.
- **Light Rail/Luas:** Bus-based transport is appropriate for passenger demand levels up to 4,000 passengers per hour per direction, with light rail for 3,500 to 7,000 passengers, and heavy rail or metro for 7,000 passengers per hour. The GDA strategy considered the passenger flow modelling along the Proposed Scheme's corridor and it is intended to develop a high capacity east-west Luas line commencing in the residential areas of Lucan and connecting to the City Centre. Traffic modelling carried out concluded that the high quality bus-based transport system supplemented by the provision of the

Luas to Lucan would represent the most environmentally appropriate means of servicing the transport requirements of the corridor, thus both facilities operating in conjunction represents the optimal public transport system along the corridor.

- **Metro/Heavy Rail:** Arising from the transport demands on the corridor and the proposed provision of a light rail and bus connects infrastructure Metro/Heavy rail alternatives are neither required nor economically or environmentally justifiable on the route. Furthermore, the provision of a metro would not, negate the need to cater for the residual bus needs of the area nor the need to develop improved cycling and pedestrian infrastructure. Similar to the other previous alternatives the need for a dedicated and inflexible corridor (or an underground service) would result in greater construction impacts, a larger land-take and potentially demolition along the corridor, and for these environmental reasons was not considered as a suitable alternative.
- **Expansion of DART line:** The GDA transport strategy considers the expansion of the DART system on both the Maynooth and Kildare Line will form part of the transport solution (which is contained within the broader corridor area of the Proposed Scheme and would require minimal construction works thus minimising environmental impacts) and would augment upgraded bus infrastructure. The Proposed Scheme would therefore complement other infrastructure upgrades while minimising construction and environmental impacts.
- **Demand Management:** The overall goal of improving transportation and accessibility in urban environments can be achieved through demand management which can be achieved through restricting car movement/access using signage and charges etc. which have minimal construction/ environmental impact. This cannot, however, be achieved in the absence of viable transport alternatives being in place. Accordingly, the public transport system capacity and reliability must be built up either in tandem or in advance of demand management measures.
- **Technological Alternatives:** Advances in technology have also been considered within the EIAR, and while the move to driverless and electric

vehicles is acknowledged it is also noted that three typical cars (electric or otherwise) take the same road space for a maximum of approximately 12 occupants that a double decker bus requires to carry approximately 90. The EIAR acknowledges the benefits of technological advancements but also notes that there is no evidence that such advancements will displace the need for mass transit in an urban environment, and therefore the need for improvement to the public transportation network and non-car modes of travel such as pedestrian and cycle facilities remains.

9.4.5. **Route Alternatives**

9.4.6. Section 3.3 of the EIAR provides an examination of the various route alternatives considered as part of the iterative design process which was informed through a range of public consultations. Feasibility and option reports were prepared initially, with public consultation undertaken on the various and emerging design options from November 2018 until December 2020 with all relevant environmental criteria also being considered.

9.4.7. Initially a stage 1 assessment was carried out considering high-level environmental constraints as well as the ability of routes to achieve the schemes goals, as well as an analysis of population catchments. At the initial stage a range of options were considered (consisting of 45 individual links) that could accommodate a core bus corridor. These options were further sifted considering engineering and high-level environmental constraints, including space requirements, availability of adjacent links to form a coherent end-to-end route as well as population catchments.

9.4.8. The options were then subjected to a finer grain analysis and compared using a multi-criteria analysis (in accordance with the Department of Transport Document 'Common Appraisal Framework for Transport Projects and Programmes') including environmental considerations such as cultural heritage, flora and fauna, soils and geology, hydrology, air quality, landscape and visual, air quality, noise and vibration, and land use character. In order to assess alternatives the corridor was divided into 4 subsections and alternatives within each were considered.

9.4.9. The alternative route to the City Centre through Chapelizod village centre via the R109 (raised by third parties) was considered under design option CZ01 in

subsection 3 of the route. This option was not considered optimal in comparison to others due to the level of potential impact on protected structures and monuments, the number of trees required to be removed, hydrological impacts due to proximity to the River Liffey, need for route widening in residential areas, loss of on-street parking, and route safety.

9.4.10. **Design Alternatives**

9.4.11. Options considered and the development of the preferred route option also included changes to the design in terms of junctions, carriageway cross-sections and allocation, as well as consideration of cycling route options, all of which were further considered under the range of environmental criteria, and presented as options throughout the non-statutory public consultation phases. In this regard I refer the Board to Section 3.4 of the EIAR which breaks down the various specific design options and alternatives considered for each of the three sections of the Proposed Scheme and which sets out the design alternatives considered for the Ballyowen Road Cycle Track, the two way cycle track along the N4 between Junctions 2 and 3, the retention of existing pedestrian/cyclist bridge at Liffey Valley, bus stops, junction layouts and parking proposals in Palmerstown Village, Chapelizod Hill Road steps and ramps, South Circular Road junction, and bus stops at Heuston Station/Dr. Steeven's Hospital.

9.4.12. I note in regard to the above that several third-party submissions have been made expressing dissatisfaction in relation to various issues arising from design options, alternative routes, public engagement/consultation, and route selection. Where necessary I have provided additional discussion in my planning assessment of this recommendation, however, overall I consider that the considerations of alternatives and reasons for route selection and overall scheme design have been adequately articulated within the submitted EIAR and project design process, furthermore I am satisfied that the overall design of the Proposed Scheme has been appropriately informed through public consultation.

9.4.13. Having reviewed the range of alternatives considered throughout the design process ranging from strategic, through to route selection, and to particular design alternatives considered in relation to specific locations, I am satisfied that the applicant has considered the full range of design options and alternatives in relation

to the Proposed Scheme. I consider that all reasonable alternatives have therefore been considered and that the design of the Proposed Scheme has emerged following an appropriate review of all environmental constraints and criteria. Furthermore, I note that a significant level of public consultation has been carried out throughout the design process. The main reasons for the selection of the emerging preferred route and evolution of the design scheme are included throughout Chapter 3 of the EIAR. I am therefore be satisfied that this section of the EIAR is sufficient to comply with the provisions of Article 94 and Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended) referring to the consideration of reasonable alternatives.

9.5. Population and Human Health

- 9.5.1. Chapters 10 and 11 of the submitted EIAR consider the impacts of the Proposed Scheme on population and human health respectively. The Board should also note that the population chapter of the EIAR draws on the traffic and transportation, air quality, noise, and vibration, as well as the landscape, townscape and visual sections (of the EIAR) and is also supported by Appendices A10.1 (Schedule of commercial businesses), and A10.2 (The Economic Impact of the Core Bus Corridors Report¹⁰).
- 9.5.2. Specific impacts on local residents and communities along and in the vicinity of the route from traffic, noise and vibration, air quality, as well as from visual/landscape/ townscape issues have been discussed in full within the EIAR and relevant parts of this report (below), and accordingly the content of this section should be read in conjunction with those others referenced
- 9.5.3. Third party submissions received concerning the Proposed Scheme in relation to population have raised issues such as accessibility to services and amenities, impact on the viability of individual business/commercial enterprises as well as adverse impacts on commercial and residential properties along the route through loss of services (bus stops and routes), parking (including accessible spaces) and connectivity with customers. Concerns in relation to individual properties include accessibility and functionality of commercial and amenity properties, potential loss of

¹⁰ EY 2021.

functionality (e.g. golf course not being able to function), adverse impact on ACA and amenities of property, accessibility to Proposed Bus Stops, and disconnection from (/or dissection of) the local community. Issues in relation to Human Health have not been referenced often in the submissions although there have been some issues raised in relation to safety, and concerns regarding increased congestion/air quality.

9.5.4. **Overview**

9.5.5. From the outset I note that the Proposed Scheme constitutes works along an existing transport corridor, which already accommodates a significant amount of general traffic, including buses, cyclists, and pedestrians and which is bounded by a mix of residential, recreational, and commercial developments as well as educational, and other institutional uses (such as clinics, religious and care facilities) and community facilities.

9.5.6. **Population**

9.5.6.1. In terms of population the potential for impacts is considered under two broad headings – Community and Economy. The method of assessing impacts on the population refers to how the local community perceive their area and how they use community and recreational resources, while the method of economic assessment considers the extent, range and impacts on commercial entities along the corridor.

9.5.6.2. The term ‘Community Amenity’ is used within the EIAR to describe the perceived character or attractiveness of an area. Potential community amenity impacts could arise from the Proposed Scheme during both construction and operational phases from land take, accessibility, traffic, air quality, noise, and vibration, as well as landscape and visual impact. Potential impacts could also arise from the same factors in relation to commercial amenities which could give rise to economic effects.

9.5.6.3. In terms of the established community baseline the Proposed Scheme is located in the vicinity of 31 places of worship, 43 recreational areas, 25 health centres/hospitals, and 46 no. schools. Notable community receptors along and in the vicinity of the route include, Phoenix Park, the War Memorial Gardens, Grounds of the Royal Hospital Kilmainham, Hermitage Golf Club, St. Loman’s Hospital, and

Heuston Station. The EIAR states that there are approximately 22,000 residential properties and 280 apartment buildings and approximately 37,000 commuters in the study area. The breakdown in modes of transport for commuters in the corridor study area (with the Dublin average presented in brackets) is as follows: 18% (12%) travel by bus/minibus, 44% (54%) car/van, 6% (8%) train, 22% (17%) foot/bike, and 9% other (9%).

9.5.6.4. The EIAR states that there are 3,079 commercial receptors within the study area with approximately 68 of these located along the Proposed Scheme (a schedule of commercial receptors is included in Appendix A10.1 of the EIAR) with the notable centres of employment including the Liffey Valley Shopping Centre, Palmerstown Business Park and the Guinness Brewery.

9.5.7. **Human Health**

9.5.7.1. The study area for human health has been established by identifying all the Small Areas of Population¹¹ that touch or coincide with a 500m boundary on each side of the centreline of the Proposed Scheme as this captures people who live and work within easy access of the Proposed Scheme and includes the air quality and noise study areas. The risk to human health from environmental hazards (including noise, air pollution, water) is considered, and baseline data from these other sections of the EIAR have been used and referenced.

9.5.7.2. Overall Dublin has a better health profile than average for Ireland with lower mortality rates, albeit cancer rates are higher. Levels of air pollution are almost entirely within the EU limits for NO₂ and PM (Particulate Matter). There is, however, a relatively high prevalence of exposure to excessive traffic noise, particularly at night-time for properties close to the route of the Proposed Scheme which can cause annoyance and is linked to other adverse health outcomes.

9.5.8. **Potential Impacts**

¹¹ Developed by the National Institute of Regional and Spatial Analysis on behalf of the OSI in consultation with the CSO.

Population

- 9.5.8.1. The characteristics of the Proposed Scheme that are considerations in assessing the potential impacts on population during the construction phase are based on the findings in relation to landscape/townscape (visual impact arising from works), traffic and transport (including temporary traffic diversions, stop/go systems, diversions to footpaths and cycle lanes), Air and Climate (dust arising and air quality impacts), Noise and Vibration (from construction and operations), disruptions/breaks in services (e.g., disruption to water or electrical services) as well as the temporary and permanent land acquisitions.
- 9.5.9. During construction there will be a negative moderate impact on community facilities along the route of the Proposed Scheme during the construction period. These impacts arise from the combination of restrictions, noise and visual impacts that will be in place for the construction phase, and accordingly will be temporary in nature. I consider community facilities within the overall study area but not immediately adjacent to the Proposed Scheme will experience a neutral but not-significant short-term impact on amenities, from traffic diversions and construction traffic due to the temporary and phased nature of the works along the corridor.
- 9.5.9.1. Further impacts will arise in relation to the land-take requirements to facilitate the Proposed Scheme which includes land-take from commercial and amenity facilities, the properties from which land-take is required and which will experience direct effects are set out in Table 9.5.1 below:

Table 9.5.1 – List of main commercial and amenity properties from which land-take is required to facilitate the Proposed Scheme

Property	Land-take	Other Considerations
Hermitage Golf Club	Temporary and permanent land take from golf club frontage onto N4 and from along its currently private access road, to facilitate provision of quiet street cycle treatment along current access road, and corridor widening	Permanent land take is required to facilitate widening of the corridor and provision of two-way cycle track. Temporary land take is required to facilitate the construction of safety netting and retaining wall/boundary wall and landscaping/planting. Hermitage House (the club house) is a protected structure and the EIAR acknowledges its attendant grounds as being of

Property	Land-take	Other Considerations
		heritage importance, albeit they are now in use as a golf club.
Hermitage Park	Temporary and permanent land take required to facilitate construction of pedestrian priority quiet cycleway link from Ballyowen Lane to Hermitage Road.	Existing pathway is in place but will be upgraded within park area to provide link from N4 to hermitage Road quiet street treatment for cyclists, and pedestrians.
The Foxhunter/Wow Burger/Elephant and Castle	Temporary and permanent land take required to facilitate route widening.	Land take required to facilitate route widening and retaining structure, predominantly into existing car park area.
Sureweld Ltd.	Temporary and Permanent land take required to the east of the entrance gate to facilitate route widening and accommodating bi-directional cycle track.	Sureweld is a protected structure, with distinctive buildings and associated boundary, boundary is to be set back.
Hermitage Medical Clinic	Permanent and temporary land take required from along frontage to N4 to facilitate route widening and retaining wall structure. Lands also being permanently acquired in vicinity of Lucan Road/Fonthill Road Roundabout to facilitate temporary construction compound and new cycle lane and footpath.	Hermitage Clinic grounds is at lower level than N4 at this location, and land take area is immediately adjoining the road edge and existing embankment.
Liffey Valley Office Campus	Permanent and Temporary land take required from the Liffey Valley complex to facilitate pedestrian bridge, ramps and route widening, and retaining wall structure.	Land take required to facilitate provision of proposed bus stop facilities, and access arrangements (ramps and pedestrian bridge landing arrangements after passing over the N4)
Palmerstown Lodge (no.'s 20 and 22) Kennelsfort Road Lower.	Temporary and permanent land take required from frontage to facilitate route widening and junction arrangements.	Properties are set back from the road, share a common parking/access area set back off the road and currently accommodate a B&B/Hotel. Space to cater for off-street parking along site frontage will be retained under scheme.
Applegreen Service Station Palmerstown.	Temporary and permanent land take required to facilitate route widening of Lucan Road to allow inbound (bus) and outbound (general) traffic access from R148 Palmerstown bypass to Palmerstown East.	Lands provide for an expansion of the existing road to the east into lands that are currently under grass to the rear of the existing service station.
Knockmaree Residential Development	Temporary and permanent land take in the vicinity to facilitate the access ramps and stairs up	Lands are currently an embankment rising up to the Chapelizod by-pass and are

Property	Land-take	Other Considerations
	to the proposed new bus stops on the Chapelizod by-pass.	predominantly covered in mature planting.
Liffey Gaels GAA Club	Temporary land take to facilitate the provision of a temporary construction compound.	Lands to be reinstated after construction period, and EIAR states that the lands are adjacent to the main playing pitches.
Open Space at Palmerstown	Lands being permanently acquired to facilitate provision of Temporary Construction Compound.	Lands to be reinstated and additional planting provided after use.
Dr. Steevens' Hospital	Permanent and Temporary Land take required from the northern frontage of the property to facilitate route widening to accommodate additional bus stop facilities.	Dr. Steevens' Hospital is on the RPS and the lands required are currently in use as front garden amenity areas.

9.5.9.2. Impacts will arise on these properties to varying degrees dependent on the nature and size of the land-take relative to the amenity, function, and character of the properties. During the construction phase these properties will experience additional impacts as temporary land-takes are required to facilitate the relevant construction works. Where boundaries are to be replaced this is being done on a like-for-like basis, and where protected structures are involved, the boundaries are to be set back with materials and features removed will be stored, reused/repurposed where practicable. All the properties listed in table 9.5.1 will experience impacts however these will be all short-term during the construction phase. The EIAR considers impacts on the Liffey Gaels grounds to be negative, significant and short-term, while the Hermitage Golf Club will experience negative moderate impacts over the short term during the construction phase. Impacts on Hermitage Park and Hermitage Medical clinic will be negative, slight, and short term, while impacts on the commercial properties will be negative, moderate and short-term.

9.5.9.3. As well as the properties listed above, other commercial, residential, community and amenity properties (that will not directly experience temporary or permanent land-take) will experience effects from the Proposed Scheme, such properties include commercial and residential uses along the Old Lucan Road in Palmerstown where the two-way cycle lane is proposed along the northern side, Heuston South Quarter, EIR offices, Liffey Valley Shopping Centre, and residential properties on Chapelizod Hill Road proximate to the route widening works on the by-pass/overpass, the

gardens at the Royal Hospital Kilmainham, the Irish National War Memorial Park, and the Oval Park and Garden. Impacts will also be experienced at community receptors along the route (not subject to land take) such as St. Philomena's, New Covenant, and St. Thomas Indian Orthodox churches, Palmerstown Parish Centre, Palmerstown Medical Centre, St. John of God Special School, Kings Hospital School, St. Dominics College, Font Hill Lodge Nursery, Little Folk Pre-school. Heuston Station will also experience impacts arising from works along its surrounding roads and pavements. At these locations works will be transitional in nature and the potential impacts are considered to be negative ranging from not-significant to moderate and short term during the construction phase.

9.5.9.4. Separate to the impacts considered above access for pedestrians, cyclists and vehicular traffic will be subject to restrictions and diversion during the construction phase, and bus stops may be temporarily relocated. Therefore, impacts on access to community areas, commercial and other properties will arise during construction, I consider these impacts will be negative, range from slight to moderate short term.

9.5.9.5. In relation to economic impacts, commercial amenities of property along the route will be affected throughout the construction phase from the activities that will be necessitated, similar to community amenity diversions and access restrictions will also arise. I note that access will be maintained to all commercial properties, however, I still consider that commercial operations along the route will experience negative slight to moderate impacts of a temporary nature during construction, with the Hermitage Golf Club having the potential to experience some of the larger predicted impacts on the basis of the documentation submitted.

9.5.9.6. Several submissions have raised concerns in relation to the loss of carparking along the route of the Proposed Scheme and the potential for adverse impacts to arise on commercial properties, in particular in the vicinity of Palmerstown Village centre. In this regard I consider that the Proposed Scheme overall improves accessibility of commercial property along the route by sustainable modes of transport and will therefore improve accessibility to a larger number of people (including those without access to cars), and I also note that there will remain significant parking facilities in the vicinity of the scheme which will continue to cater for the private car.

- 9.5.9.7. Potential operational phase impacts from the Proposed Scheme on population could arise from effects on community amenities, changes to commuting patterns, modal shift, reduced on-street parking, permanent land acquisition, improvements to cycling and pedestrian facilities, changes to the public realm, altered traffic patterns, permanent alterations to streetscape, works in the vicinity of protected structures and other elements of heritage value, as well as reduced available on-street car-parking.
- 9.5.9.8. Overall, I consider community accessibility to commercial properties to be improved by the Proposed Scheme due to the bus, pedestrian and cycling infrastructure enhancements. I consider these impacts to be positive and long term. In relation to the private car, I note that parking has been retained where possible while also improving infrastructure for the more sustainable means of travel throughout the scheme.

Human Health

- 9.5.10. The key characteristics of the Proposed Scheme which could influence human health during the construction phase are traffic management, noise and vibration, dust/air pollution, disruption to footpaths and cycle lanes/tracks/ways, land acquisition from community and residential receptors and interruption to services (e.g., water and power).
- 9.5.11. In the do-nothing scenario the Proposed Scheme is not carried out and the existing car-dominated infrastructure remains, the resultant high and increasing levels of traffic congestion (which is projected to grow in line with population) and disjointed infrastructure would discourage pedestrian and cycling movements and the pattern of car use would exacerbate sedentary lifestyles throughout with all associated health effects potentially worsening.
- 9.5.12. Potential exists for impacts on health from pedestrian, cyclist and traffic collisions and conflict in the event of temporary diversions, stress levels could also arise for regular commuters or those on the school run. As proper signage and advance notice will be in place, I consider these impacts to be negative, slight, and temporary. Similarly, increased congestion could give rise to moderate impacts on more sensitive groups using the route.

- 9.5.13. Construction related air pollution could also give rise to impacts, the air assessment has stated that risk of dust impacts is low, and construction could give rise to general stress in the population. Furthermore, construction within 250m of hospitals will be subject to the national guidelines for the prevention of Nosocomial Aspergillosis to ensure protection of those with suppressed immune systems. Accordingly, I consider these risks to be negative, slight/not significant, and short-term.
- 9.5.14. The noise assessment considers residual noise impacts to be negative, moderate to significant and temporary. I note that construction hours will be generally restricted, however, night working will be required under agreement to avoid/reduce the significance of impact on peak traffic. For this reason, some sleep disturbance may arise although I note that works will be temporary and modular with works being carried out in phases along various sections of the route. Accordingly, I consider such impacts to be negative, moderate, and temporary.
- 9.5.15. The relevant impacts during the operational period relate to provision of bus priority (improving timing and reliability for users), redistribution of traffic (resulting in busier streets and potentially creating through-traffic on previously quieter streets, decreasing air quality and/or affecting accessibility), enhancing pedestrian and cyclist facilities, improved public realm (affecting wellbeing), reduction in on-street parking, and permanent land acquisition.
- 9.5.16. I am satisfied on the basis of the submitted information that the Proposed Scheme will encourage and increase cycling and pedestrian activity while also reducing car dominance and dependence, resulting in a positive, significant and long-term benefit to the population at large within the study area. Below is a summary of the main impacts:
- The improvements in bus journey times and reliability will give rise to reduced stress and reduction in commuters exposure to air pollutants.
 - The air quality impacts arising from the Proposed Scheme as assessed elsewhere in this report will be neutral and long term.
 - Noise impacts during the operational phase to be negligible with road and traffic noise remaining dominant along this existing transport corridor. I do note that the likelihood of lower noise levels in the medium to longer term may

arise through the increased electrification of the national transport fleet although this is not subject to the Proposed Scheme.

- During the operational phase emergency access to hospitals and properties generally along the route will be improved through the ability for emergency vehicles being able to operate within the bus lanes, public access to hospitals will be maintained throughout, and the infrastructure for access from sustainable travel modes will be improved. These impacts will be positive, significant to very significant, and long-term and in this regard, I note that access will be more equitable with the Proposed Scheme improving accessibility to healthcare for those who do not have access to a car.

9.5.17. **Mitigation Measures**

9.5.18. No additional mitigation measures beyond those set out in the relevant sections of the EIAR (traffic, noise and vibration, landscape(townscape), heritage, and air quality sections and within the CEMP) are provided in relation to Population and Human Health. The CEMP provides details of traffic management and diversions will be properly signposted and advance warnings provided for the construction and works periods and locations will also be made public in advance through the provision of a communications plan.

9.5.19. **Conclusion on Population and Human Health**

9.5.20. I consider that the Proposed Scheme will improve accessibility throughout the route for community and business uses by improving bus, pedestrian and cycling infrastructure. I note that specific properties may experience impacts individually of a significant scale, however, overall these impacts are not of such significance to consider the scheme to be inappropriate in its entirety, and where issues have been identified I am satisfied that these can be addressed by appropriate condition or mitigated through the measures incorporated into the Proposed Scheme.

9.5.21. I have considered all of the written submissions made in relation to population and human health, in addition to those specifically identified in this section of the report. I am satisfied that impacts which arise that are not positive can be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme, the proposed mitigation measures and through the imposition of suitable conditions where appropriate. I am, therefore, satisfied that the Proposed Scheme would not

have any unacceptable direct or indirect impacts in terms of Population or Human Health. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.6. Air and Climate

9.6.1. Chapters 7 and 8 of the submitted EIAR deals with Air Quality and Climate respectively. The Board should note that third party submissions have raised concerns in relation to the potential for air quality impacts to give rise to adverse impacts including on human health in the Palmerstown and Chapelizod areas in particular.

9.6.1.1. Air Quality

In relation to air quality the applicants have focused on receptors within 350m of the Proposed Scheme as well as receptors along construction traffic routes and redistributed traffic as the study area for the construction phase and a distance of 200m from the route corridor for the Operational Phase.

The key potential pollutants in terms of Air Quality have been identified as Nitrogen Oxide/dioxide (NO_x), dust, Particulate Matter - PM₁₀ (i.e. with an aerodynamic diameter < 10 microns) and PM_{2.5} (with an aerodynamic diameter of < 2.5microns).

Section 7.2 (incl. tables 7.2 and 7.3) of the EIAR sets out the upper limits established in the various guidelines, policies, and regulations in relation to nitrogen dioxide and particulate matter (PM).

Baseline air quality was arrived at following a desk study of relevant available EPA ambient air quality data as well as through NO₂ monitoring surveys proximate to, and in the vicinity of, the Proposed Scheme, figure 7.1 of the EIAR (Volume 3 part 3) shows the monitoring locations. Modelling was also carried out (air quality, traffic data, traffic dispersion, emissions) as well as verification of modelling¹² to ensure predictions are accurate to allow assessment.

¹² Comparison of monitored and modelling NO₂ concentrations.

The sensitivity of the receptors has been categorised in terms of effects on people and property, human health impacts and ecological impacts. Overall, the study area has high, medium, and low sensitivity receptors within 350m of the Proposed Scheme.

9.6.1.2. Climate:

The key potential factors in terms of climate are:

- Land Use Change (loss of trees/carbon sink).
- Greenhouse Gas (GHG) emissions (CO₂ being of primary concern in relation to transport projects).

Section 8 of the EIAR sets out the potential climate impacts arising from the Proposed Scheme and includes considerations on both the direct study area (i.e. the transport corridor within the red-line of the current application) and the indirect study area (i.e. a wider area where the Proposed Scheme will have an influence on changing traffic volumes above a defined threshold¹³ with reference to TII traffic and Transport Assessment Guidelines).

The climate assessment is desk based and draws from the projected traffic levels to calculate carbon emissions from construction materials, traffic, and traffic pattern changes as well as operational maintenance.

9.6.2. **Air Quality**

9.6.2.1. **Construction Phase Potential Impacts- Air Quality**

9.6.2.2. During construction the main dust generating impacts will arise from demolition (including removal of pedestrian bridge at Ballyowen Road, removal of retaining walls at the Hermitage Golf Club), earthworks (excavations, haulage, tipping, stockpiling, levelling, and landscaping), general construction activities and track out (i.e. dust/dirt transported from the site onto the public road networks and deposited/re-suspended by other vehicles). The construction phase also has the potential to give rise to impacts on regional air emissions as the construction phase

¹³ Refer to Section 6.2.1 of the EIAR for further details and map.

will require traffic to loiter more and take more circuitous routes. The Board should note that the projections and assessment within the EIAR consider 2024 as the construction year, 2028 as the opening year and 2043 as the design year (opening year plus 15 years). The air quality assessment in the EIAR compares the Do Something ('DS' i.e. provide the Proposed Scheme) and Do Minimum ('DM', i.e. do all other major committed transport schemes but not the Proposed Scheme) scenarios in order to quantify the potential impacts arising.

- For demolition works there is a low overall risk of temporary dust soiling impacts and human health impacts, due to the sensitivity of the areas where such works proposed. There is not considered to be any impacts arising on sensitive ecological features as there are no such sensitive receptors within 50m of demolition works. Mitigation measures are required.
- In relation to earthworks as the Proposed Schemes construction compounds and construction site areas will have a total site area greater than 10,000m² with potentially dusty soil types and therefore such works can be classified as large¹⁴. The sensitivity of the area is high for dust soiling and medium for human health and ecological impact. On this basis there is an overall high risk of temporary dust soiling impacts and a medium temporary risk of human health impacts from earthworks. As there are receptors of medium sensitivity there is medium risk for ecological impacts in an unmitigated scenario.
- The main relevant construction activities other than earthworks relate to the installation of paving materials, provision of retaining walls, pedestrian/cycle bridges, boundary setbacks, gateway alterations, route widening and provision of safety nets. Using the IAQM guidance construction activities are classified in terms of building volumes (m³), and as no buildings are proposed construction activities can be categorised as 'small' for the Proposed Scheme. Accordingly, the risk of dust soiling, human health and ecological impact the risk arising from dust is low in the unmitigated scenario.
- Track out activities, with between 10 – 50 Heavy Duty Vehicle (HDV) outward movements in any one day is classified as having a dust emission magnitude of medium under the IAQM. Overall giving a medium risk of temporary dust

¹⁴ Using the Institute of Air Quality Management (IAQM) 2014 guidelines

spoiling, human health and ecological impacts arising in an unmitigated scenario.

- Construction traffic has been considered in the context of the DM and DS scenarios, in the context of NO₂ and particulate matter (PM) concentrations. The EIAR provides a comparison between the two scenarios and notes that slight beneficial (24 locations), moderate beneficial (one location) and slight adverse impacts (two locations) will arise throughout the route in relation to NO₂. PM₁₀ and PM_{2.5} concentration impacts are negligible throughout the Proposed Scheme, accordingly overall construction phase traffic emissions are neutral and long-term overall. In terms of impacts on ecology from construction traffic the annual mean NO_x concentration is exceeded at the Liffey Valley pNHA (Chapelizod bypass), in both the DM and DS scenarios albeit in the DS scenario levels are lower. The Nitrogen deposition levels are at the lower critical load factor in the DM scenario and below it in the DS scenario. Accordingly I consider ecological impacts arising from construction traffic emissions to be overall negative, slight and short term.
- In terms of the Regional Air Quality the construction phase impacts will result in slight increases in emissions of all but one (Butadiene) of the modelled pollutants. The majority of increases in emissions result from redistribution of vehicles onto diversionary routes during construction and increases are minimal between the do nothing and do something scenarios. The regional impacts on air quality for the construction phase pre-mitigation are therefore, neutral and short term.

9.6.2.3. **Operational Phase Potential Impacts- Air Quality:**

9.6.2.4. Operational Phase impacts on air quality will arise solely from the changes in pollutants arising, these have been modelled for the DM and DS Scenarios across the 2028 (opening year) and 2043 (design year) in relation to the various receptors, with analysis concentrated on 'most impacted' receptors (i.e. receptors that are modelled to experience non-negligible impacts due to the Proposed Scheme. The detailed results of the modelling are set out in Appendix A7.1 of the EIAR (Vol. 4).

- 9.6.2.5. In comparing both 2028 DM and DS scenarios at the most impacted receptor locations (table 7.33 of the EIAR refers), in relation to NO₂ a slightly beneficial impact is estimated at 6 receptors, with the remainder anticipated to experience negligible impacts. Overall, PM level (both PM₁₀ and PM_{2.5}) impact differences between the DM and DS scenarios are negligible throughout. Accordingly, impacts arising from the Proposed Scheme for the operational phase are neutral and long-term in an unmitigated scenario. I note that conservative assumptions have been used throughout the modelling with 2019 background pollutant concentrations being used to represent 2028, and no consideration has been allowed for improvements to the transport fleet in terms of emissions or increased electrification, I therefore consider the modelling outputs to be robust.
- 9.6.2.6. In relation to impacts on sensitive ecological receptors (i.e. SPAs, SACs, NHAs and pNHAs) during the operational phase, only Liffey Valley pNHA lies within 200m of the Proposed Scheme. Modelling shows that critical levels for NO_x are exceeded in both DM and DS scenarios (albeit the DS scenario levels are slightly [0.2µg/m³] lower) at the pNHA proximate to the Chapelizod bypass. Furthermore, the lower critical load for the designated habitat (5kgN/ha/yr) is also exceeded in both DM and DS scenarios (both are 5.1kbN/ha/yr). Accordingly, I consider that the ecological impacts arising from the operational phase to be overall negative, slight, and long-term.
- 9.6.2.7. In terms of impact on regional air quality the EIAR notes that the Proposed Scheme pre-mitigation will lead to an overall decrease across pollutants modelled in the opening year of the Proposed Scheme (2028). The decreases are primarily due to the predicted modal shift, decreased car usage and a cleaner and more efficiently managed bus fleet. All emissions from cars and buses are also predicted to decrease in the design year. Modelling for 2043 shows that benzene emissions are predicted to increase by 0.1%, in this regard I note that the modelled increase in benzene will arise from goods vehicles. Volumes of goods vehicles which will not be subject to modal shift from the Proposed Scheme but will be dictated by economic requirements. Pre-mitigation impacts for the operational phase on regional air quality are therefore considered overall to be neutral and long-term.

9.6.3. Mitigation Measures – Air Quality

- 9.6.3.1. Mitigation measures are set out in section 7.5 of the EIAR and make provisions during construction to reduce dust nuisance arising, these include inspection and cleaning of affected public roads, material handling and stockpiling of materials to minimise exposure to wind, water misting/spraying as necessary, trucks moving materials to be covered with tarpaulins, 2.4m high site hoarding along sensitive boundaries and around construction compounds, as well as monitoring of dust mitigation measures and updating methods were appropriate.
- 9.6.3.2. In relation to construction traffic as there will be a neutral/slight temporary impact on air quality no specific construction phase monitoring or mitigation is proposed.
- 9.6.3.3. No specific operational phase mitigation measures are proposed as the Proposed Scheme will have a generally neutral impact on air quality and while a negative slight and long term impact is predicted on local ecological receptors this will arise both in the DM and DS scenarios. Furthermore, I anticipate that changes to the national vehicle fleet will improve traffic emissions over the short, medium and long terms arising from the Climate Action Plan targets which have not been incorporated into the modelling.

9.6.4. Climate

- 9.6.4.1. Construction Phase Potential Impacts- Climate:
- 9.6.4.2. Potential construction phase impacts on climate arise from the use of carbon in materials, construction traffic emissions and land use change. The EIAR estimates that the Proposed Scheme will result in total construction phase emissions of 8,498 tonnes CO₂ equivalent (CO_{2e}) for materials over the 24-month construction period. Given that the purpose of the Proposed Scheme is to encourage modal shift and it will result in reductions of emissions in the operational phase, the scheme is considered to have a negative, minor and short term impact in the non-mitigated scenario. Construction phase traffic is predicted as having an increase of 3.9ktonnes of CO_{2e} over the “do Minimum” estimates, the majority of this increase

arises from diversion of traffic onto longer routes during construction. The board should note that these rates are conservative, as the modelling used applies the peak construction day in 2024 across an entire year. This impact is negative, minor, and short-term in the unmitigated scenario having regard to Ireland's transport emissions ceiling.

9.6.4.3. The proposed land use will essentially remain the same (significant transportation corridor) during construction albeit that there will be a minor variation where the construction compounds will result in the removal of grasslands, and where route widening is proposed. Trees will be felled (196 individual trees, 16 full groups of trees and 8 partial groups of trees) and re-planting and landscaping will take place throughout the construction phase (including the proposed provision of 479 trees, 7,979m² of species rich grassland, 1,373m² of ornamental planting, 2,975m² of native planting and 14,531m² of amenity grassland planting). Elsewhere in this report I have recommended alterations to the extent of works which will amend both tree-planting and tree loss (particularly along the frontage of the HGC). I note that these measures are not provided as climate change mitigation measures but are included within the overall landscaping and design of the Proposed Scheme, nonetheless they will contribute to carbon sequestration. I consider that these amendments will have a neutral impact on the balance of tree loss and re-planting as fewer trees will be removed and fewer replanted within the recommended reduced works area. Accordingly, I consider that there will be a negligible impact in terms of carbon sequestration as a result of the construction phase.

9.6.4.4. **Operational Phase Potential Impacts- Climate**

9.6.4.5. The operational phase of the Proposed Scheme is expected to be 60 years and will give rise to total maintenance phase GHG emissions of 440 tonnes CO_{2eq} which equates to, at most, 0.000022% of Ireland's non-ETS (EU Emission Trading Scheme) 2030 emissions target. Accordingly, this impact is considered to be negligible and permanent in the absence of mitigation. In terms of land use change as set out previously above the operational phase will not result in significant change and the impacts arising is therefore neutral in terms of carbon sequestration.

- 9.6.4.6. Direct and indirect operational phase impacts will arise from the traffic emissions arising from the Proposed Scheme as discussed in Section 8.5.2.4 of the submitted EIAR. In comparing the DS and DM scenarios for combined direct (along the transport corridor) and indirect (trip re-distribution outside the corridor) operational phase emissions in the opening year 2028 there is a reduction of 1.13ktonne CO_{2eq} in emissions for cars and buses, while the same figure for the 2043 design year is a decrease of 0.48ktonnes. For context these figures equate to the removal of approximately 2,180 car trips per weekday from the road network in 2028 and the removal of 3,460 car trips per weekday from the road network in 2043.
- 9.6.4.7. The Board should note that these figures are based on projections using existing traffic volumes and without considering improvements on traffic signalling in the indirect area, which once optimised (not subject to the current application) will facilitate improved travel times over the wider network and thus improve indirect emissions arising. In this regard modelling traffic signal optimisation in the indirect study area results in a reduction of 2.2ktonne CO_{2eq} in emissions for cars and buses in 2028 (compared to the previously stated 1.13ktonnes without optimising traffic signals in the indirect study area), while the same figure for the 2043 design year is a decrease of 1.0ktonnes CO_{2eq} emissions (compared to the 0.48ktonnes previously stated). Accordingly, the Proposed Scheme will have a positive minor and permanent effect in relation to climate change prior to mitigation.
- 9.6.4.8. The above figures do not consider any future frequency in bus services beyond that set out in the current application albeit the Proposed Scheme will facilitate increased levels of resilience, frequency, and attractiveness of bus services (as well as pedestrian and cycling facilities) along the route, thus, encouraging modal and societal shifts in travel behaviour. With additional service frequency and reliability of bus services facilitated by the subject works the submitted EIAR considered the potential impacts of a range of different percentage uptake of residual bus capacity from the car and found that:
- a 100% uptake of residual bus capacity results in a 5.53kt and 2.69kt reduction in CO₂ emissions in 2028 and 2043 respectively, equivalent to the removal of approximately 18,540 and 19,740 car trips per weekday.

- A 50% uptake of residual bus capacity results in a 3.99kt and 1.95kt reduction in CO₂ emissions in 2028 and 2043 respectively, equivalent to the removal of approximately 13,350 and 14,310 car trips per weekday.

9.6.5. **Mitigation Measures - Climate**

9.6.5.1. Measures to minimise/reduce embodied carbon in the construction phase are set out in section 8.7.1.1/2 of the submitted EIAR. These include the use of ground granulated blast furnace slag concrete in lieu of Portland cement where practicable, reuse of materials and local sourcing of materials. A construction traffic management plan will also be developed/used (as detailed in the CEMP).

9.6.5.2. During the operational phase road maintenance will require the use of bituminous materials for which mitigation cannot be provided beyond reuse of this material where possible, however, in this regard I note that the use of the route as a major transport corridor will remain the same and while the additional works and surfaces will likely require more maintenance interventions than the existing infrastructure would necessitate, in the DM scenario there would already be an established baseline level of maintenance into the future, which may require further additional interventions in the absence of the infrastructure improvements proposed due to the aging nature of the existing.

9.6.6. **Residual Impacts**

Air Quality

9.6.6.1. Following the implementation of the construction phase mitigation measures there will be a neutral short-term impact on air quality from the Proposed Scheme in relation to construction dust, road traffic impact on local human receptors and regional air quality, with a negative, slight, short-term impact on local ecological receptors.

9.6.6.2. The operational phase does not have bespoke specific mitigation measures in relation to air quality as the impacts are neutral and long term in relation to local

human receptors, and regional air quality, while impacts on local ecological receptors are negative, slight, and long-term. The operational phase of the proposed development will therefore give rise to a neutral long-term effect.

Climate

9.6.6.3. In relation to climate following implementation of mitigation measures I consider that the construction phase will give rise to minor short-term negative impacts. Mitigation measures and construction practices will serve to minimise these but not alter the significance of impact in relation to climate.

9.6.6.4. For the operational phase I note that the proposed development will result in improving bus, pedestrian, and cycling facilities. The GHGs reductions facilitated through the reductions in emissions from cars and buses enabled directly by the Proposed Scheme (and its associated modal shift), equate to the removal of approximately 2,180 and 3,460 car trips per weekday from the road network in 2028 and 2043 respectively, with the potential for this to increase significantly when traffic signal optimisation in the indirect study area, and residual uptake in bus capacity is considered. Accordingly, the operational phase of the proposed development will have a positive, minor and permanent impact on climate.

Conclusion – Air Quality and Climate

9.6.6.5. I have considered all of the submissions made in relation to air quality and climate, as well as the submitted application documentation. I am satisfied that while adverse impacts will arise at certain times and phases within the scheme that these would be either sufficiently managed and mitigated by the measures which form part of the proposed scheme and/or through the provision of suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable significant direct or indirect impacts in terms of air quality and climate and that ultimately the Proposed Scheme will give rise to positive impacts in relation to Climate. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would

be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.7. Noise and Vibration

- 9.7.1. Noise and Vibration is dealt with in Section 9 of the submitted EIAR, it considers Noise Sensitive Locations (NSLs) as well as vibration sensitive locations (VSLs) within a study area in a buffer of 300m (for construction) and 1km (for operational phase) of the Proposed Scheme (as well as along re-distributed traffic routes). The Bord should note that third-party submissions have raised concerns in relation to noise and vibration effects arising from the Proposed Scheme both during construction and operation as being inappropriate and having adverse impacts in particular on residential amenities at Palmerstown and Chapelizod, as well as the amenities of the Hermitage Golf Course and Hermitage Clinic.

The key noise and vibration sensitive receptors along the Proposed Scheme include residential properties within up to 100m, schools, pre-schools and colleges, clinics, nursing homes, hotels and hospitals.

- 9.7.2. The submitted EIAR considers the Proposed Scheme in the context of the TII Noise Guidelines 2004 (NRA 2004) and 2014 (NRA 2014) – albeit these documents predominantly relate to roads developments through rural (and therefore lower noise) areas – as well as BS 5228 – 1:2009+A1:2014, and from these has derived construction noise thresholds (CNTs) for the Proposed Scheme, given its urban/suburban location in combination with the projects linear character and transient nature of the works as they progress. The CNTs established for the Proposed Scheme are set out in table 9.8 of the EIAR and the established baseline level is used to categorise and classify the level of impacts arising from noise on receptors in the study area. The CNTs established within the submitted EIAR range from 45 to 75 dBL_{Aeq} (period). The magnitude of effects is considered to be significant where it is determined that a major or moderate magnitude of impact occurs for a duration exceeding 10 or more days in any 15 consecutive days or nights or in excess of 40 days over any 6 consecutive months. Significance ratings of noise impacts have been determined by using the baseline noise levels of 70dB L_{Aeq,12hr} and 68dB L_{Aeq,4hr} for daytime and evening respectively (established from the

noise surveys carried out on the route) and comparing noise effects from the Proposed Scheme in the context of any exceedance of the CNTs.

- 9.7.3. In relation to vibration, the assessment in the EIAR has established differing recommended limits for transient (surface construction) vibration in relation to buildings depending on the soundness of their construction, their use (i.e., residential, commercial, industrial), their heritage value or protected status. The recommended limits range from a Peak Particle Velocity (PPV) of 3mm/s for vulnerable structures to 50mm/s for reinforced or framed structures, continuous vibration levels are set at 50% those of the relevant transient levels. Values have also been assigned to human response criteria to vibration levels noting that higher levels of vibration are usually tolerated for single events of short-term nature during construction. Table 9.12 of the EIAR establishes these values where significance of levels under 0.14mm/s PPV are imperceptible, ≥ 0.14 to 0.3 mm/s PPV are considered imperceptible to not significant, ≥ 0.3 to 1mm/s PPV not significant to slight, ≥ 1 and < 10 mm/s PPV – moderate to significant, and 10mm/s PPV and greater significant to very significant. In terms of the operational phase vibration levels from road traffic are orders of magnitude below levels that would impact buildings or structures, and so operational impacts are focused on human response.
- 9.7.4. In relation to assessing noise and vibration I note that the proposed works are to an existing transport corridor which will continue to cater for significant traffic volumes whether the Proposed Scheme goes ahead or not, and accordingly changes in traffic volumes in the design year and differences between the DM and DS scenarios are also of consideration. In relation to this issue the EIAR considers that where changes in traffic noise levels at NSLs along the Proposed Scheme in the short to medium term (i.e. year of opening plus 15 years) is less than 3dB the impact is not significant and above this level impacts are deemed to be potentially significant, similarly 3dB is the threshold for significance for the long term (i.e. design year 2043).
- 9.7.5. The EIAR has also considered absolute noise levels and the provisions of the Dublin Agglomeration Noise Action Plan 2018-2023 (NAP), and the ProPG (Planning and Noise) 2017, both of which define a daytime noise level below 55db(A) as being low/desirable low, and noise levels above 70dB(A) as high/undesirably high. The WHO guidelines are also referenced within the EIAR, however, I note that these are primarily considered to inform national policy decisions and public health orientated

recommendations at a large population level/scale and are not intended to be applied at a receptor level or individual project basis.

9.7.6. In the interests of clarity I wish to confirm that I am satisfied that the methodologies set out in the submitted EIAR are appropriate to assess the noise and vibration impacts arising in relation to the proposed development having regard to the nature and location of the proposed works.

9.7.7. **Overview - Baseline**

9.7.7.1. While confirming road noise as the dominant noise source throughout the route The noise surveys also provided the following average daytime noise levels:

- N4 Junction 3 to M50 Junction 7, closest NSLs are at Hermitage Gardens, Hermitage Way and Ballyowen Lane, c. 15-25m from the Proposed Scheme as well as St. Loman's Hospital, the Hermitage Medical Clinic, and the Hermitage Golf Course. Noise surveys returned a dB L_{den} of 68-71 for this area, and noise contour mapping shows the NSLs are between 60dB and 69 L_{den} .
- M50 Junction 7 to Con Colbert Road, closest NSL's are residential dwellings off the R148 at Palmerstown within 25-50m of the edge of the road, and at the proximate apartments and residential buildings off the Chapelizod bypass and Chapelizod Hill Road. Other NSLs include the Ballyfermot CDET B training Centre, St. Dominics College Ballyfermot, and De La Salle National School. Noise surveys returned a dB L_{den} of 58-68 for this area, and noise contour mapping shows the NSLs range between 55dB and 69 L_{den} .
- Con Colbert Road to City Centre, closest NSL's are residential dwellings north and south of R148 Con Colbert Road, St. John of God School and Gaelscoil Inse Chor. Noise surveys returned a dB L_{den} of 73 for this area, and noise contour mapping shows the NSLs range between 55 and 69 dB L_{den} .

9.7.7.2. I note that the noise surveys for the Proposed Scheme were carried out in July and August 2020 when the COVID-19 restrictions were in place but minimised (i.e. schools and non-essential retail had been re-opened and employees permitted to return to work if working from home was not an option). As monitoring was carried

out during COVID travel restrictions the submitted EIAR compares the results of the dedicated noise survey data with DCC long term noise monitoring and compares traffic counters between 2019 and 2020, and determined that the noise levels during the 2020 survey periods are likely to be 0.4 to 1.5 dB lower than the same months in 2019. I consider that this small degree of variance appropriate and acceptable as baseline noise levels are not used in predicting future traffic noise, or construction noise but used as a comparator to determine significance of impact. Using the established baseline survey results therefore represent a conservative approach and serve to highlight rather than hide the levels of significance of impacts in relation to noise.

9.7.7.3. In relation to vibration, attended vibration monitoring was carried out at sample locations both adjacent to existing bus lanes within Dublin City (so that typical vibration levels of buses along a mixed-use traffic lane could be measured) and at a controlled sampling location (so that the specific vibration level of buses could be determined). The results of these survey's confirmed that vibration levels associated with a heavily trafficked urban – suburban road inclusive of a dedicated bus lane results in negligible vibration levels at the edge of the road in terms of both human perception and building response, these results are consistent with my subjective observations during site inspection.

9.7.8. **Potential Noise and Vibration Impacts:**

Construction Phase.

9.7.8.1. Any construction project is going to give rise to noise impacts. The EIAR lists the relevant equipment required to carry out the various construction activities and works needed to provide the Proposed Scheme (including breakers, excavators, piling equipment, dump trucks, road planers, etc.) and calculates noise that will be generated at NSLs in the vicinity of areas where such works are required and equipment used. As would be typical in urban and suburban construction projects noise levels are shown to exceed CNTs at noise sensitive locations throughout, with negative impacts ranging from slight to very significant during both daytime and evenings in the absence of mitigation along the works areas dependent on the nature and proximity of the receptor. The Board should note the provisions of table

9.42 of the EIAR in this regard and that all such impacts will be short-term as they will arise during the construction period.

9.7.8.2. In relation to vibration from construction activities the submitted documentation confirms that all works required for the Proposed Scheme (including piling which will be carried out by using low vibration methods) are an order of magnitude below limits which could generate any cosmetic or structural damage to structurally sound or protected/heritage buildings. I therefore consider potential for impacts to arise from construction vibration to be negative, imperceptible to not significant and temporary while ground breaking within 10m of occupied residential buildings could potentially give rise to negative, slight to moderate and temporary impacts.

9.7.8.3. In relation to impact from construction traffic all roads within 1km have been considered and the noise levels from the DM and DS scenarios have been calculated and compared. For the majority of roads within that study area traffic noise impacts have been determined to be imperceptible/positive and temporary to negative – slight to moderate and temporary, due to the negligible to low volume of additional traffic along the road network. The Old Lucan road was identified as triggering a potential negative, moderate and temporary impact as the noise level difference between the DM and DS scenarios was greater than 3dB, in this regard the Board should note that this is predicted using the worst case scenario under which multiple work sections are taking place concurrently.

Operational Phase.

9.7.8.4. From modelling the traffic volumes in 2043 are predominantly shown to be lower than those in 2028, largely due to modal shift into public transport facilitated through the transport Strategy for the Greater Dublin Area, 2016-2035.

9.7.8.5. Traffic modelling in the EIAR has shown that the route of the Proposed Scheme and the surrounding road network will experience a direct, positive, short to medium term to negative, slight short to medium term impact from noise in 2028, as a result of overall reduced overall traffic volumes. For 2028 no roads within the overall study areas will experience an increase of 3db or greater with only a small number having

1-2dB increases in noise levels, i.e. minor which are minor changes that would be just perceptible.

- 9.7.8.6. The 2043 design year modelling shows that both the Proposed Scheme and surrounding road network will experience noise impacts ranging from positive, imperceptible long-term to negative, not significant to slight, long-term. There are no roads within the overall study area which will experience significant impacts with the majority outside the Proposed Scheme predicted to experience noise level changes less than 1dB (imperceptible) change and a small number predicted to experience 1 to 2 dB (negligible) change.
- 9.7.8.7. In terms of vibration levels during the operational phase I note that the monitoring scenarios carried out indicate that a bus generates 0.1mm/s PPV or less, which is below the normal range of perceptible human response to vibration. Furthermore, the route of the Proposed Scheme is already in use as a busy transport corridor. Accordingly, I consider that the overall impact from vibration during the operational phase is neutral, not significant and long term.
- 9.7.8.8. The relocation and provision of new bus stops at new locations has the potential to increase noise impacts, particularly where new locations are proximate to NSLs and/or are at locations which do not benefit from extant screening. The EIAR identifies two such locations (north of the Liffey Valley shopping Centre [relocation of existing stop by moving it approximately 150m west] and on the Chapelizod by-pass on the bridge over Chapelizod Hill Road). At these locations traffic noise is dominant and will remain so during the operational phase and local design features such as the existing boundary wall between the N4 and Old Lucan Road and provision of a retaining wall to the south (at the Liffey Valley location) and retention/replacement of the existing noise barriers on the Chapelizod bypass will minimise noise impacts. In this regard I do note a certain degree of ambiguity in relation to the commitment in the EIAR where it is stated “existing noise barriers along the Chapelizod bypass will be retained or replaced in proximity to the new bus stop.” In the event of favourable consideration therefore, I recommend a specific condition requiring the Proposed Scheme to include a detailed review by a suitably qualified acoustician of noise barriers within 50m of the start of the entrance and exit slip roads into and out of the

new bus stops on the Chapelizod bypass and that these should be redesigned, replaced and/or retained in accordance with a design to be agreed with the planning authority, the primary function of which being to optimise noise abatement from the bus stop while also maintaining the visual amenities of the area.

9.7.8.9. I note that the EIAR does not consider that the two new bus stops on the Old Lucan Road in Palmerstown to be new locations proximate to NSLs, in this regard I note that they are located in close proximity to the village centre, however, both are located proximate to residential properties located within 10m. At this location I note that widened footpaths are being provided and that overall traffic speeds will be minimal due to the carriageway widths and the existing signalised pedestrian crossing I therefore do not consider that significant adverse effects will arise on properties in the vicinity from vehicle noise at these bus stops given the characteristics of the area. Accordingly, I consider that noise impacts arising from these new bus stop locations will not be significant.

9.7.8.10. In relation to maintenance works these will be ongoing throughout the 60 year operational lifespan of the Proposed Scheme and will be similar in nature in terms of noise impacts required along this transport corridor whether the Proposed Scheme goes ahead or not. I therefore consider that these impacts will not be significant.

9.7.9. **Mitigation Measures**

9.7.9.1. The submitted CEMP (Appendix A5.1 of the EIAR) and section 9.5.1.1 of the EIAR provides a suite of mitigation measures in relation to noise and vibration for the construction phase which include the following:

- Contractor being required to put in place the most appropriate noise control measures dependent on the level of noise reduction required at individual working areas (based on the construction threshold values for noise and vibration set out in chapter 9 of the submitted EIAR). Intrusive works within 50m of NSLs will need specific noise control measures in accordance with the time of occurrence (i.e. daytime/evening).
- Employing the best means practicable to minimise noise from site operations.

- The least noisy item of plant or equipment available must be selected where practicable.
- Mobile plant will use acoustic exhausts and canopy's and operated with panels closed.
- For percussive tools (like breakers) noise control measures such as mufflers or sound reducing equipment are to be fitted and any air-line leaks sealed.
- Where compressors, generators and pumps are located in proximity to NSLs and have potential to exceed the construction noise thresholds, these will be surrounded by acoustic lagging or enclosed within acoustic enclosures providing air ventilation.
- A 2.4m high hoarding will be provided along noise sensitive boundaries and at a minimum around site compounds.
- Construction activities will generally be between 07.00 and 23.00 hrs on weekdays and 08.00 to 14.30 on Saturdays, the planning of works outside these hours will take account of sensitive receptors.
- Construction activities will be scheduled in a manner that reflects the location of the site and the nature of neighbouring properties and activities scheduled to avoid significant cumulative noise levels.
- The NTA will establish clear forms of communication that will involve the appointed contractor and NSLs in proximity to the works so that residents or building occupants are aware of the duration of activities likely to generate noise or vibration that are of potentially significance.
- The contractor will carry out noise monitoring during construction at representative NSLs to evaluate and inform the requirement and/ or implementation of noise management measures.
- Contractor will carry out vibration monitoring at buildings and structures where proposed works have the potential to be at or exceed the vibration limit values established in the EIAR. Vibration from construction activities will be limited to the values set out in Table 9.11 in Chapter 9 of the EIAR to avoid any form of potential cosmetic damage to buildings and structures.

- Activities capable of generating significant vibration effects with respect to human response (as per Table 9.12 in the EIAR) will be restricted to daytime hours only, as far as practicable.
- Appropriate vibration isolation (such as resilient mounts to pumps and generators) will be applied to plant and equipment, where required and where feasible.

9.7.9.2. In relation to the operational phase as the Proposed Scheme is along an established road transport corridor with limited land use changes and ongoing maintenance by the relevant local authorities, I consider that significant noise impacts will not arise. Traffic noise will remain the dominant noise source throughout the Proposed Scheme and in the vicinity, and impacts will be slight, imperceptible or not significant, and accordingly additional mitigation is not proposed.

9.7.10. **Noise and Vibration Conclusion**

9.7.10.1. As with any construction project of the scale proposed noise impacts will arise in relation to the Proposed Scheme. I am satisfied that due to the nature of the proposal that the scale of the proposed construction impacts will be temporary and transient in nature. During the daytime I am satisfied that significant adverse impacts will not arise and while night or evening works could give rise to negative significant impacts, these will be temporary and the requirements and needs of the local population can be adequately managed to minimise the impacts felt from noise and vibration. I also note that during the operational phase that the use of the transport corridor will be consistent with that already in place (albeit that there will be carriageway reassignment and priority assigned to public transport with additional cycling and pedestrian facilities provided) and accordingly I do not consider that significant adverse impacts will arise.

9.7.10.2. I have considered all of the submissions made in relation to noise. I am satisfied that issues raised can be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of noise. I am also satisfied

that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.8. Biodiversity

- 9.8.1. Biodiversity is dealt with in Section 12 of the EIAR which reviews the relevant legislation, provides details of the baseline ecological environment, and provides a variable Zone of Influence (ZOI) in relation to specific ecological features/receptors. The EIAR biodiversity section has been informed by both desk study and field assessments and surveys.
- 9.8.2. From the outset I note that the site of the Proposed Scheme constitutes works along an existing busy transport corridor within a largely urban environment, however, there are sensitive ecological corridors, features, and species proximate, and within the development footprint of the works areas. Furthermore, I note that the importance of the ecological/natural features and amenities within the urban environment including planting, parks, treelines, gardens, urban trees, and riparian zones, should not be underestimated in terms of their importance to support local biodiversity regardless of the urban context.
- 9.8.3. I have reviewed the various Zones of Influence (ZOI - distances over which a likely significant effect may occur) that have been established in the EIAR in relation to various environmental receptors/media and consider them to be acceptable and appropriate having regard to the specific nature of the scheme and the characteristics of the receptors. The following ZOIs are of note in relation to biodiversity:
- ZOI for terrestrial habitats is generally the footprint and immediate environment of the Proposed Scheme.
 - ZOI for Air Quality construction phase impacts of 50m from the Proposed Scheme and 500m from the temporary construction compound. Operational Air Quality phase ZOI of 200m from routes which have a change in Annual Average Daily Traffic (AADT) greater than 1,000.

- The potential ZOI for aquatic plants, habitats and animals includes all estuarine, river or bay habitats downstream of the Proposed Scheme, with that for Atlantic Salmon and Lamprey being limited to waterbodies crossed by, or drained to, the Proposed Scheme. The critical consideration here being the hydrological linkages in place and the potential magnitude of discharged waters and/or potential volumes and type of pollutants.
- The ZOI for mammals is species dependent, with otter and badger having a ZOI of 150m¹⁵, bat roosts approximately 200m but can be variable (increased) and is considered in a case-by-case basis dependent on importance/type of roost.
- The ZOI in relation to birds is considerably more variable. Breeding birds ZOI is generally restricted to the habitat loss within the footprint of the Proposed Scheme (such as tree loss and hedgerows), however, indirect impacts on wintering birds could extend to 300m for general construction, while ex-situ disturbance impacts from the Scheme could have wider ranging impacts as many estuarine bird species use inland feeding sites proximate to works/operational areas with many species being SCIs of European designated sites.
- ZOI of amphibian species is generally limited to direct habitat loss or severance within the scheme boundary or disturbance/displacement in the immediate area.

9.8.4. The main characteristics of the construction phase of the Proposed Scheme that have potential for ecological impact are:

- Site preparation and clearance.
- Removal of existing boundaries, pavements, lighting columns, bus stops, and signage.
- Protection and/or diversion of buried services.
- Road widening, pavement reconstruction, and kerb improvements.

¹⁵ In line with NRA guidelines (Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (NRA 2005) and the Guidelines for the Treatment of Badgers Prior to the Construction of National Road Schemes (NRA 2005b))

- Reconfiguration of traffic lanes throughout.
- Reconfiguration of connections to existing drainage infrastructure and connection of new drainage infrastructure into the existing surface water drainage network.
- Installation of new bus stops and junction / roundabout modification.
- Provision of new structures (bridges, retaining walls etc (e.g., replacement pedestrian and cyclist bridge over the N4 at Ballyowen Road; pedestrian bridge over the N4 at Liffey Valley Shopping Centre; widening of Chapelizod Hill Road bridge; and retaining walls along the N4, including at Hermitage Golf Club, Liffey Valley Shopping Centre and Hermitage Medical Clinic))
- Temporary and permanent land take at a number of areas including.
 - Hermitage Golf Club – permanent and temporary land take to allow for boundary wall removal and relocation, tree removal and replacement.
 - The Hermitage Medical Clinic- permanent and temporary land take to allow for boundary wall removal and relocation.
 - Temporary land-take immediately north-east of the N4 Junction 2, between the Old Lucan Road and the R113 for provision of a Construction Compound LU1a.
 - Land take between the N4 National Road and the Old Lucan Road for provision Construction Compound LU1b at the slip to N4 junction 2.
 - Amenity grassland north of the R148 Palmerstown Bypass, on the M50 Junction 7 to Con Colbert Road section of the Proposed Scheme – permanent land take for the provision Construction Compound LU2; and,
 - Liffey Gaels Park, south of Chapelizod Bypass – temporary land take for the provision Construction Compound LU3.
- Property boundary reinstatement, signage replacement; relocation of and/or installation of lighting columns; and
- Landscaping and tree planting, and reinstatement of temporary land acquisitions.

9.8.5. In order to establish the ecological baseline, the applicant carried out a range of surveys throughout 2018 to 2022, including:

- Habitat surveys: June-August 2018, August 2020.
- Bat Surveys: Surveys consisting of walked transect surveys at two selected locations (adjacent to Palmerstown Drive and adjacent to the Irish War Memorial Park) and once at the Hermitage Golf Club. Trees located within the footprint of the Proposed Scheme were also assessed for their potential to support roosting bats.
- Other Mammal Surveys: Badger and Otter surveys were carried out as part of the multidisciplinary walkover surveys undertaken June to August 2018, August 2020, October 2020 and June 2022 (at the Hermitage Golf Club only).
- Wintering Birds: Desk Study identified one site at Liffey Gales with the potential for wintering birds which would be subject to direct habitat loss. This site was surveyed using a “look-see” methodology – February to March 2020, twice a month from October to 2021 and March 2022, and three additional surveys from March and April 2022.
- Amphibian and reptile habitat suitability assessments were carried out from June to August 2018 and August 2020.

9.8.6. **Habitats – Overview**

The Proposed Scheme does not overlap with any European Designated sites and the potential for, and consideration of, impacts on these sites is set out in full in Section 10 of this report (Appropriate Assessment) further below. There are also a number of nationally designated sites (pNHAs and NHAs) in the wider area of the Proposed Scheme (listed in Section 12.4.3.1.2 of the submitted EIAR), some of which are incorporated within/overlapping SACs/SPAs.

The habitats along and within the footprint of the Proposed Scheme corridor are relatively typical of its suburban/urban environment, and include hedgerows, treelines, buildings and artificial surfaces, scrub, flower beds and borders, as well as amenity grasslands, tilled lands, and improved agricultural grasslands. There are also aquatic habitats in place along the corridor - depositing lowland river habitat (associated with the River Liffey, as well as the Camac and River Annfield), and the

Liffey adjacent to Heuston Station at the eastern end of the Proposed Scheme is identified as a Tidal River habitat type, which the Board should note, corresponds with Annex I habitat Estuaries [1130]. This habitat is proximate to but lies outside of the boundary of the proposed works, none of the habitats within the footprint of the Proposed Scheme correspond to Annex I habitats.

9.8.7. Habitats – Potential Impacts and Mitigation

In relation to habitats (including European designated sites, NHAs and pNHAs) there are a number of potential impacts that can arise from the Proposed Scheme during the construction and operational phases, which I have listed below.

- Habitat Loss and Fragmentation,
- Habitat degradation arising from hydrological/hydrogeological impacts,
- Habitat degradation due to spread of invasive species,
- Habitat degradation due to adverse impacts on air quality,
- Disturbance and Displacement Impacts on Habitats.

9.8.7.1. Habitat Loss and Fragmentation:

Habitat loss will arise from the Proposed Scheme primarily from works within the footprint in the form of permanent land take of edge habitats along the existing roads network. The works will necessitate the removal of individual trees, hedgerows, treelines, scrub, flower beds and borders which all contribute to biodiversity. No Annex I habitats will be subject to loss or fragmentation arising from the Proposed Scheme. Furthermore, the Board should note that no direct loss of aquatic habitats will arise as the Proposed Scheme does not cross the River Liffey and only crosses other watercourses where they are already significantly culverted (e.g. the River Camac at Heuston Station). There is potential for surface water discharges from the Proposed Scheme into the Liffey, Annfield and Camac Rivers and so mitigation to ensure protection of ground water quality is incorporated within the design.

A single inland feeding site which is used by SCI species of SPAs in the wider area (Liffey Gaels GAA pitch) will be impacted for the duration of the construction period as this is proposed to be used as a temporary construction compound (as well as for

the Liffey Valley CBC – which has been previously permitted by the Board). The surveys and data collected in relation to this site demonstrate that it is not a significant foraging resource for the light-bellied Brent goose, given the infrequent recorded use of the site by that species. Similarly, the numbers of black-headed and herring gulls are not significant having regard to national and international populations.

In relation to the two raptor species (Peregrine and Merlin) for which Wicklow Mountains SPA is designated the Proposed Scheme is too far removed from the SPA to interfere with the foraging ranges of either and thus suitable habitat will not be affected. The Wicklow Mountains SAC is designated for Otter, however, due to the separation distances and the Proposed Scheme being located in a different sub-catchment to the SAC any Otter population in the vicinity of the Proposed Route is considered to be separate to that of the SAC. The Proposed Scheme will not result in the permanent direct loss or fragmentation of potential Otter habitat, as works will be occurring at watercourses where crossings already occur and/or where there is significant culverting in place (e.g. the River Camac).

While direct habitat loss will occur arising from the Proposed Scheme, no habitats of international or national importance will be affected (the Board should note that there are no overlaps with European designated sites, NHAs or pNHAs). Any sensitive habitats that will be lost are of local importance (higher value - i.e. trees, hedges etc.) and will have minimal geographic impact beyond the local level). However, I recognise that the loss of trees and hedgerows could be considered a significant impact throughout the entirety of the scheme. Trees and hedgerows are subject to replacement through the provision of additional landscaping as part of the overall design and as such while localised impacts (through the loss of a mature tree) may arise, impacts will be mitigated through the replacement planting and landscaping that is being provided. Where practicable existing sensitive habitats along the route will be protected and maintained, however, the Proposed Scheme will result in the permanent loss of 196 individual trees, 16 full groups of trees and 8 partial groups of trees and one hedgerow is to be removed to facilitate the Proposed Scheme. In mitigation of this loss the Proposed Scheme includes the provision of 479 trees and 281m of hedgerows. The Scheme also incorporates the provision of 7,979m² of species rich grassland, 1,373m² of ornamental planting, 2,975m² of native planting

and 14,531m² of amenity grassland planting. As stated previously, I am recommending alterations to the works along the frontage of the HGC which will cause a reduction in tree removal and tree replacement, however, this will have a neutral impact in terms of trees lost and replaced.

I do not consider habitat fragmentation to be of significant concern as the works are along an existing significant transport corridor which is in place and operational.

9.8.7.2. **Habitat degradation arising from hydrological/hydrogeological impacts:**

The Proposed Scheme is hydrologically connected to Dublin Bay, via the Liffey, River Camac, Liffey Estuary (Upper and Lower) and the various drains and sewers along its length. The potential release of contaminated surface water runoff, accidental spillage, or a pollution event discharging to any surface water features in the Construction Stage has the potential to affect water quality in the receiving aquatic environment. Such impacts in an unmitigated scenario have the potential to create adverse impacts at the local and national level.

Such events could degrade the relevant aquatic environment and the range of species which are reliant on it. The potential adverse impacts that could arise include those directly on species that inhabit the aquatic environment as well as those that rely on it (e.g. through availability/abundance of prey species) including those species which are QIs/SCIs of European Designated sites and I therefore consider such impacts to be potentially significant and negative at the national scale in the absence of mitigation measures.

The Proposed Scheme incorporates a Surface Water Management Plan (SWMP), Section 5.4 of the submitted CEMP refers, which provides details for control and management measures for avoiding, preventing and/or reducing any significant adverse impacts on the surface water environment during construction. The measures relate to the storage of materials and waste, sediment control, use of concrete, management of vehicles (refuelling and wheel wash) as well as monitoring and include an Environmental Incident Response Plan (EIRP) for construction. Specific measures are also proposed for:

- Works close to the Liffey_180 at the entrance to the Hermitage Golf Club and proximate to the Liffey - bunding of existing surface water drains, and no proximate refuelling.
- Widening and tree removal at the frontage of Hermitage Golf Club and Hermitage Clinic - temporary infiltration (cutoff) ditches or silt fences will be used to prevent silty runoff entering N4 surface water system.
- At construction compounds bunding/silt fencing or both will be used to ensure silty water does not enter surface water system, manholes will be sealed, and fuel and other materials will be stored to the rear of the proposed Lu1b compound.
- Throughout sections 1 and 2 of the Proposed Scheme silt fences or infiltration ditches will be used and refuelling will only occur at locations greater than 10m from surface water drains.

These are discussed fully in section 9.9 (water) of this report below and in section 12.5.1 of the submitted EIAR. In relation to the operational phase the implementation of SuDs measures (including bioretention areas and filter drains) throughout the Proposed Scheme will provide appropriate management of the surface water run-off from the increase in impermeable area. The Board should also note that drainage maintenance and management will be undertaken by the relevant Local Authorities during the operational phase.

Due to the nature, location, and extent of proposed works (/excavations) in combination with the extant ground conditions (underlying aquifers are associated with low permeability) I do not consider it likely that there will be impacts arising on groundwater dependent habitats from impacts on hydrogeology due to the separation distances involved. However, I do note that there are proposed to be localised excavations which could result in an unmitigated scenario to a risk of pollutants entering groundwater and that contaminated ground conditions could arise and therefore mitigation is required. The relevant mitigation measures are set out in the CEMP and Section 14 (land, soils, geology and hydrogeology) of the EIAR (Section 9.10 of this report refers). These predominantly relate to good construction practice and application of CIRIA guidance control of water pollution from construction sites. I note that certain excavations may require pumping which could

give rise to surface water interactions with ground water, however, due to the nature of the works such interactions will only be negligible.

9.8.7.3. **Habitat degradation due to spread of invasive species.**

Four areas of Japanese Knotweed were identified within proximity of the Proposed Scheme, with records of other non-native invasives in the wider area. The spread of invasive species have the potential to give rise to significant negative impacts on sensitive habitats within the ZOI of the Proposed Scheme. An Invasive Species Management Plan (ISMP - Section 5.3 of the CEMP refers) has been included within the EIAR, the implementation of which will ensure that invasives are not spread as a result of the proposed works. The ISMP provides for pre-construction survey and provides details of how any recorded invasives can be dealt with in the event of any becoming established at works areas prior to commencement of development.

The Surface Water Management Plan is also relevant in relation to control of invasive species.

9.8.7.4. **Habitat degradation due to adverse impacts on air quality**

Reductions in air quality from the Proposed Works have the potential to adversely impact on sensitive habitats in the vicinity. Reductions in air quality can arise from dust emissions during construction which will be mitigated through management of construction practices and good housekeeping on site (e.g. stockpiling of materials in compounds, cleaning public roads, vehicle coverings, water misting/spraying and provision of 2.4m hoardings around compounds and at noise sensitive boundaries).

Impacts on air quality can also arise from vehicle emissions during the construction and operational phases. As set out above in section 9.6 (Air Quality) of this report I consider such impacts to be negative, slight, and short term on local ecological receptors following the implementation of mitigation measures for dust nuisance.

NO_x concentrations are predicted to increase slightly at Grand Canal pNHA (Davit Road) and decrease at Liffey Valley pNHA (Chapelizod Bypass) during construction. The NO₂ deposition levels will remain below the critical loads for inland and surface water habitats at the Grand Canal while the levels are at the lower edge of the range for the Liffey Valley pNHA which decreases following construction, therefore I consider that significant harmful effects will not arise.

9.8.7.5. **Disturbance and Displacement Impacts on Habitats.**

The potential for impacts on habitats from disturbance and displacement arises from the impact of the proposed works on the various species that will be affected, including birds as well as mammals. These are discussed further in detail below in relation to the relevant species.

9.8.8. **Protected Plant Species Potential Impacts and Mitigation**

No protected plant species from the Flora Protection Order 2022 were recorded within the Proposed Scheme. Four such species were recorded (opposite-leaved pondweed [in the Grand Canal] and hairy violet, betony, and meadow barley, [all at the Phoenix Park]). I do not consider that direct impacts will arise due to the nature and location of the proposed works relative to these locations, however, impacts could arise from habitat degradation due to surface water quality impacts. Such impacts in the absence of mitigation have the potential to be of national scale significance. Accordingly, the mitigation measures set out regarding the protection of surface water, watercourses and drainage interventions will also ensure protection of rare/protected plant species.

9.8.9. **Mammals, Potential Impacts and Mitigation**

9.8.9.1. **Bats**

In relation to bats where transect surveys took place bats were identified (namely Leislars bat, Common pipistrelle, Soprano pipistrelle and Myotis bat) and records confirming that these and another species (Brown Long-Eared bat) are known in the area. I note that three transect areas were identified and surveyed for bats (Chapelizod bypass from Chapelizod to Palmerstown, Con Colbert Road at Islandbridge and along the southern boundary of the Hermitage Golf Club). No bat roosts were identified along the corridor although trees along the route were identified as having the potential to support roosting bats. Two beech trees to the north of the Lucan Retail Park with potential roosting features will not be impacted by the Proposed Scheme. Five trees with potential for roosting features have been identified within the temporary land-take area along the frontage of the Hermitage Golf Club, and which are stated could potentially be lost as a result of the Proposed

Scheme. Other Potential Roost Features (PRF) have been identified; however, these are outside the proposed areas of works. Section 12.5.1.4.1 of the EIAR includes specific provisions to ensure protection of trees with PRFs during construction where practicable and references further bat mitigation measures (section 12.5.1.4.1.2) where roost loss or loss of PRFs will arise. Such measures include additional pre-construction surveys, engagement with the NPWS, handling and release/relocation of bats if necessary (under licence), installation of 3 bat boxes for any PRF tree removed 3 months in advance of felling at appropriate locations. I am satisfied that these measures will ensure that impacts on bat roosts (should they arise) will be adequately mitigated.

I note that the Proposed Scheme will result in loss of habitats which are important to bat such as treelines and hedgerow, mitigation for this loss is incorporated into the scheme through the provision of additional planting including 479 trees and 281m of hedgerow. The board should note that the number of re-planted trees will be reduced in the event of my recommendation to reduce the extent of works along the frontage of the HGC, however, this will be offset through the associated reduction in tree loss. The loss of bat habitat area is predominantly along planting/hedging adjacent to the existing transport route and its associated infrastructure (lights footpaths etc.), while bats at this location will be somewhat habituated to lighting and human activity due to the presence of the existing transport corridor, I note that additional inappropriate lighting during the construction or operational phase of the Proposed Scheme, could give rise to adverse impacts. In this regard the EIAR commits to engaging a suitably qualified ecologist to work with the appointed contractor in order to ensure lighting at construction compounds and active works areas proximate to areas with known bat activity will be designed to minimise light spill, will be cognisant of downward light-spill into watercourses, and that night time works will also implement suitable mitigatory lighting solutions (section 12.5.1.4.1.4 of the EIAR refers). Accordingly, there is, in my opinion, limited potential for the works to result in fragmentation or the creation of a barrier effect due to the nature, location and context of the works, and surrounding habitats. I consider that the impact on foraging/commuting bats to be significant but only at the local level. Generally, works are being carried out at well-lit urban and peri-urban locations with sufficient artificial lighting provided, it is unlikely that additional lighting will be required and if it is, the CEMP and mitigation measures

set out in EIAR provide for the potential of impact from any additional lighting (at works or compound areas) on bats to be considered and designed to minimise adverse effects.

During the operational phase I consider that there is the potential for temporary localised negligible impacts to arise pending the species becoming habituated to the new boundary features and planting layouts and amended activity levels along the corridor. Due to the short-term effect of this impact, I do not consider further mitigation necessary.

9.8.9.2. **Badger**

No evidence of badger setts were recorded along the corridor in the original surveys carried out to inform the submitted EIAR, however, signs of Badger activity were noted at Hermitage Golf Club and this species are known to be widely distributed throughout the Greater Dublin Area. A significant number of third-party submissions and the DAU noted the presence of a Badger Sett at Palmerstown¹⁶ proximate to the proposed LU2 temporary construction compound. The DAU sought additional surveys at this location. In response to the submissions lodged the applicant carried out an additional walkover survey of the proposed LU2 construction compound area in March 2023 which confirmed that there was no evidence of badger within the proposed development footprint. Notwithstanding this, I consider it appropriate to specifically include a confirmatory badger survey at the location of the LU2 compound (and in its vicinity) in order to ensure minimal impacts arise and to inform the provisions of a badger conservation plan should one be necessary. I note that the EIAR assumes that badger may occur in vegetated areas adjacent to the proposed scheme. Where the Proposed Scheme does require the removal of habitat that could be suitable for badger, such works will be localised and proximate to the existing roads/pathways and as such is along infrastructure which is already in place and so novel or new barriers or fragmentation will arise. Areas being incorporated into the transport corridor through localised widening may be suitable for foraging or commuting badgers but would not be significant for the species. Badgers are nocturnal and as such lighting could give rise to impacts, however, the Proposed

¹⁶ DAU submission noted the badger sett was recorded by a staff member approximately 12 years ago.

Scheme is along an existing well-lit and busy transport corridor and accordingly any locally occurring badgers would be habituated to a certain level of lighting and infrastructure. Additional compound and works activity areas lighting could give rise to significant local effect on badgers, however, the lighting arrangements at works areas and compounds will be informed by an ecologist and designed to minimise impacts. The mitigation measures set out in the EIAR ensures that lighting will be designed in a manner that will limit light-spill, furthermore pre-construction badger surveys will be carried out (with timing restrictions to be imposed on certain construction activities should a sett be identified within 150m of proposed works), and excavations will be covered to ensure entrapment does not occur during construction. Furthermore, I note that the works are proposed along an existing transport corridor and while there will be a modal shift, I do not consider that the Proposed Scheme will result in any increased mortality risk for badger. The mitigation measures are, in my opinion, appropriate and will ensure that no significant residual effects will remain in relation to badger habitat loss, mortality risk, and displacement/disturbance, and these will be augmented by the provision of a pre-commencement badger survey in the vicinity of the LU2 temporary construction compound in the event of favourable consideration.

9.8.9.3. **Otter**

No evidence of Otter was recorded along the Proposed Scheme during surveys; however, they are known to occur in the wider area along the River Liffey, River Camac and Grand Canal. I do not consider that habitat severance, nor disturbance/displacement to be issues as the proposed works are predominantly along an existing busy transport corridor and any watercourse crossings are existing with significant traffic movements in place along the route. Furthermore, I consider that mortality risk to this species will not be increased by the Proposed Scheme, albeit there will be a modal shift during the operational phase. The EIAR commits to confirmatory pre-construction surveys along the route, lighting requirements shall be informed by a suitably qualified ecologist and potential habitat degradation from impacts on water quality will be mitigated through the provision of the SWMP incorporated into the CEMP). During the operational phase I note that maintenance of surface water drainage features will be carried out by the relevant Local Authority.

Accordingly, I consider that the range of mitigation measures proposed in relation to this species (Section 12.5.1.4.3 of the EIAR refers) is appropriate and will ensure significant adverse impacts will not arise.

9.8.9.4. **Marine Mammals**

The Proposed Scheme is hydrologically connected to Dublin Bay and there are a range of marine mammals present in the Bay which are protected under the Wildlife Acts and also listed on Annex II of the Habitats Directive, while all cetacean species are listed in Annex IV. Some species, such as Harbour Porpoise, Harbour Seal, Grey Seal are QIs of SACs in the wider area. The construction phase of the Proposed Scheme has the potential to result in adverse effects on marine mammals in the event of adverse effects on water quality (both directly on the species themselves and by reducing the availability of food supply). The mitigation measures in relation to protecting water quality during construction as set out in the SWMP of the CEMP (Appendix A5.1 of the EIAR) are therefore relevant, and I am satisfied that they will ensure impacts on marine mammals will not be significant. Similarly, the SuDs drainage system and inclusion of the Proposed Scheme within the maintenance programmes of the relevant Local Authorities will ensure adverse impacts do not arise during the operational phase.

9.8.9.5. **Other Mammals**

No other mammal species were recorded along the proposed scheme during the survey effort. I note that other (smaller) mammals are likely to be present in the wider area, however, the Proposed Scheme will not give rise to significant adverse impact on these other mammals given the local mammal populations will be habituated to the extant transport corridor, the majority of works will be to existing infrastructure, and smaller mammals are mobile and nocturnal in nature. Furthermore, the suite of mitigation measures incorporated within the scheme (and in particular in the SWMP, ISMP, other construction measures within the CEMP) will ensure significant adverse impacts will not arise during either the construction or operational phases.

9.8.10. **Birds, Potential Impacts and Mitigation**

9.8.10.1. **Breeding Birds**

In relation to breeding birds the records along the Proposed Scheme comprise bird species common to suburban habitats that habituate residential and parkland areas. Breeding wetland and Riverine Bird species were also recorded in the wider area, which is to be expected given the location of the Proposed Scheme proximate to suitable habitat including the River Liffey adjacent to the Irish National War Memorial Gardens, and River Annfield at the Old Lucan Road. There are records of several breeding bird species in the general area of the Proposed Scheme which are listed under Annex I of the Birds Directive, are SCI species, and/or are amber/red listed (i.e. species of medium/high conservation concern in Ireland), details of which are listed in Table 12.9 of the EIAR. The Proposed Scheme will result in the loss of breeding bird and nesting sites due to the loss of trees, treelines, hedgerow, and other planting including:

- Along the N4 Lucan Road in particular at the Hermitage Golf Club, R835 Lucan Road and location of construction compound LU1b,
- Hedgerow between Old Lucan Road and R113 to accommodate the LU1a compound.
- Treeline west of Kings Hospital School.
- Mixed broadleaved woodland habitat either side of the Chapelizod by-pass at Chapelizod Hill Road.
- Amenity grassland at LU2 construction compound (Palmerstown) and LU3 construction compound (Liffey Gaels Pitch).

Such habitats are broadly in the immediate environs of a significant transport corridor, they form a relatively small part of similar habitat types and mosaics in the wider locality (such as parks, pitches, embankment planting and other amenity spaces) and replanting will also occur, with construction compounds being reinstated following use. Accordingly, I consider that while there may be a temporary decline in breeding bird abundance at a very local level the works will not affect the local ranges of bird species nor adversely affect populations. Breeding/nesting birds could be adversely affected in a significant manner locally should clearing works be carried out in the breeding season. However, as set out in Section 12.5.1.5 of the EIAR

vegetation will not be removed during the breeding season where practicable, and if such works are necessary, they will be preceded by ecological survey and only areas not found to contain nests will be cleared. Furthermore, the erection of the safety netting at the Hermitage Golf Club will be carried out outside the breeding season to reduce collision risk.

Construction works will always cause some level of disturbance and I note that in certain instances noise and vibration levels as well as impacts on water quality could give rise to temporary displacement and disturbance of birds, however, given their temporary and phased nature, combined with the existing levels of disturbance already in place along this busy transport corridor I consider disturbance impacts to be negative, short-term and at a local scale. Potential issues arising from water quality are mitigated through the SWMP incorporated within the CEMP.

9.8.10.2. **Wintering Birds**¹⁷

Fifteen wintering bird surveys were carried out at the Liffey Gaels GAA playing pitches from October 2020 to March 2022. Large numbers of gulls or other wintering birds were not recorded during the surveys. The Proposed Scheme is hydrologically connected with Dublin Bay which is of considerable ornithological importance due to a number of SPAs and SCI birds that use it. Wintering bird species use inland feeding sites such as open parkland and grassland, and there are large areas of suitable foraging and/or roosting habitat available, both adjacent to, and in the wider locality of, the Proposed Scheme (including the Liffey Gaels GAA pitch, Hermitage Golf Club, Markievicz Park, Waterstown Park Palmerstown, Longmeadows Park as well as wetland habitats associated with North Dublin Bay SPA and South Dublin Bay and River Tolka Estuary SPA). In relation to the light-bellied Brent Goose there are no known feeding sites within 300m of the Proposed Scheme and while goose droppings have been identified in surveys of the Liffey Gaels pitch the survey results suggest that the pitches have recently started to be used infrequently by the species and that it is not a significant inland foraging resource.

Impacts will arise on wintering birds from the loss of the grassed area (approx. 0.446ha) to provide the temporary construction compound (LU3), I do not consider

¹⁷ i.e. those bird species which are SCIs of SPAs for their wintering populations or are listed on either the Birds of Conservation Concern in Ireland (BOCCI) Red or Amber lists for their wintering populations.

this temporary loss of suitable habitat to be significant due to the relatively low frequency of occurrence and low peak flock of wintering bird species recorded at this location during surveys and the availability of alternative large areas of suitable foraging/roosting habitat in the wider area. I also note that since the EIAR for the Proposed Scheme was lodged, the Board has granted permission for the Liffey Valley BusConnects CBC and thus the use of the Liffey Gaels grounds as a temporary construction compound has been previously approved.

Disturbance and/or displacement of wintering birds could occur in the construction phase. In this regard I note that construction will be a temporary phase and that disturbance from noise and activity will not arise at distances greater than 300m, furthermore the works are to be phased, will occur along an existing transport corridor and there are a wide range of alternative foraging/roosting sites along the route (within 300m) and in the wider area at distances of greater than 300m that will not be subject to any disturbance from the Proposed Scheme. During the operational phase disturbance levels will be broadly consistent with that of the existing corridor. I therefore consider that the disturbance/displacement will not result in a significant negative effect at any geographic scale. Notwithstanding this, the EIAR provides for mitigation in relation potential displacement by establishing construction compound LU3 outside the wintering bird season (October to March), or if this is not possible the contractor shall be advised by an appropriately qualified ecologist who will carry out pre-commencement surveys. Appropriate lighting will also be used at this location and compound hoarding erected prior to the wintering bird season.

Impacts on water quality also have the potential to adversely affect wintering birds through direct exposure to pollutants or effects on food supplies. The controls and mitigation measures in relation to water quality provided for within the SWMP and in Chapter 13 of the EIAR will ensure impacts are not significant during the construction phase. I also consider that operational impacts will not be significant on wintering birds having regard to the operational phase mitigation measures set out in relation to drainage maintenance being the responsibility of the relevant Local Authorities.

9.8.11. Reptiles and Amphibians, Potential Impacts and Mitigation:

No reptile species (protected under the Wildlife Acts) were recorded in surveys nor any suitable habitat for this species identified within the footprint of the proposed

scheme, however, their presence cannot be ruled out in the wider area due to the presence of suitable habitat in the vicinity. Similarly, no evidence of common frog or smooth newt (both protected species) were found during surveys, however, records show their presence in the wider area (within 1km of the Proposed Scheme).

Accordingly, there is potential for impact to arise on these species in relation to habitats (fragmentation, degradation and barrier effects) mortality and general disturbance, having regard to the nature of the works along an existing busy transport route, the extent of the relative habitats and the temporary nature of works I do not consider the impacts on reptiles and amphibians to be significant.

Notwithstanding this, the water quality controls and mitigation measures will ensure effects are minimised.

9.8.12. Fish, Potential Impacts and Mitigation

There are no instream works proposed as part of the Proposed Scheme, although the Camac River is traversed by works (where it is already significantly culverted) and the River Liffey is proximate to and hydrologically linked to the works areas as is the Annfield River. Both the Liffey and Camac are salmonid systems (salmon and trout) and there are Lamprey records in both (upstream of the proposed works). No records of salmonid species or lamprey were identified in the River Annfield. There are also records of European Eel upstream of the Proposed Scheme in the River Camac with the Liffey Estuary serving as the linkage between freshwater and marine habitats.

The Proposed Scheme will not result in any direct aquatic habitat loss nor will it create any barrier effect. There is the potential for habitat degradation to occur from surface water quality runoff, however, I am satisfied that the water protection measures provided within the SWMP and in Chapter 13 of the EIAR can provide comprehensive mitigation in this regard and ensure that significant adverse impacts will not arise.

9.8.13. Invertebrates, Potential Impacts and Mitigation

There are no records of white-clawed crayfish within the footprint of the Proposed Scheme, however, they are known to occur upstream of works in the Rivers Camac and Liffey. The Camac is completely culverted at the Proposed Scheme and

accordingly there is no suitable habitat for white-clawed crayfish and works will not interact with the stretches of watercourses in the vicinity in which white-clawed crayfish are known to occur. Freshwater molluscs have been recorded approximately 700m north of the scheme footprint, however, the provisions of the SWMP will ensure protection of surface water quality and therefore ensure to my satisfaction that no significant adverse impacts will arise.

No records of Marsh Fritillary were returned in the footprint of the Proposed Scheme nor was any suitable habitat identified. Other red-listed invertebrates such as other butterflies, damselflies, dragonflies and bumblebees, require large areas of appropriate habitat to sustain populations with appropriate varied diets. While suitable habitats do occur along the Proposed Scheme corridor, these are considered to be fragmented and isolated and accordingly are not suitable for significant populations of red-listed invertebrates.

9.8.14. Biodiversity Impacts Conclusion

In conclusion in relation to the potential impacts arising on biodiversity I refer the Board to tables 12.20 (Summary of Construction Phase Significant Residual Impact) and 12.21 (Summary of Operational Phase Impacts) of the submitted EIAR, I am in broad agreement with the findings set out in each.

9.8.14.1. Construction Phase

In relation to habitats designated for nature conservation the potential for construction phase impacts generally arise from potential degradation through hydrological linkages, spread of non-native plant species, and adverse impacts on air quality. The potential significance of these impacts pre-mitigation are likely significant at the national to international geographic scale (dependent on the nature of the protected habitat). With the application of mitigation measures such as water quality controls and, construction controls as set out in the CEMP, good site housekeeping, bespoke construction methodologies for retaining walls, proper storage of pollutants, dust controls, hoarding, and application of the ISMP I consider that no significant residual effects will arise.

Similar to the above habitats outside of the designated/protected areas (e.g. Tidal river, river, woodland, hedgerows, and treelines) could potentially experience

adverse impacts arising from hydrological connection and invasives, resulting in degradation, as well as direct habitat loss (woodland, scattered trees and parkland, treelines, and hedgerow). Such impacts pre-mitigation will have likely significant effect at the local to national geographic scale¹⁸, however, with the application of the mitigation measures set out previously above impacts will be reduced to having no significant residual effect, with the exception of broadleaved woodland, hedgerows and treeline habitats where the loss of mature trees which are not replaced in the immediate vicinity will continue to have a residual likely significant effect at the local geographic scale.

In relation to faunal species, the majority (bats, badger, otter, other mammals, marine mammals, SCI bird species, breeding bird, wintering bird, amphibians, fish species could potentially be subject to likely significant effects at the local to international geographic scale due to disturbance/displacement, habitat degradation (water quality), habitat loss/fragmentation, and mortality risk, however, following the application of mitigation (including proper site management, application of good construction practices, timing of works, pre-commencement surveying and water quality protections) I consider that the residual risks will reduce to having no significant effects for all but breeding bird species which will in my opinion have a significant local temporary residual effect through habitat loss until the relevant species become habituated to the alternative available planting.

9.8.14.2. **Operational Phase**

In relation to the operational phase of the proposed scheme I note that maintenance will be carried out by the relevant local authorities in accordance with all relevant guidelines and that the overall landuse will remain broadly consistent with that established (i.e. the route will remain a transport corridor). Areas designated for nature conservation (i.e. SPAs, SACs, NHAs, pNHAs) will have the potential for operational impacts on habitat degradation to arise from hydrological connectivity, and spread of invasives. The significance of such effects could range from national to international geographic scale in the absence of mitigation. With the application of mitigation measures (as set out in Section 12.5.2.1 of the submitted EIAR) which

¹⁸ National scale for tidal rivers only as this corresponds to Annex I estuaries.

include surface water management, SuDs maintenance, ongoing local authority maintenance regimes, the residual impacts will have no significant impact on areas designated for nature protection.

In relation to habitats outside of designated areas for nature conservation potential impacts could arise from hydrological connection, spread of invasives and direct Habitat Loss, such impacts would be at the local geographic level in the absence of mitigation. With the application of the previously referenced mitigation measures which include drainage management and replanting/landscaping included within the design of the Proposed Scheme I consider that there will be no significant adverse residual effects.

Relevant faunal species could potentially, in the absence of mitigation, experience likely significant effects of local (otter, breeding and non-SCI birds, amphibians, fish and invertebrates), national (marine mammals only) or international (SCI bird species only) geographic scales from potential habitat degradation (through hydrological connection), mortality risk, habitat loss, as well as disturbance/displacement, during the operational phase. With the implementation of the mitigation measures set out which include surface water management I consider that there will be no significant residual effects arising.

9.8.14.3. Accordingly, I have considered all of 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 adverse impacts can be avoided, managed, and mitigated by the mitigation measures which form part of the Proposed Scheme, and through the imposition of suitable conditions. I note that while residual impacts may remain in terms of habitat loss (treelines, hedgerow) disturbance and displacement for breeding birds I consider that the significance of these would be restricted to a local geographic level, that species will become habituated to such changes and the design of the scheme will provide additional/replacement planting with a range of similar habitat alternatives in the immediate wider area. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable significant direct or indirect impacts in terms of biodiversity. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted

developments, these would be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.9. Water

9.9.1. Overview

9.9.1.1. Section 13 of the EIAR deals with Water, and it considers all classified and non-classified Water Framework Directive (WFD) water bodies (rivers, lakes, and coastal) within 500m of the Proposed Scheme boundary to be receptors. The EIAR has been informed by a desk study as well as field walkover assessments carried out in March 2020 and March 2022.

9.9.2. Receiving Environment

9.9.2.1. The Proposed Scheme lies within the Liffey and Dublin Bay catchment (Hydrometric Area 09 – EPA), with the main Water Framework Directive (WFD) and the relevant waterbodies within 500m are listed in table 9.9.1 below.

Table 9.9.1 Distance of waterbodies in Study Area to Proposed Scheme.

Waterbody	Nearest Proposed Scheme Section	Approx. Distance from Proposed Scheme	No. of Crossings	WFD Risk Categorisation
Liffey_170	Section 1	1.5km*	0	At Risk
Liffey_180	Section 1 and 2	0 – 500m	0	At Risk
Liffey_190	Section 3	20-300m	0	At Risk
Liffey Estuary Upper	Section 3	0-300m	0	At Risk
Camac_040	Section 3	0-390m	1	At Risk

*Liffey_170 was included in Study Area notwithstanding the 1.5km separation distance as the western part of the Proposed Scheme Drains to Griffeen Valley Park which drains into Liffey_170

9.9.2.2. The listed waterbodies include a number of named rivers including River Hermitage, River Annfield, River Quarryvale, River Astagob, Longmeadow Stream and Glenaulin Stream (all within Liffey_180), Magazine Stream and Creosote Stream

(both within Liffey_190), and Ballymount Stream, Robinhood Stream, and Walkinstown Stream (Camac-040). The Camac is a heavily industrialised urban river which is subject to significant culverting under Heuston Station. The Camac is the only waterbody being crossed by the Proposed Scheme at R148 St. John's Road West. All the watercourses are considered to be of either very high sensitivity due to being within the Liffey Valley Nutrient Sensitive Area or high sensitivity (Camac) due to its connection to the nutrient sensitive area and being a recognised salmonid system.

9.9.2.3. Appendix 13.1 of the submitted EIAR provides a Water Framework Directive (WFD) Assessment report which concludes that the Proposed Scheme will not cause a deterioration in status in any waterbody, nor will it prevent or compromise progress towards Good Ecological Status (GES) or Good Ecological Potential (GEP) of any relevant water bodies. Water body status of relevant water bodies is set out in table 13.7 of the submitted EIAR. The WFD also requires consideration of how a new scheme might impact on other water bodies and other EU legislation.

9.9.3. **Potential Impacts**

9.9.3.1. Potential impacts on water could arise from both the construction and operational phases of the proposed development.

9.9.3.2. The potential impacts that could arise during construction can be summarised as follows:

- Hydrology – disruption to local drainage systems from diversions, dewatering of excavations affecting ground water or surface water receptors, temporary increases in hard standing areas and/or compaction creating increased runoff.
- Water Quality - sediment laden or otherwise polluted (e.g. hydrocarbons, concrete, re-mobilisation of settled contaminants. siltation etc) runoff from construction site activities.
- Hydromorphology – sediment plumes (from sediment loading or siltation) could smother riverbed substrate and/or change existing morphological features.

9.9.3.3. The Proposed Scheme requires a range of works to be carried out, and the provision of structures as set out in the development description section of this report and will result in a general increase in impermeable areas which will ultimately drain into the various waterbodies. No surface water systems drain from the Proposed Scheme to the Camac River where it is in open channel. It is only in open channel at distances of greater than 200m from works areas making overland pollution flows unlikely. The Camac is completely culverted where works are proposed, and so impacts will not arise on this water body from construction. The other waterbodies have the potential to be impacted by construction activities from increased sediment run off (all listed waterbodies), potential pollution (e.g., hydrocarbon spills - all listed waterbodies), increases to surface water runoff (from additional impermeable areas - Liffey_180, Liffey 190, and Liffey Estuary), and proximity to waterbody (Liffey_180).

9.9.3.4. Potential operational phase impacts could arise from:

- Deterioration in water quality from increased levels of road contaminants (e.g. hydrocarbons, metals, sediment) due to increase in sediment loads from new or widened roads,
- Increased impermeable areas and changes to nature, frequency and numbers of vehicles using the route of the Proposed Scheme.
- Dispersal of traffic onto other side roads which may drain to different catchments or have less stringent pollution control infrastructure.
- Changes to the flow regime in existing watercourses due to increased surface water runoff or discharges in new locations causing different sedimentation processes and altering riverbank structures.

9.9.3.5. The increases in impermeable surface areas will be 2,629m² for the Liffey_170, 4,681m² for the Liffey_180, and 44m² for the Liffey-190 which amount to increases of 4.85%, 2.06% and 0.09% respectively. The Proposed Scheme will result in a decrease of 730m² (-1.2%) in impermeable area draining into the Liffey Estuary Upper. The design of the Proposed Scheme includes SuDS to provide a level of attenuation and treatment which will ensure that there will be no net increase in the surface water flow discharged to the various waterbody receptors as well as

providing a level of treatment for surface waters. SuDS measures being provided include the provision of oversized pipes, bioretention areas, filter drains and tree pits.

9.9.3.6. If implemented, the Proposed Scheme will result in changes to traffic flows in the operational phase. Overall, modelling shows that there will be a reduction in traffic numbers along the route and thus an associated reduction in routine contaminants arising. The modelling also shows that seven road sections (R112 to R148 slip road, R112 Kylemore Road, and 4 sections of the N1 Church Street) are anticipated to experience Annual Average Daily Traffic (AADT) increases above 10,000. All of these have established drainage networks in place and are within the same catchment as the Proposed Scheme or drain to the Ringsend WwTP, accordingly I do not consider that impacts will be of significance nor adversely affect water drainage catchments. I therefore consider that operational impacts on water bodies will not arise from traffic re-distribution.

9.9.4. **Mitigation Measures**

9.9.4.1. Mitigation measures in relation to water are set out in section 13.5 of the submitted EIAR which draws on the detailed measures and controls set out in the CEMP, including the provisions of the SWMP. The SWMP includes measures requiring the implementation of a Pollution Incident Response Plan, as well as relating to management of construction compounds, storage of fuels, control of sediment, use of concrete, as well as the management of vehicles and plant. The CEMP provides for good site housekeeping and ensures good construction practices and monitoring throughout.

9.9.4.2. Mitigation measures of note in relation to water protection, during the construction process include.

- the bunding of surface water drains during the removal of existing surfaces and works to the boundary wall at the entrance to the Hermitage Golf Club close to the Liffey_180, to prevent sediment entering the water body, and not allowing refuelling at this location.

- Temporary infiltration (cutoff) ditches or silt fences will be provided at the Hermitage Golf Club and Hermitage Clinic frontages where route widening and tree removal is required north of the N4, to prevent silty water runoff.
- Specific provisions will be applied as necessary to the construction compounds including the provision of bunding and silt fences. At the LU1b compound the silt fence will be reinforced with additional bunding, surface water manholes will be sealed, and material storage and concrete batching will occur to the rear as far from the surface water drains as possible.

9.9.4.3. Additional mitigation is not required during the operational phase as all drainage design measures and upgrades will have been undertaken and completed during construction, and the maintenance of the SuDS drainage measures will be subject to the management procedures of the relevant local authority.

9.9.5. **Flooding**

9.9.5.1. The EIAR documentation includes a Floodrisk Assessment (FRA - Appendix A13.2 of the submitted EIAR refers). There are no records of flood events at the site of the Proposed Scheme or its immediate vicinity. The vast majority of the Proposed Scheme is located within Floodzone C, with only its easternmost extent proximate to Heuston Station being located in Floodzone B. The risk of pluvial flooding along most of the route is considered to be high and no flooding events have been identified as arising from groundwater sources. The risks identified are in place in the current scenario and the Proposed Scheme includes drainage design measures which will present an improvement over the current situation along the entirety of the route. The SuDS features incorporated throughout will reduce the overall risk of pluvial flooding.

9.9.5.2. Under the provisions of “The Planning System and Flood Risk Management – Guidelines for Planning Authorities” (2009) the Proposed Scheme is classified as ‘Highly Vulnerable Development’. Accordingly, as works are proposed in an area which falls within flood zones B (in the vicinity of Heuston Station) the relevant justification test must be applied.

9.9.5.3. The development management justification test from the floodrisk planning guidelines requires that:

- the lands have been zoned for development in accordance with the requirements of the floodrisk guidelines,
- an appropriate floodrisk assessment has been carried out,
- the proposal will not increase floodrisk elsewhere and if practicable reduce the overall risk,
- the proposal includes measures to minimise floodrisk and to ensure residual risks can be managed regarding the adequacy of existing flood protection measures, or implementation of future flood risk management measures, and provisions for emergency services access, and
- in addressing the above issues, the proposal must be compatible with the wider planning objectives of achieving good urban design and active streetscapes.

In my consideration of the above I note that the area of the Proposed Scheme within flood zone B is along an existing transport corridor (accordingly the land use is not altered) and will increase connectivity, provide additional cycle tracks, and increase the provision of dedicated bus lanes and services. The route has been designated as an existing high frequency bus connects spine, and proposed bus connects radial core bus corridor under the 2022 City Development Plan (which has been informed by strategic floodrisk assessment) and the Proposed Scheme incorporates SuDs features into the drainage design where appropriate, thus reducing the risk of pluvial flooding and minimising floodrisk. It is not intended to raise the road levels significantly as part of the Proposed Scheme and the floodrisk drainage measures being proposed do not adversely affect streetscape or urban design.

9.9.5.4. In relation to flooding, following review of the drainage measures proposed I note the following:

- The Proposed Scheme includes the provision of new surface water sewers designed to ensure that no flooding will occur for a return period of 30 years through the provision of greater storage capacity in the network and incorporation of SuDs throughout which will reduce the pluvial flood risks.

- The Proposed Scheme does not involve significant changes in levels, or land use changes of use along the corridor.
- The works are proposed along existing roads with no known flooding arising from groundwater.
- Neither local Planning Authority's nor any third-party submissions raised flooding as a significant concern in consideration of the Proposed Scheme.

Accordingly, arising from the above I consider that the proposed development will not give rise to flooding implications elsewhere and that it will in fact improve the flooding situation through the improved drainage measures being provided along the route.

9.9.6. Residual Impacts

9.9.6.1. The Proposed Scheme provides a comprehensive suite of mitigation measures (including those which will control sediment release, ensure appropriate storage and use of hydrocarbons and provide bespoke methods of construction at sensitive locations) which will, in my opinion, ensure the protection of water quality and avoid significant impacts on water bodies in the vicinity.

9.9.6.2. I consider that the Proposed Scheme will not give rise to floodrisk impacts nor significant adverse impacts on water quality or flows. Overall, following the implementation of the stated mitigation measures I consider that impacts in relation to flooding and water quality arising from the construction and operational phases of the Proposed Scheme will be imperceptible to slight and short-term during construction, and imperceptible, permanent and beneficial during the operational phase. In this regard the Board should note that I have considered the potential for cumulative impacts with other developments in the vicinity and I am satisfied that no cumulative impacts will arise.

9.9.6.3. In relation to the WFD I consider that the Proposed Development does not prevent or compromise progress of any water body to Good Ecological Status (GES) or Good Ecological Potential (GEP), and that the works are consistent with the

implementation of other European Community environmental legislation such as the Habitats and Bathing Water Directives.

9.9.7. **Conclusion Water**

I have considered all of the written submissions made in relation to Water in addition to the relevant application documentation. I am satisfied that the potential for impacts on water can be avoided, managed and/or mitigated by the measures which form part of the Proposed Scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts on water. I am also satisfied that cumulative effects are not likely to arise from the Proposed Scheme together with existing and permitted developments.

9.10. **Land, Soils, Geology and Hydrogeology**

9.10.1. **Overview**

9.10.1.1. Chapter 14 of the submitted EIAR deals with land, soils, geology and hydrogeology and the study area extends 250m either side of the Proposed Scheme boundary. Landcover throughout the Proposed Scheme is predominantly described as continuous/discontinuous urban fabric, with some exceptions such as artificial non-irrigated arable land (north of N4 junction 3), sports and leisure facilities (Hermitage Golf Club), green urban areas (i.e. parks including the Irish National War Memorial Park [INWMP]).

9.10.1.2. Soils along the Proposed Scheme are generally of low importance (made ground [widespread throughout the Scheme], alluvium [along watercourses], poorly drained topsoil [north of the old Lucan Road]). There are however soil types of high importance including shallow well-drained topsoil (south of the River Liffey at the INWMP) and deep well-drained topsoil (at a number of locations including north of the Old Lucan Road, along the Chapelizod by-pass, west of the INWMP). The main subsoils along the Proposed Scheme are predominantly glacial tills with areas of bedrock outcrops, alluvium, and glacial gravels. These are classified as being of low importance within the EIAR.

9.10.1.3. Underlying bedrocks consist primarily of Lucan Formation limestone, Tober Colleen Formation, Ballysteen Formation and Walstorian Limestone. The EIAR considers the bedrock to be of low importance due to its low value on a local scale. Project specific ground investigations were undertaken from September to October 2020, and the report prepared in December 2020 (Appendix A14.2 of the EIAR refers).

9.10.1.4. No karst features have been identified by the GSI along the Proposed Scheme, nor have there been any records of landslide events. Due to the urban/peri-urban location of the Proposed Scheme there is a likelihood of contaminated land occurring along the route. The potential sources of contaminated land have been identified within the EIAR (table 14.23 refers).

9.10.1.5. Three Geological Heritage Areas have been identified in the study area (roadside exposures of Calp Limestones near the Liffey Valley shopping centre junction, Phoenix Park, and two borehole wells within the Guinness Brewery complex).

9.10.1.6. There are two aquifer types along the Proposed Scheme corridor (a) Locally Important Aquifer (bedrock is moderately productive only in local zones) and (b) Poor Aquifer (bedrock is generally unproductive except for local zones). Groundwater vulnerability along the route covers all the ratings ranging from 'low', through 'moderate', 'high', and 'extreme' to 'extreme - rock at or near the surface'. The extreme rock at or near the surface vulnerability occurs in isolated pockets north of N4 junction 3, and north of Palmerstown Drive along the alignment of the River Liffey.

9.10.1.7. The Liffey Valley pNHA is the only designated area (pNHA, SAC, SPA, NHA) which is considered to have groundwater dependent habitats.

9.10.2. **Potential Impacts – Construction Phase**

9.10.2.1. Following review of the application documentation, site visit, as well as consideration of submissions and relevant information I am satisfied that the Proposed Scheme could give rise to the following potential impacts:

- Loss or damage of topsoil – through potential spillages or construction contamination events, incorrect stockpiling of material leading to erosion/weathering, mobilisation of pollutants from excavation of contaminated soil, sediment release, waterlogging, as well as disposal of topsoil instead of reuse/reinstatement. The magnitude of the effects on the various identified types of topsoil across the site are considered to be small-adverse, with a slight significance.
- Excavation of potentially contaminated land, due to the location of the Proposed Scheme in an urban/peri-urban area and the nature of the works which requires excavation/ground works across predominantly made-up ground in combination with the development history of the wider area, it is likely that excavations will be required in areas where there are previous contaminants. The EIAR has identified a number of such potentially contaminated sites and the magnitude of this potential impact is small - adverse and to have a slight significance.
- Loss of Future Quarry or Pit Reserve: the loss of future quarry or pit reserve is also a potential impact in relation to the proposed scheme. Given the location of the proposed works, concentration of residential and other properties in the vicinity, I do not consider that the Proposed Scheme could be stated as having an impact on quarry reserves. I therefore consider the magnitude of effects to be negligible and being of imperceptible significance.
- Loss or damage of portion of designated geological heritage sites, I note that the footprint of the Proposed Scheme is not proximate to the designated geological sites identified in the study area and that they are removed from any potential direct or indirect impacts. Accordingly potential impacts are negligible with an imperceptible significance.
- Loss or damage of aquifer, the Proposed Scheme runs over two aquifers, one which is classified as being locally important and the other as being poor. In relation to the aquifer of local importance effects could arise from excavation or mobilisation of contaminants or spillage/pollution events from construction. As excavations are of a limited nature in the context of the underlying aquifers and depths of cover effects are considered to be

negligible with an imperceptible significance. In relation to pollution events potential effects are considered to be moderate adverse with a moderate significance.

- Change to Groundwater Regime, construction activities may require localised pumping of excavations. In this regard I note the nature and minimal depths of proposed excavations involved as well as the extent/depth of cover over bedrock that is generally in place. I therefore consider the magnitude of effects to be negligible with an imperceptible significance.
- Loss or damage of groundwater dependent habitat, adverse impact could arise on groundwater dependent habitat from pumping of localised excavations. As pumping is anticipated as being limited, localised and temporary the potential impacts arising from this source are negligible. Excavations are proposed at various locations 250-730m distant from the Liffey pNHA where it is downgradient of the works. Any groundwater draw down will be limited, localized and not extend to the boundary of the pNHA. There is however risk of pollutants entering the groundwater as a result of spillages in the absence of mitigation resulting in a potentially local moderate adverse and potentially significant impact.

9.10.3. Potential Impacts – Operation Phase

- 9.10.3.1. In the event of the Proposed Scheme being implemented the operational phase has the potential to give rise to accidental leakage of oil, petrol, or diesel which could lead to contamination/pollution of the environment. Given that the works are proposed along an existing transport corridor I consider that the magnitude of such impacts to be negligible with an imperceptible significance.

9.10.4. Mitigation Measures

- 9.10.4.1. The design of the Proposed Scheme and nature of the subject works provide significant mitigation in relation to a range of the identified impacts in relation to the construction phase. These are set out in Section 14.5 of the submitted EIAR as well as within the submitted CEMP, and include the following:

- Topsoil:
 - To be stockpiled using appropriate methodology,
 - Will be assessed for reuse within the Proposed Scheme, where practical removal will be avoided, and material handled appropriately with all earthworks carried out in accordance with relevant specifications.

- Contaminated Ground:
 - Excavations to be kept to a minimum using shoring or trench boxes where appropriate, additional bespoke excavation support measures will be designed where necessary for more extensive works.
 - Excavated soils will be regularly tested by the contractor to monitor suitability of the soil for re-use. Testing will also be carried out on suspected contaminated ground and excavations disposed to a suitably licensed/permitted site as necessary.
 - Dewatering in areas of contaminated ground will be designed to minimise potential mobilisation of contaminants.

- Pollution of Soil/Groundwater:
 - Good construction management practices as set out in relevant CIRIA guidance and section 14.5.1.3 of the submitted EIAR will be used including, only employing a competent workforce, provision of appropriate site-specific training, appropriate storage and containment of hydrocarbons and pollutant liquids, deployment of spill kits, design of fuel storage areas, implementation of Environmental Incident Response Plan (EIRP) and sediment control methods outlined in the SWMP and good on-site housekeeping and management.

9.10.4.2. The operational phase does not require the provision of specific mitigation measures over and above those set out in the design of the Proposed Scheme. During the operational phase the Proposed Scheme will be subject to the management and maintenance procedures of the relevant Local Authority.

9.10.4.3. With the implementation of mitigation measures set out within the EIAR I consider that there will be no significant residual impacts arising on land, soils, geology or hydrogeology from the Proposed Scheme.

9.10.5. **Conclusion Land, Soils, Geology and Hydrogeology**

I have considered all of the written submissions made in relation to land, soils, geology and hydrogeology, as well as the relevant contents of the planning application documentation including the EIAR. I am satisfied that the potential for impacts to arise can be avoided, managed and/or mitigated by the measures which form part of the Proposed Scheme, the proposed mitigation measures and through the inclusion of suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of land, soil, geology and hydrogeology. I am also satisfied that cumulative effects in the context of existing and permitted development in the vicinity and surrounding area of the Proposed Scheme are not likely to arise.

9.11. **Archaeology, Cultural, and Architectural Heritage**

9.11.1. **Overview**

9.11.1.1. Archaeological and Cultural Heritage is discussed in Chapter 15 of the submitted EIAR while Architectural Heritage is set out in Chapter 16. Various third-party submissions have made reference to concerns in relation to impacts on elements of architectural heritage (such as works in the vicinity of conservation areas/ACAs, protected buildings or close other elements of built heritage merit), however, no submissions have raised any significant issues in relation to the potential for impact on archaeological features. The EIAR Archaeology and Cultural Heritage chapter is informed by previous archaeological investigations in the vicinity of the Proposed Scheme and an Inventory of Archaeological and Cultural Heritage and is also supported by mapping (Appendices 15.1, 15.2, and Figure 15.1 of volume 3 of the EIAR refer respectively). The Architectural Heritage Chapter is supported by a Historical Background Report (Appendix A16.1), an Inventory of Architectural Heritage Sites (Appendix A16.2) and a Methodology for Works Affecting Sensitive and Historic Fabric (Appendix A16.4). The Board should note that in the following

discussions features which remain standing (i.e. have a visible presence – buildings, street furniture etc) are generally considered as being of architectural heritage while those which only have potential sub-surface features are dealt with as being of archaeological heritage, while monuments or sculptures are considered as cultural heritage.

9.11.1.2. In terms of third-party submissions where issues of heritage are raised these have been generally focused on specific protected structures or conservation areas (such as in Palmerstown village – works in the vicinity of Red Cow Cottages [ACA] and Hermitage golf course [protected structure and attendant grounds]). Concerns are therefore focused on the potential for impacts to arise from the Proposed Scheme either directly (through boundary setbacks / changes to curtilage / and provision of bus stops) or indirectly through the scheme introducing changes to the streetscape/character of an area.

9.11.1.3. The Archaeology Section of DCC generally concur with the EIAR findings however, they also request monitoring to be undertaken in the vicinity of Recorded Monument DU018-029 (House) where road widening is proposed, as well as during the removal of a strip of land to the front of the landscaped grounds at the site of Steevens' Hospital (DU18-020). Furthermore, DCC conservation section consider that the Proposed Scheme could potentially negatively affect the character of Dr. Steevens' Hospital grounds through the proposed land-take, design and siting of the bus shelters and should be re-assessed. SDCC do not raise any issues in relation to archaeology, cultural or architectural heritage.

9.11.2. **Baseline Conditions**

9.11.2.1. The study area for archaeology and architectural heritage has been established as the full extent of the Proposed Scheme as well as 50m each side of the route. For archaeology consideration was also given to extending the study area where appropriate, and for architectural heritage where the demesne/curtilage/site of a relevant structure overlaps with this boundary the entirety of the demesne/curtilage is considered. Both the Architectural and Archaeological Heritage Assessments in the submitted EIAR have been informed by desk and field studies.

Archaeology and Cultural Heritage Baseline

9.11.2.2. In order to assess the impacts on archaeology and cultural heritage the submitted EIAR considers sites which have been identified on the Record of Monuments and Places (RMP) and/or the Sites and Monuments Record (SMR) (should there be upstanding buildings associated they are also considered under Architectural Heritage), furthermore where a designated Zone of Archaeological Potential (ZAP) is established it is also considered.

- **Section 1 – N4 Junction 3 to M50 Junction 7.**

There are no national monuments, sites under preservation, recorded archaeological monuments (Records of Monuments and Places [RMP]/ Sites and Monuments Record [SMR Sites]), along this section of the Proposed Scheme nor have any sites of archaeological potential been identified. Furthermore, while there have been limited previous archaeological investigations in the vicinity of this section, none have identified any items of archaeological interest. One site of industrial heritage interest was identified, that being the former route of the Dublin and Lucan Electric Railway, which in part follows the route of the N4.

- **Section 2 - M50 Junction 7 to R148 Con Colbert Road**

There are no national monuments, sites under preservation order this section of the Proposed Scheme. There is one RMP/SMR site (RMP DU018-029 – 16th/17th Century house) located under the south carriageway of the Chapelizod by-pass. Archaeological finds have been made off the Chapelizod by-pass and Palmerstown Lower. While there have been limited previous archaeological investigations in the vicinity of this section, none have identified any items of archaeological interest. In relation to industrial heritage the former route of the Dublin and Lucan Electric Railway, continues to partly follow the route of the N4, and there are also gravel pits along and in the vicinity of this section of the route. The surviving historic character along this section is focused on the village of Palmerstown.

- **Section 3 – R148 Con Colbert Road to City Centre**

There are no national monuments, on this section of the route (the closest being Kilmainham Gaol located 150m to the south). This section of the Proposed Scheme is within the ZAP for the Historic City of Dublin (RMP DU018-020). Bully's acre (southeast of the Con Colbert Road / St. Johns Road West junction is immediately adjacent to the Proposed Scheme and has been associated with burials for over 1100 years, contains evidence of an enclosed early medieval ecclesiastical settlement and also has an association with the Royal Hospital Kilmainham. There are several RMP / SMR sites along the route and in the vicinity of this Section with previous archaeological investigations revealing evidence for activity from the prehistoric to medieval periods in the vicinity of this section, including numerous Viking burials in the War Memorial Gardens. In relation to industrial heritage the site of a former gas house is noted on the Con Colbert Road. There are also a number of notable buildings of cultural interest as well as being RMP sites including Dr. Steevens' Hospital, and the Royal Hospital complex. This section of the route therefore has considerable historic character and has a number of archaeological, historical and cultural heritage sites.

9.11.3. **Architectural Heritage baseline**

9.11.4. There are a number of architectural heritage features along and in the vicinity of the Proposed Scheme, and the locations of all such features are identified in Figure 16.1 of the EIAR, which includes items from the Record of Protected Structures (RPS), National Inventory of Architectural Heritage (NIAH) features (including garden survey), and other Architectural Heritage Sites considered of merit but not afforded any specific designation or protection.

9.11.5. There are four features which are considered to be of Architectural and Archaeological heritage significance – a garden pavilion, walled garden, and infirmary building in the grounds of the Royal Hospital Kilmainham, as well as Dr. Steeven's hospital, all of which are on the Record of Protected Structures (RPS). There are 18 RPS sites in total along and within 50m of the Proposed Scheme, these are listed in table 16.7 and a detailed description of each is included in Appendix A.16.2, Volume 4 of the EIAR. The RPS structures include Sureweld, Fonthill Power Station, (Lucan Road), the Deadmans Inn, (Old Lucan Road),

Palmerstown House, Palmerstown Barn (both Main Street Palmerstown), the Irish War Memorial Gardens (Chapelizod by-pass) and Heuston Station.

- 9.11.6. The Proposed Scheme does pass adjacent to Architectural Conservation Areas (ACA) within the functional areas of both SDCC and DCC. Within the functional area of SDCC the Proposed Scheme runs along the Lucan Road along the northern frontage of the ACA designated at Woodfarm Cottages 1-8 and Red Cow Cottages 1-8 (the scheme also runs along the N4 to the south of this ACA). In relation to this ACA the Board should note that it was designated under the provisions of the 2022 SDCC Development Plan which came into effect in August 2022, the EIAR (submitted with the application in October 2022) does not reference the ACA, however, further discussion is provided in relation to interactions at this location in the NTAs response to submissions. Within the functional area of DCC the Proposed Scheme, runs adjacent (to the south of) the Chapelizod and Environs ACA.
- 9.11.7. Within the DCC area the Proposed Scheme passes adjacent to and through conservation areas which are afforded some protection under the zoning provisions of the City Development Plan. The Proposed Scheme runs through and adjacent to such areas from the Chapelizod by-pass, running east along the Con Colbert and St, Johns Road West. These areas are characterised by the Liffey Valley and Irish War Memorial Park, Royal Hospital Kilmainham, Dr. Steevens' Hospital and Heuston Station and the Liffey Quays at the easternmost extent of the Proposed Scheme.
- 9.11.8. Designed/man-made landscapes are also considered to be of importance in the study area, most of these are associated with protected structures, demesnes, recorded monuments, or gardens A total of 10 designed landscapes were identified and are listed in table 16.10 of the submitted EIAR. Three industrial heritage sites of architectural merit are noted in the study area in the EIAR, all of which are railway bridges.
- 9.11.9. Other structures not subject to designation but considered to be of architectural merit within the study area include buildings on the National Inventory of Architectural Heritage (NIAH), post boxes (3 no. pillar post boxes), lamp posts (2 groups, 6 no. to the side of Heuston Station and 3 to the front of Dr. Steevens' Hospital), statuary and miscellaneous street furniture (3 no. Milestones, one fountain, and 3 no. cast iron

electrical cabinets). Heritage paving and surface treatments of architectural merit were identified at the front of Heuston Station.

9.11.10. **Potential Impacts – Archaeological and Cultural Heritage**

9.11.10.1. Potential impacts on archaeology and cultural heritage can arise from ground-breaking works associated with the construction process. Accordingly, the construction of the Proposed Scheme could give rise to the following impacts:

- Excavations could have a negative, slight, and permanent impact on the former tramlines which may be present under the parts of the Proposed Scheme. Although I note that these are not designated as an archaeological feature or exposed on the surface at any location, they are an item of industrial heritage interest along the route of the Proposed Scheme.
- Works could give rise to negative, significant, permanent impacts on SMR DU018-302 (burial site), the designated ZAP for the Historic City of Dublin (RMP DU018-020) and other recorded archaeological sites along the Con Colbert Road and St. Johns Road West, including burial sites, and Bully's Acre as well as the site of a non-designated archaeological site of a 19th Century Gas House.
- Potential negative moderate permanent impacts could arise at a former mill site in the vicinity of Dr. Steevens' Hospital, and a potential negative, slight and temporary impact the setting of the hospital building.
- There is potential for negative slight and permanent impacts to arise from the provision of the temporary construction compound LU3 due to its greenfield nature.

9.11.10.2. No impacts on archaeological cultural heritage features have been identified as arising during the operational phase.

9.11.11. **Potential Impacts - Architectural Heritage**

9.11.11.1. In the construction phase direct impacts on architectural heritage could arise where the Proposed Scheme requires alterations to sensitive fabric, e.g., through land-take,

setting back boundaries, or by relocating street furniture to accommodate carriageway widening. Indirect physical impacts could arise where sensitive buildings or features offer a boundary to, or are in, the Proposed Scheme. Indirect visual impacts could arise where construction impacts the setting of sensitive features. Similarly, the operational phase of the Proposed Scheme could give rise to adverse impacts. The following impacts are anticipated in the absence of mitigation.

Protected Structures:

9.11.11.2. Of the 22 no. protected structures / groups of Protected Structures identified in the Study area the EIAR states that none will have their built fabric directly impacted by the construction phase of the Proposed Scheme. In relation to the three high sensitivity protected structures that share a boundary with the Proposed Scheme (Heuston Station, St. Steevens' Hospital, and the Irish War Memorial Gardens), Negative, Significant and Temporary Impacts are anticipated during construction. In relation to St. Steevens' Hospital the Board should note that while works will encroach on the existing garden along the northern frontage of the building onto St. Johns West Road, it is stated that this garden and frontage dates from c.1987 and thus no historic fabric will be impacted and the established setting of the structure is therefore not an original feature of the siting. The EIAR states that the alterations have the potential to be positive moderate and long term, while the DCC Conservation Section have raised concern that the works will negatively affect the character of the building and its setting. In this regard I note that the current garden arrangement is non-original being a relatively recent provision and that the design of the Proposed Scheme at this location has considered the heritage setting and items of architectural importance. The extant lamp-posts are to be retained or slightly relocated, the majority of trees are to be retained, bus stops proposed are stated as being "glass" with one offset to ensure primacy of views towards the northern façade of the building is retained and the landscaping drawings show natural stone paving features to align with the main access to St. Steevens' Hospital, as well as providing additional planting and hedgerow. I am satisfied that the design approach adopted is appropriate, and respects and maintains the aspect and setting of the protected structure and its attendance grounds. To ensure visual clutter is minimised at this location in the event of favourable consideration and to ensure the detailed design

and works respect the setting and design detail commitments in the submitted plans I recommend that a specific condition be included precluding advertisements on the bus shelters at this location and requiring engagement with the local authority in relation to the finishes/final design details.

9.11.11.3. The boundary of the Sureweld building (SDCC RPS 036 – former Fonthill Power Station/Tram yard) is also proposed to be set back slightly to accommodate the Proposed Scheme works.

9.11.11.4. In the Construction/Operational Phase the provision of a new pedestrian bridge over the N4 at Liffey Valley has the potential to impact the setting of Avondale House (gate lodge) and gates (SDCC RPS 066), as it will require the removal of mature trees and hedgerow opposite the structure, thus giving rise to a potential negative, slight and long-term impact.

Architectural Conservation Areas

9.11.11.5. In relation to the ACAs the EIAR predicts a negative, moderate and long-term impact from the Proposed Scheme on the Chapelizod and Environs ACA, arising from the widening of the by-pass, loss of trees and provision of access ramps and steps to the bus stops, there are no works within the ACA but they are immediately to the south. In relation to the Red Cow - Woodfarm Cottages ACA in Palmerstown, impacts on this were not considered in chapter 16 of the EIAR, although I note reference to this ACA is made in Chapter 17 – Landscape/Townscape, and architectural impacts on this ACA were addressed in the applicants' response to submissions. The Proposed Scheme will provide widened footpaths and bus stops at the boundary of this ACA and thus introduce changes during the construction phase works will give rise to temporary slight negative impacts.

9.11.11.6. In relation to operational impacts on the ACAs I consider that impacts will be negative slight and long-term due to the alterations that will be carried out in their vicinity and the minor changes in character associated with the Proposed Scheme.

Conservation Areas:

9.11.11.7. The Proposed Scheme travels through several areas that are designated as conservation areas in the DCC City Plan east of Chapelizod where it runs by the River Liffey and in the vicinity of Kilmainham Hospital, Dr. Steevens' Hospital, Heuston Station and proximate to the Quays. The EIAR notes that these do not extend to incorporate heritage lamp posts identified along St. Johns Road West at Steevens' Hospital or Heuston Station, however, in my opinion impacts on these features remain a relevant consideration and while RPS structures within these areas will not be directly impacted by construction, as the Proposed Scheme will run adjacent, there is potential for damage to occur during construction. Furthermore, the garden to the north of Dr. Steevens' Hospital will be altered/reduced to expand bus waiting facilities and the public realm and a tree is also proposed to be removed. Accordingly, having regard to the sensitivity of the conservation areas at Kilmainham and St. Steevens' Hospital the potential for construction phase impacts is negative, significant and temporary, while those at Liffey Valley and Liffey Quays areas are negative, moderate and temporary.

9.11.11.8. In terms of the operational phase the EIAR considers the impacts to be positive moderate and long term in relation to the conservation area surrounding Dr. Steevens' Hospital. In relation to the Liffey Valley conservation area the widening of the Chapelizod Bypass to accommodate additional bus stops will occur there with a resulting negative slight and long-term operational impact locally, outside these areas I do not consider that the Proposed Scheme will give rise to adverse impacts on the other DCC designated conservation areas as the land use and character of the scheme remains consistent with that already in place.

NIAH Structures:

9.11.11.9. Two locations from the NIAH (1-2 Fonthill Road, and Bully's Acre) have potential to experience negative, moderate and temporary impacts from construction, while two further locations (1-4 Chapelizod Hill Road, and St. Johns Gardens, South Circular Road) will experience temporary slight negative impacts in the unmitigated scenario.

9.11.11.10. In the operational phase 1-4 Chapelizod Hill Road will experience negative. Slight and long-term impacts from the loss of trees, Chapelizod bypass widening and provision of ramps/stairs access to the new bus stops.

Designed Landscapes:

9.11.11.11. Negative, Moderate and Permanent Impacts will arise on the designed landscape associated with Woodville House (now demolished) from boundary setbacks to accommodate new cycle lanes, and bus stop along the R835 Lucan Road.

9.11.11.12. Seven locations (including the Hermitage, Quarryvale, Palmerstown House, Stewarts hospital), will experience negative moderate temporary impacts from the construction phase due to boundary works and two others (Fonthill and Inchicore House) will experience slight negative and temporary impacts.

9.11.11.13. Four designed landscape locations are predicted to experience indirect visual impacts from the Proposed Scheme. The former designed landscape associated with Hermitage House which is now a golf course will be affected through the loss of existing boundary trees and planting resulting in a negative, moderate and long-term impacts. The former designed landscape associated with Fonthill House (SDCC RPS no. 024) will potentially experience negative, slight and long term impacts from the loss of planting along the boundary. The former designed landscape at Quarryvale will experience a slight negative long-term impact through the loss of planting associated with the provision of the new footbridge over the N4 – previously discussed above in relation to Avondale house and gate impacts. The entrance to Kings Hospital school (Brooklawn House RPS structure grounds) will be enhanced through the public realm improvements proposed and will therefore experience positive, slight long term impacts in the operational phase.

Other Structures of Architectural Interest:

9.11.11.14. The site of Hermitage Lodge (not on the RPS of itself but located within the curtilage of Hermitage Golf Club which is on the RPS) has the potential to

experience negative moderate and temporary impacts from damage arising during the construction phase. Where other structures of architectural interest have been identified (refer to Appendix A16.2 of the EIAR) the potential impacts that could arise are negative, slight and temporary.

9.11.11.15. Operational negative, slight and long term impacts will arise on the visual impacts of dwellings in the vicinity of the new footbridge over the N4 at Liffey Valley due to the removal of mature trees and planting on the opposite side of the Old Lucan Road.

Street Furniture:

9.11.11.16. Three cast iron post-boxes occur along the route, two of which (one at Heuston Station and another at St. Philomena's Church) are required to be slightly repositioned and potential damage could occur in an unmitigated scenario giving rise to negative significant and long-term impact. Disruption of access to the boxes will occur during construction and accordingly indirect, negative, moderate, and temporary impact will also arise.

9.11.11.17. Two sets of lamp posts of interest have been identified, the first outside Heuston station requires 2 lamp posts to be relocated with potential negative, significant and temporary impacts arising with others in this group remaining in the same position but which could be damaged during construction. Similarly, one of the replica lamp posts at the front of Dr. Steevens' Hospital is proposed to be relocated giving rise to potential negative moderate (as it is a replica) temporary impact. The remainder of the lamp posts at this location are to remain as they are, however, potential for damage from works remains in the unmitigated scenario and therefore negative slight and temporary impact could arise.

9.11.11.18. In relation to statuary and miscellaneous street furniture six features of architectural heritage were identified including milestones, fountain and cast-iron electrical cabinets. None of these will be directly impacted however, due to construction practices in the vicinity in the unmitigated scenario there is potential for negative temporary impacts of slight or moderate scale to arise. I also note the

presence of a statue on the landscaped/grassed area between the outbound slip onto the R833 Con Colbert Road and the R148 Con Colbert Road. This is not referenced in the EIAR; however, this feature will not be directly impacted and accordingly I consider there is potential for negative temporary impacts of a moderate scale to arise in the unmitigated scenario.

Mitigation Measures

9.11.12. Archaeological Mitigation Measures

9.11.12.1. Archaeological mitigation measures can be achieved by avoiding, preventing, reducing or offsetting negative effects through preservation insitu, by design and/or recording, these are set out in section 15.5 of the EIAR and include the following:

- A suitably qualified archaeologist will be appointed by the NTA as part of the team administering and monitoring the works, further the appointed contractor will employ a competent archaeologist to advise on archaeological and cultural heritage during construction.
- Archaeological monitoring will be carried out under license where ground breaking, road resurfacing, excavations or ground disturbance works are required and will ensure full recognition, the proper excavation, and recording of archaeological soils, features, fines, and deposits which may be disturbed. Such monitoring will take place along the route of the former Dublin & Lucan Electric Railway, the Old Lucan Road at Quarryvale, the Old Lucan Road at Palmerstown, within the ZAP for the historic city of Dublin along the Con Colbert Road and St. Johns Road West, and at the site of the 19th Century Gas house, and relevant SMR and RMP sites.
- Provision will be made for archaeological monitoring, inspection, and excavation works that may arise on site during the construction phase.
- Should archaeological features or material be uncovered, all machine work will cease in the immediate area to allow the archaeologist/s time to inspect and fully record any such material.

9.11.13. Cultural Heritage Mitigation Measures

9.11.13.1. While no impacts have been identified on cultural heritage features in the EIAR it commits to protecting such features where they occur in proximity to works, or should relocation be required.

9.11.14. **Architectural Heritage Mitigation Measures**

9.11.14.1. The methodology for works affecting sensitive historic fabric arising from the Proposed Scheme is set out in Appendix A16.3 and Section 16.5 of the EIAR. The Appendix sets out the general principles of the conservation approach i.e., that consultation will be held with the relevant local authorities, carrying out of surveys and protection measures for specific items of architectural heritage during works activities. Detailed approaches to works to and around a range of features is also included, such as:

- Boundary treatments – rubble, coursed boundary, brick, walls plinths and railings, gate piers, gates and railings, will be recorded, removed, stored and re-used.
- Historic paving and surface treatments will be surveyed/photographed, protected, or removed where necessary, cleaned, repaired and stored prior to reinstatement/relaying in an appropriate manner.
- Statues and other street furniture including post-boxes and lamp posts will be recorded and protected, as appropriate and where removal is necessary, they will be recorded, stored and reinstated.

9.11.14.2. At the three locations where identified high sensitivity protected structures share boundaries with the Proposed Scheme (Irish War Memorial Gardens, Dr. Steevens' Hospital and Heuston Station) and ten further such locations with medium sensitivity the mitigation measures are recording, protection and monitoring of the sensitive fabric before and during the works in accordance with the methodologies in Appendix 16.3 of the EIAR. Similarly these mitigation measures are proposed to be applied to DCC designated conservation areas, NIAH structures, other structures of interest (listed in the EIAR - including Hermitage Lodge, and Red Cow Cottages), Statuary and Street furniture (I recommend the inclusion of a specific condition ensuring the application of the mitigation measures to the statue at the Con Colbert

Road junction as it is not referenced in the EIAR) and ACAs (the board should note that the EIAR references Chapelizod and Environs ACA only – however, for clarity in the event of favourable consideration I recommend the inclusion of a specific condition requiring application of the mitigation measures to the Red Cow and Woodfarm Cottages ACA as well).

9.11.14.3. In relation to designed landscapes whose boundaries will have a direct impact and which have a medium sensitivity and where impacts are considered negative, moderate and permanent (i.e. where certain elements of historic rubble walling remains in place) - namely the boundary of the now demolished Woodville House, mitigation consists of recording the existing boundary in position prior to works, affected masonry being labelled prior to careful removal, to safe storage and their reinstatement along the new line/location. At other boundary locations sharing boundaries along the route where impacts are predicted to be negative moderate and temporary (such as the boundary of the Hermitage Golf Club, Quarryvale, and Site of Ballyowen Cottage) mitigation is recording, monitoring and protection of sensitive fabric.

9.11.14.4. In relation to impacts on street furniture (e.g. posts boxes and lamp posts) where such structures are to remain in place these will be recorded, protected and monitored throughout construction. Where relocation of such features is proposed recording in location, labelling, careful removal to safe storage and relocation (within 2m of current locations) will be carried out. The methodologies set out in Appendix 16.3 of the EIAR will be followed to ensure careful dismantling and re-erection.

9.11.14.5. There are no specific operational phase mitigation measures proposed as it is stated that these have been inherently included within the design of the overall scheme. It is noted in the EIAR, however, that negative operational phase impacts could arise on the former designed landscape of Hermitage House (now golf course) due to the loss of trees and planting along the site frontage. In this regard the Proposed Scheme is reinstating a high boundary wall with replanting behind. I note that the Hermitage Golf Club has objected to the Proposed Scheme for reasons including the land take, loss of trees/boundary treatment and visual impact. I note that the full extent of the proposed land-take set out and consider that the subject works can be

carried out using less space and therefore further reducing the loss of trees, accordingly, in the event of favourable consideration I recommend a reduction in the land take and preservation of additional trees along this frontage, this matter has been discussed in full previously in this report.

9.11.15. **Residual Impacts and Conclusion**

Archaeology and Cultural Heritage.

9.11.15.1. With the application of the mitigation measures during the pre-construction and construction period all archaeological and cultural heritage features/items will be subject to either preservation by record (archaeological excavation), in situ, or by design, and/or archaeological monitoring. Accordingly, no residual adverse significant impacts are anticipated.

9.11.15.2. I note that the EIAR has stated that no impacts will arise on cultural heritage features, third party submissions have been made asserting that the Proposed Scheme in its operational phase will give rise to adverse impacts on cultural activities and events which take place in the eastern side of Palmerstown Village which rely on/use road closures for that side of the village (such as Ceile at the Crossroads, lighting of the Palmerstown Christmas Tree, and local parades etc.). While this issue has not been discussed in the EIAR the NTA in response to submissions has clarified that the Proposed Scheme does not preclude any application for temporary road closures accordingly I accept that the Proposed Scheme which does include changes to the streetscape at this location will not preclude the pursuit or operation of cultural activities at this location which will remain, in essence, a public road.

Architectural Heritage

9.11.15.3. With the application of the mitigation measures incorporated in the EIAR in terms of construction practices and design of the Proposed Scheme, and with the application of appropriate conditions I consider that significant adverse residual impacts on architectural heritage will not arise.

Overall Conclusion

9.11.15.4. Having considered in detail all the submissions lodged and the application documentation I am broadly in agreement with the conclusions and impacts of the Proposed Scheme as set out in the EIAR, however, there are certain amendments to the scheme that could be made to further minimise impacts. In this regard I note the following in the event of favourable consideration:

- A condition should be imposed to ensure that all works and mitigation measures required to or in the vicinity of items of architectural heritage value identified in the EIAR and here in this report should be subject to adequate oversight and supervision by an appropriate architectural heritage specialist appointed by the contractor/applicant.
- A further condition to ensure the bus shelters proposed along the St. Johns Road West frontage of St. Steevens' hospital do not incorporate advertisements or advertisement panels, and similarly, for the bus stops proposed adjacent to the ACA in Palmerstown, with finishes of the Proposed Scheme in Palmerstown to be agreed with the Planning Authority, in the interests of ensuring protection of the character and setting of the village centre.
- In relation to the boundary set back of the Sureweld building (SDCC RPS 036 – former Fonthill Power Station/Tram yard), this is a distinctive industrial building which has an existing blue railings within a brickwork plinth boundary. The fencing and boundary treatment drawings indicate that this is to be replaced by a 'proposed wall'. Due to the ambiguity arising in relation to the application of appropriate architectural heritage mitigation and protected status of the structure at this location, I recommend that a condition be imposed, in the event of favourable consideration, stating that the detailed design of this boundary along the site frontage of SDCC RPS 036 be agreed with the local planning authority following landowner engagement.
- Appropriate protection measures/mitigation shall be applied to the statue at the junction between the west-bound off-slip to the R833 Con-Colbert Road from the R148 Con-Colbert Road.

- The mitigation measures for works in the vicinity of ACAs are to be applied to both the Chapelizod and Environs ACA and the Red Cow Woodfarm Cottages ACA.
- A reduction in land take and tree loss will be incorporated into that part of the Proposed Scheme along the frontage of the Hermitage golf club.

9.11.15.5. I note that in their submissions the Local Authorities recommended that conditions be imposed to ensure agreement and implementation of the proposed construction practices relating to heritage features, boundaries and works to protected structures. I consider the imposition of such a condition to be prudent and will ensure that adequate protections are provided in relation to works to protected structures and heritage features. Accordingly, I recommend that such a condition be provided in relation to the relevant features as set out in my list of recommended conditions below.

9.11.15.6. I have considered all of the written submissions made in relation to archaeological, cultural, and architectural heritage, in addition to those specifically identified in this section of the report. I am satisfied that significant adverse impacts can be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of archaeological, cultural or architectural heritage. I am also satisfied that cumulative effects with other existing and permitted developments will not arise due to the nature of the design of the Proposed Scheme and with the implementation of the mitigation measures as set out.

9.12. **Landscape (Townscape) & Visual**

9.12.1. Landscape (Townscape) and Visual is dealt with in Chapter 17 of the submitted EIAR which is supported by 8 no. photomontages (Figure 17.2 of the EIAR), and an Arboricultural Impact Assessment (AIA - Appendix A17.1). I have reviewed these documents in the context of the Proposed Scheme and should the Board require further details in relation to the Photomontages section 17.5.2.1 of the EIAR provides a commentary on each of the 8 viewpoints.

9.12.2. The study area in terms of landscape/townscape is considered to be the length and width of the Proposed Scheme corridor which is expanded where possible to incorporate wider viewpoints to the Proposed Scheme where available. The EIAR was supported by desktop studies as well as route walkover.

9.12.3. Several submissions have raised concerns that the Proposed Scheme will give rise to adverse visual impacts affecting both individual properties, as well as the established character of particular areas. In this regard I note that the primary concerns in relation to adversely impacting the character of an area are centred on Palmerstown Village, the area in the vicinity of the new bus stops and route widening at the Chapelizod by-pass, the Hermitage Golf Club, and Hermitage Clinic. DCC conservation section have also raised concerns in relation to the impact the proposed works will have on the setting and amenity of the area surrounding Dr. Steevens' Hospital. Furthermore, I note that while the majority of the third party concerns raised in this regard refer to the adverse impact arising from the physical works proposed several also raise concerns in relation to the nature of the operational phase, in that increased bus activity and potential grouping/gathering/clustering of additional buses on the route (particularly the two new bus stops proposed associated with the routing of buses through the eastern side of Palmerstown village) would have an adverse impact on the amenities, character and streetscape.

9.12.4. The Board should note that there is a degree of overlap between the consideration of impacts on townscape/streetscape and visual impact and those of architectural heritage set out in the previous section. Insofar as is practicable and in the interests of brevity I do not intend to repeat consideration of any impacts previously considered in that section.

9.12.5. **Overview - Baseline**

9.12.5.1. The Proposed Scheme runs through peri-urban, suburban and city landscapes throughout its length, it runs along a variety of streetscapes and road types, as well as through residential and mixed use zonings, conservation areas, mixed-use zonings, historic landscapes and boundaries, and by biodiversity and heritage features.

9.12.5.2. There are several development plan policies (both DCC and SDCC) listed as being of particular relevance in relation to the consideration of impacts on landscape/townscape. These include:

- The Liffey River Valley Special Amenity Area Order (SAAO) which lies to the north of the N4, and requires that development within the area should be designed and sited to preserve amenities, minimise visual impacts and maintain views and vistas over the river valley.
- The ACA's, RPS, Conservation Areas and Tree Preservation Order (TPO) in the vicinity. The relevant ACAs, RPS items and conservation areas have been previously listed and discussed, the most proximate TPOs relate to trees located north of the N4 at Kings Hospital and will not be affected by the Proposed Scheme.
- The SDCC development plan defines the Liffey Valley as its distinct landscape character area and notes the N4 presents the primary settlement edge to it. The plan also indicates an objective to protect and preserve significant views, one of which is from the eastbound lane of the N4 at the N4/Fonthill Road junction looking north towards the Liffey Valley (i.e. over the Hermitage Clinic and its associated junction). Following site inspection, I note that this view is predominantly enclosed/restricted by mature roadside planting and vegetation with a notable break being provided from the N4 overpass of the R113 Fonthill Road, and my consideration of this view has been fully discussed previously above.
- The DCC development plan notes a key view and prospect north to the Phoenix Park from the Royal Hospital Kilmainham (over the route of the Proposed Scheme).

9.12.5.3. In terms of baseline sensitivity and considering the townscape/streetscape character, key townscape features, amenity designations, TPOs, protected views and structures throughout the route the three sections are considered to have a baseline sensitivity of low (Section 1 [N4 Junction 3 to M50 junction 7]), medium (Section 2 – M50 [Junction 7 to Con Colbert Road]) and Medium/High (Section 3 [Con Colbert Road to Frank Sherwin Bridge]).

9.12.6. Potential Impacts

- 9.12.6.1. Section 17.4.2.1 of the EIAR provides a list of changes that were incorporated through the iterative design process to reduce the visual/landscape impact, and improve the public realm elements of the Proposed Scheme, these include the provision of substantial native tree re-planting, along the frontage of the Hermitage Golf Club, provision of planting surrounding the new pedestrian bridge over the N4 accessing the Liffey Valley Shopping Centre, moving the new ramp and stair access from the Chapelizod Hill Road to the southern side of the road (resulting in a reduced height and length of ramps and reduction in loss of trees), providing the accessible ramp and stairs, and the design of the public realm surrounding the south side of St. Johns Road West along the frontage of St. Steevens' Hospital (incorporating tree retention, paving patterns following the building lines and offsetting a 'glass' bus shelter discreetly to the side so as not to obstruct the approach to, or views of, the doorway).
- 9.12.6.2. The characteristics of the Proposed Scheme which could give rise to impacts in terms of townscape and visual assessment during the construction phase include: amendment, adaption and widening of existing road network, verges, medians, boundaries and junctions, temporary and permanent land-take, establishment of temporary construction compounds, provision of cycle tracks, drainage (SuDs provisions) and landscaping/planting.
- 9.12.6.3. The areas which will potentially experience the largest interventions/changes in terms of townscape/streetscape during the construction phase include:
- Provision of new piled boundary wall and removal of young planting on the R835 Lucan Road (requiring temporary land acquisition).
 - Replacement of existing pedestrian bridge at N4 Junction 3 (Ballyowen/Lucan Road) with a new pedestrian and cycle bridge and junction rearrangements
 - Works along frontage of Hermitage Golf Club including temporary and permanent land-take, set back of boundary wall, provision of safety netting and loss of boundary planting.

- Works along front boundary of Sureweld Ltd. (former Fonthill Power Station/tram yard – SDCC RPS 036) and Hermitage Clinic, resulting in new retaining wall structure and loss of boundary planting.
- Temporary land-takes, setting up and hoarding associated with the provision of the three proposed construction compounds.
- Works along the Old Lucan Road at Quarryvale between the N4 junction 2 and M50 to provide a two-way cycle track, pedestrian crossings, a 61.5m chicane to facilitate one-way at a time traffic, and landscaping works associated with the new pedestrian bridge.
- Provision of new bus stops and pedestrian overbridge (at and over the N4) to facilitate access to Liffey Valley shopping centre, including temporary land take, the removal of young/semi-mature trees, existing bus stops and their pedestrian access ramps from the existing foot/cycle bridge.
- Works along the Old Lucan Road through Palmerstown to facilitate improved cycling infrastructure and additional bus stops.
- Land-take and junction works at the Kennelsfort Roads junction with the Palmerstown bypass N4 including revised bus stop arrangements.
- Works at junction of R148 Palmerstown bypass and Old Lucan Road including land-take and impact on boundaries at petrol station (Applegreen).
- Works at Chapelizod Hill Road providing for new bus stops and widening on the Chapelizod by-pass as well as accessible ramping and stairs, requiring land-take and loss of trees.
- Works along St. John Road West including footpaths and median outside Heuston Station, land acquisition from St. Steevens' Hospital, upgrade and expansion of existing bus stops and revised public realm provisions at both Steevens' Hospital and addressing the front elevation of Heuston Station.

9.12.6.4. Overall, impacts through the construction phase in the absence of mitigation vary between the three sections of the Proposed Scheme, with Section 1 impacts being negative, moderate and temporary/short term, Section 2 impacts being negative, slight / moderate and temporary/short term [with impacts around the R148 bridge at

Chapelizod Hill Road being locally negative, significant and temporary], and Section 3 negative, significant and temporary / short term in the unmitigated scenario.

9.12.6.5. During the construction phase the elements which have the potential to experience the most significant negative impacts in relation to streetscape and landscape are at the ACA's (and here I include east Palmerstown Village in my consideration), Chapelizod Hill Road, Conservation Area surrounding Dr. Steevens' Hospital, protected structures at Heuston Station and Dr. Steevens' Hospital, amenity areas and boundaries associated with the Hermitage Golf Club, Liffey Valley Gaels, and surrounding Knockmaree Apartments.

9.12.6.6. The characteristics of the Proposed Scheme which could give rise to impacts in terms of townscape and visual assessment during the operational phase arise from alterations to the physical and visual character of the existing road/street, changes in traffic, pedestrian and cycle movements as well as modifications to properties, boundaries and other areas. Impacts should improve throughout the operational phase as the works become bedded in and new landscaping matures throughout. Again, the areas of most significant impact arise at the Hermitage Golf Club frontage, along the Old Lucan Road, at Liffey Valley Shopping Centre (arising from the new foot/cycle bridge and works/traffic patterns on the Old Lucan Road, Palmerstown Village, Chapelizod Hill Road, Knockmaree Apartments, and Dr. Steevens' Hospital and surrounding area.

9.12.6.7. For clarity I have noted the design of the Proposed Scheme and the existing amenities associated with the Liffey Valley Special Area Amenity Order, and protected views from the N4 at Fonthill and I do not consider that the works or operational phase will give rise to significant adverse impacts due (a) the proposed scheme representing alterations to an existing strategic transport corridor, (b) the fact that the mature boundaries in place screen intervisibility between the amenity areas and the Proposed Scheme, (c) the additional landscaping being provided as part of the scheme, (d) the nature of the protected view which is from the existing transport route towards the Liffey valley at a distance, (e) the extent and nature of the existing views that are available from this location, and (f) the separation distance between the roadway and works and the SAAO.

9.12.7. Overall, impacts from the operational phase are generally consistent with those identified in the construction phase arising for the 3 no. sections of the route, with the various design interventions carried out at construction continuing to impact in the operational stage. I consider that throughout the operational phase the public realm works, planting and landscaping will further mature and be assimilated within the built and natural environment and thus operational mitigation is provided through natural growth and acclimatisation.

9.12.8. **Mitigation Measures**

9.12.8.1. Mitigation measures provided for within the Proposed Scheme in relation to streetscape and visual impacts are set out in section 17.5 of the EIAR and include the following in relation to the construction phase:

- Where practicable trees will be retained as set out in the Arboricultural Impact Assessment (AIA). Protection of trees to be retained and works to remove trees will be carried out in accordance with relevant standards and with project specific methodology set out by a qualified professional arborist.
- For properties subject to permanent/temporary acquisition and boundary alterations an inventory of features that may be disturbed will be taken and recorded, and appropriate protection measures/screening applied to features, trees and planting to be retained.
- Appropriate access will be retained to all properties and public amenities/open spaces.

9.12.8.2. There is no specific operational mitigation measures incorporated into the design of the Proposed Scheme in relation to the Operational Phase, with all landscaping, planting, and design evolution being set out within the overall design of the proposal. Throughout the operational phase the scheme will mature as will the landscaping and planting provided. Following construction the temporary construction compounds will be reinstated. I also note the following general arrangements throughout the scheme:

- New boundaries being established on the set-back line where route widening is required will generally match existing boundaries and take account of existing tree planting and other features.
- Where paving, existing trees, hedges or planting is removed from temporary acquisition areas new planting and paving will be provided using similar and semi-mature species/trees if practicable.
- Urban realm works will consider the established character of the area and have regard to heritage features.
- Landscaping proposals have regard to biodiversity, water and SuDs considerations.
- All elements of the Proposed Scheme within public areas will revert to on-going management and maintenance by the relevant Local Authority once works are completed.

9.12.9. Residual Impacts and Conclusions

9.12.9.1. Mitigation measures in relation to streetscape/visual amenity/townscape do not have a significant effect on construction phase impacts as the works to provide the Proposed Scheme will give rise to impacts which cannot be practicably mitigated until the work activities cease. Accordingly, the residual impacts post-mitigation for the construction phase continue to be negative, ranging from significant to very significant across all considered criteria. These impacts are all, however, temporary and short term in nature and I consider that the design scheme adopted has given sufficient consideration to all streetscape and townscape issues in the design approach adopted.

9.12.9.2. I consider operational impacts on street/townscape after mitigation (which is predominantly on-going through the establishment and maturing of landscaping and visual measures) to be long term, predominantly positive in a range of slight to moderate in relation to the overall Sections of the scheme. Within this overall assessment I note that there are potential locally significant impacts on townscape which could potentially give rise to negative impacts, or which have given rise to

significant third party objections. The following elements are of particular note in this regard:

- The frontage of the Hermitage Golf Club, I note that the frontage of the golf club is to be set back and boundary trees are proposed to be lost and safety netting erected. Furthermore, temporary and permanent land-take is required from the golf club to facilitate construction. In terms, of streetscape and visual impact I am satisfied that the required works are necessary, as is a portion of the proposed tree loss in order to facilitate the overall achievement of modal change, improved cycling infrastructure, improving public transport and pedestrian facilities. Elsewhere in this report I review the justification of the scale of the temporary land-take proposed, having regard to the fact that the works are all to be constructed from the N4, and I am recommending that the scale of the temporary land-take be reduced to minimise impact on the golf course. This will have the added benefit of ensuring the protection of a greater number of trees from adverse impacts and minimising visual impacts.
- In relation to the proposed works at Palmerstown Village, I am satisfied that these are necessary to improve cycling facilities that will encourage more sustainable travel patterns and an appropriate modal shift. Furthermore, I am satisfied that they will not give rise to significant adverse impacts on the streetcape of the village nor the Red Cow – Woodfarm cottages ACA (as discussed previously in this report). I do note, however, the fact that Palmerstown represents the heart of a vibrant and distinct community that has retained its character and sense of place notwithstanding its immediate proximity to such a significant elements of the transportation network (i.e. the Palmerstown by-pass and junction 7 of the M50). A fact that has been attested by the significant amount of third party submissions that have been submitted from the Palmerstown area. The application documentation does not provide any detail of a different palette of materials to be used for the Proposed Scheme within Palmerstown or in the vicinity of the ACA in the village centre. I consider that the Proposed Scheme could improve its visual integration within the village and enhance the character and amenities of the area by engaging further with the Local Authority in order to agree the range of materials and finishes appropriate to the village centre to allow the village

centre to be further enhanced and retain its distinct character and therefore in the event of favourable consideration I am recommend the inclusion of a condition in this regard.

- I note that the works proposed at Chapelizod Hill Road in proximity to the Knockmaree apartments complex will give rise to adverse impacts through the loss of mature planting and the change in use of the embankment that will occur from wooded area to access ramps and steps. These impacts will be significant and negative in the short term, however, as the planting proposed matures this impact will move to be neutral and moderate in the long term.
- In terms of the visual impacts of the Proposed Scheme in the vicinity of Dr. Steevens' Hospital and Heuston Station, I am satisfied that the design approach to the revised bus stops, public realm and treatment of heritage features is appropriate and respectful of the setting.
- I consider that provision of a new pedestrian bridge crossing of the N4 at Liffey Valley while significant is not out of character for the area and appropriate landscaping is provided where appropriate. Furthermore, the provision of a replacement cycle/footbridge at the Ballyowen junction in lieu of the existing footbridge is visually consistent with the existing footbridge and will be read visually in the context of the existing road junction/overpass and will not give rise to significant adverse visual effects.

9.12.9.3. I consider operational residual impacts on conservation areas, protected structures, individual properties (where land-take or direct works are proposed), and trees (removal) to be negative, and ranging from slight to significant. In concluding some impacts as being significant, I note that the design of the Proposed Scheme has insofar as practicable minimised impacts, and that the general benefits of the scheme in improving the provision of sustainable travel infrastructure are of sufficient merit to justify the interventions proposed and that the impacts arising are not unacceptable given the nature of the environment and the existing uses and infrastructure associated with this significant and busy transport corridor.

9.12.9.4. I have previously (under my conclusions in relation to architectural/cultural/archaeological heritage) detailed where improvements can be applied through the

Proposed Scheme including in relation to the bus shelters at Dr. Steevens' Hospital, the application of mitigation measures in the Red Cow and Woodfarm cottages ACA and boundary treatments at Sureweld while also recommending additional design related conditions at other locations.

9.12.9.5. I note that concerns have been raised in relation to the operational period due to the potential for adverse visual impacts to arise on the streetscape/character of an area from either the increase in buses transiting or the accumulation/clustering of buses at particular locations along the route. In relation to this issue, I consider that bus vehicles moving along the Proposed Scheme will not give rise to adverse impacts on the character or amenities of the streetscape. Bus movements are transitory in nature and with the improved infrastructure being proposed buses will move more quickly along the route and congestion (which has its own range of significant impacts on the visual character of an area as well as increased noise, emissions, and human health impacts) will be reduced. Considering this matter further in relation to the other sustainable modes of transport (cycling and walking) which will be facilitated by the Proposed Scheme, I note that the additional bicycles and pedestrians being encouraged through the improved infrastructure proposed could impact the character of the route. Such impacts will, in my opinion, bring greater vitality and interactions a human scale throughout the impacted streetscapes and would overall have beneficial impacts on character. In relation to the potential for clustering or accumulation of buses and the potential for impacts on the streetscape, I note that the proposed bus priority infrastructure proposed will improve the movement of buses throughout the route and will facilitate better management and real-time monitoring of bus activity and progress. The management of buses will therefore be improved and clustering or gathering of buses in particular locations will not arise. In consideration of potential cumulative effects arising from all the other BusConnects projects in relation to this matter, similarly, I consider that the improvement of bus priority infrastructure with the availability of real time monitoring of all the routes will make the management of buses throughout the city easier, and with the increased priority being afforded to buses the cumulative effects of the BusConnects CBCs throughout the City will, in fact, facilitate the prevention of buildups, congestion and accumulation of buses.

9.12.9.6. I have considered all of the written submissions made in relation to visual impacts and impact on townscape/streetscape in addition to those specifically identified in this section of the report. I am satisfied that these can be sufficiently avoided, managed and mitigated by the measures which form part of the Proposed Scheme, the proposed mitigation measures, and through the imposition of suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of visual impact. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.13. **Material Assets – Traffic, Roads and Transportation**

9.13.1. Material Assets are separated into separate components/headings within the submitted EIAR – Traffic and Transport (Chapter 6 of the EIAR), Waste and Resource Management (Chapter 18 of the EIAR) and impacts on infrastructure and utilities (Chapter 19 of the EIAR). For ease I consider these issues in the same order below.

9.13.2. **Traffic and Transport**

9.13.2.1. Chapter 6 of the submitted EIAR assesses the proposed pedestrian and cycling infrastructure changes as well as the reassignment of carriageway priority and other physical changes to the transportation corridor (including traffic controls, parking and provisions and public transport priority measures). Chapter 6 also carries out a modelling assessment for people movement, bus performance indicators and general traffic. This section of the EIAR is informed by, and draws from, a Transport Impact Assessment, a Transport Modelling Report, a Junction Design Report, and Impact Assessments which are set out in Appendices A6.1, A6.2, A6.3 and A6.4 of the EIAR respectively.

9.13.2.2. Traffic impact arising from the Proposed Scheme is a significant concern raised in third-party submissions particularly those discussing the Palmerstown area with

issues raised including loss of car parking, accessibility to property, works increasing traffic congestion, re-distribution of traffic in the wider area giving rise to additional traffic, traffic safety, and inappropriate junction rearrangements (removal of left turning filter lanes), removal of left turn (inbound) from Kennelsfort Road Lower onto the Palmerstown by-pass.

Methodology

9.13.2.3. The Proposed Scheme was designed using an iterative approach supported by a multi-tiered modelling framework. The EIAR states that the iterative design process stopped when the design team were satisfied that the movement capacity of the Proposed Scheme was maximised, and environmental and residual impacts were minimised. There were four tiers of modelling used to support the design process:

- Tier 1 – At strategic level, the NTAs East Regional Model (ERM) was used to provide the multi-modal demand outputs for the proposed forecast years.
- Tier 2 – At local level a local Area Model (LAM) was used to provide a more detailed understanding of local traffic movements.
- Tier 3 – At corridor level a micro-simulation model was developed to support junction design and signal control strategies.
- Tier 4 – Local junction models were developed for each junction along the scheme based on people movement prioritisation.

9.13.2.4. The various impact assessments in the EIAR primarily compare the 'Do Minimum' (DM) scenario - the likely 2028 and 2043 traffic and transport conditions without the Proposed Scheme, but including other transport schemes approved or planned (i.e. based on the progressive roll-out of the GDA Transport Strategy); and the 'Do Something' (DS) scenario - the traffic and transport conditions with the proposed scheme and including any other transport schemes. Each scenario considers 2024 as the worst-case period for the construction of the scheme, as well as 2028 (opening year) and 2043 (design year – opening year plus 15 years). Traffic forecasting is based on population growth of 11% to 2028, 25% by 2043 (from the 2016 census base), employment growth of 22% and 49% by 2028 and 2043

respectively, and a 45% and 77% increase in goods traffic (HGV and LGV) in 2028 and 2043 respectively.

9.13.2.5. The models consider the direct study area (i.e. area within the boundary of the Proposed Scheme) and the indirect area (the wider area of influence that the Proposed Scheme has on changing traffic volumes above a defined threshold with reference to TII's Traffic and Transport Assessment Guidelines).

9.13.2.6. To allow straightforward comparison of the changes in conditions between scenarios the EIAR has adopted a Level of Service (LoS) approach which allows a mix of quantitative and qualitative indicators to be used/summarised and various grades to be applied from 'A' (highest quality) down to 'F' (lowest quality).

Baseline

9.13.2.7. In terms of traffic and transportation infrastructure, overall, the EIAR describes the baseline of the existing corridor as providing 30.5% cycle priority outbound (9.9% segregated cycle track, 20.6% [non-segregated] cycle lanes), and 21.2% inbound priority (9.9% segregated cycle tracks and 11.4% cycle lanes). Bus services are described as operating in a constrained and congested environment with 77% and 67% inbound and outbound priority respectively, and the standard deviation in bus journey time on the corridor is 10 minutes.

Relevant Characteristics

9.13.2.8. The primary characteristics which have the potential to impact on traffic and transportation can be summarised as follows:

- Alterations to the pedestrian environment and increase in pedestrian signal crossings of 71%, from 20 no. (DM) to 28 no. (DS), revised footpaths and urban realm.
- The provision of segregated cycling facilities along 6.45km inbound and 6.31km outbound along the corridor representing an increase from the 0.73km in both directions in the DM scenario. The proportion of segregated

cycle facilities (including quiet street treatment) will increase from 38% (DM) to 95% (DS).

- Upgrading of all signalised junctions along the route.
- Provision of raised table crossings on side roads the number of which are proposed to increase from 1 no. (DM) to 19 no. (DS).
- Provision of bus priority measures throughout the corridor which includes:
 - Dedicated bus lanes along the majority of the route, 9.17km inbound and 8.6km outbound will be provided, increased from 7.45km and 6.4km inbound and outbound respectively in the DM scenario, representing an increase of 28% in total bus priority measures in both directions in the DS scenario.
- Total parking provision along the Proposed Scheme will be reduced by approximately 265 spaces primarily at Palmerstown Village and on the Old Lucan Road between Junction 2 of the N4 and the entrance to Kings Hospital School.
- In relation to the above the submitted documentation states that all proposed facilities have been designed in accordance with DMURS and the National Disability Authority 'Building for Everyone: A universal Design Approach' (2020), as discussed previously above I have noted the accessibility issues arising at the location of the new bus stops at the Chapelizod bypass.

9.13.3. Potential Impacts – Traffic and Transport

Do Something Scenario – Construction Impacts

- 9.13.3.1. Construction of the Proposed Scheme will take 24 months, carried out in phases over 14 different subsections with works being carried out concurrently on multiple work fronts to minimise overall construction duration. The construction vehicle traffic routes have been identified as the M50 and N4 as well as through the local network of regional roads (R111, R112, R1134, R136, R148, R833 and R835) which will give rise to potential impacts on these routes.

9.13.3.2. There will be potential impacts on people's day-to-day activities along the corridor as temporary diversions are required, furthermore temporary closure of sections of existing dedicated bus lanes/roads will be put in place and some existing bus stops will need to be temporarily relocated to alternative locations for the duration of construction.

9.13.3.3. Construction activities will involve 250 – 270 staff (rising to 300 at peak construction), with working hours typically between 07.00-23.00 across two shifts (while noting some works will be required special arrangements) to minimise clashing with peak hour traffic. The CEMP commits the contractor to providing a construction stage mobility plan to actively discourage staff from using private vehicle for site access.

9.13.3.4. Impacts arising are summarised below:

- Restrictions to pedestrians, general traffic, public transport, parking/loading along the proposed route due to diversions or restrictions around works areas are predicted to give rise to slight, negative, and temporary impacts. Similar impacts are anticipated on general traffic flows on the surrounding road network.
- Impacts on cyclists and general traffic along the Proposed Scheme arising from restrictions are predicted to be negative, moderate and temporary impacts, as lane closures will be subject to management measures and that works will be carried out in a rolling basis throughout the route. Traffic flows in both directions will be maintained throughout and emergency vehicle access maintained at all times.

Do Something Scenario – Operational Impacts

9.13.3.5. In terms of the DS scenario operational phase the EIAR breaks the assessment into Qualitative (i.e. pedestrian, cycling, and bus infrastructure as well as consideration of parking) and Quantitative (i.e. people movement, bus network performance indicators (journey time and bus reliability) and general traffic network performance indicators (junction capacity and redistributed traffic flows). Each of these is considered below.

DS Scenario – Operational Qualitative Impacts

- In terms of pedestrian infrastructure, the Proposed Scheme will provide 2m wide footpaths (with some localised reductions to navigate local constraints or reduce impact), and junction alterations. The findings of the level of service (LoS) qualitative assessment comparison between the DM and DS scenarios across the 3 sections of the Proposed Scheme are summarised below:
 - Section 1: (5 no. junctions): The LoS for pedestrians in the DM scenario for impacted junctions ranges between D and E. In the DS scenario the Proposed Scheme results in 3 of the 5 junctions achieving a B LoS rating (due to the provision of more direct crossings and introducing features that will reduce traffic speeds). The remaining two junctions achieve a C rating (they have a D and E rating under DM scenario). Overall, positive, significant and long-term impacts are therefore anticipated along section 1 of the Proposed Scheme for the operational phase.
 - Section 2 (9 no. impacted junctions): The LoS for pedestrians in the DM scenario for impacted junctions ranges between E and C with eight of the ten junctions given a D or E rating. In the DS scenario all impacted junctions achieve an A (3 no.) or B (6 no.) rating. Overall, moderate, positive, and long-term impacts are anticipated for pedestrians in Section 2 through infrastructure improvements (provision of dropped kerbs, tactile paving, compliant footpaths and crossing widths, and raised tables at minor junctions).
 - Section 3 (4 no. impacted junctions): The LoS for pedestrians in the DM scenario for impacted junctions ranges between D and C. In the DS scenario the Proposed Scheme results in the relevant junctions achieving an A (1 no.) or B (3 no.) LoS rating. Overall, positive, significant and long-term impacts are anticipated in relation to pedestrian facilities in Section 3.
- For cycling infrastructure the key characteristics of the Proposed Scheme are the general provision of 2m wide (at some locations 3.5m bi-directional, while at others localised reductions to navigate local constraints or minimise land-

take see section 3 of this report for deviations) segregated cycle tracks, raised table treatments on priority side roads with cycle symbol markings, provision of toucan crossings, protected treatment for cyclists at signalised junctions in the form of dedicated cycle crossings, kerb segregation at corners and green signal priority for cyclists at some junctions. The LoS rating comparisons for cycling infrastructure between the do minimum and do something scenarios are summarised below for each section of the Proposed Scheme.

- Section 1 has been broken down into five subsections to consider the changes overall between the DM and DS scenario. Overall this section has a LoS rating of C for cycling infrastructure in the DM scenario which is improved to a rating of A throughout in the DS scenario, primarily as a result of the provision of off-road cycle tracks along the majority of the route and leading to a potential positive, moderate and long-term effect.
- Section 2 has a LoS rating of C for cyclists in the DM scenario which is predicted to rise to an A rating in the DS scenario, as cycling facilities are being introduced where none currently exist (e.g. through Palmerstown). Cyclists will not be permitted on the Chapelizod by-pass (which is not being provided with cycle tracks/lanes) with the east-west cycling route being channelled through Chapelizod village. Overall, a positive, moderate and long-term effect is anticipated.
- Section 3 has an overall LoS rating of C in the DM scenario which is improved to a B in the DS scenario primarily through the provision of continuous off-road cycle tracks throughout. Therefore, it is anticipated that the effect will be positive, moderate and long-term effect will arise.
- In relation to buses key infrastructure includes new bus stop layouts, provisions of new and relocation of stops, provision of additional bus stop facilities, dedicated bus lanes, other bus priority measures (priority signals). The specific changes over the DM scenario along the sections of the Proposed Scheme are summarised below:
 - Section 1 – All nine existing stops are to be retained or slightly relocated (e.g. proximate to the Liffey Valley Shopping Centre) and

provided with real time passenger information (RTPI), timetable information, shelters, and seating to be provided in the DS scenario. Stops on the N4 will be located in lay-bys to allow buses to pull in while others will be located in-line. The predicted result will be a positive, very significant and long-term effect.

- Section 2 – At time of the application there were 10 bus stops in this section (the Board should note that the EIAR only references 5 no. as it focuses on the stops along the R148 Palmerstown and Chapelizod bypass, and does not to reference the two stops on Kennelsfort Road Lower (which are to be removed) nor does it reference the two proposed bus stops [one inbound one outbound] that are to be provided on the Old Lucan Road in Palmerstown [East] as part of the Proposed Scheme. The Board should also note that the three stops on the Old Lucan Road in Palmerstown West are not referenced either. The loss of the bus stops in Palmerstown West have given rise to objections due to adverse impacts on services, and third parties have also stated that the provision of the two stops on the Old Lucan Road (Palmerstown East) will adversely impact the amenities and character of the area while also giving rise to potential antisocial behaviour. In relation to these issues, I note that in response to submissions the NTA have stated that the provision or removal of bus services as well as the routes of these services is not part of the scope of the Proposed Scheme. The Proposed Scheme has been designed to facilitate the Dublin Bus Area Network Redesign, the final version of which was published in 2019 (and was at the time informed by the consideration of over 72,000 submissions). The 2019 Dublin Area Bus Network redesign shows the routing of bus services along the Old Lucan Road (Palmerstown East) between Kennelsfort Road and the Oval and shows that there is no bus route being provided along the Old Lucan Road in Palmerstown West (i.e. west of Kennelsfort Road Lower). The Proposed Scheme has been designed to facilitate the Dublin Area bus network redesign and therefore bus facilities in Palmerstown West are not required, with the decision to remove this portion of the route

having been made already. In relation to the bus stops in Palmerstown east I note that shelters are proposed as these are shown on drawings, and in the event of favourable consideration I am recommending that RTPI, accessible kerbing, timetable information, and seating be provided in the interests of clarity as these facilities have not been specified in the EIAR for these stops, subject to an appropriate design and palette of materials being agreed with the Local Authority.

The Proposed Scheme will result in the outbound bus stop to the rear of Palmerstown Drive on the R148 Palmerstown by-pass being removed/omitted, this has given rise to several third party objections and is noted in the EIAR as having a 'local disbenefit' to bus users, the most proximate bus stop to this location in the DS scenario will be at the Oval (c. 200m to the west). The Proposed Scheme will provide two new double-length bus stops on the Chapelizod by-pass (at the overpass of the Chapelizod Hill Road) allowing residents of the village to access bus services on the by-pass. The bus stops at Kennelsfort Road, and the Oval are proposed to be lengthened and relocated to allow the provision of bus lay-bys. All bus stops referenced in the EIAR are to be provided with RTPI, timetable information, shelters, seating, accessible kerbs, and indented drop off areas. Overall, a medium, positive, long-term impact for bus passengers is predicted over the DM scenario.

- Section 3 - There are currently six bus stops in this section and the Proposed Scheme will also provide six stops, albeit the majority will be relocated to be more proximate to pedestrian crossing facilities. An additional outbound stop is proposed at Heuston (double length stop being provided along the Dr. Steevens' hospital frontage) and four other stops are proposed to be lengthened. All stops are proposed to have RTPI, shelters, seats, accessible kerbs, and timetables, with two stops being removed and five being relocated in the DS scenario. Of the stops proposed only those at Heuston Station inbound and outbound will have indented drop off areas. Effects of the improved

infrastructure for this section are considered to be profound, positive and long term over the DM scenario.

- In terms of parking provisions the DS scenario will result in the following changes over the DM scenario:
 - Section 1: DS scenario results in the loss of over 100 car parking spaces (all of which are informal and unmarked spaces on the Old Lucan Road from junction 2 on the N4 to the access to Kings Hospital school (and in the vicinity of the Deadman's Inn). The impact of the loss of these spaces is considered moderate given the Deadman's Inn has its own car park (which will be unaffected), the fact that the school and all residential properties in the vicinity have their own private driveways and the presence of significant parking at the Liffey Valley which is accessible by footbridge from this location. Overall, the impact of the loss of parking at his location is considered negative, moderate and long term.
 - Section 2: DS scenario results in the loss of approximately 124 car parking spaces from Palmerstown Village (106 no. informal spaces from the Old Lucan Road from between the M50 interchange and Kennelsfort Road Lower, 2 no. permit/pay and display spaces and 1 no. accessible space from Kennelsfort Road Lower, and 15 no. from Old Lucan Road Palmerstown east of Kennelsfort Road Lower). The loss in car parking within Palmerstown Village has been raised in several third party submissions. The EIAR categorises the loss in car parking as resulting in a predicted negative, slight and long-term effect. The EIAR and applicant's response to submissions notes that the loss in parking is required to facilitate the provision of the proposed two-way cycle track along the northern boundary of the Old Lucan Road, that to the west of St. Philomena's church informal parking will continue to be permitted on the full length of the southern side of the Old Lucan Road, the majority of residential dwellings on the Old Lucan Road in Palmerstown have their own private driveways, commercial properties such as the Coach House and bank building have their own private car parks, and 14 additional spaces are being provided to the south of the

Old Lucan Road in the eastern part of Palmerstown through the provision of perpendicular parking.

- Section 3 - The DS scenario results in the loss of a total of 33 no. car parking spaces (3 no. permit/pay and display, 10 no. informal and 20 no. taxi queuing spaces). Two EV charging points are also proposed to be relocated. This gives rise to a negative, slight and long-term effect on parking for this section.

DS Scenario – Operational Quantitative Impacts

- Modelling carried out highlights the differences between the DS and DM scenarios for the operational phase. In 2028 there is a predicted 4% reduction in the number of people travelling by car, an increase of 24% in the number of people travelling by bus and an increase of 56% in the number of people walking or cycling inbound along the Proposed Scheme in the AM peak hour. The total number of people moved along the route by the Proposed Scheme increases by 13% in the DS scenario with an increase of 25% in people moved by sustainable modes (public transport, walking or cycling).
- For the PM peak hour in 2028 there is a reduction of 6% in the number of people travelling by car, an increase of 17% of people travelling by bus and a 17% increase in those walking or cycling outbound along the route, resulting in an increase in the total number of people moved by 9% and 17% increase in people moved by sustainable modes.
- For the 2043 design year in the AM peak hour there is a decrease of 3% in the number of people travelling by car, an increase of 39% in the numbers traveling by bus, and an increase of 58% cycling and walking inbound along the route. This results in an 18% increase in people moved in the DS scenario and a 41% increase in those moved by sustainable modes. For the PM peak hour in 2043 there is a reduction of 4% in the number of people travelling by car, an increase of 18% of people travelling by bus and a 70% increase in those walking or cycling outbound along the route. These figures account for a 9% increase in people moved and a 21% increase in those moved by sustainable modes of travel along the corridor in the DS scenario.

- The DS scenario modelling shows a higher level of bus passenger loadings throughout the scheme with peak loading in the AM reaching 3,500 inbound (compared to 2,800 - DM) in 2028, and 2,700 (compared to 2,400) in the PM outbound peak.
- In 2028, there will be a 4.6% increase in people boarding bus routes using the Proposed Scheme during the AM peak (an additional 670 passengers for that hour) and a 5.3% increase during PM peak (an additional 730 passengers for that hour). The equivalent figures for 2043 are 6.3% in the AM peak (850 passengers) and 4.8% in the PM peak (620 passengers).
- To model bus journey times the EIAR uses the C1 service as a comparator as this service runs along the length of the Proposed Scheme. In the peak hour inbound AM 2028 the average journey time for the C1 service in the DS scenario will be 18 minutes, representing a 7.1 minute time saving (-28%) over the DM scenario. For 2043 the same figures are 18.2 minutes representing the same 7.1 minute (28%) time saving over the DM scenario (for that year). The PM peak hour savings for 2028 is 3 minutes (15%), and for 2043 is 3.1 minutes (15%). Outbound time savings vary from 0.7 to 2.4 minutes for a percentage difference ranging from 4 – 11%.
- The micro-simulation modelling carried out shows that bus journey times for all Proposed Scheme bus services will be reduced by up to 19% during the AM and PM Peak hours in 2028 and 2043. On an annual basis this equates to a 5,400 hours of bus vehicle savings in 2028 and 5,600 in 2043.
- Bus journey time reliability (i.e. standard deviation times) is also shown to be improved across all AM and PM, 2028 and 2043 peak hour DS scenarios when compared with the DM scenario.
- The modelling used is conservative in its approach as it does not incorporate additional frequency of service that the Proposed Scheme will facilitate through its improved infrastructure. Further micro-simulations were carried out which demonstrates that a high level of journey time reliability is maintained even should an additional 10 buses per hour be provided over the route.
- In terms of people movement, the preceding figures are considered to have a positive, very significant and long-term effect.

- In terms of general traffic, the operational capacity of the route (i.e. direct study area) will be reduced as the transport corridor and carriageways are proposed to be prioritised to promote modal shift and improve infrastructure for sustainable modes of travel. The Local Area Modelling (LAM) carried out comparing the DS and DM scenarios shows a reduction of between 108 PCUs (the Oval) and 259 PCUs (R148 east bound on approach to M50 J7) along the route during the AM Peak hour in 2028 under the DS scenario. Two areas show slight increases in traffic flow, the R136 Ballyowen Road between N4 and Lucan Road, (+148 PCUs) and N4 west bound off-slip at J3 (+180 PCUs) in the AM peak. The overall reduction in general traffic flow is considered to be a positive, slight and long-term effect on the direct study area.
- The modelling also shows reductions of ≥ 100 combined traffic flows along 29 road links within the indirect study area in the vicinity of the Proposed Scheme during the AM peak (2028) in the DS scenario, varying between -102 (Ballyfermot Road) and -370 (N4 J3 north bound prior to north bound off slip). Two road links (both regional roads) experience increases, Emmet Road (+107 PCUs) and Davitt Road (+188 PCUs). Overall, this impact is considered to be positive, slight and long term.
- For the PM 2028 peak hour in the direct study area (i.e. the Proposed Scheme route) the modelling shows slight to moderate reductions of between -131 and -383 on eight links and increases of between +103 and +241 on seven other links, which on balance gives rise to a positive, slight and long-term effect. In the indirect study area (i.e. redistributed traffic) the modelling predicts a slight negative impact on 14 links and a slight positive impact (where traffic is predicted to reduce) on 19 links which on balance is assessed to be overall negligible. In terms of national road links two of the seven assessed junctions were shown to experience slight increases in inbound traffic with the largest being 3.1%, for an overall negligible effect on national junctions.
- The Proposed Scheme will result in an overall reduction in operational capacity for general traffic along the route which will create a level of traffic redistribution onto the surrounding road network. The LAM 2028 model results

were used to identify the differences in traffic flows between the DM and DS scenarios, and considers junction capacity in terms of volume to capacity (V/C) ratios (a V/C of below 85% indicates a junction is operating well with spare capacity, a V/C in excess of 100% indicates the junction is operating above its capacity and experiences regular delays and queues, A V/C of 85-100% indicates approaching capacity with occasional queues and delays). The majority of assessed junctions have V/C ratios of below 85% indicating that the available capacity can cater for the modelled redistributed traffic, no capacity issues are predicted at any identified junctions in the AM peak, however, two junctions (Chapelizod Hill Road/St. Laurence Road/Lucan Road and Fonthill Road North/St. Lomans Road roundabout) are predicted to have a V/C ratio >100 in the PM peak in 2028 and 2043. This will occur, however, in both the DM and DS scenarios with performance expected to be similar in both.

- Overall, therefore, the Proposed Scheme is considered to have a negligible potential impact on the surrounding road networks in terms of redistributed traffic.

9.13.4. Mitigation Measures

9.13.4.1. In relation to construction the submitted CEMP provides a range of mitigation measures which will be put in place to ensure that impacts arising from construction processes are minimised and provides for phasing of the overall construction programme. A Construction Traffic Management Plan (CTMP) is provided for within the CEMP which will ensure adequate road safety measures are provided for all users of the route, minimise disruption, maintain access to properties along the route, and to control traffic impacts of construction insofar as it may affect the environment, local residents, and the public in the vicinity of construction works.

Construction mitigation measures in the CTMP include:

- Where footpaths and off-road cycle tracks are affected by construction a safe route will be provided past the work area and where practicable provisions for matching existing facilities for pedestrians and cyclists will be made.

- Existing public transport routes will be maintained throughout construction albeit occasional road closures/diversions may be necessary.
- Should temporary relocation of bus stops be required they will be safely accessible to all users.
- Local arrangements will be made on a case-by-case basis to maintain continued access to homes and businesses affected by the works, at all times, where practicable, and access egress will be maintained at all times.
- A construction stage mobility management plan will be used to encourage construction personnel to commute by sustainable means.
- Road closures and diversions will only be used where necessary and will be minimised and carried out in consultation with the Gardai, and relevant Local Authority, taking into consideration the impact on road users, residents and businesses with emergency vehicle access maintained.
- 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 2019) and associated guidance.

9.13.4.2. In relation to the operational phase as the Proposed Scheme will result in positive impacts on walking, cycling, bus and people movement no mitigation is proposed beyond that designed into the works. The EIAR notes that mitigation in relation to general traffic and parking/loading have been incorporated into the design of the Proposed Scheme.

9.13.5. **Residual Impacts**

9.13.6. With the implementation of the mitigation measures the residual impacts remain consistent with those outlined previously in this section:

- Pedestrian Infrastructure – Positive, Moderate to Significant and Long-term.
- Cycling Infrastructure – Positive, Moderate and Long-term.
- Bus infrastructure – Positive, Very Significant to Profound and Long-term.
- Parking and Loading – Negative, Slight to Moderate and Long-term.

- People Movement – Positive, Significant and Long-term.
- Bus Network Performance – Positive, Very Significant and Long-term.
- General Traffic Network – Positive, Slight and Long-term in relation to general traffic flows along the Proposed Scheme, and Negligible in relation to redistributed general traffic along the surrounding road network.

9.13.7. Conclusions on Traffic and Transport

9.13.7.1. I have considered in detail the third-party submissions lodged and EIAR that has been submitted in relation to the Proposed Scheme. I am satisfied that the documentation submitted provides a robust assessment of the qualitative (physical infrastructure changes) and quantitative (traffic modelling and predictive analysis) impacts arising from the Proposed Scheme. The modelling carried out provides strategic/regional level outputs as well as local area simulation and junction level analysis, which considers the peak hours (both AM and PM) for 2028 and 2043. I consider it appropriate that the modelling focuses on the peak hours in these years as this represents (and will continue to represent) the busiest periods in terms of traffic and people movements.

9.13.7.2. I am satisfied that the beneficial impacts set out above in relation to pedestrian, and cycling facilities are an accurate reflection and that the Proposed Scheme will not only facilitate but encourage the modal split towards more sustainable travel patterns. Some third-party submissions state that the Proposed Scheme could have an adverse impact on communities and residents of certain locations such as Palmerstown (through service changes and impacts on amenities) and in the vicinity of the route widening at the Chapelizod By-pass (adverse impacts on amenity and noise). In this regard I note that the Proposed Scheme reallocates carriageway space along an existing transport corridor to favour more sustainable modes of transport, and therefore the use of the corridor remains consistent with that already in place. (My consideration of noise and amenity impacts are discussed elsewhere in this report). The changes are viewed in some third party submissions, as cutting off neighbours and amenities presenting difficulties to residents and visitors to cross cycle tracks, bus lanes and general traffic lanes. I do not share this opinion as the

Proposed Scheme provides (ample and additional) pedestrian crossing facilities that have been designed in accordance with the relevant accessibility standards therefore ensuring connectivity is assured for all including the most vulnerable.

- 9.13.7.3. Bus journey time improvements and reliability will enhance bus passengers experience and further encourage additional use of public transport and make it a more attractive proposition along the route which will serve to provide a viable and more user-friendly alternative to the private car.
- 9.13.7.4. In relation to the proposed bus stops in Palmerstown East (i.e. adjacent to the Red Cow Cottages ACA) I note that the submitted EIA does not provide detail in terms of the intended infrastructure to be provided at this location in terms of RTPI, accessible kerbing etc. Bus shelters are proposed, and given the location proximate to an ACA and consistent with my conclusions earlier in this report I consider that the applicant engage and agree the palette of materials to be used in Palmerstown with the Planning Authority. I further recommend, in the event of favourable consideration that the design of the new bus shelters on the Old Lucan Road in Palmerstown be agreed, including the suitability or presence of advertisement panels and associated infrastructure.
- 9.13.7.5. I note third party submissions which have raised concerns that the removal of left turning slip roads at the Oval and Kennelsfort Road junctions in Palmerstown will give rise to increased congestion, be unsafe and is inappropriate. Initially the provisions of section 4.4.3 of the Design Manual for Urban Roads and Streets must be considered, which states that in general designers should "...omit left turn slips, which generally provide little extra effective vehicular capacity but are highly disruptive for pedestrians and cyclists. Where demand warrants, they may be replaced with left turning lanes with tighter corner radii." Furthermore, in this regard, Section 10.5 of the Greater Dublin Area Transport Strategy 2022-2042 (GDA Transport Strategy) states that "Traditionally designed to cater for the maximum throughput of motorised traffic, many junctions in urban areas are characterised by multiple vehicle lanes; wide entry and exit flares; lack of formalised crossings and slip lanes".... "These types of junctions are not conducive to the promotion and facilitation of walking and cycling, in particular for local trips, with the design of such

junctions being too focused on maximising vehicle throughput rather than people throughput". These issues are translated into measure WALK4 of the GDA transport strategy which states that the NTA in conjunction with Local Authorities will implement junction improvements across the GDA by reducing kerb-line radii (to manage vehicle speeds) and to enhance pedestrian and cyclist movement through a programme of, inter alia, removing slip lanes. Furthermore, I note that the submission from SDCC is supportive of the removal of left-turning slip lanes from the route. In terms of safety, I note that the Proposed Scheme has been subject to independent road safety audit and no issues were raised in relation to the removal of the left turning slips at these junctions.

- 9.13.7.6. The general arrangement drawings submitted label the provision of a bus stop to the west of existing stop 2637 (at the front of the Revenue Building), however, no bus stop infrastructure, cycling or pedestrian safety measures are shown at this location. In the interests of clarity, maintaining network efficiency and safety I recommend attaching a condition in the event of favourable consideration highlighting that a bus stop is not consented at this location.
- 9.13.7.7. The Proposed Scheme will result in the loss of car parking throughout the scheme resulting in a total reduction of approximately 265 spaces, with the majority of these being lost from Palmerstown Village (losing approximately 124 no. spaces) and from the Old Lucan Road between Junction 2 of the N4 and the entrance to Kings Hospital school. I concur with the findings in the EIAR that this impact is negative, slight to moderate and long-term. In this regard I consider that the Proposed Scheme provides significant upgrades to the public bus infrastructure, cycling and pedestrian facilities, the car parking spaces being lost are predominantly informal, and at locations where local residents dwellings predominantly have their own private driveways for off-street parking and where commercial enterprises and other uses (such as schools, care facilities, churches etc.) have access to their own off-street car parking facilities. Furthermore, in relation to the Old Lucan Road between J2 of the N4 and Kings Hospital school I note the presence of significant alternative parking available at the Liffey Valley Shopping Centre which will be connected to this location via a new pedestrian bridge, and that at Palmerstown the EIAR contains a commitment that informal parking on the south side of the Old Lucan Road (west of

St. Philomena's Church) will be retained under the new scheme. I consider this feature to be of merit and should be assured through the provision of an appropriate condition in the event of favourable consideration. Furthermore, I note that while accessible parking is proposed to be relocated its provision is to be maintained along the Proposed Scheme and similarly EV charging points are to be relocated but maintained in the general area of their current location.

9.13.7.8. A number of submissions have raised concerns that the loss of car-parking will lead to an adverse impact on commercial businesses (both for customers and staff), and connectivity to services within Palmerstown, and that this may have adverse impact on vulnerable people who are reliant on their cars to access services (e.g., such as religious services at St. Philomena's Church). I fully acknowledge the important role played by Palmerstown in serving its hinterland and the contribution of the village centre to community vitality. In relation to the loss of car parking spaces I note that while it is proposed that there will be a reduction in the quantum of car parking spaces along the Proposed Scheme, pockets of car parking (including accessible car parking spaces) are provided within and in the vicinity, and informal car parking is to be retained on the southern side of the Old Lucan Road to the west of St. Philomena's Church, furthermore residents in the vicinity predominantly have their own private driveways and thus adverse impact on residential parking will be minimised. I also note that the Proposed Scheme will result in the improved connectivity of Palmerstown by more sustainable means – i.e. segregated cycle tracks while retaining public transport services (albeit in a varied location still within the village centre), and improving pedestrian infrastructure. Accordingly, the Proposed Scheme will facilitate a transformative shift in the modal share towards sustainable modes of transport. I, therefore, consider that the Proposed Scheme will improve and enhance the accessibility and connectivity for Palmerstown while also presenting an opportunity to enhance the amenity of the area (see previous comments in relation to the provision of a specific condition requiring further engagement with the Local Authority in terms of finishes and materials to be used within the village centre).

9.13.8. I have considered all of the written submissions made in relation to traffic and transport, as well as the content of the submitted EIAR. I am satisfied that adverse

impacts identified would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that while impacts will arise that the Proposed Scheme would not give rise to any unacceptable direct or indirect impacts in terms of traffic and transport. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed and mitigated by the measures which form part of the Proposed Scheme and through the application of suitable conditions.

9.14. Material Assets – Waste and Resources

9.14.1. Overview

9.14.2. Section 18 of the submitted EIAR considers the waste that will be generated by the Proposed Scheme and resources used both during the construction and operational phases. Waste will arise from demolition, site clearance, excavations and other construction activities while during the operational phase the primary wastes arising will be from ongoing infrastructure maintenance works. It is anticipated that municipal waste will be generated only in small quantities during the construction and operational phases by workers.

9.14.3. The EIAR identifies the capacity and types of waste facilities in the area that will be used, and presents desk study data on types and quantities of waste products that are predicted to be generated by the Proposed Scheme. The EIAR reviews the Proposed Scheme in terms of the waste hierarchy, quantities of waste requiring disposal and the capacity waste infrastructure in the area, it also confirms that the available construction and demolition (C&D) waste and by-product capacity in the Eastern Midlands Waste Region (EMWR) for 2020 as 10.7 million tonnes.

9.14.4. Potential Impacts

9.14.4.1. The main impacts arising in relation to waste will occur during the construction phase will be from demolition, and excavation activities. Surplus organic materials (vegetation from landscaping works, site clearance, tree removal etc.) will also

generate organic waste material that will need to be treated at appropriate waste facilities during the construction stage. The operational phase will generate waste from maintenance activities; however, I note that a degree of maintenance will also be required along the transport corridor in the do nothing/do minimum scenarios.

9.14.4.2. The application documentation states that all demolition waste will be considered for reuse within the Scheme or in other construction projects. The total waste arising (2,210 tonnes) from demolition equates to 0.02% of the capacity of C&D Waste in the EMWR from 2020. Pre-mitigation the impact of this generation of waste is considered to be adverse, not significant and short term.

9.14.4.3. Excavated material will either be reused within the Proposed Scheme (where it is deemed suitable) or delivered to appropriate recovery, recycling or disposal facilities. Should any hazardous waste arise, this will be dealt with under the appropriate legislation and all transportation will be carried out by suitable permit holders. It is anticipated that the excavations will give rise to 60,000 tonnes of soil and stone, 9,000 tonnes of concrete, bricks, tiles and similar, and 20,000 tonnes of bitumous mixtures which will all need management. The total excavation waste arising amounts to 89,000 tonnes which is equivalent to 0.83% of the C&D waste capacity for the Eastern Midlands Waste Region in 2020. Pre-mitigation the impacts are considered to be adverse, slight, and short-term.

9.14.4.4. Construction activities themselves will give rise to both non-hazardous and hazardous waste, such as excess/damaged works materials, batteries, fuels etc. The quantities of such materials will be small and there remains adequate capacity for the management of such wastes, and segregation facilities will be provided. There is adequate capacity for the management of such waste arisings and the pre-mitigation impact is considered to be adverse, imperceptible and short-term.

9.14.4.5. While municipal waste will be generated by the on-site workers the impact is considered to be negligible and segregation facilities will be available at the construction compound. During the operational phase municipal waste impacts are considered adverse, imperceptible and long-term.

9.14.4.6. For the operational phase maintenance works will be required, as is the case in both the do minimum and do nothing scenarios accordingly impacts arising will not be significant. Municipal wastes generated in the operational phase is considered to be broadly similar to the DM scenario and impacts will therefore be neutral.

9.14.5. **Mitigation Measures**

9.14.5.1. A Construction and Demolition Resource and Waste Management Plan (CDRWMP) is included within the CEMP and will be implemented. That document sets out all relevant roles and responsibilities for the contractor and ensures that waste will be managed and disposed of in a way that complies with the Waste Management Act, 1996 (as amended) and associated Regulations. The CDRWMP will also facilitate reuse and recycling and divert waste from landfill insofar as is practicable. In this regard it is estimated that up to approximately 14,500 tonnes of recycled/reused material could potentially be incorporated into the Proposed Scheme.

9.14.5.2. Management measures will follow best practice and include the following:

- Avoiding waste generation where possible, and minimising the need for waste disposal.
- Reuse of materials throughout the Proposed Scheme where possible.
- Source segregating of materials into their waste streams and removal off-site by approved transport to licenced facilities.
- Hazardous waste, if it arises, will be managed by the contractor in accordance with the relevant legislation.
- Waste auditing will be carried out to ensure materials leaving site are recorded and sent to the proper facilities.

9.14.5.3. No specific mitigation measures are proposed for operational wastes as these are not considered to give rise to significant effects.

9.14.5.4. I am satisfied that with the application of the mitigation measures and through the design and management of the Proposed Scheme that there will be no significant residual impacts arising from the construction or operational phases of the scheme.

9.14.6. **Material Assets – Waste Conclusion**

9.14.6.1. I have considered all of the written submissions made in relation to material assets – waste, and the potential effects and impacts that could arise. I am satisfied that significant adverse impacts can be avoided, managed, and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of waste. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed, and mitigated by the measures which form part of the Proposed Scheme and through suitable conditions.

9.15. **Material Assets – General – (Services and Materials)**

9.15.1. **Overview**

9.15.1.1. Section 19 of the EIAR considers the potential impacts on material assets in terms of built services (utilities) and major infrastructure (e.g., motorways, railway lines, etc.) as well as potential impacts arising from the importation of construction materials to the site. The Proposed Scheme is a large-scale construction project which will require the import of a range of key materials to facilitate the construction processes. In relation to impact on utilities this is assessed in terms of diversion and changes necessitated by the Proposed Scheme.

9.15.2. **Baseline:**

9.15.2.1. Given the urban location of the proposed works there are a number of utilities in place, which include the following networks and all their associated infrastructure:

- ESB electricity lines (high, medium and low voltage),
- Gas Networks Ireland (GNI) gas mains (high, medium and low pressure),
- Irish Water (IW) potable water mains, sewer lines (foul and combined),
- Local Authority surface water drainage networks,

- Eir, Enet, and Virgin Media telecommunication lines,
- Local Authority traffic signal ducting.

9.15.2.2. In terms of major infrastructure, the Proposed Scheme traverses the M50 at the M50/N4 interchange, crosses a number of railway lines west of Heuston Station (beneath the Con Colbert/South Circular Roads junction), and the Luas Red line in the vicinity of Hueston Station.

9.15.2.3. The only materials currently imported to the site are those required for maintenance purposes along the existing transport corridor.

9.15.3. **Potential Impacts**

9.15.3.1. The do something scenario impacts are summarised below in relation to the relevant topics.

Major Infrastructure and Utilities:

9.15.3.2. Construction of the Proposed Scheme and in particular associated excavations have the potential to impact existing major infrastructure and utilities. If protection of utilities is not an option realignment, upgrade or replacement of services/utilities will be necessary. The Board should note that tables 19.6 (electricity), 19.7 (Water), 19.8 (Wastewater) and 19.9 (Telecommunications) of the submitted EIAR lists the proposed major infrastructure diversions necessitated by the Proposed Scheme, and as such interruption to services will require management. The Proposed Scheme itself will also require use of utilities in its construction and operational phases and accordingly could give rise to potential demand impacts. The impacts on major infrastructure and utilities can be summarised as follows:

- Major Infrastructure – The Proposed Scheme will cross over the M50 and railway lines via existing bridges. There will be no works carried out to these bridges which would affect the operation of the motorway or railway lines underneath therefore no significant impacts will arise during construction or operational phases of the Proposed Scheme. Similarly, construction activities will not affect the operation of the Luas Red Line and in the operational phase

the interaction with the Luas line will continue to be signal controlled. Accordingly, no significant impacts are anticipated during operational or construction stages.

- Electricity – Construction phase will have a negative, moderate, temporary impact regarding service interruption, and negative, not significant, short-term impact in terms of demand. During operational phase electricity will be required for streetlights, signalling and RTPI displays, such impacts are considered negative, imperceptible and long-term.
- Water – Construction will require water use for welfare facilities and dust suppression/mitigation which can be supplied through connection to mains or water tankers. Impacts on demand are considered to be negative, not significant, and short term, while interruption to service impacts during construction are negative, moderate and temporary. The Proposed Scheme will not result in any additional water provisions being required during the operational phase and accordingly no significant impacts are anticipated.
- Wastewater and Surface Water runoff – There will be wastewater (welfare facilities on construction compound may be connected to mains or portable toilets used as necessary) and surface water run-off generated by the construction phase whose impacts are considered negative, not significant and short term on the demand side. A number of interfaces have been identified between the Proposed Scheme and the foul drainage network, some of which will require diversion which may lead to temporary local interruptions to service, giving rise to potential negative, not significant and temporary impacts. There will be limited upgrade works required to the surface water drainage network to accommodate the Proposed Scheme and its associated SuDs measures, no significant impacts are predicted in terms of service interruption. In relation to the operational phase while there will be an increase in impermeable areas from the Proposed Scheme, drainage upgrades and SuDs measures included within the overall design will attenuate any additional runoff, and no foul sewer connections are required, accordingly no significant operational phase impacts are anticipated.

- Gas – No significant impacts are considered to arise in terms of demand (as no connections to gas services are required) while there will be a negative, moderate, and temporary impact in terms of service interruption during the construction phase as diversion of gas assets will be required at two locations in section 2 of the Proposed Scheme. The Proposed Scheme does not require any gas connection in its operational phase and accordingly no significant impacts are anticipated.
- Telecommunications – Negative, not significant and short-term impact is predicted to arise in terms of demand as access to the network will be required by the construction compounds, while a negative, moderate, and temporary impact is considered in terms of service interruption during the construction phase as a number of diversions of infrastructure will be required. During the operational phase telecommunications links will be required throughout the Proposed Scheme for the RTPI displays, signal controllers, and bus information applications. Such infrastructure is already in place in certain locations along the route and the anticipated impact on telecommunications demand is anticipated to be negative, imperceptible and long-term.

9.15.3.3. The construction of the Proposed Scheme will require the importation of materials to the site, while this is a significant construction project the amounts of materials (e.g., 90,500 tonnes of asphalt, 23,070 tonnes of concrete) are not significant in terms of the available supply chain in Ireland, are readily available and demand will be spread throughout the construction phases so potential impacts (beyond those assessed in the traffic, air, climate and noise and vibration sections previously) are considered to be negative, slight and long term. Similarly, during the operational phase as the materials needed for maintenance purposes are readily available, the amounts needed will be small in the context of the material available impacts are considered to be neutral and long-term.

9.15.4. **Mitigation Measures**

9.15.4.1. While, the Proposed Scheme has been designed to minimise impacts on major infrastructure and utilities precautions are included to avoid unplanned interruptions to services during construction, such as:

- Investigations in working areas to identify the precise location of utilities prior to excavations.
- Utilities will be protected in line with best practice where works are proposed.
- Consultation with the utilities companies whose infrastructure is to be diverted will continue.
- Where utility diversions and interruption to services are necessary, they will be planned, minimised, generally only occur for a set period of time and not be continuous for full days at a time. Prior notification will be given to all impacted parties,
- Materials for construction will be sourced as locally as practicable from authorised suppliers and a just-in-time supply scheme will be adopted to reduce the need for storage on site.
- Due to the nature of the works required during the operational phase (maintenance by the relevant local authorities) impacts on major utilities are not anticipated and therefore no specific mitigation measures are included.

9.15.5. **Material Assets – General (Services and Materials) Conclusion**

9.15.6. I am satisfied that the proposed works have been designed to minimise impacts insofar as it practicable and where interruptions to services are required these can be adequately managed, implemented and provided with appropriate contingencies to avoid significant adverse impacts arising. The submitted EIAR demonstrates that the applicant is aware of the need to ensure continuity of services and minimum impact is highlighted throughout. Construction works related to the Proposed Scheme will require additional liaison, and discussions with all affected properties along the route and this has been committed to in the documentation.

9.15.7. I have considered the written submissions made in relation to material assets (General, Services and Materials), in addition to the relevant details on file including the EIAR. I am satisfied that the potential for impacts can be avoided, managed and

mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the Proposed Scheme would not have any unacceptable direct or indirect impacts in terms of services or materials. I am also satisfied that cumulative effects in the context of existing and permitted developments in the surrounding area are not likely to arise.

9.16. Risk of Major Accidents and/or Disasters

9.16.1. Overview

9.16.1.1. Chapter 20 of the EIAR considers the vulnerability of the proposed scheme to risks of major accidents and/or disasters and incorporates a risk assessment that was carried out in three stages (Identification and Screening – setting out a list of potential incidents, Risk Classification – evaluating the likelihood of the potential incident arising as well as classifying its consequence, and Risk Evaluation – determining the level of significance). This process facilitates the assessment of the likely impacts of such incidents/disasters in relation to all environmental, social and economic receptors.

9.16.1.2. The events identified for the construction phase resulting in a medium risk category (no identified events have been categorised as high risk) are listed in table 9.16.1 below:

Table 9.16.1 – Likelihood and Category of Major Accidents

Potential Event	Likelihood / Consequence	Risk Category
Contamination event, pollution event leading to environmental damage	Unlikely / Very Serious	Medium
Utilities - risk of gas explosion due to contact with/damage to mains or release of trapped gas	Unlikely / Serious	Medium
Major transport accidents resulting from construction traffic or works adjacent to traffic	Likely / Serious	Medium
Biosecurity - risk of spread of invasive species during construction works.	Likely / Serious	Medium

Potential Event	Likelihood / Consequence	Risk Category
Structural damage/collapse	Unlikely / Serious	Medium
Disruption to Emergency response vehicles (Fire, Ambulance, and Garda)	Likely/Very Serious	High

9.16.1.3. No medium or high-risk category events have been identified for the operational phase.

9.16.1.4. The Proposed Scheme is not located within the consultation zone of any Seveso sites, and the EIAR states that the Proposed Scheme will not give rise to any significant impacts on emergency response times or access to such sites.

9.16.2. Conclusion in Relation to Major Accidents and/or disasters

9.16.3. The Proposed Scheme has been designed through an iterative process to avoid and mitigate environmental impacts. I am satisfied that an appropriate suite of mitigation measures will be implemented throughout the construction phase that will reduce the level of risk for impacts or environmental effects to non-significant levels. The proposed schemes construction incorporates a range of plans and procedures that will effectively manage and minimise risk. In this regard, I note that the CEMP will address Construction and Demolition Resource and Waste Management, Construction Traffic Management, Non-Native Invasive Species Management, Surface Water Management and also provides an Environmental Incident Response Plan. With the implementation of the construction methodologies, and mitigation measures set out within the submitted EIAR and CEMP in relation to all proposed works the potential for any identified risks to arise will be reduced to low throughout the construction phase.

9.16.4. I am satisfied that given the nature of the proposed development, its design and character as well as the mitigation measures proposed, together with the low probability of a major accident/ natural disaster, it is not likely that significant effects on the environment will arise in this regard.

9.16.5. I have considered all of the written submissions made in relation to major accidents, as well as the content of the submitted EIAR. I am satisfied that adverse impacts identified would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that while impacts will arise that the Proposed Scheme would not give rise to any unacceptable direct or indirect impacts in terms of major accidents. I am also satisfied that while some cumulative effects may arise from the Proposed Scheme together with existing and permitted developments, these would be avoided, managed and mitigated by the measures which form part of the Proposed Scheme and through the application of suitable conditions.

9.17. Cumulative Impacts and Environmental Interactions

9.17.1. Overview

9.17.1.1. 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 eleven other BusConnects routes that are proposed throughout Dublin in the context of the foregoing sections of the EIAR. Section 21 of the EIAR is augmented by three appendices (A21.1 – Record of Stages 1 & 2 Cumulative Effects Assessment, A21.2 Specialist Assessments, and A21.3 (Air Quality Cumulative Modelling Results). In the interests of clarity please note that I have considered all the relevant projects from the more recent planning history in the vicinity of the Proposed Scheme within this cumulative assessment.

9.17.1.2. As well as the BusConnects projects other developments considered in the context of cumulative assessment have been identified on the basis of the relevant zones of influence and anticipated timeframes for construction. The applicants have screened, reviewed, and shortlisted projects (using planning status, potential for temporal overlap with the Proposed Scheme, scale, location relevant to respective ZOIs, and likelihood of significantly contributing to the effects of the Proposed Scheme criteria) to establish the potential extent and nature of cumulative impacts across the range of

EIAR environmental media. For the operational phase it was assumed that all 12 Dublin Core Bus Corridor (CBC) schemes will be operational as will all EIAR shortlisted projects, while in the construction phase it was considered that all shortlisted projects would be constructed concurrently unless sequential construction would represent the worst-case scenario for any particular environmental topic. Other types of projects included within the cumulative assessment include local planning applications and SHD projects, DART+ south west and tunnel project; Luas line extensions (including green Line capacity enhancement) as well as the Greater Dublin Area Cycle Network Plan.

9.17.1.3. Having regard to the traffic assessments and modelling carried out for all the BusConnects projects in Dublin the NTA have identified the potential for significant adverse impacts on traffic in the event of all 12 BusConnects bus corridor projects being constructed concurrently. For this reason, the EIAR clearly states that the following schemes will not be constructed concurrently with adjacent BusConnects Core Bus Corridor schemes:

- Lucan to City Centre (the Proposed Scheme) will not be constructed concurrently with Liffey Valley to City Centre and Blanchardstown to City Centre schemes.
- Bray to City Centre will not be constructed concurrently with the Belfield/Blackrock and Templeogue/Rathfarnham to City Centre Schemes.
- Ballymum/Finglas to City Centre will not be constructed concurrently with Swords to City Centre and Blanchardstown to City Centre Schemes, and
- Templeogue/Rathfarnham to City Centre will not be constructed concurrently with Kimmage and Bray schemes.

9.17.1.4. Adopting this approach will minimise additional congestion and associated cumulative impacts from arising in relation to the scheduling of these major projects which are under the control of the same applicant. Controlling the implementation of the various core BusConnects corridor schemes (in the event of favourable consideration being provided for all) will ensure that significant adverse cumulative impacts do not arise through the construction phases of projects within relative proximity to each other and which are proposed to operate within the same

population catchment (or a subset of same), perform or serve similar functions within the same larger spatial area or which offer an alternative route that traffic may rely on while construction of another corridor is underway.

9.17.1.5. In terms of the operational phase the DM and DS scenarios for 2028 and 2043 are modelled and compared, with the do minimum scenario assuming the full implementation of the other GDA strategy schemes (e.g. DART+, etc.) and forecasted growth in population and general travel demand.

9.17.1.6. The EIAR has also had regard to and considered the relevant plans for the area within the EIAR. I note that some plans have been reviewed/updated from those quoted in this section of the EIAR in particular, I refer to the current Dublin City Plan 2022, however, I am satisfied that the applicable and relevant provisions of the updated plans remain consistent with the overall objectives of the Proposed Scheme and I have considered these within this cumulative assessment.

9.17.2. **Traffic and Transport**

9.17.2.1. As referenced above the applicants have clarified that in order to minimise the potential for significant adverse cumulative impacts to arise in terms of traffic, air quality and noise during the construction phase a commitment has been made to ensure concurrent construction of certain BusConnects corridors will not take place. Limiting concurrent construction in this manner will ensure only limited overlap of traffic dispersion within each of the study areas and thus reduce the potential to cause cumulative traffic impacts above the levels of the individual schemes. It is anticipated that the DART+ Tunnel element (Kildare Line to Northern Line) will not be under construction within the timeframe of the Proposed Scheme and accordingly cumulative impacts will not arise. The Proposed Scheme aims to co-ordinate construction with other major infrastructure projects and other construction projects along the route, and a Construction Traffic Management Plan will be in operation by the appointed contractor. In this manner I am satisfied that there will be no significant cumulative effects on Transport and Traffic other than those identified as attributable to the Proposed Scheme in isolation for the construction period.

9.17.2.2. In terms of the operational phase in the 2028 AM peak the Proposed Scheme (in combination with the other BusConnects CBC projects) will result in an approximate 10% increase in passenger boardings across all public transport services, and 17% more on bus services (with 11% and 18% increases respectively in the PM peak), which will again rise to 9% for both AM and PM peak for all public transport passengers boarding in 2048, and 23% and 22% increases in bus passengers boarding respectively. Accordingly, I consider this cumulative effect on people movement by sustainable means to be long-term, profound and positive. I am satisfied that the traffic modelling carried out demonstrates that the Proposed Scheme, cumulatively with other BusConnects corridors and the implementation of the wider GDA Transport Strategy measures will cater for the overall projected growth in travel demand through sustainable means.

9.17.2.3. I consider that cumulative negative effects will not arise in the operational period beyond those identified in the stand-alone assessment of the Proposed Scheme. In this regard I note that the improvements in bus priority infrastructure throughout Dublin will improve the ability to manage and control all bus activity and scheduling across the city. The infrastructure will facilitate overall improved bus services and activities over the long-term which is considered to be a positive long-term impact, however, with this arises a potential concern in relation to the accumulation of buses at certain locations – such as the terminal points of the various projects or the city centre in general. In this regard I consider that the proposed bus lane and priority infrastructure proposed will improve the movement of buses and their flow throughout the City and will facilitate better management and real-time monitoring of bus locations and routes. The management and flow of buses will therefore be improved, as will the ability to be moved throughout the city, accordingly, in my opinion, the clustering, build-up, or accumulation of buses at particular locations will therefore not arise as a cumulative issue of any significance.

9.17.3. **Air Quality**

9.17.3.1. In terms of assessing the potential for cumulative impacts arising on air quality during the construction phase, projects within the 350m ZOI of the Proposed Scheme have been considered. Consistent with the Proposed Scheme larger

construction projects are all subject to dust control and mitigation measures being adopted during the construction phase and accordingly I do not anticipate significant cumulative adverse impacts to arise. In terms of air quality from construction traffic, no new additional significant adverse effects were identified in comparing the DM and DS cumulative construction scenarios other than those in the stand alone air quality assessment discussed previously above. Other projects will directly interface with the Proposed Scheme however, the application documentation commits the applicant to liaise with third-party developers on a case-by-case basis to ensure co-ordination, access and proper management of potential cumulative effects. Accordingly, no significant cumulative effects are predicted in relation to air quality. In terms of cumulative impact on ecological receptors during construction the annual mean NO_x concentration at the Liffey Valley pNHA (Chapelizod bypass) exceeds the critical level in both the DM and cumulative DS scenarios, on the basis of assessing a worst-case scenario. In reality this effect will be short term as the works are short term in nature, giving rise to an overall negative, slight and short term affect i.e. similar to the results of the standalone Proposed Scheme assessment. In terms of regional air quality, the cumulative assessment shows that emissions will be increased due to traffic redistribution during the construction phases of the BusConnects CBCs, giving rise to cumulative negative, not significant and short term impacts.

9.17.3.2. In terms of the cumulative operational phase impacts of the Proposed Scheme, two new additional adverse localised effects were identified (at the R148 Victoria Quay and Arran Quay) with annual mean NO₂ concentrations exceeding the limit value in 2028 but returning to below the limit by 2043. When considered in total the Proposed Scheme generates little change in air quality in the context of the cumulative situation.

9.17.3.3. In terms of impacts from air quality on proximate sites of ecological sensitivity I note that the NO_x levels are exceeded in both the DM and DS scenarios at the Liffey Valley pNHA (Chapelizod by-pass). This exceedance is anticipated to decrease by 2043 due to enhancements in engine technology and increased penetration of electric vehicles, and accordingly ecological impacts from associated with the cumulative assessment are considered to be negative, slight and long-term.

9.17.3.4. In considering regional air quality I am satisfied that the Proposed Scheme will result in reductions in emissions of all pollutants modelled for cars and buses due to the predicted modal shift (decreased car usage). Goods vehicles show continued increases due to the projected increases and challenges with implementing improved technology on delivery/HGV vehicles, accordingly I am satisfied that cumulative impacts in regional air quality will be neutral with no additional significant adverse impacts over and above those assessed for the Proposed Scheme as a stand-alone project.

9.17.4. **Climate**

9.17.4.1. In terms of climate emissions will come from both construction practices themselves as well as traffic being diverted onto longer routes for the construction phase. The embodied construction carbon arising from the Proposed Scheme when considered cumulatively with the other 11 BusConnects CBC projects is the equivalent of 0.15% of Ireland's Non-ETS (Emissions Trading Scheme target) for 2020 or 0.17% of the 2030 target. Construction traffic and traffic diversions onto longer routes will also give rise to increased emissions. Mitigation measures are proposed, where feasible, such as using less carbon intensive concrete, traffic management, and good construction practices. Notwithstanding this there will remain a negative, minor and short term impact on Climate during the construction phase when considered cumulatively with other projects.

9.17.4.2. In the operational phase both direct (transport network along the proposed schemes) and indirect (area of influence that the proposed scheme has cumulatively with the other 11 CBCs) have been considered. A comparison between the 'do minimum' and cumulative 'do something' GHG emissions for total car and bus in 2028 predicts a decrease of 27.2% CO_{2eq}, and a similar 25.3% decrease in total car and bus emissions in the design year (2043). While bus, cycling and pedestrian infrastructure is improved it is noted that there will be an overall reduction in operational capacity for general traffic (private car) along the direct study area which will redistribute some traffic onto alternative and sometimes longer routes, such indirect impacts cumulatively are predicted to give rise to increases of a total of 4.8% and 5.3% in CO_{2eq} emissions in the opening year and design years respectively. Overall

cumulative phase carbon emissions for the BusConnects CBC schemes predicts a decrease of 6.9kt (-1.2%) in CO_{2eq} in 2028 and 0.6kt (-0.6%) in 2043. As this falls into the range of +/- 0.01% and +/-0.5% of the 2030 transport emission ceiling it is considered to be a positive, minor, and permanent impact in 2028.¹⁹ This reduction in GHG emissions represents the equivalent of the removal of 13,400 car trips per weekday from the road network in 2028.

9.17.4.3. The CBCs have been designed to cater for increased cycling, bus frequency(/reliability/resilience) and demand management. The increase in bus frequency and resilience that would be facilitated by the overall BusConnects CBCs will provide the schemes with the infrastructural capacity to remove approximately 105,500 and 102,200 car trips per weekday in 2028 and 2043 if all residual capacity is used (i.e. the provision of more frequent bus services), or the removal of 74,400 and 69,700 weekday car trips in 2028 and 2043 respectively should 50% of the residual capacity be taken up. These figures would represent a significant contribution towards reducing total car kilometres. Accordingly, I am satisfied that cumulatively the CBC works will make a significant and long-term contribution towards carbon reduction.

9.17.5. **Noise and Vibration**

9.17.5.1. Cumulative noise and vibration impacts will not arise due to the separation distances between schemes, and other projects and the temporary, and linear nature of the construction phases of the Proposed Scheme. Consideration has been given to a variety of projects within 300m of the Proposed Scheme in relation to construction noise. Due to the nature of the proposed works and locations of noise sensitive locations, the Proposed Scheme will remain the dominant noise and vibration source therefore the standalone noise assessment results remain valid. The works will be subject to a full suite of mitigation measures to minimise noise impacts and accordingly significant cumulative noise impacts will not arise. In relation to the assessment of cumulative construction traffic, higher noise impacts (in the moderate to significant range) are calculated along four roads (Manor Place, St. Joseph's

¹⁹ While a comparison cannot be made for 2043 as the emissions ceiling has not yet been set for beyond 2030, however, a similar level of impact is expected by the EIAR.

Road, Stoneybatter, Cowper Street and Oxmantown Road), all of which will be temporary in nature. As construction activities will be co-ordinated with other projects to minimise impacts, I am satisfied that no likely significant cumulative effects will arise on noise and vibration during construction over and above those set out in the individual assessment.

9.17.5.2. In relation to operational impacts, modelling has demonstrated that cumulatively during the opening year higher initial short to moderate term noise impacts will rise along certain roads with all 12 Dublin CBCs operational. This will fall by the design as traffic volumes reduce along the roads in question. I also note that these impacts will in actual fact be further reduced with increased penetration of electrical vehicles into the national fleet. Therefore, I do not consider that cumulative adverse impacts will arise apart from local temporary effects as traffic patterns assimilate to the CBCs.

9.17.6. **Population and Human Health**

9.17.6.1. There could be potential cumulative construction impacts on population from the land-take that is required to facilitate the Proposed Scheme and the timing of relevant activities during the construction period. In this regard I note that relevant projects permitted and in use along the route are aware of the works and any construction activities will be co-ordinated insofar as practicable. Accordingly, I do not consider that significant cumulative effects or impacts will arise. Furthermore, I am satisfied that the operational period will not give rise to any adverse impacts on the various population considerations.

9.17.6.2. In terms of human health, I note that cumulative construction activities could result in increased inconvenience and annoyance for walkers and cyclists, however, such impacts while negative, are temporary and moderate. Furthermore, I note the commitment within the application documentation to engage with other projects and manage construction activities to minimise cumulative effects and ensure significant cumulative impacts will not arise. During the operational phase I consider that the cumulative improvements the CBCs propose to walking, cycling, and public transport infrastructure, combined with the better quality public transport linkages which will

improve access to health facilities for those who do not have cars will have a significant, positive, long-term, benefit to the study areas health and wellbeing.

9.17.7. **Biodiversity**

9.17.7.1. The potential cumulative impacts on Biodiversity could only arise in relation to residual impacts identified from the Proposed Scheme (such as impacts on habitat loss, disturbance/displacement of fauna, impacts on specific fauna species, hydrology etc.) being exacerbated by other developments or projects. In this regard I note that cumulative impacts with other projects are unlikely to increase the significance of impacts above the local geographic scale and will not alter the findings of the standalone biodiversity assessment considered previously in this report above. The Proposed Scheme is located in an urban area and is compliant with the relevant Development, Biodiversity and River Basin Management plans that are currently in place along its route and any permitted or future developments and projects must also remain compliant with these same plans, policies and objectives (and which include significant environmental and biodiversity protection policies), and thus significant adverse cumulative effects will not arise. Furthermore, any projects with the potential to impact on designated sites have either undergone (or will undergo) Appropriate Assessment to ensure adverse effects do not arise (in this regard the Board should also note the conclusions and assessment of In-combination cumulative projects included in Section 10.8 of this report – Appropriate Assessment – In combination Effects, which concludes that the Proposed Scheme will not adversely affect the integrity of any European Sites either alone or in combination with any other plans or projects). Accordingly, I am satisfied that the Proposed Scheme will not give rise to additional significant cumulative impacts on Biodiversity during the construction phase.

9.17.7.2. The Proposed Scheme represents works along and to an existing busy transport corridor, with mitigation measures having been built into the design stage to ensure significant adverse effects do not arise in relation to biodiversity issue. The route of the Proposed Scheme runs through zoned areas which are subject to their own Development Plan provisions that include significant biodiversity protections. Given the suburban/ urban environment, the planning policy frameworks in place and the

minimal effect/disturbance arising from traffic on the Proposed Scheme cumulative impacts/effects of significance are not anticipated in the operational phase.

9.17.8. **Water.**

9.17.8.1. In relation to Water with the implementation of the measures set out in the SWMP the Proposed Scheme will not give rise to any impacts of perceptible significance during construction. The incorporation of SuDS measures will ensure that no significant impacts will arise cumulatively on water during the operational phase. Similarly other projects both permitted and proposed within the ZOI in relation to water can be assumed to be carried out in accordance with good practice and I am therefore satisfied that significant adverse cumulative effects will not arise during the construction or operational phases.

9.17.9. **Land, Soils, Geology and Hydrogeology**

9.17.9.1. The residual impacts arising from the Proposed Scheme on Land, Soils, Geology and Hydrogeology are of negligible magnitude and imperceptible significance and accordingly no significant cumulative impacts can arise when considered with other plans and project during the construction or operational phases.

9.17.10. **Archaeology, Architectural, Cultural Heritage and Landscape**

9.17.10.1. The Proposed Scheme has been shown to have no residual impacts on archaeology, nor architectural heritage, accordingly significant adverse cumulative impacts cannot arise across these environmental criteria. Furthermore, no projects have been identified within the relevant ZOI that could give rise to cumulative effects. Accordingly, I am satisfied that no cumulative effects on Archaeology or Cultural Heritage can arise in the operational or construction phases.

9.17.10.2. In relation to townscape/landscape, should construction of other projects, other BusConnects CBCs, and/or other permitted projects occur within the same (or overlapping) timeframes, there is the potential for cumulative adverse impacts to arise, however, I consider such impacts will be contained to the immediately

surrounding built form in local areas and to be temporary/short-term in nature. In terms of the operational period, I note that the Proposed Scheme provides for public realm improvements and incorporates additional planting which will mature and grow throughout the operational phase. There remains potential for slight / moderate cumulative effects with other projects as both they and the Proposed Scheme matures, any such effects would be temporary to short term.

9.17.11. **Waste and Resources**

9.17.11.1. Cumulative effects for waste management must be considered on a regional basis due to management practices in Ireland, and therefore large-scale regional projects considered in assessing potential impacts include Metrolink, Dart underground, Dublin Port Masterplan, N2 Slane by-pass, Ardee by-pass and the Greater Dublin Drainage Project (refer to table 21.12 of EIAR for complete list) as well as the other 11 CBC projects. All of these projects will generate a range of wastes. While opportunities will always arise for reuse of materials not needed on one project within another in the wider area, I note that the East Midlands Waste Region has the most capacity within the country to deal with such waste and recovery. Accordingly, I consider that that there will be no likely significant cumulative effects arising. During the operational phase maintenance measures will be required which will give rise to waste, I do not consider such maintenance measures to be significant across the cumulative network as the proposed CBCs are along existing transport corridors which would necessitate ongoing maintenance even in the do minimum scenario.

9.17.12. **Material Assets**

9.17.12.1. Having regard to the nature of the Proposed Scheme which is refurbishing an existing transport corridor and reallocating carriageway priority there is potential for a range of utility diversions and services to be diverted, disrupted and managed during the construction phase. Such measures will be undertaken by agreement with those affected as would be the case in any of the other projects along the route or beyond. I, therefore, consider that this element will be managed appropriately, and no significant cumulative impacts will arise. The material quantities for the Proposed Scheme are not considered significant in terms of the availability of the relevant

resources and accordingly I consider that significant cumulative impacts will not arise in this regard.

9.17.13. **Interactions**

9.17.13.1. I have considered the interrelationships between the various EIAR topics and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. Table 21.29 of the EIAR provides a matrix of interactions between environmental factors during the construction and operational phases of the proposed development. Significant interactions occur between population, human health and these two topics are further linked to varying degrees of significance to all the other topics (biodiversity, land and soils, water, air quality, climate, noise and vibration, waste, landscape/ townscape/visual, traffic and transport, cultural/architectural/ archaeological heritage, traffic and transport as well as major accidents) either through direct connection, perception or appreciation.

9.17.13.2. The interaction between traffic and transport and climate is one of the main drivers behind the Proposed Scheme. The reduction in operational phase traffic and modal shift to more sustainable means of transport will reduce GHG emissions and associated impacts on climate.

9.17.13.3. The proposed construction phase of the development has the most potential to interact with human health and biodiversity in relation to water contamination with the potential for pollutants to enter waterbodies through spillage to directly impact human health and biodiversity. In this regard I note that with the application of the CEMP measures to protect water quality and residual impacts to water were expected to be imperceptible and as such there is no likely significant interaction between Water and Human Health, Population or Water and Biodiversity from the construction phase of the Proposed Scheme. Similarly, with the application of SuDS and the proposed maintenance programme provided for there will be no significant interactions between these topics during the operational phase.

9.17.13.4. Population / Human health and biodiversity interact with air quality, noise and vibration, as well as traffic. While I note some adverse localised air quality impacts will arise in the vicinity of the Liffey Valley pNHA, I am satisfied on the basis of the assessment set out above, information provided, and having regard to the location and nature of the Proposed Scheme (representing works to an existing transport corridor within an urban environment) that no significant impacts are expected in this regard and there is no likely significant interaction between these topics and human health/population.

9.17.13.5. Traffic and population/human health interactions will occur during construction where access may be disrupted and diversions required, this can lead to stress. The construction phase could also potentially affect local drainage and present an increase of flood risk with associated impacts on human health. These impacts are likely to be imperceptible, and are capable of management and control, I am therefore satisfied that no significant interaction will occur between these factors during the construction phase. In terms of the operational phase the modal shift encouraged and facilitated by the Proposed Scheme will provide for beneficial interactions from traffic and population/human health due to increased accessibility, improved cycling, walking and public transport infrastructure.

9.17.13.6. Interactions will also arise between population/human health and landscape/townscape/visual. The construction phase will have impacts on a number of local amenities and open spaces, as well as representing the removal of a number of trees from along the route which are enjoyed by the community. On the basis of the information provided access to community spaces will be maintained insofar as practicable during construction and that phase will also provide for additional planting of trees and improvements to the public realm which will mature through the operational phase. I am satisfied therefore that the significance of interactions in this regard will be negligible and balanced against the public realm improvements and increased accessibility that will arise from the Proposed Scheme which will influence wellbeing, as well as providing opportunities for increased outdoor activity and social interactions with associated health benefits.

9.17.13.7. There is also the possibility of interactions between population/human health and material assets during the construction phase due to the potential for disruption to services/utilities. I am satisfied on the basis of information received that any such disruptions will be minimised and where necessary appropriate management and mitigation can be applied through the construction process to ensure that any such interactions will not give rise to significant effect.

9.17.13.8. I acknowledge the potential for interactions between the topics of biodiversity, traffic, land, soils, geology and hydrology, water, air quality, noise and vibration as well as landscape/visual. These potential interactions arise from tree removal and replanting (townscape), mortality risk (traffic), habitat degradation (water and air quality), and spread of invasives (soil). I am satisfied that while the potential for interactions exists that the mitigation measures provided within the submitted documentation will ensure these will be managed effectively and not give rise to significant impacts beyond those previously set out in the individual topic assessments above.

9.17.13.9. Potential interactions could also arise between land, soils, geology, and hydrology, and water due to the potential impact on water from works polluting watercourses, ground water or water supplies, including contaminated ground works. Such interactions have been discussed in the relevant topic sections and I am satisfied that the measures set out in the submitted documentation will ensure that the significance of interactions will be minimal.

9.17.13.10. There are also interactions between Landscape (townscape) and Visual, with Archaeology, Architectural and Cultural Heritage. All these factors influence the quality of townscape and place; however, I am satisfied that these interactions have been assessed, discussed and mitigated within the relevant sections of the EIA set out above.

9.17.13.11. Other potential interactions are of a more minor nature and include risks of major accidents with all topics, material assets and traffic, climate and water, climate and air quality, waste, traffic, among others. I consider these topics will not give rise to significant interactions and have been adequately considered and discussed within the individual topic discussions set out previously in this report above.

9.17.14. **Cumulative Impacts and Environmental Interactions Conclusion**

9.17.14.1. Having regard to the foregoing I am satisfied that cumulative impacts and effects as a result of interactions, both indirect and direct can be avoided, managed and/or mitigated for the most part by the measures which form part of the Proposed Scheme and where appropriate the stated mitigation measures can be augmented by specific conditions. I consider the methodology carried out in the submitted EIAR to be appropriate as it assesses the Proposed Scheme with the other CBC projects, together with the other major transport proposals in the Greater Dublin Area and where appropriate considers other permitted developments, which I have augmented by considering the current relevant development and biodiversity plans and any additional relevant permissions/consents. I consider this to be a robust approach which allows a comprehensive assessment of the Proposed Scheme both by itself and in the context of any cumulative interactions with projects and plans in the area.

9.18. **Reasoned Conclusion**

9.18.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from third parties and from prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Positive long-term impacts on **population and human health** through facilitation of improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion, improved air quality and noise reduction, improved road/ street safety, more social interaction and positive accessibility and amenity impacts for community areas.
- Negative short-term impacts on **population and human health** from the construction phase in terms of access restrictions, noise, vibration, dust, contaminated material, traffic and visual impact. These will be adequately mitigated through compliance with the CEMP and mitigation measures outlined in the Land, Soils, Water, Air and Climate and Material Assets sections of the EIAR.

- Negative impacts on **population and human health** arising from land take (both permanent and temporary) required to facilitate the Proposed Scheme, from various individual properties. Where properties are directly affected the boundaries will be replaced and access will be maintained throughout the construction process.
- Negative Impacts on **Townscape and Landscape** arising from construction activities (which will be temporary in nature) as well as longer term impacts on **Landscape** from the removal of trees. While these will be replaced where and as possible throughout the Proposed Scheme the loss of mature trees will be a long-term negative impact.
- Positive Impacts on **Townscape and Landscape** arising from the provision of improved public realm and pedestrian facilities throughout the proposed scheme.
- Negative impacts on **Architectural Cultural Heritage** arising from the construction phase in the vicinity of Dr. Steevens' Hospital, this impact will be temporary/short term in nature with the final design of the Proposed Scheme at this location treating the streetscape along the frontage of the hospital in a sensitive manner.
- Adverse impacts on **biodiversity** from the proposed removal of habitat. Mitigation is designed into the Proposed Scheme as it includes the provision of additional trees and hedgerow, which will provide new habitats. The new planting will provide new nesting habitat for birds and the landscaping proposed will reduce the significance of habitat loss. Trees with potential roosting habitats for bats will not be removed and pre-construction surveys will ensure significant impacts on Bats do not arise. Similarly, pre-construction surveys for other fauna (including Badger) and invasive species within works areas will ensure that impacts will not arise as results will inform further mitigation measures. The Proposed Scheme does not include works within designated sites. Suitable mitigation is also incorporated within the CEMP in relation to invasive species. Impacts on biodiversity will therefore not be significant.

- Potential adverse impacts on **land, soils, geology and hydrogeology** from loss or damage of topsoil, excavation of potentially contaminated ground and contamination of parts of an aquifer could arise during the construction phase. These impacts will be adequately mitigated through the implementation of the various environmental measures and best practice set out in the CEMP and therefore impacts will not be significant.
- Potential negative impacts on **water** quality could arise during construction due to runoff from the works areas containing fine sediments, or accidental spillages/ leakages of contaminants and direct disruption to the local drainage networks. The application documentation (EIAR and associated CEMP) contains a comprehensive suite of mitigation measures which are adequate and will protect water quality and ensure that significant adverse impacts will not arise.
- There is potential for impacts on **air quality** to arise from dust during construction works. These will be minimised with implementation of the appropriate mitigation measures set out within the EIAR and CEMP which will minimise dust emissions arising. During the operational phase there remains the possibility of adverse impact on air quality at the Liffey pNHA, this will arise in both the do nothing and do something scenarios and this impact is not considered to be significant.
- There is potential for **noise** disturbance to arise during the construction phase, works will generally be carried out in daytime hours causing no significant effects and mitigation measures will be applied in relation to works areas proximate to sensitive properties. Where works are required to be carried out at night-time and weekends (to avoid significant traffic impacts) liaison will be held with affected property owners and appropriate mitigation applied as practicable. Furthermore, significant noise abatement and controls are provided for within the CEMP to minimise noise arising from construction activities. During the operational phase the use of the transport corridor will remain consistent with its established use and overall impacts will be negligible, having particular regard to the changes (technological improvements) to the bus fleet and with the reduction in car numbers facilitated by the improved sustainable transport infrastructure being provided

in the Proposed Scheme. Accordingly, significant impacts from noise can be ruled out during all phases of the Proposed Scheme.

- Potential for positive long-term impacts on **climate** through removal of the equivalent of approximately 2,180 and 3,460 car trips per weekday from the road network in 2028 and 2043 respectively (these numbers increase with increased uptake in residual bus capacity) and associated reduction in CO₂ / GHG emissions.
- 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 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 Climate Action Plan.
- Positive impacts on **traffic and transport** by maximising the capacity of the Proposed Scheme to move more people by sustainable modes, whilst also providing for general traffic movements and activities.
- Short-term negative impacts on **traffic and transport** arising from the construction phase and the need to adequately divert and control traffic movements in and around works areas. Such impacts will be mitigated through the implementation of the traffic and transportation plan and CEMP.
- Potential adverse impacts on **cultural heritage** due to construction works potentially impacting on underlying archaeology and other cultural or heritage features such as monuments. Mitigation measures including archaeological monitoring and provision for protection / recording / monitoring underlying archaeology and heritage features in the vicinity of works.
- Potential adverse impacts on **Architectural Heritage** could arise from the Proposed Scheme due to the direct construction interventions on lands within the vicinity of protected structures or to protected structures themselves or where infrastructure is proposed within the wider setting of Protected

Structures. Where works are proposed to protected structures, I am satisfied that these are necessary to secure the overall wider beneficial impacts of the Proposed Scheme and that these interventions have been designed to have minimum impact. Where boundaries are to be altered/set back to facilitate the Proposed Scheme I am satisfied that where practicable existing boundary materials can be removed and reused/repurposed in an appropriate manner and using sensitive methodologies. Similarly, where heritage features are to be relocated or altered, I am satisfied that the methodologies and supervision set out are appropriate and will ensure impacts are not significantly adverse.

9.18.2. 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 will arise. 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 **Appropriate Assessment**

This section provides the consideration of the likely significant effects on European sites arising from the Proposed Scheme.

10.1. **Article 6(3) of the Habitats Directive**

10.1.1. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB of the Planning and Development Act, 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:

- The Natura Impact Statement,
- Screening for appropriate assessment, and
- Appropriate Assessment (AA) of implications of the Proposed Scheme on the integrity of each European site.

10.2. **The Natura Impact Statement and Supplemental Information**

10.2.1. The application is accompanied by an Appropriate Assessment Screening Report (AASR) and a Natura Impact Statement (NIS) both dated October 2022. The NIS provides a description of the Proposed Scheme, the methodology and consultations undertaken, an overview of the receiving environment, lists potential impacts, identifies zones of influence and European sites at risk of effects, it also provides an assessment of potential effects on European sites, as well as setting out a summary of mitigation measures and residual impacts, as well as carrying out an in-combination assessment before presenting its conclusion. The NIS Appendices include (I) the general arrangement drawings for the scheme, (II) proposed surface water drainage works drawings, (III) the Construction Environmental Management Plan (CEMP), (IV) Desk Study, and (V) Water Framework Directive Assessment²⁰.

10.2.2. All ecology and appropriate assessment related documents have been prepared by staff ecologists from Scott Cawley Ltd. (the project ecological consultants) and

²⁰ The Board should note that while an Appendix VI is referenced in the table of contents of the NIS it is not provided nor is it referenced anywhere else in the document, and so the reference should be considered a typographical error.

informed by desk study including reference material from the NPWS website and database as well as by field surveys.

10.2.3. A description of all baseline surveys is outlined within Section 4.6 of the NIS. The following is a list of surveys undertaken (the Board should note that no dedicated aquatic habitat or fish surveys were carried out as the Proposed Scheme is not hydrologically connected to any European Site designated for Annex II fish species or white-clawed crayfish), furthermore Kingfisher habitat surveys were not considered necessary as no instream works are proposed and no sites where water bodies may be subject to significant disturbance were identified:

- Habitat and Floral Surveys were undertaken in June and August 2018 (along the then Proposed Scheme alignment), confirmatory surveys were undertaken August 2020, with additional surveying carried out along any new route sections added since 2018.
- Fauna surveys were undertaken as follows:
 - The footprint of the Proposed Scheme and suitable lands (i.e., greenfield sites immediately adjacent) were surveyed for otter activity between June and August 2018, and August 2020.
 - A desk study and habitat suitability assessment (October 2020) identified one site which would be subject to habitat loss (Liffey Gaels GAA playing pitches) with potential for inland feeding/roosting for SCI birds. This site (referred to as CBC0006WB001) was surveyed twice a month between October 2020 and March 2021 and October 2021 to April 2022.

10.2.4. 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. The Proposed Scheme does not overlap with any European Site. The Proposed Scheme is located in a generally urbanised environment which runs parallel to the course of the River Liffey and none of the habitats present within the footprint corresponds to Annex I or Qualifying Interests Habitat. The NIS does note however, that the habitat type – Tidal Rivers (CW2²¹)

²¹ Fossitt 2000

which is located adjacent to the terminus of the Proposed Scheme at Heuston Station corresponds with Annex I habitat Estuaries [1130] albeit no direct works are proposed at this location, and it is not a designated site.

- 10.2.5. No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.
- 10.2.6. There was one non-native invasive plant species (Japanese Knotweed) listed on the Third Schedule (i.e. non-native species subject to restrictions) of the European Communities (Birds and Natural Habitats) Regulations, identified along the Proposed Scheme, outside the Proposed Scheme boundary at five separate locations along St. Laurence's Road. The desk study (Appendix IV) returned records of a total of 18 species listed on the Third Schedule across the wider study area, none of which were present within the Proposed Scheme footprint.
- 10.2.7. No signs of otter, an Annex II species, were recorded during the multi-disciplinary surveys within the footprint of the Proposed Scheme. There is recorded Otter activity along the Camac and Liffey Rivers, particularly along the Dublin Quay Walls and south of the Phoenix Park at Chapelizod. The nearest SAC with Otter as a qualifying interest is Wicklow Mountains SAC, (approx. 11.7km as the crow flies to the south of the Proposed Scheme). While the River Liffey and its tributaries are known to support otter the populations there are not considered to be connected to the Wicklow Mountains SAC population as they both are located in different water sub-catchments (the Proposed Scheme is located in the Liffey_SC_090 subcatchment while the SAC is located in the Dodder_SC_010).
- 10.2.8. The Proposed Scheme is hydrologically linked with Dublin Bay via the River Annfield, River Camac, Grand Canal, River Liffey, the Liffey Estuary Upper and Liffey Estuary Lower. Harbour Seal, Grey Seal (both Annex II²² species) and Harbour Porpoise (Annex IV) are present in Dublin Bay, with the closest European Sites for which these species are qualifying interests (QIs) being Lambay Island SAC (both seals) located in excess of 23km east of the Proposed Scheme, and Rockabill to Dalkey Island SAC (harbour porpoise) located in excess of 13km east.

²² Of the Habitats Directive

10.2.9. In relation to invertebrates a review of the National Biodiversity Data Centre (NBDC) database returned records for marsh fritillary and white-clawed crayfish (both Annex II species). White-clawed crayfish were recorded north of Leixlip Bridge on the River Liffey (i.e. upstream of the Proposed Scheme), and in the River Camac (again upstream of the Proposed Scheme). There were no records for the white-clawed crayfish in the zone of influence of the proposed scheme nor were there any records of marsh fritillary (or its potential habitats) within the footprint.

10.2.10. In relation to Birds, Kingfisher (Annex I) are known to occur within 1km of the Proposed Scheme and in the wider area, however, none were recorded during site surveys within the footprint of the scheme. The closest SPA for which kingfisher is designated is the River Boyne and River Blackwater SPA which is in excess of 30km of the scheme. It is therefore considered that the kingfisher in the vicinity of the Proposed Scheme are not an SPA population. The desk study returned records of 3 breeding gull species (black-headed, herring, and lesser black-headed gulls) within 300m of the Proposed Scheme which may use inland amenity grassland feeding sites, and a total of 47 no. regularly occurring wintering bird species across the wider area, including records of 11 annex I species. The majority of wintering birds identified are typically found in coastal, estuarine, and intertidal habitats. The desk review identified several records of SCI wintering bird species which may use inland amenity grassland feeding sites. A total of 15 Wintering bird surveys were carried out for the Proposed Scheme at CBC0006WB001 (Liffey Gaels playing pitches). Species of conservation concern recorded were Common-, Black-headed-, and Herring gull. Disturbance levels were high on this site due to loose dogs, horses, evidence of quad/motorcross bikes, littering and bonfires. Large numbers of birds were not recorded, and wintering bird activity was stated as being low across all visits. Droppings attributed to light-bellied Brent Goose were recorded on two dates during the 2021-2022 survey season (294 no. droppings on the 21/12/2021 and 16 no. droppings on the 28/02/2022) at the Liffey Gaels pitch and none in the 2020-21 season. The survey results suggest that the GAA pitches are not a significant inland foraging resource for this SCI bird species. The desk study also returned records of peregrine falcon and merlin, two raptor species for which the Wicklow Mountains SPA is designated. The Proposed Scheme is well outside the typical foraging ranges of these species. Furthermore, based on available data disturbance to these species

would be most likely to occur within a ZOI of 1km. There are no habitat areas within this disturbance area that support populations of the SCI species for which the Wicklow Mountains SPA is designated, accordingly the potential for impacts on any of these species which are SPA populations can be ruled out.

- 10.2.11. The Proposed Scheme crosses the following watercourses,
- Annfield River, at an existing crossing point along the southern boundary of the Hermitage Golf Club.
 - River Camac at an existing crossing point on St. Johns Road West (proximate to Heuston Station) where it is culverted under the road.

The Proposed Scheme is also located in close proximity to the River Liffey at a number of locations. Surface water from the Proposed Scheme will drain into the Liffey via the existing surface water network. Other water bodies of relevance are the Grand Canal (located c.700m to the south of the Proposed Scheme at its closest point), Liffey Estuary Upper, Liffey Valley Lower and Dublin Bay through hydrological linkages.

- 10.2.12. Details on the water quality of each watercourse, as sourced from the Environmental Protection Agency (EPA), and the distances to the waterbodies are provided in Table 6 of the NIS.

- 10.2.13. The scientific assessment to inform the AA (Potential Impacts, Zone of Influence, identification of European Sites at Risk of Effects and Assessment of Potential Effects on European sites) is presented in sections 6 and 7 of the NIS. 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 are presented.

- 10.2.14. Mitigation measures are presented in section 7.1.4 of the NIS as well as their application/implementation relevant to each of the European sites (Sections 7.1 to 7.11 of the NIS refers). Mitigation measures are also detailed in full in the CEMP which includes a Construction Traffic Management Plan, Invasive Species Management Plan, SWMP, Construction and Demolition Waste Management Plan,

Environmental Incident Response Plan. Assessment of potential in-combination effects is presented in Section 9 of the NIS.

10.2.15. The NIS together with supplemental information concludes that:

“... following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Scheme, and with the implementation of the mitigation measures proposed that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans and projects.”

10.2.16. **Adequacy of information submitted by the applicant.**

10.2.17. 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 Scheme which runs from junction 3 of the N4 in an easterly direction to the City Centre ending just prior to the Frank Sherwin Bridge east of Heuston Station, all in County Dublin within the administrative areas of Dublin City and South Dublin County Councils.

10.2.18. I am satisfied that all possible European Sites that could in anyway be affected have been considered by the Applicant at the time of submission. I do note, that since the application and NIS was submitted that a new candidate SPA (the North-West Irish Sea cSPA) has been designated. The submitted NIS could not take account of this as it had not been identified at the time of submission (the cSPA was announced in July 2023). Notwithstanding this, however, given the nature of potential impacts that could arise from the construction and operational phase of the Proposed Scheme, as well as the nature of SCIs identified in this cSPA and publication of the sites Conservation Objectives (September 2023) as well as the survey work completed to inform the submitted NIS, I consider that there is sufficient detail on file to allow full consideration of potential impacts on the North-West Irish Sea cSPA.

10.2.19. 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 insofar as practicable. While I note clarifications in relation to text, typographical errors and certain statements in the submitted NIS documentation, in my report this is done as a matter of clarification for the Board, and I do not consider that these prevent the Board from completing its AA of the Proposed Scheme.

10.3. Screening for Appropriate Assessment

- 10.3.1. The first test of Article 6(3) is to establish if the Proposed Scheme could result in likely significant effects to a European site, in which case the development is 'screened in' for further detailed appropriate (stage 2) assessment.
- 10.3.2. The screening assessment undertaken on behalf of the applicant concluded that the potential for significant effects could not be ruled out for 16²³ no. European Sites within the wider Dublin area in view of the conservation objectives of those sites and thus the Proposed Scheme must proceed to (stage 2) Appropriate Assessment, and an NIS prepared to inform this stage.
- 10.3.3. I note that in determining the potential significant effects of the Proposed Scheme, the applicant took account of the potential for ex-situ effects for foraging birds and mammals as well as the potential for adverse impacts arising from water runoff, potential spread of invasive seeds, air and water quality as well as the potential for in-combination effects to occur. It is of note that a precautionary approach has been taken in including 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 Scheme site. In relation to SPA's, I note that the North Irish Sea cSPA was not considered as it had not (yet at the time of writing the AA screening) been identified, I have considered this site in the screening process below.
- 10.3.4. Similarly, a precautionary approach has been taken in relation to Qualifying Interests (QIs) associated with SACs in the wider area. Potential impacts and effects considered are presented in **Table 10.1** below.

²³ Noting that the North-West Irish Sea cSPA had neither been identified or established when the application was lodged.

Table 10.1 Summary of European Sites for which the likelihood of significant effects cannot be ruled out, (based on applicant’s assessment with consideration added for the North West Irish Sea cSPA which had not yet been designated at the time of writing the NIS).

Potential impacts and zone of influence of effects	European sites within Zone of Influence
<p>Habitat loss and Fragmentation No European Sites are at risk of direct habitat loss impacts.</p> <p>There is potential for loss of/impact on ex situ inland feeding site used by SCI bird species.</p>	<p>Yes</p> <p>The European sites at risk of ex-situ habitat losses: Malahide Estuary SPA; Baldoyle Bay SPA; Rogerstown Estuary SPA; North Bull Island SPA; South Dublin Bay and River Tolka Estuary SPA; Skerries Islands SPA, Lambay Island SPA; Ireland’s Eye SPA; North-West Irish Sea cSPA, and The Murrough SPA;</p>
<p>Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts:</p> <p>Habitats and species downstream of the Proposed Scheme and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants</p>	<p>Yes</p> <p>The European sites at risk of hydrological effects associated with the Proposed Scheme: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Baldoyle Bay SAC (listed in table 7 of NIS, but not discussed in section 6.2 or 7 of submitted NIS) Ireland’s Eye SAC (listed in table 7 of NIS, but not discussed in section 6.2 or 7 of submitted NIS) Ireland’s Eye SPA Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, North-West Irish Sea, and The Murrough SPA,</p>
<p>Habitat degradation as a result of hydrogeological impacts:</p> <p>Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.</p>	<p>No</p> <p>There are no European Sites within the unmitigated hydrogeological zone of influence of the Proposed Scheme.</p>
<p>Habitat degradation as a result of introducing/spreading non-native invasive species:</p>	<p>Yes</p>

Potential impacts and zone of influence of effects	European sites within Zone of Influence
Habitat areas within, adjacent to, and potentially downstream of the Proposed Scheme	There are non-native invasive species present within or adjacent to the Proposed Scheme and in the surrounding area, therefore due to the nature of the sites there is a risk associated with the Proposed Scheme to downstream European sites from the spread/introduction of non-native invasive species South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA.
<p>Air quality impacts</p> <p>Potentially up to 50m from the Proposed Scheme boundary and 500m from construction compounds during the Construction phase and up to 200m during the Operational Phase.</p>	<p>No</p> <p>There are no European Sites at risk of air quality effects associated with the Proposed Scheme as there are no sites within the ZOI for air quality.</p>
<p>Disturbance and displacement impacts:</p> <p>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 (e.g., Otter not exceed 250m while wintering birds may be beyond 300m).</p>	<p>Yes</p> <p>There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the Proposed Scheme.</p> <p>However, there is an <i>ex situ</i> inland feeding site used by SCI wintering bird species within the potential disturbance ZOI of the Proposed Scheme. Therefore, disturbance could arise for species from the following sites:</p> <p>Malahide Estuary SPA, Baldoye Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North-West Irish Sea cSPA, and The Murrrough SPA (a distal site outside the typical 20km range but nonetheless supporting Brent Geese and a number of other SCI species that are recorded from Dublin Bay).</p>

10.4. Screening Determination (recommendation)

10.4.1. Having regard to the information presented in the AA Screening Report, NIS, submissions, the nature, size and location of the Proposed Scheme and its likely direct, indirect and cumulative effects, the source - pathway - receptor principle and sensitivities of the ecological receptors, I broadly 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, Rockabill to Dalkey Island SAC, Lambay Island SAC, Howth Head Coast SPA, Dalkey Islands SPA, Rockabill SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Ireland's Eye SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Lambay Island SPA, and, The Murrough SPA. 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.

10.4.2. Given the hydrological connectivity, proximity of the proposed works to an ex-situ feeding site associated with the Qualifying Interests of the European sites listed above as well as 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 (using a very conservative approach) in relation to habitat loss, degradation, effects on QI/SCI species, disturbance, and displacement. In regard to the very conservative approach adopted within the NIS and this Appropriate Assessment, I refer the Board to the submission of the DAU which stated that *"... because of the dilution effects, this Department considers that, even taking the precautionary principle into account, without mitigation only a small minority of the European sites listed in the NIS would actually be vulnerable to adverse effects as a result of water borne pollution arising from the construction of the bus corridor, namely the sites within Dublin Bay, including the South Dublin Bay Special Area of Conservation (SAC), North Dublin Bay SAC, The South Dublin Bay and River Tolka Special Protection Area (SPA) and the North Bull Island SPA."*

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

West Irish Sea cSPA and, The Murrrough SPA are brought forward for inclusion in the AA.

10.4.4. In consideration of the fact that both Baldoyle Bay SAC and Ireland's Eye SAC are listed in table 7 of the NIS ('summary of the potential impacts of the Proposed Scheme on the receiving environment, their potential zone of influence and European Sites within the zone of influence') and in the box following section 6.2 of the submitted NIS, (in relation to potential for habitat degradation as a result of hydrological impacts) but are not discussed within the remainder of the NIS as European Sites that have the potential to be impacted, I wish to clarify as follows. I have considered these two sites, their QI's, the source pathway receptor principle, as well as the likely direct, indirect and cumulative effects of the Proposed Scheme and have concluded that the potential for significant effects on either of these sites does not arise, specifically due to the nature of the QI's of the sites, their separation distances from the Proposed Scheme, their locations (on the opposite side of Howth Head) and the lack of direct hydrological links. Furthermore, as a matter of clarity the Board should note, there are two references made (in paragraph 107 of the submitted NIS and paragraph 87 of the AASR) to "North Dublin Bay SPA" which is not a designated site, this appears to be a simple misnaming/ transcription error in those paragraphs where the reference should be to North Bull Island SPA which overlaps in area extensively with the North Dublin Bay SAC.

10.5. **Appropriate Assessment (recommendation)**

- 10.5.1. 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 and conclusions. A final determination will be made by the Board.
- 10.5.2. 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.

10.5.3. Mitigation Measures

Prior to reviewing in detail, the potential specific impacts that could arise on the various European sites, within the Stage II Appropriate Assessment, I have first summarised below the range of main mitigation measures being proposed within the Proposed Scheme and referenced in tables 10-2 to 10-9 below of my assessment. Section 7.1.4 of the submitted NIS sets out the full suite and details of mitigation measures being incorporated/implemented during the construction and operational phases of the Proposed Scheme to avoid or reduce potential impacts on European Sites which have been developed in consideration of a range of standard best international practices. The mitigation measures referenced are summarised below (it should also be noted that the various mitigation measures are also set out in full in the submitted CEMP).

10.5.3.1. Measures to Protect Surface Water Quality during Construction:

- Specific measures to prevent the release of sediment over baseline conditions in the downstream receiving water environment, during the construction work. These measures 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.

- Weather conditions will be taken into account when planning construction activities to minimise risk of run-off from the site.
- Prevailing weather and environmental conditions will be considered prior to the pouring of cementitious materials for the works adjacent to any surface water drainage features, or drainage features connected to same. Pumped concrete will be monitored to ensure no accidental discharge. Mixer washings and excess concrete will not be discharged to existing surface water drainage systems. Concrete washout areas will be located remote from any surface water drainage features, to avoid accidental discharge to watercourses. Concrete trucks will not be washed out on site.
- Any fuels or chemicals (including hydrocarbons or any polluting chemicals) will be stored in a designated, secure bunded area(s) within the construction compound to prevent any seepage of potential pollutants into the local surface water network. These designated areas will be clearly sign-posted and all personnel on site will be made aware of their locations and associated risks.
- All mobile fuel bowsers shall carry a spill kit and operatives will have spill response training. All fuel containing equipment such as portable generators shall be placed on drip trays. All fuels and chemicals required to be stored on-site will be clearly marked. Care and attention will be taken during refuelling and maintenance operations. Particular attention will be paid to gradient and ground conditions, which could increase risk of discharge to waters.
- A register of all hazardous substances, which will either be used on site or expected to be present (in the form of soil and/or groundwater contamination) will be established and maintained.
- Response measures will be implemented to potential pollution incidents, an Environmental Incident Response Plan (EIRP) is included in Section 5.6 of the CEMP. Emergency procedures/precautions and spill kits will be available, and all staff appropriately trained.
- All trucks carrying excavated materials will have tarpaulin covers and wheel wash facilities will be provided.

- Any dewatering in areas of contaminated ground will be designed by the contractor to minimise mobilisation of contaminants.
- Implementation of measures to minimise waste and ensure correct handling, storage and disposal of same.
- The removal of any made ground material, which may be contaminated, from the construction site and transportation to an appropriate licenced facility shall be carried out in accordance with the Waste Management Act, best practice and relevant guidelines.
- A discovery procedure for contaminated material will be prepared and adopted by the appointed contractor prior to excavation works commencing on site which will detail how potentially contaminated material will be dealt with during excavations.
- Implementation of measures to minimise waste and ensure correct handling, storage and disposal of waste.
- All of the above measures implemented on site will be monitored throughout the duration of construction to ensure that they are working effectively, to implement maintenance measures if required/applicable and to address any potential issues that may arise.

10.5.3.2. Measures to Protect Surface Water Quality During Operation:

- Mitigation for the operational phase has been built into the design of the proposed scheme. The additional surface water from the overall net increase in impermeable area for the road corridor will be managed for the Proposed Scheme through a range of combination of oversized pipes, bio-retention areas and tree pits and additional permeable areas will also be provided by the softening of public realm along the route.
- Where no new paved areas are proposed the existing drainage network will be retained and utilised.
- The range of measures including SuDs installed during the construction phase will reduce both the volume and rate of surface waters discharging into the existing surface water drainage network.

- The maintenance regime for the drainage systems will be carried out by the Local Authorities and subject to their management procedures.

10.5.3.3. Measures to prevent the spread of non-Native Invasive Species to Downstream

European Sites during Construction:

- Pre-construction invasive species survey will be undertaken to confirm presence/absence of invasive species within footprint of the Proposed Scheme. Where invasives are identified the Non-Native Invasive Species Management Plan (ISMP - contained in the CEMP/Appendix III of NIS) will be implemented by appropriately qualified and trained personnel.
- The appointed contractor will adhere to control measures specified within the non-native ISMP throughout the construction phase of the Proposed Scheme and appropriate monitoring after the control measures have been implemented will be carried out.

10.5.3.4. Measures to prevent the Spread of non-Native Invasive Species to Downstream

European Sites during Operation:

- In the operational phase the Local Authorities will implement a maintenance and management regime subject to their management procedures, accordingly no additional mitigation is required.

10.6. **Relevant European sites:**

10.6.1. 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,
- Rockabill to Dalkey Island SAC,
- Lambay Island SAC,
- Howth Head Coast SPA
- Dalkey Islands SPA,
- Rockabill SPA,
- North Bull Island SPA,

- South Dublin Bay and River Tolka Estuary SPA,
- Ireland’s Eye SPA
- Malahide Estuary SPA,
- Baldoyle Bay SPA,
- Rogerstown Estuary SPA,
- Skerries Islands SPA,
- Lambay Island SPA
- North West Irish Sea cSPA, and
- The Murrrough SPA.

10.6.2. 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*”, and in tables 10-2 to 10-9 below.

10.6.3. Consideration of Individual Relevant European Sites

10.6.4. I have examined the Conservation Objectives Supporting Documents for the relevant European Sites listed above, available through the NPWS website (www.npws.ie).

10.6.5. Tables 10.2 - 10.9 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 and I have expanded on certain issues further in my report.

10.6.5.1. North Dublin Bay SAC [000206]

Table 10.2 below sets out the Qualifying Interests (QIs), Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on the European Site from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the North Dublin Bay SAC in the context of the Proposed Scheme.

Table 10.2: AA summary matrix for North Dublin Bay SAC

North Dublin Bay SAC [000206]

Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)

Summary of Appropriate Assessment

Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
1140 Mudflats and sandflats not covered by seawater at low tide	To maintain the favourable conservation condition in relation to habitat, community -extent/structure/distribution including extent and quality of the <i>Mytilus edulis</i> (common Mussel) dominated community, and conservation of the following community types in a natural condition: Fine sand to sandy mud with <i>Pygospio elegans</i> and Crangon crangon community complex; Fine sand with <i>Spio martinensis</i> community complex.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support.	Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.
1210 Annual vegetation of drift lines	Restore the favourable conservation condition in relation to habitat - extent/distribution/structure as well as the vegetation zonation and composition. Maintain presence of sea rocket (<i>Cakile maritima</i>), sea sandwort (<i>Honckenya peploides</i>), prickly saltwort (<i>Salsola kali</i>) and oraches (<i>Atriplex</i> spp.), while maintaining negative indicator species to represent <5%.	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	The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.
1310 Salicornia and other annuals colonising mud and sand.	Restore the favourable conservation condition in relation to habitat - extent/distribution/structure, vegetation – structure /zonation/composition and no significant expansion of common cordgrass.		
1330 Atlantic salt meadows (Glaucopuccinellietalia maritimae)	To maintain the favourable conservation condition in relation to habitat, extent/structure, vegetation structure –		

North Dublin Bay SAC [000206]

Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)

Summary of Appropriate Assessment

Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
1410 Mediterranean salt meadows (Juncetalia maritimi)	zonation/height/cover /composition and no significant expansion of common cordgrass		
2110 Embryonic shifting dunes	To restore the favourable conservation condition in relation to habitat – extent/distribution/physical structure/vegetation structure and composition.	Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay. 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	The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.
2120 Shifting dunes along the shoreline with Ammophila arenaria ('white dunes')			
2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes')			
2190 Humid dune slacks			
1395 Petalophyllum ralfsii (Petalwort)	To maintain the favourable conservation condition in relation to distribution/ population size/ habitat / hydrological conditions/ vegetation structure.		

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this Proposed Scheme alone or in combination with other plans and projects will not adversely affect the integrity of this European site with no residual impacts.

The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on North Dublin Bay SAC due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded for North Dublin Bay SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.

North Dublin Bay SAC [000206]

Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)

Summary of Appropriate Assessment

Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
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An invasive species (Japanese Knotweed) has been identified proximate to the Proposed Scheme, this could spread or be introduced to downstream terrestrial habitats. The spread of invasive species is to be controlled via mitigation measures, including pre-confirmatory surveys, adequately treating/removing invasive plants prior to construction being carried out and appropriate management and monitoring in accordance with the Invasive Species Management Plan appended to the NIS within the CEMP. These mitigation measures will ensure invasive species are not spread.

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

The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the North Dublin Bay SAC and adverse effects on site integrity can be excluded.

10.6.5.2. South Dublin Bay SAC [000210]

Table 10.3 below sets out the Qualifying Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on the European Site from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the South Dublin Bay SAC in the context of the Proposed Scheme.

Table 10.3: AA summary matrix for South Dublin Bay SAC

South Dublin Bay SAC [000210]

Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)

Summary of Appropriate Assessment

Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary - inserted)	Potential adverse effects	Mitigation measures
[1140] 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 <i>Angulus tenuis</i> .	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 affect the quality of the intertidal habitats and the fauna communities they support.	Detailed pollution control Measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality.
[1210] Annual vegetation of drift lines	Restore the favourable conservation condition in relation to habitat – extent /distribution, physical and vegetation structure as well as the vegetation zonation and composition.	The introduction and/or spread of invasive species 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.	The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.
[1310] Salicornia and other annuals colonising mud and sand	Restore the favourable conservation condition in relation to habitat - extent/ distribution/ physical structure, vegetation structure and zonation/composition		

South Dublin Bay SAC [000210]

Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)

Summary of Appropriate Assessment

Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary - inserted)	Potential adverse effects	Mitigation measures
[2110] Embryonic shifting dunes	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition.	<p>Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.</p> <p>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</p>	<p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.</p>

Overall Conclusion: Integrity test

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

The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on South Dublin Bay SAC due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded for South Dublin Bay SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.

An invasive species (Japanese Knotweed) has been identified proximate to the Proposed Scheme, this could spread or be introduced to downstream terrestrial habitats. The spread of invasive species is to be controlled via mitigation measures, including pre-confirmatory surveys, adequately treating/removing invasive plants prior to construction being carried out and appropriate management

South Dublin Bay SAC [000210]			
Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary - inserted)	Potential adverse effects	Mitigation measures
<p>and monitoring in accordance with the Invasive Species Management Plan appended to the NIS within the CEMP. These mitigation measures will ensure invasive species are not spread.</p> <p>Based on the information submitted, surveys carried out and analysis provided I am satisfied that no uncertainty remains.</p> <p>The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the South Dublin Bay SAC and adverse effects on site integrity can be excluded.</p>			

10.6.5.3. Rockabill to Dalkey Island SAC [000300]

Table 10.4 below sets out the Qualifying Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on Rockabill to Dalkey Island SAC [000202] from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the SAC in the context of the Proposed Scheme.

Table 10.4: AA summary matrix for Rockabill to Dalkey Island SAC

Rockabill to Dalkey Island SAC [003000]			
Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)			
Summary of Appropriate Assessment			
Qualifying Interests (QI)	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
[1170] Reefs	Maintain favourable conservation condition in relation to habitat area, distribution and community structure.	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect	Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of

		the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats	surface water quality.
[1351] Harbour porpoise (Phocoena phocoena)	Maintain favourable conservation condition in relation to access to suitable habitat and prevention of disturbance by human activity.	Accidental (construction or operational) pollution event could potentially affect the quality of the intertidal /marine habitats which support harbour porpoise and fish prey species.	
<p>Overall conclusion: Integrity test</p> <p>The applicant determined that following the implementation of mitigation measures the construction and operation of this Proposed Scheme alone or in combination with other plans and projects will not adversely affect the integrity of this European site.</p> <p>The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on Rockabill to Dalkey Island SAC due to this hydrological (and downstream) connection. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.</p> <p>Based on the information provided and my review I am satisfied that adverse effects can be excluded for the Rockabill to Dalkey Island SAC. Based on the information submitted, surveys carried out, and analysis provided I am satisfied that no uncertainty remains.</p> <p>The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the Rockabill to Dalkey Island SAC and adverse effects on site integrity can be excluded.</p>			

10.6.5.4. Lambay Island SAC [000204]

Table 10.5 below sets out the Qualifying Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on Lambay Island SAC [000204] from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the SAC in the context of the Proposed Scheme.

Table 10.5 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 feature	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
[1170] Reefs	Maintain favourable conservation condition in relation to habitat area/distribution/community structure; intertidal reef community complex and Laminaria-dominated community complex in natural condition.	No. There is no pathway for impacts to occur on any habitats associated with this SAC as it is located a significant distance from the Proposed Scheme on the north side of the Howth peninsula.	N/A
[1230] Vegetated sea cliffs of the Atlantic and Baltic coast	Maintain favourable conservation condition in relation to habitat length; no decline in habitat distribution; no alteration to natural functioning of geomorphological and hydrological processes; maintain range of sea cliff habitat zonations; maintain structural variation within sward; maintain range of Irish Sea Cliff Survey species; negative indicator species less than 5%; and cover of bracken and woody species on grassland/heath less than 10% and 20% respectively	No. There is no pathway for impacts to occur on any habitats associated with this SAC as it is located a significant distance from the Proposed Scheme on the north side of the Howth peninsula.	N/A
[1351] Phocoena phocoena (Harbour Porpoise)	Maintain favourable conservation condition in relation to access to suitable habitat and prevention of disturbance by human activity. (Adopted from Rockabill to Dalkey above as site specific measures not available at time of writing)	An accidental pollution event of sufficient scale during construction or operation (either alone or cumulatively) could potentially affect downstream waters and the quality of the intertidal /marine habitats which support the harbour porpoise,	Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water
[1364] Halichoerus grypus (Grey Seal)	Maintain the favourable conservation condition of this species, range should not be restricted by artificial barriers to site use;		

Lambay Island SAC [000204]Detailed Conservation Objectives available: [ConservationObjectives.rdl \(npws.ie\)](#)**Summary of Appropriate Assessment**

Qualifying feature	Interest	Conservation Objectives Targets and attributes (summary- inserted)	Potential adverse effects	Mitigation measures
		breeding, moult and resting haul-out sites maintained in natural condition; and human activities should occur at levels that do not adversely affect the species at the site.	grey seal, and the harbour seal species.	quality in Dublin Bay
[1365] Phoca vitulina (Harbour Seal)		Maintain the favourable conservation of this species, range should not be restricted by artificial barriers to site use; breeding, moult, resting and haul-out sites maintained in natural condition; and human activities should occur at levels that do not adversely affect the species at the site.		

Overall conclusion: Integrity test

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

Based on the information provided and my review, I am satisfied that adverse effects can be excluded for Lambay Island SAC. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of the hydrological links (watercourses, drains and pipework) to Dublin Bay.

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

The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the Lambay Island SAC and adverse effects on site integrity can be excluded.

10.6.5.5. South Dublin Bay and River Tolka Estuary SPA [004024]

Table 10.6 below sets out the Special Conservation Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on South Dublin Bay and River Tolka Estuary SPA from the Proposed

Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the SPA in the context of the Proposed Scheme.

Table 10.6: AA summary matrix for South Dublin Bay and River Tolka Estuary SPA [004024]

South Dublin Bay and River Tolka Estuary SPA [004024]		
Detailed Conservation Objectives available: ConservationObjectives.rdl (npws.ie)		
Special Conservation Interests (SCI)		
<p>[A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>), [A130] Oystercatcher (<i>Haematopus ostralegus</i>), [A137] Ringed Plover (<i>Charadrius hiaticula</i>), [A141] Grey Plover (<i>Pluvialis squatarola</i> - is proposed for removal from the list of SCI's for the site so no site specific conservation objective is included for the species), [A143] Knot (<i>Calidris canutus</i>), [A144] Sanderling (<i>Calidris alba</i>), [A149] Dunlin (<i>Calidris alpina</i>), [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>), [A162] Redshank (<i>Tringa totanus</i>), [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>).</p>		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>Maintain favourable conservation condition of the species in the SPA in terms of population trend (stable or increasing) and distribution (no significant decrease in the range, timing of intensity of use other than that occurring from natural patterns of variation)</p>	<p>An accidental (construction or operational) pollution event during 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 SCI 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.</p> <p>The introduction and/or spread of non-native 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.</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p> <p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.</p>
Special Conservation Interests (SCI)		
<p>Roseate Tern (<i>Sterna dougallii</i>) [A192], Common Tern (<i>sterna hirundo</i>) [A193], Artic Tern (<i>Sterna paradisaea</i>) [A194]</p>		

Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>Maintain the favourable conservation condition of the species in the SPA in terms of no significant decline in passage population, distribution of roosting areas, prey biomass available, no significant increase in barriers to connectivity and human activities should not occur at levels that would cause adverse effects. As well as targeting no significant decline in roosting areas, breeding colonies, productivity rate, and breeding population abundance in relation to the Common Tern.</p>	<p>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 and quantity of fish prey as well as the quality of and suitability of roosting sites within this SPA. This could potentially affect the use of habitat areas by SCI species.</p> <p>The introduction and/or spread of non-native 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.</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p> <p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.</p>
<p>Special Conservation Interests (SCI)</p> <p>[A999] Wetland and Water Birds</p>		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>Maintain the favourable conservation condition of the wetland habitat in the SPA as a resource for the regularly occurring migratory water birds that use it. In terms of its extent not falling significantly below the estimated/established/map ped area of 2,192ha other than natural patterns of variation.</p>	<p>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 that support the SCI bird species. Potentially affecting the use of habitat areas by birds and have long-term effects on the SPA populations.</p> <p>The introduction and/or spread of non-native invasive species to downstream European sites could potentially result in the degradation</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p> <p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above</p>

	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.	will prevent the introduction and/or spread of invasive species.
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Overall conclusion: Integrity test

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

The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on South Dublin Bay and River Tolka Estuary SPA due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded for the SPA. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.

There is no potential for impacts to occur on inland feeding SCI populations associated with this SPA in light of their conservation objectives from habitat loss/fragmentation notwithstanding the short-term loss of 0.466ha of GA2 habitat suitable to support breeding gull and wintering bird species (e.g. light-bellied Brent goose) at the Liffey Gaels GAA Club because:

- Survey results indicate that the site is not a significant foraging resource, and its temporary loss will not result in any likely significant effects of the conservation status of the light bellied Brent goose.
- Numbers of black-headed gull recorded at this site are not significant in the context of national and international populations thus significant effects on this species as a result of habitat loss can be excluded.
- The absence/low frequency of occurrence of SCI bird species on lands located within the footprint of the Proposed Scheme demonstrates that these species do not regularly use or rely on the lands for roosting/foraging, and they are likely to use other suitable sites availing in the wider area on a similar or more regular basis.
- The land-take will be temporary as the subject area will be used as a temporary construction compound and returned to GA2 habitat following completion of works.

The spread of invasive species is to be controlled via mitigation measures, including pre-confirmatory surveys, adequately treating/removing invasive plants prior to construction being carried out and appropriate management and monitoring in accordance with the Invasive Species Management Plan appended to the NIS within the CEMP. These mitigation measures will ensure invasive species are not spread and habitat degradation as a result of introducing invasive species will not arise.

Disturbance and displacement impacts from noise/vibration and human activity would not be expected to arise beyond a distance of 300m from the Proposed Scheme. I do not consider that the operational phase will result in significant changes to existing noise levels given the urban nature of the location of the Proposed Scheme and the fact that it is already functions as a busy transport corridor. No significant disturbance or displacement effects will arise on inland feeding/roosting sites of SCI bird species associated within the designated site due to: the low numbers of species recorded in surveys using the Liffey Gaels pitch which suggest this is not a regularly used or relied upon site, the availability of large areas of foraging/roosting habitat in the wider locality including in closer proximity to the SPA, and the temporary nature of the construction of the Proposed Scheme.

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

The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the South Dublin Bay and River Tolka Estuary SPA and adverse effects on site integrity can be excluded.

10.6.5.6. North Bull Island SPA [004006] and North West Irish Sea cSPA [004014]

Table 10.7 below sets out the Special Conservation Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on the designated site from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the North Bull Island SPA in the context of the Proposed Scheme.

Table 10.7: AA summary matrix for North Bull Island SPA

North Bull Island SPA [004006],		
Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI)		
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Teal (<i>Anas crecca</i>) [A052], Pintail (<i>Anas acuta</i>) [A054], Shoveler (<i>Anas clypeata</i>) [A056], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Knot (<i>Calidris canutus</i>) [A143], Sanderling (<i>Calidris alba</i>) [A144], Dunlin (<i>Calidris alpina</i>) [A149], Black-tailed Godwit (<i>Limosa limosa</i>) [A157], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Curlew (<i>Numenius arquata</i>) [A160], Redshank (<i>Tringa totanus</i>) [A162], Turnstone (<i>Arenaria interpres</i>) [A169], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Wetland and Waterbirds [A999].		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Maintain the favourable conservation condition of the relevant species according to the following trends: long term pop trend stable or increasing, and no significant decrease in distribution range, timing or intensity of use of areas by all the SCI species other than occurring from natural patterns of variation.	An accidental (construction or operational) pollution event during 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 SCI 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 as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.

<p>In terms of Wetlands [A999] The conservation objective to maintain the favourable conservation condition of the habitat in the SPA. The target is that the permanent area occupied by the wetland habitat should be stable and not significantly less than the estimated area of habitat (1,713ha) other than that occurring from natural patterns of variation.</p>	<p>The introduction and/or spread of non-native 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.</p>	<p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.</p>
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North-West Irish Sea cSPA [004014]

Detailed Conservation Objectives available: <https://www.npws.ie>

Special Conservation Interests (SCI)

Red-throated Diver (*Gavia stellata*) [A001], Great Northern Diver (*Gavia immer*) [A003], Fulmar (*Fulmarus glacialis*) [A009], Manx Shearwater (*Puffinus puffinus*) [A013], Cormorant (*Phalacrocorax carbo*) [A017], Shag (*Phalacrocorax aristotelis*) [A018], Common Scoter (*Melanitta nigra*) [A065], Little Gull (*Larus minutus*/*Hydrocoloeus minutus*) [A177/A862], Black-headed Gull (*Chroicocephalus ridibundus*) [A179], Common Gull (*Larus canus*) [A182], Lesser Black-backed Gull (*Larus fuscus*) [A183], Herring Gull (*Larus argentatus*) [A184], Great Black-backed Gull (*Larus marinus*) [A187], Kittiwake (*Rissa tridactyla*) [A188], Roseate Tern (*Sterna dougallii*) [A192], Common Tern (*Sterna hirundo*) [A193], Arctic Tern (*Sterna paradisaea*) [A194], Little Tern (*Sterna albifrons*) [A195], Guillemot (*Uria aalge*) [A199], Razorbill (*Alca torda*) [A200], Puffin (*Fratercula arctica*) [A204]

Summary Of Appropriate Assessment

Conservation Objectives Targets and attributes (summary)	Potential Adverse Effects	Mitigation Measures
<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this cSPA, considering the following targets: no significant decline, stable or increasing population trends, sufficient number of locations, area and availability of suitable habitat to support the population, sufficient number of locations, area of suitable habitat and available forage biomass to support population target, intensity, frequency, timing and duration of</p>	<p>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 cSPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the cSPA populations.</p> <p>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</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p> <p>The mitigation measures described in Section 7.1.4 of the NIS (para's 152 – 157) and summarised in section 10.5.3.3 and 10.5.3.4 above will prevent the introduction and/or spread of invasive species.</p>

disturbance, barriers not significantly impacting populations access to the SPA or other ecologically important sites outside the SPA.	habitat areas by birds and have long-term effects on the cSPA populations.	
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Overall conclusion: Integrity test

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

The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on North Bull Island SPA and the North West Irish Sea cSPA due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded for the SPA and cSPA. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.

There is no potential for impacts to occur on inland feeding SCI populations associated with these SPAs in light of their conservation objectives from habitat loss/fragmentation notwithstanding the short-term loss of 0.466ha of GA2 habitat suitable to support breeding gull and wintering bird species (e.g. light-bellied Brent goose) at the Liffey Gaels GAA Club because:

- Survey results indicate that the site is not a significant foraging resource, and its temporary loss will not result in any likely significant effects of the conservation status of the light bellied Brent goose.
- Numbers of black-headed gull recorded at this site are not significant in the context of national and international populations thus significant effects on this species as a result of habitat loss can be excluded.
- The absence/low frequency of occurrence of SCI bird species on lands located within the footprint of the Proposed Scheme demonstrates that these species do not regularly use or rely on the lands for roosting/foraging, and they are likely to use other suitable sites available in the wider area on a similar or more regular basis.
- The land-take will be temporary as the subject area will be used as a temporary construction compound and returned to GA2 habitat following completion of works.

The spread of invasive species is to be controlled via mitigation measures, including pre-confirmatory surveys, adequately treating/removing invasive plants prior to construction being carried out and appropriate management and monitoring in accordance with the Invasive Species Management Plan appended to the NIS within the CEMP. These mitigation measures will ensure invasive species are not spread and habitat degradation as a result of introducing invasive species will not arise.

Disturbance and displacement impacts from noise/vibration and human activity would not be expected to arise beyond a distance of 300m from the Proposed Scheme. I do not consider that the operational phase will result in significant changes to existing noise levels given the urban nature of the location of the Proposed Scheme and the fact that it is already functions as a busy transport corridor. No significant disturbance or displacement effects will arise on inland feeding/roosting sites of SCI bird species associated within the designated site due to: the low numbers of species recorded in surveys using the Liffey Gaels pitch which suggest this is not a regularly used or relied upon site, the availability of large areas of foraging/roosting habitat in the wider locality including in closer proximity to the SPA, and the temporary nature of the construction of the Proposed Scheme.

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

The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the North Bull Island SPA nor the North West Irish Sea cSPA and adverse effects on site integrity can be excluded.

10.6.5.7. Dalkey Islands SPA [004172], Howth Head Coast SPA [004113], and Rockabill SPA [004014]

Table 10.8 below sets out the Special Conservation Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on the listed SPAs from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the SPAs in the context of the Proposed Scheme.

Table 10.8: AA Summary matrix for Dalkey Islands SPA, Howth Head Coast SPA, and Rockabill SPA.

Dalkey Islands SPA [004172]			
Detailed Conservation Objectives available: https://www.npws.ie			
Special Conservation Interests (SCI)			
Roseate Tern (<i>Sterna dougallii</i>) [A192], Common Tern (<i>sterna hirundo</i>) [A193], Artic Tern (<i>Sterna paradisaea</i>) [A194]			
Summary of Appropriate assessment			
Conservation Targets (summary)	Objectives and attributes	Potential adverse effects	Mitigation measures
To maintain or restore the favourable conservation condition of the bird species listed as SCI for this SPA. (There are no site-specific conservation objectives for this site, accordingly the NIS considers the attributes and targets available for the relevant three tern species available in the South Dublin Bay and River Tolka Estuary SPA, including passage/breeding populations, distribution, prey biomass availability, no significant increase in barriers to		An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the quality and suitability of roosting sites within 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 as outlined in within section 7.1.4 (para.'s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.

connectivity, abundance, productivity rate, distribution, prey availability, barriers to connectivity and disturbance of breeding site).		
Howth Head Coast SPA [004113]		
Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI)		
Kittiwake (<i>Rissa tridactyla</i>) [A188]		
Summary of Appropriate assessment		
Conservation Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>(There are no site-specific conservation objectives for this site, accordingly the NIS considers the attributes and targets available for Kittiwake available in the Saltee islands SPA, relating to breeding population abundance, productivity rate, distribution, prey availability, barriers to connectivity and disturbance of breeding site).</p>	<p>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/quantity of fish prey species and the quality and suitability of roosting sites within the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p>
Rockabill SPA [004014]		
Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI)		
Purple Sandpiper (<i>Calidris maritima</i>) [A148], Roseate Tern (<i>Sterna dougallii</i>) [A192], Common Tern (<i>Sterna hirundo</i>) [A193], Arctic Tern (<i>Sterna paradisaea</i>) [A194]		
Summary Of Appropriate Assessment		
Conservation Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>In relation to the Purple Sandpiper long-term population trend stable or increasing, and no significant decrease in the range, timing or intensity of use of areas other than that occurring from natural patterns of variation.</p>	<p>There is no pathway for impacts to occur on the Purple sandpiper due to the separation distance (by a large marine waterbody) from the Proposed Scheme and its location on the far side of the Howth Peninsula.</p>	

<p>In relation to the three tern species no significant decline in - breeding population abundance, fledged young per breeding pair, distribution of breeding colonies, prey biomass available. No significant to barriers to connectivity, and human activities should occur at levels that do not adversely affect the breeding populations.</p>	<p>In relation to the tern 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/quantity of fish prey species and the quality and suitability of roosting sites within the SPA.</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p>
<p>Overall conclusion: Integrity test</p> <p>The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this Proposed Scheme alone or in combination with other plans and projects will not adversely affect the integrity of these European sites in view of their conservation objectives.</p> <p>The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on the SPAs due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded for the SPA. Adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.</p> <p>Based on the information provided and mitigation measures included in relation to protection of water, I am satisfied that adverse effects can be excluded for the listed SPAs and accordingly no effects of significance will occur.</p> <p>Therefore, based on the information submitted, surveys carried out, and analysis provided I am satisfied that no uncertainty remains.</p> <p>The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of Dalkey Islands SPA, Howth Head Coast SPA, Rockabill SPA, and adverse effects on these sites' integrity can be excluded.</p>		

10.6.5.8. **Baldoye Bay SPA [004016], Malahide Estuary SPA [004025], Rogerstown Estuary SPA [004015], Skerries Islands SPA [004122], Ireland's Eye SPA [004117], Lambay Island SPA [004069] and The Murrough SPA [004186]**

Table 10.9 below sets out the Special Conservation Interests, Conservation Objectives (summary of targets and attributes) and potential adverse effects that could arise on the listed SPAs from the Proposed Scheme, the relevant measures being incorporated to mitigate and avoid effects are also listed and an overall conclusion presented in relation to the integrity of the SPAs in the context of the Proposed Scheme.

Table 10.9: AA Summary matrix for Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA and The Murrrough SPA.

Baldoyle Bay SPA [004016] Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI) Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Wetlands and Waterbirds [A999].		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Maintain the favourable conservation condition of the species according to the following targets - long term population trend stable or increasing and no significant decrease in range, timing or intensity of use of areas other than that occurring from natural patterns.	An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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 as outlined in within section 7.1.4 (para’s 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay
In terms of Wetlands, it is the conservation objective to maintain the favourable conservations condition of the habitat in the SPA. The target is that the permanent area occupied by the wetland habitat should be stable and not significantly less than the estimated area of habitat (263ha) other than that occurring from natural patterns of variation.	No potential impacts can occur on habitats associated with Baldoyle Bay SPA due to its separation distance to the Proposed Scheme, the location of the SPA (north of Howth Head) and the lack of a direct hydrological connection.	N/A
Malahide Estuary SPA [004025] Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI) Great Crested Grebe (<i>Podiceps cristatus</i>) [A005], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Pintail (<i>Anas acuta</i>) [A054], Goldeneye (<i>Bucephala</i>		

clangula) [A067], Red-breasted Merganser (*Mergus serrator*) [A069], Oystercatcher (*Haematopus ostralegus*) [A130], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157] Redshank (*Tringa tetanus*) [A162], Wetland and Waterbirds [A999]

Summary of Appropriate Assessment

Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Maintain the favourable conservation condition of the species in the SPA defined by the following targets: long term population trend stable or increasing, and no significant decrease in range, timing or intensity of use of areas.	An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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 as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.
In relation to Wetland Habitat area, the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765ha, other than that occurring from natural patterns of variation	No potential impacts can occur on habitats associated with Malahide SPA due to its separation distance to the Proposed Scheme, the location of the SPA (north of Howth Head) and the lack of a direct hydrological connection.	N/A

Ireland's Eye SPA [004117]
Detailed Conservation Objectives available: <https://www.npws.ie>

Special Conservation Interests (SCI)
 Cormorant (*Phalacrocorax carbo*) [A017], Herring Gull (*Larus argentatus*) [A184], Kittiwake (*Rissa tridactyla*) [A188], Guillemot (*Uria aalge*) [A199], Razorbill (*Alca torda*) [A200].

Summary of Appropriate assessment

Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
To maintain or restore the favourable conservation condition of the bird species listed	An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An	Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised

<p>as Special Conservation Interests for this SPA.</p> <p>As there are no site-specific conservation objectives for this SPA the NIS has considered targets based on the specific objectives available for Rogerstown Estuary. These targets relate to stable or increasing population trends, and no significant decrease in the range. Timing and intensity of use of areas by SCI species other than that occurring from natural patterns of variation.</p>	<p>accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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.</p>	<p>above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay</p>
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Rogerstown Estuary SPA [004015]

Detailed Conservation Objectives available: <https://www.npws.ie>

Special Conservation Interests (SCI)

Greylag Goose (*Anser anser*) [A043], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Shoveler (*Anas clypeata*) [A056], Oystercatcher (*Haematopus ostralegus*) [A130], Ringed Plover (*Charadrius hiaticula*) [A137], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Redshank (*Tringa totanus*) [A162], Wetland and Waterbirds [A999]

Summary of Appropriate Assessment

Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA, considering the following targets: stable or increasing population trends, and no significant decrease in the range, timing and intensity of use of areas by SCI species other than that occurring from natural patterns of variation.</p>	<p>An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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.</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p>
<p>In relation to Wetland Habitat area, the permanent area occupied by the wetland</p>	<p>No potential impacts can occur on habitats associated with Malahide SPA due to its separation distance to the Proposed Scheme, the location of the</p>	<p>N/A</p>

habitat should be stable and not significantly less than the area of 646ha, other than that occurring from natural patterns of variation	SPA (north of Howth Head) and the lack of a direct hydrological connection.	
Skerries Islands SPA [004122]		
Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI)		
Cormorant (<i>Phalacrocorax carbo</i>) [A017], Shag (<i>Phalacrocorax aristotelis</i>) [A018], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Purple Sandpiper (<i>Calidris maritima</i>) [A148], Turnstone (<i>Arenaria interpres</i>) [A169], Herring Gull (<i>Larus argentatus</i>) [A184]		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Maintain or restore the favourable conservation condition of the SCI bird species listed as Special Conservation Interests for this SPA	An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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 as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.
Lambay Island SPA [004069]		
Detailed Conservation Objectives available: https://www.npws.ie		
Special Conservation Interests (SCI)		
Fulmar (<i>Fulmarus glacialis</i>) [A009], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Shag (<i>Phalacrocorax aristotelis</i>) [A018], Greylag Goose (<i>Anser anser</i>) [A043], Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183], Herring Gull (<i>Larus argentatus</i>) [A184], Kittiwake (<i>Rissa tridactyla</i>) [A188], Guillemot (<i>Uria aalge</i>) [A199], Razorbill (<i>Alca torda</i>) [A200], Puffin (<i>Fratercula arctica</i>) [A204]		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
To maintain or restore the favourable conservation condition of the bird species listed	An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their	Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151)

<p>as Special Conservation Interests for this SPA.</p> <p>(As there are no site-specific conservation objectives for this SPA the NIS has considered targets based on the specific objectives available for Rogerstown Estuary. These targets relate to stable or increasing population trends, and no significant decrease in the range. Timing and intensity of use of areas by SCI species other than that occurring from natural patterns of variation.)</p>	<p>core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the 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.</p>	<p>of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay.</p>
<p>The Murrrough SPA [004186]</p> <p>Detailed Conservation Objectives available: https://www.npws.ie</p>		
<p>Special Conservation Interests (SCI)</p> <p>Red-throated Diver (<i>Gavia stellata</i>) [A001], Greylag Goose (<i>Anser anser</i>) [A043], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Wigeon (<i>Anas penelope</i>) [A050], Teal (<i>Anas crecca</i>) [A052], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Herring Gull (<i>Larus argentatus</i>) [A184], Little Tern (<i>Sterna albifrons</i>) [A195], Wetland and Waterbirds [A999]</p>		
<p align="center">Summary of Appropriate Assessment</p>		
<p>Conservation Objectives Targets and attributes (summary-inserted)</p>	<p>Potential adverse effects</p>	<p>Mitigation measures</p>
<p>To maintain or restore the favourable conservation condition of the SCI bird species.</p> <p>There being no site-specific conservation objectives available the submitted NIS used objectives and targets for these species in other SPA²⁴s and considered population trend - stable or increasing, range/timing</p>	<p>An accidental pollution event during construction could affect surface water downstream in Dublin Bay which SCI bird species could use outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality/quantity of fish prey species and the intertidal/coastal habitats that support the special conservation interest bird species of the SPA. This could potentially affect the use of</p>	<p>Detailed pollution control measures to protect water quality as outlined in within section 7.1.4 (para's 144 – 151) of the NIS and summarised above in Section 10.5.3.1 and 10.5.3.2 of this Report will ensure protection of surface water quality in Dublin Bay</p>

²⁴ The Raven SPA [004019]; Rogerstown Estuary SPA [004015]; South Dublin Bay and River Tolka Estuary SPA; [004024]; Wexford Harbour and Slobs SPA [004076]; North Bull Island SPA [004006]; and Boyne Estuary SPA [004080]

<p>& intensity of use - not significantly decreasing, other than that occurring from natural patterns of variation.</p>	<p>habitat areas by birds and have long-term effects on the SPA populations.</p>	
<p>To maintain or restore the favourable conservation condition of the wetland habitat at the SPA as a resource for the regularly occurring migratory waterbirds that utilise it</p>	<p>No potential impacts can occur on habitats associated with the Murrough SPA due to its separation distance to the Proposed Scheme (in excess of 28km distant), the location of the SPA (significantly south of Dublin Bay) and the lack of a direct hydrological connection.</p>	<p>N/A</p>
<p>Overall conclusion: Integrity test</p> <p>The applicant determined that following the implementation of mitigation measures the construction and operation of this Proposed Scheme alone or in combination with other plans and projects will not adversely affect the integrity of the listed European sites (i.e. Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA and The Murrough SPA).</p> <p>The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey (Liffey_180 and Liffey_190), River Camac (Camac_040), Liffey Estuary Upper and Liffey Estuary Lower, as well as a network of interconnecting and established surface or combined surface/sewer pipes, therefore, there is potential for impacts on the listed SPAs due to this hydrological (and downstream) connection. Based on the information provided and my review, I am satisfied that adverse effects can be excluded and adverse effects from water contamination and sediment release can be effectively prevented by mitigation measures ensuring the protection of Dublin Bay.</p> <p>There is no potential for impacts to occur on inland feeding SCI populations associated with these SPAs in light of their conservation objectives from habitat loss/fragmentation, notwithstanding the short-term loss of 0.466ha of GA2 habitat suitable to support breeding gull and wintering bird species (e.g. light-bellied Brent goose) at the Liffey Gaels GAA Club because:</p> <ul style="list-style-type: none"> ▪ Survey results indicate that the site is not a significant foraging resource, and its temporary loss will not result in any likely significant effects of the conservation status of the light bellied Brent goose (for the relevant SPAs for which this is an SCI). ▪ Numbers of black-headed gull recorded at this site are not significant in the context of national and international populations thus significant effects on this species as a result of habitat loss can be excluded (for the relevant SPAs for which this is an SCI). ▪ The absence/low frequency of occurrence of SCI bird species on lands located within the footprint of the Proposed Scheme demonstrates that these species do not regularly use or rely on the lands for roosting/foraging, and they are likely to use other suitable sites availing in the wider area on a similar or more regular basis. ▪ The land-take will be temporary as the subject area will be used as a temporary construction compound and returned to GA2 habitat following completion of works. <p>Disturbance and displacement impacts from noise/vibration and human activity would not be expected to arise beyond a distance of 300m from the Proposed Scheme. I do not consider that the operational phase will result in significant changes to existing noise levels given the urban nature of the location of the Proposed Scheme and the fact that it is already functions as a busy transport corridor. No significant disturbance or displacement effects will arise on inland feeding/roosting sites of SCI bird species associated within the designated sites due to: (a) the low numbers of species recorded in surveys using the Liffey Gaels pitch which suggest this is not a regularly used or relied upon site, (b) the availability</p>		

of large areas of foraging/roosting habitat in the wider locality including in closer proximity to the SPAs, and (c) the temporary nature of the construction of the Proposed Scheme.

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

The Proposed Scheme would not delay or prevent the attainment of the Conservation objectives of the Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA, accordingly adverse effects on these site's integrity can be excluded.

10.7. Potential for Adverse effects

10.7.1. At this stage it is important to note that the Proposed Scheme does not overlap with any designated European Sites. Furthermore, it should be noted that I consider that the Proposed Scheme will not give rise to habitat degradation from air-quality in relation to any European Sites as there are none within the relevant Zone of Influence (i.e. 50m from construction works, 500m of construction compound, and 200m of operations). Similarly, habitat degradation from hydrogeological impacts will not arise as the ZOI of the Proposed Scheme does not extend to any relevant groundwater dependent ecosystems linked to a designated site.

10.7.2. As outlined in each of the tables above (and discussed individually within the 'Overall Conclusion: Integrity Test' of each table) there is potential for adverse effects to arise on European sites from the proposed scheme due to:

- Habitat Loss and Fragmentation.

While no works are proposed within any designated sites the Zone of Influence (ZOI) of this impact is potentially any habitat area within or crossed by the Proposed Scheme boundary that lies within/adjacent to Dublin Bay or potential ex-situ sites supporting SCI bird species. Potentially affected sites are Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, North West Irish Sea cSPA and The Murrough SPA.

The consideration of this potential impact on these sites is set out in the individual conclusions in tables 10.6, 10.7 and 10.9 above.

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

The ZOI of this impact is potentially any wetland, coastal or marine habitat downstream of any watercourse crossings or drainage outfalls and any aquatic or marine species within these habitats. Potentially affected sites are North Dublin Bay SAC, South Dublin Bay SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, North West Irish Sea cSCI, and The Murrrough SPA.

The consideration of this potential impact on these sites is set out in the individual conclusions in tables 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8 and 10.9 above.

- Habitat degradation as a result of introducing/spreading non-native invasive species.
- The ZOI of this impact is potentially any habitats crossed by, immediately adjacent to, or downstream of the Proposed Scheme, as well as those along any proposed construction routes (along which contaminated soil/material could be transported). Invasive species could potentially spread or be introduced to QI habitats and in particular coastal habitats not permanently or regularly inundated by sea water and/or habitats on which SCI species rely. Potentially affected sites are North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA, North West Irish Sea cSPA and South Dublin Bay and River Tolka Estuary SPA.
- The consideration of this potential impact on these sites is set out in the individual conclusions in tables 10.2, 10.3, 10.6, and 10.7 above.

- Disturbance and displacement impacts.

The ZOI for disturbance and displacement impacts from construction activities for wintering birds does not extend beyond 300m, while there are no designated sites within this ZOI other than one potential ex-situ feeding site

supporting SCI listed bird species. Potentially affected sites are Malahide Estuary SPA, Baldoyle Bay SPA, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, the North West Irish Sea cSPA and The Murrough SPA.

- The consideration of this potential impact on these sites is set out in the individual conclusions in tables 10.6, 10.7 and 10.9 above.

10.8. In combination Effects

- 10.8.1. In combination effects are examined within Section 9 of the submitted NIS. The proposed works were considered in combination with all plans and/or projects with the potential to impact upon the European sites outlined above (with the exception of the North-West Irish Sea cSPA which was not at that time designated – however, in the interests of clarity please note that the potential in-combination effects have been considered this report). The plans and projects considered include any national, regional and local land use plans or any existing or proposed projects (in place at the time of lodgement of the Proposed Scheme) that could potentially affect the ecological environment within the Zol of the Proposed Scheme. The Plans and Projects are considered for in-combination effects in Tables 33 (plans and programmes) and 34 (major projects) of the submitted NIS.
- 10.8.2. It is important to consider at this juncture that some concerns have been raised within the submissions received in relation to the potential for in-combination effects with regard to other projects in and around the city and along the route of the Proposed Scheme. In this regard I note that the Proposed Scheme is located in an urban location with a significant number and wide range of projects both permitted and proposed along the scheme corridor, in the vicinity, and in the wider area. I also note that while the submitted NIS has considered a range of projects individually in table 34 (including the other BusConnects proposals, SHD developments – which are discussed together under a single heading as well as various transport infrastructure proposals – Metrolink, DART+ and LUAS extensions and enhancements etc.) there are certain planning permissions/consents along the route that have not been specifically referenced and/or have been referenced in the

received submissions from third parties. In the interests of clarity, I wish to state that I have considered these consents as part of this assessment in relation to the potential to give rise to in-combination effects on the relevant European Sites. In particular, I have considered the context of the permissions that have issued for these projects (being located very much within a fully serviced urban environment), as well as the nature and character of the consents (which have considered all relevant environmental factors and included appropriate conditions/design/mitigation measures as relevant). I also note that all projects which have been permitted, or are currently proposed 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.) which include protections for Natura 2000 sites and areas of ecological sensitivity. In this regard all such projects are subject to the environmental protection policies included within the relevant land use plans and have all been, or will be, (in the case of current not-yet consented projects) subject to the full rigours of the relevant consenting and appropriate assessment processes. In this regard I have considered all relevant projects and am satisfied that all such projects have been considered in the context of potential for in combination effects on the relevant European Sites.

10.8.3. I note that the submitted NIS references several out of date plans in their list of plans and programmes, and I note that several have been updated such as the Dublin City Development Plan, 2022-2028, Fingal County Development Plan 2023-2029, and Wicklow County Development 2022-2028. However, no new issues arise within these development plans that would have a materially different impact upon the cumulative/in-combination impacts assessed by the applicant in reference to the previous development plans. The updated land use plans contain the following overarching plan level environmental protection policies:

- Dublin City Development Plan 2022-2028.
 - Policy GI9 states it is policy to conserve, manage protect and restore the favourable conservation condition of all QIs/SCIs of all designated SACs and SPAs.
- Fingal County Development Plan 2023-2029.

- Policies GINHP17 and GINHP12 ensure the protection of areas designated as Natura 2000 sites (i.e., SACs and SPAs)
- Wicklow County Development Plan 2022-2028
 - Objective CPO 17.4 refers to contributing as appropriate towards the protection of designated ecological sites including SACs and SPAs. Objective CPO 17.5 states that projects which give rise to adverse effects on the integrity of European sites will not be permitted, while CPO 17.6 ensures development proposals will contribute as appropriate towards protection and where possible enhancement of the European site network and goes on to state that all projects and plans arising from the Development Plan will be screened for the need to undertake AA.

These landuse plans (which were all subject to relevant Appropriate Assessment/Habitats Directive Reporting as part of the plan-preparation and adoption processes) continue to include objectives and policies to ensure the protection of European sites from any projects proposed within their functional areas (similar to the previous plans in these areas whose objectives and policies are listed in the submitted NIS). I also note the provisions of the Dublin City Biodiversity Plan 2021-2025 in this regard.

10.8.4. As a matter of clarity, I also note that given the recent new legislative provisions that have been enacted in relation to maritime consents for marine/coastal developments for both An Bord Pleanála and the relevant Marine Coastal Area Local Authorities, that the consideration of the National Marine Planning Framework, 2021 (NMPF) is pertinent. In this regard I note that the provisions of the NMPF require that any proposals must demonstrate that they can be implemented without adverse effects on the integrity of SACs or SPAs (Protected Marine Sites Policy 1 refers).

10.8.5. Considering the environmental protection policies included within these land use plans (similar to their predecessors) as well as the NMPF, and given that, as concluded previously above, on its own the Proposed Scheme will not give rise to adverse impact on the integrity of any European site I do not consider there will be any in-combination impacts arising. In this regard I note that all local area plans (currently in place and any forthcoming updated plans) must also fit within and follow

the framework policies and objectives established within the higher-level City and County Level landuse plans in the policy hierarchy.

10.8.6. A number of other individual projects/ developments in the immediate vicinity of the proposed scheme are also planned and are considered for the purposes of in-combination assessment. These have been listed under planning history in Section 4.17 of this report above and considered in conjunction with the projects listed in the submitted NIS for the purposes of in-combination assessment.

10.8.7. I am satisfied that the range of mitigation measures included in the Proposed Scheme will avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, I am also satisfied that other such projects within the zone of influence of the Proposed Scheme will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

10.8.8. The in-combination assessment within Section 9 of the NIS 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, in consideration of the mitigation measures being provided.

10.8.9. The implementation of, and adherence to, the policies and objectives of the relevant plans set out above (similar to the policies of the previous plans as set out in the submitted NIS) will ensure the protection of European sites across all identified potential impact pathways and will ensure any future project must undergo Screening for Appropriate Assessment and/or Appropriate Assessment, as required.

10.8.10. As the Proposed Scheme will not affect the integrity of European sites and given the protection afforded to European sites under the overarching land use plans and NMPF, 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.

10.9. **Mitigation Measures and Monitoring**

10.9.1. Full details of the mitigation measures are provided in the NIS, Construction Management Plan and Invasive Species Management Plan and summarised

previously above in Section 10.5.3 of this report. I consider that all measures proposed are implementable and will be effective in their stated aims. Furthermore, an Environmental Manager (EM) or equivalent role will be appointed by the contractor during the construction phase who will, inter-alia, co-ordinate the day-to-day management of environmental impacts and commitments, and also a suitably qualified Ecologist will be appointed to advise the contractor on ecological matters during construction.

10.10. Appropriate Assessment Conclusions

10.10.1. In screening the need for Appropriate Assessment, for the Proposed Scheme 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, Rockabill to Dalkey Islands SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA, the North West Irish Sea cSPA, and the Murrough SPA. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of these sites in view of their conservation objectives.

10.10.2. The Department of Housing, Local Government and Heritage submission to the project has noted the submitted NIS and the various mitigation measures included to prevent any pollution arising. In relation to the NIS the Department states:

“Through the employment of these mitigation measures it is considered any negative effects on the downstream European sites resulting from the laying out of the proposed bus corridor can be avoided. The Department accepts this conclusion that the employment of such measures during construction should prevent any negative impacts on European sites originating from the proposed scheme. In any case, because of distance and dilution effects, this Department considers that, even taking the precautionary principle into account, without mitigation only a small minority of the European sites listed in the NIS would actually be vulnerable to adverse effects as a result of water

borne pollution arising from the constriction of the bus corridor, namely the sites within Dublin Bay, including the South Dublin Bay Special Area of Conservation (SAC), North Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary Special Protection Area (SPA) and the North Bull Island SPA.”

- 10.10.3. 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, Rockabill to Dalkey Islands SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland’s Eye SPA, Lambay Island SPA, the North West Irish Sea cSPA, and the Murrough SPA.(The Board should note that although not included within the submitted NIS (as it had not yet been identified) the I have considered the North West Irish Sea cSPA within this AA).
- 10.10.4. The potential for adverse effects can be effectively ameliorated by both design-based and applied mitigation measures associated with the Proposed Scheme which will ensure that in-combination effects will not arise, this will be further assured through the legislative requirements in place in relation to the consideration of currently proposed and future developments in the vicinity.
- 10.10.5. 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 Scheme, combined with the proposed mitigation measures, adverse effects on the integrity North Dublin Bay SAC, South Dublin Bay SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland’s Eye SPA, Lambay Island SPA, the North West Irish Sea cSPA, and the Murrough SPA can be excluded with confidence in view of the conservation objectives of those sites.

10.11. Accordingly, following an appropriate assessment, it has been ascertained that the Proposed Scheme/Project, individually or in combination with other plans or projects would not adversely affect the integrity of the North Dublin Bay SAC, South Dublin Bay SAC, Rockabill to Dalkey Islands SAC, Lambay Island SAC, Howth Head Coast SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA, the North West Irish Sea cSPA, and the Murrough SPA, or any other European site, in view of the sites' Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects. This conclusion is based on the following:

- Full and detailed assessment of all aspects of the Proposed Scheme that could result in significant effects or adverse effects on European Sites within a zone of influence of the Proposed Scheme.
- Consideration of the conservation objectives and conservation status of qualifying interest species and habitat.
- A full assessment of risks to special conservation interest bird species and qualifying interest habitats and species.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.

The Proposed Scheme will 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.

11.0 Compulsory Purchase Order

11.1. Overview

11.1.1. The National Transport Authority ("NTA") is seeking confirmation of the Lucan to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2022 ("the CPO"). The purpose of the CPO is to facilitate the construction of the Lucan to City Centre

Core Bus Corridor Scheme ('the Proposed Scheme') to facilitate public transport and all ancillary and consequential works.

- 11.1.2. Sections 1.1 and 1.2 of my report (above) has previously set out the introduction, legislative provisions, and listed the submitted documentation relevant to the CPO respectively. A detailed description of the Proposed Scheme is set out in Section 3, and the policy context in section 4.
- 11.1.3. Schedule Part I of the CPO order lists 22 plots of land permanently acquired by the CPO and the Schedule part II lists 23 plots that will be temporarily acquired during construction works. There are no plots listed in Schedule III (Section A) as there will be no public rights of way extinguished. Public rights of way which will be restricted or otherwise interfered with are listed in Schedule III (Section B). There is one such location this being the removal of the u-turning facility through the median from outbound to inbound at the Palmerstown bypass. Private rights are to be acquired at nine locations (listed in Schedule Part IV – Section A) and no private rights are to be restricted or otherwise interfered with (Schedule Part IV – Section B). Finally, private rights of way will be temporarily restricted or otherwise interfered with at seven locations (Schedule Part IV – Section C).
- 11.1.4. The lands described in the schedule are lands other than land consisting of a house or houses unfit for human habitation and not capable of being rendered fit for human habitation at reasonable expense.
- 11.1.5. For the Board to confirm the CPO, it must be satisfied that the National Transport Authority ('NTA') as the relevant acquiring authority has demonstrated that the CPO *"is clearly justified by the exigencies of the common good"*²⁵. This has been interpreted by legal commentators²⁶ and broadly accepted as a requirement to satisfy the following criteria:
- That there is a community need that is to be met by the acquisition of the site in question.
 - That the particular site is suitable to meet the community need.

²⁵ Set out in the judgment of Geoghegan J. in *Clinton v An Bord Pleanála* (No. 2) (2007) 4 IR 701.

²⁶ As per 'Compulsory Purchase and Compensation in Ireland: Law and Practice, Second Edition, by James Macken, Eamon Galligan, and Michael McGrath, published by Bloomsbury Professional (2013)',

- Any alternative methods of meeting the community need have been considered but are not demonstrably preferable (taking into account environmental effects, where appropriate), and
- The works to be carried out should accord or at least not be in material contravention of the provisions of the statutory development plan.

Another test set out in “Planning and Development Law” (Garrett Simons – Second Edition) requires consideration of whether the proposed CPO measures will have a disproportionate or excessive effect on the interests of the affected persons. This issue of proportionality, along with other issues arising from the matters raised by the objectors to the compulsory acquisition are all discussed in order in the following sections. In assessing the CPO I have considered throughout whether the lands/rights being acquired are necessary and suitable to facilitate the provision of the Lucan to City Centre Core Bus Corridor Scheme. The Board should also note that a number of these issues (in particular, justification/need for the scheme, development plan compliance, and assessment of alternatives) have been discussed throughout the Planning Assessment (Section 8) and EIA (Section 9) of my report above and accordingly these preceding sections should be read in conjunction with this CPO assessment.

11.2. Community Need

- 11.2.1. The proposed scheme is being developed in response to the need for a sustainable, reliable form of public transport, and a safe and comfortable active transport network along the main radial routes of Dublin City. Sustainable transport infrastructure is known to assist in creating better communities and places to live and work, while also stimulating economic development and enhanced health and well-being when delivered effectively. In this context, it can be reasonably argued that a community need would be fulfilled with the implementation of this project.
- 11.2.2. The National Planning Framework forecasts that the population of the Greater Dublin Area will increase by 25% by 2040. This population growth will give rise to increased traffic demands on a transportation network which is already experiencing significant congestion due to over-dependence and reliance on the private car. This congestion will only continue and increase unless suitable, viable and attractive alternative

transport solutions can be provided to increase and maximise people movement. A double-decked bus takes up the same road space as 3 no. standard cars but typically carries 50-100 times more people, making it generally 20 times more efficient in providing people movement capacity within the same spatial area (i.e. three cars). As a simple comparison, using average occupancy levels, 50 or more cars would be required to provide the equivalent people movement capacity of one double decked bus, similarly walking and cycling take up much less space than the private car. Accordingly, prioritising the movement of buses and providing safer and more attractive cycling and pedestrian facilities will provide a more sustainable, efficient, and effective means of moving people around the City versus the current car dominated model. Such an intervention is vital along the corridor of the Proposed Scheme as the route is already experiencing congestion, is a very busy strategic transportation link, and the forecasted growth in population, jobs and all vehicle numbers (private car and goods vehicles) are all set to increase. The modelling carried out demonstrates that in the 2028 AM peak hour the Proposed Scheme will result in a reduction in 4% of people travelling via car, an increase of 24% in the number of people travelling by bus and an increase of 56% in people travelling inbound along the corridor by cycling or walking. Overall, there will be a 13% increase in people moved and a 25% increase in people moved by sustainable means in the AM peak in 2028. In the PM peak hour in 2028 there is a predicted reduction of 6% in the number of people travelling by car, an increase of 17% of people travelling by bus and a 17% increase in those walking or cycling outbound along the route, resulting in an increase in the total number of people moved by 9% and 17% increase in people moved by sustainable modes.

- 11.2.3. As a matter of clarity, the Board should note that I am satisfied that the modelling carried out is robust and arrives at reasonable conclusions. Furthermore, while I note that the reduction in car travel movements (i.e. 4 and 6% 2028, AM and PM peaks respectively) are lower than reductions achieved in other BusConnects projects, these figures remain significant. In the interests of clarity on this issue the Board should note that the Proposed Schemes car reduction modelling is effected by the fact that the route is an existing bus corridor, with fewer junctions to improve and as the majority of the route is of sufficient width to accommodate bus lanes throughout there is minimal carriageway reassignment from general traffic to bus lanes in the

current proposal (when compared to other BusConnects projects) and as such the Proposed Scheme does not provide a significant disincentive to car users.

- 11.2.4. Moving more people using less space will result in less congestion and less emissions along the corridor over the short and long terms. Increased traffic without intervention will increase congestion and emissions, leading to longer journey times, significant adverse impacts on the amenities and character of the area, as well as on community health and wellbeing. Modelling shows that the Proposed Scheme has the potential to reduce CO_{2e} emissions equivalent to the removal of approximately 2,180 and 3,460 car trips per weekday from the road network in 2028 and 2043 respectively.
- 11.2.5. The current infrastructure along the route does not prioritise people movement, with only 72% of it having bus priority measures, and 25% having segregated cycling facilities, and accordingly there is a clear community need for improvements to reduce congestion. The Proposed Scheme will provide bus priority measures along 93%, and segregated cycling infrastructure across 95% of the corridor as well as improving pedestrian facilities and the public realm. This will create attractive, efficient, and sustainable alternative modes of travel to the private car, thus improving journey times, reliability and combat increased congestion throughout the corridor.
- 11.2.6. The CPO is in relation to the Lucan to City Centre Core Bus Corridor Scheme, which is a significant existing transport route, serving the City Centre as well as significant nodes (village and commercial centres) and the wider national road network via the N4 along its length. Congestion is already a common experience along this route, and without appropriate intervention the additional population and forecasted economic growth will increase traffic volumes and potentially lead to gridlock becoming a common feature along the route. Planning and transport policy all clearly point to the need to provide a better alternative to facilitate increased people movement along transport corridors to reduce emissions and congestion which adversely effects the population, economy and climate.
- 11.2.7. Overall, the Proposed Scheme as facilitated by the CPO will deliver critical and necessary physical infrastructure which is required to sustain and cater for the projected population growth. It will also provide more accessible, resilient, efficient

and reliable public transport to the most disadvantaged and vulnerable in society, in a safer environment while also allowing travellers to benefit from better journey times and providing comfortable, predictable and attractive alternative to the private car. I also note that the private car will continue to be accommodated within the corridor albeit reallocation of road space will be in favour of public transport, cycling and pedestrian facilities.

11.2.8. From the above it is clear that there is distinct and obvious community need and justification for the proposed scheme from a population growth and congestion perspective; through the provision of the necessary infrastructure to facilitate connections and connectivity throughout the corridor and the wider area. The infrastructure facilitated by the CPO will provide greater opportunities and enhanced connectivity for all sections of the local community (and those who need to transit through this area) and all will be able to enjoy the wider benefits arising in terms of modal shift, reduced congestion, and reduced emissions, as well as providing healthier and more sustainable transport options.

11.3. **Suitability of site/land to meet community need.**

11.3.1. Under the CPO it is proposed to acquire land (both on a permanent and temporary basis), restrict or otherwise interfere with public rights of way, acquire private rights, and temporarily restrict/interfere with private rights, all along and in proximity to existing roads and streets throughout and along the route of the Lucan to City Centre transport corridor as described in Section 2. A detailed description of the Proposed Scheme and its route has been provided previously in Section 3 above.

11.3.2. The lands subject to the CPO are currently subject to a range of land uses which include roads, footpaths, public amenity spaces (e.g. road verges/embankments, green spaces – Hermitage Park, Frontage of Dr. Steevens’ Hospital), residential developments communal space (e.g. Knockmaree apartments), recreational use (e.g. golf course, GAA grounds), agriculture (e.g. lands opposite junction of Lucan and Ballyowen Roads), commercial (curtilage of commercial premises e.g. Foxhunter public house, Sureweld premises, lands adjoining Block B, Liffey Valley Office Campus, frontage of no.’s 20 and 22 Kennelsfort Road Lower, Palmerstown

Service station), medical uses (frontage of Hermitage Clinic). No habitable dwellings are proposed to be permanently acquired.

11.3.3. The Board should note that the Proposed Scheme relates predominantly to lands within and immediately proximate to existing public roads, streets, and pedestrian areas where there are no specific zoning objectives in place. The Proposed Scheme runs through the functional area of two local authorities and while noting that the transport corridor roads and footpaths are not subject to specific zoning objectives the route travels through and adjacent to lands whose zoning includes the following:

South Dublin County Council (SDCC):

- RW – to provide for retail warehousing,
- RES – to protect and/or improve residential amenity,
- OS – To preserve and provide for open space and amenity,
- HA – LV To protect and enhance the outstanding natural character amenity of the Liffey Valley,
- MRC – to protect, improve and provide for the future development of a major retail centre,
- VC - to protect, improve and provide for the future development of village centres.

Dublin City Council:

- Z1 (sustainable residential neighbourhoods),
- Z5 (City Centre),
- Z6 (employment/enterprise),
- Z9 (Amenity / Open Space / Green Network),
- Z10 Inner Suburban and Inner City Sustainable Mixed-uses,
- Z15 (Community and Social Infrastructure)

The Proposed Scheme occurs along existing roads and streets with the reallocation of road space, route widening, junction changes, provision of foot and cycle bridges, and provision of cycle tracks being highly compatible with the existing uses on and along the corridor. All works and ancillary elements included (such as bus shelters

and their associated infrastructure, RTPI poles, along with amenity space improvements, planting etc.) are, in my opinion compatible with the relevant zoning objectives of the two development plans. Furthermore, I note that under the Dublin City Plan the works would be considered as Public Service Installations which is listed as a compatible use within all the relevant zoning provisions along the corridor in the DCC area. The SDCC development plan states that public services are open for consideration across all relevant zoning provisions although I note that a definition of this use is not included in the plan nor provided in the SDCC submission, I am, however, satisfied that the proposed works entail public services.

- 11.3.4. Within the DCC area the Proposed Scheme does not pass through any ACAs however, it does run to the south of the Chapelizod and Environs ACA and passes through conservation areas designated in the City Plan. Within the SDCC area the Proposed Scheme runs along and forms the northern boundary of the Red Cow – Woodfarm Cottages ACA in Palmerstown. The Proposed Scheme also runs adjacent to several Protected Structures along the entirety of the route in both DCC and SDCC functional areas. I consider that the Proposed Scheme is consistent with the provisions of these conservation areas and will not adversely impact the setting or heritage value of protected structures, albeit I have recommended minor alterations in terms of the design approach to confirm the bus shelter design and materials along the Old Lucan Road (in the vicinity of the ACA) and along the frontage of Dr. Steevens' Hospital (Protected Structure and conservation area).
- 11.3.5. The deposit map booklet identifies all lands that are being acquired on both a permanent and temporary basis and identifies lands on which public and private rights of ways will be altered or interfered with. Individual submissions/objections received in relation to the CPO lands, and impacts on rights have been set out in detail previously in Section 5.4 of this report.
- 11.3.6. The extent of the land that would be acquired under the order is determined by the specifications of the proposed core bus corridor layout and associated construction works. I consider that the Proposed Scheme has been designed to minimize the impacts on third party landowners and there are examples throughout where preferred infrastructure widths have been reduced to the minimum to reduce the extent of the associated land take.

11.3.7. Lands to be temporarily acquired are generally located adjacent to works areas and lands that are to be permanently acquired from third parties, and typically are narrow roadside strips. Areas of land at Palmerstown (immediately north of the Palmerstown Bypass), Con Colbert Road (Liffey Gaels Park) and adjacent to the Old Lucan Road/Fonthill Road Roundabout (at the N4 Junction 2) are to be temporarily acquired to facilitate the provision of temporary construction compounds. These areas will be landscaped and returned to their original use once construction is complete.

11.3.8. Areas which are subject to larger land take requirements or those which could give rise to more significant effects on landowners include:

- Land to north side of Old Lucan Road (in the townland of Woodville north of R136 and R835 junction).
- Car Park south of Lucan Road, Ballydowd (foxhunter public house)
- Hermitage Park,
- Hermitage Golf Club frontage,
- Sureweld International Ltd. frontage,
- Hermitage Medical Clinic frontage,
- Lands in the vicinity of Block B at Liffey Valley Office Campus and Liffey Valley Shopping Centre
- Frontage of Palmerstown Lodge Hotel (Nos. 20 and 22 Kennelsfort Road Lower).
- Applegreen Service Station, Palmerstown
- Lands surrounding the new bus stops on the Chapelizod bypass in the vicinity of Chapelizod Road including City of Dublin Education and Training Centre lands, road embankments and communal open space/embankment area of Knockmaree residential development.
- Dr. Steevens' Hospital frontage onto St. Johns Road West.

11.3.9. Overall, I am in agreement that the land-take for the proposed CPO along the corridor is necessary and proportional to ensure the delivery of the proposed scheme to appropriate standards to satisfy the community need (with the exception of the

temporary land take proposed along the frontage of the Hermitage Golf Club which I discuss further below in section 11.6) . Furthermore, I consider that the subject lands to be acquired are suitable for the use proposed given the current land use, the location of the land take (immediately adjacent to the existing transport corridor carriageway and footpaths) and the design of the Proposed Scheme which has in general, minimised the land take requirements from third parties. I am satisfied that the land and rights subject to the CPO are suitable for the uses and purposes for which the CPO is being brought (i.e. to facilitate public transport, cycling and pedestrian infrastructure improvements along the Lucan Core Bus Connects Corridor and all associated works).

11.4. Alternative Methods of Meeting the Community Need

- 11.4.1. The next criteria to be satisfied in assessing the CPO is whether alternative methods of meeting the community need have been considered but are not demonstrably preferable (taking into account environmental effects where appropriate). Detailed consideration of alternatives is set out within section 3 of the submitted EIAR in relation to the application for the Proposed Scheme (ABP-314952-22). I have considered the available alternatives at Section 9.4 of this report above and have also considered the merits of a range of design alternatives in relation to route selection, bus stops, junction design, and car parking (Sections 8.4 and 8.5 above). Alternatives to the Proposed Scheme were considered at three levels, strategic alternatives, route alternatives and design alternatives.
- 11.4.2. Strategic alternatives were considered primarily by the quantum of passenger traffic that is required to be accommodated and balanced against the potential impacts (including environmental impacts) that would arise. Alternatives considered include the 'do nothing' scenario, which given the community need as outlined above and the potential for continued congestion and potential for gridlock in the context of increasing population and economic activity is neither viable nor appropriate. The full range of public transport options have been considered, bus rapid transport, light rail, metro heavy rail demand management and technological alternatives. The Transport Strategy for the Greater Dublin Area 2022-2042 recognises that a comprehensive bus network based on enhanced level of service and greater on-street priority is central to the delivery of a successful public transport system for the region.

- 11.4.3. Route alternatives have also been considered in detail and assessed against a full range of environmental receptors and criteria, 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 alternative selections modified and reduced accordingly. Submissions have raised concerns in relation to specific route selection alternatives such as the need for the diversion of bus routes into Palmerstown Village and a request to bring the corridor through Chapelizod and I have considered these matters fully in section 8.4 above.
- 11.4.4. I note that throughout the public engagement and design process in relation to the Proposed Scheme that the applicant has considered and reviewed a large number of design and route alternatives (Section 3.3 of the submitted EIAR on ABP-314942-22) refers. Furthermore, I note that the design of the Scheme has insofar as is possible minimised impacts on individual landowners, and in particular has sought to avoid impacts on smaller property owners such as private dwellings and gardens. Where land take requirements are necessary the EIAR shows that a number of alternatives were considered and reviewed before the final route was selected.
- 11.4.5. Accordingly, having regard to the information provided by the applicant in relation to alternatives, the design approach adopted, and the submissions lodged, I am satisfied that a significant number and wide range of options have been considered in detail before arriving at the design of the Proposed Scheme and establishing its CPO requirements. The applicant has engaged in a detailed consultation process, and where issues have been raised in relation to alternatives, these have been assessed and considered. Furthermore, I am satisfied that the process undertaken by the applicant presents a robust assessment of all relevant alternative options (including those raised by the public through consultation) having regard to environmental considerations and the project objectives, which I consider to be reasonable and appropriate.
- 11.4.6. On the basis of the above I am satisfied that the Proposed Scheme chosen is the one which best meets the stated scheme objectives including reducing congestion and improving public transport services and reliability as well as facilitating better

cycling and pedestrian infrastructure. I also accept that the consideration of options within the selected route corridor and the strategy for key infrastructure provisions was a rigorous process, which had regard to environmental considerations. I therefore generally concur with the reasons for choosing the preferred alternatives as presented in the Proposed Scheme that will be facilitated by the CPO. I am, therefore, satisfied that any alternative means of meeting the community need have been considered and are not demonstrably preferable to that set out in the application and CPO documentation.

11.5. Development Plan Compliance

11.5.1. BusConnects is identified as being a key transport infrastructure project that has been specifically identified and is supported at all levels within the relevant planning policy context as set out previously in Section 4 of this report above. The consistent message set out at all policy levels in the hierarchy from EU, national, regional through to the relevant Development Plans is that there must be a transition to a low carbon and climate resilient society and that active and sustainable transport solutions must be encouraged to reduce congestion and emissions while fostering sustainable growth. The main objectives of the Proposed Scheme include the following:

- 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 measure to provide priority bus movements over general traffic.
- To enhance the potential for cycling by providing safe infrastructure for cycling, segregated from general traffic wherever practicable.
- To support the delivery of an efficient, low carbon and climate resilient public transport service, which supports the achievement of Ireland's emission reduction targets.
- 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.

I consider that the above objectives are consistent with the overall proper planning and sustainable development of the area and have significant merit that will have benefits for the wider area of the Proposed Scheme.

- 11.5.2. The proposed Lucan to City Centre Core Bus Corridor runs through the functional area of two planning authorities, Dublin City Council and South Dublin County Council. The development plan policy context for both areas are set out in Sections 4.13 (South Dublin County Development Plan, 2022-2028) and 4.14 (Dublin City Development Plan 2022-2028) with further consideration set out in Section 8.2 of this report above. I note that third party submissions have referenced concern in relation to compliance with specific development plan provisions and these have also been fully addressed and discussed in section 8.8 of my report above.
- 11.5.3. The Dublin City Development Plan specifically identifies BusConnects as a key sustainable transport project which is supported by Dublin City Council. In this regard SMT 22 of the Dublin City Plan states *“It is the Policy of Dublin City Council 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 developer of Luas to Poolbeg and Lucan.”*
- 11.5.4. The South Dublin County Development Plan 2022 – 2028 also provides wide ranging support for the BusConnects programme, with the objectives of the Proposed Scheme fully according with aims of the plan to increase the number of people walking, cycling and using public transport while reducing reliance on the private car journeys. SM1 objective 3 of the plan states that it is an objective “to support the delivery of key sustainable transport projects including DART and Luas expansion programmes, BusConnects and the greater Dublin Metropolitan network ...”.
- 11.5.5. Having regard to the above, I am satisfied that the Proposed Scheme is justified and wholly in accordance with the overriding policy position set out within the Dublin City Development Plan 2022-2028, the South Dublin County Development Plan 2022-

2028 as well as the national and regional policy documents set out in section 4 of this report above. In reaching this conclusion I also note that BusConnects is a key action under the major public transport infrastructure programme to deliver abatement in transport emissions, and is consistent with the provisions of the Climate Action Plan 2023 (which is in place at time of writing) and the published Climate Action Plan 2024.

11.6. Proportionality of Land Take

- 11.6.1. Overall, I consider that the land to be acquired permanently for the operation of the Proposed Scheme, and temporarily for the construction phase, as well as the associated acquisition/interference with various rights, is modest and proportionate to the works, and is required in the context of meeting an identified community need. The permanent land take proposed ensures that as far as practically possible, geometric design standards to facilitate bus lanes, cycle paths, pedestrian movement and general traffic movement are adhered to, and that such land take is commensurate with the requirements to implement the project to a sufficient design standard to satisfy the community need identified. I also note, as pointed out previously, that, where necessary, preferred infrastructure widths have been reduced to minimise the scale of land take requirements.
- 11.6.2. I also consider that the temporary land take requirements are appropriate in all but one situation. The exception being the temporary land take requirements within the Hermitage Golf Club immediately north of the permanent land take along the frontage of the Golf Club. This issue has been discussed in full in sections 8.9.2 to 8.9.6 of my report above. In essence, I consider the permanent land take to be appropriate and justified at this location given the need to provide appropriate and sufficient sustainable transport infrastructure along this transport corridor, however, the extent of the temporary land take to accommodate these works has neither been justified nor demonstrated. The temporary land take as proposed includes all of the rough between the 6th hole fairway and the new boundary of the Hermitage Golf Course (HGC) and the documentation submitted has not justified the need for the extent of this area. I consider that this land take (albeit temporary in nature) will have an undue and disproportionate impact on the operations and functionality of the golf course given that there is a lack of certainty as to when, and for how long this land

take will be required, the loss of the entirety of the 'rough' on this side of one fairway will render this hole deficient and not practically playable - restricting the course to a 17 hole round, nor has the need for the extent of this area been sufficiently detailed in terms of the construction requirements to facilitate the works. Furthermore, the existing landscaping and mature planting within the 'rough' area performs a dual function of screening and presenting features to be negotiated as part of playing the 6th hole of the golf course. The Proposed Scheme, while setting out that significant additional planting is to occur at the location of the temporary land take has not indicated a specific design nor appears to have given consideration to the dual function of the planting within this wider area. Furthermore, I am satisfied that the screening/boundary planting required at this location to provide a backdrop to the sports netting and maintain the character of the area can be provided on a narrower strip of temporary land take at this location (in conjunction with the sports netting) which will minimise impacts on the operations of the golf course and allow the 6th hole to remain playable throughout. In this regard I recommend that the temporary land take area designated as 1007(2).2f on the deposit maps be reduced in size to extend only a further 15m north into the HGC land along the length of the northern boundary extent of the permanent land take reference 1007(1).1f shown along the N4 frontage.

11.7. Third Party Submissions/Objections on the CPO.

11.7.1. There were 3 no. third party submissions lodged in the initial public consultation phase in relation to the CPO process. The submissions and issues raised have all been summarised individually previously in Section 5.4 of this report. The submissions were circulated to the applicant (the NTA) who submitted a response to the issues raised (the responses to each individual submission are also summarised in Section 5.4 of this report). The NTA responses were forwarded to the various parties by the Board and further commentary was invited, two further submissions were made, (also summarised in section 5.4). As set out previously in section 5.4 the Board may also wish to review the submissions of Naomi Louisa O'Connor, and Cuan Ó'Seireadáin, residents of Knockmaree Residential Estate reference the CPO, albeit they are not listed in the CPO schedule. Their submissions are summarised in Appendix 1, and the issues raised have been dealt with in the discussions relating to

the Proposed Scheme, with their issues being broadly consistent with those raised by Knockmaree Management Company CLG.

11.7.1.1. The Trustees of Hermitage Golf Club

The Trustees of Hermitage Golf Club have made an objection to the CPO in relation a number of issues which have been discussed previously in this report, relating to timing and process, contending that the CPO should not be taken in advance of a decision issuing on the Lucan to City Centre BusConnects Scheme, and in the absence of such a determination the CPO cannot be justified. There is also contention made that EIA and AA requirements and potential mitigation measures require lands beyond those subject of the CPO and that the Proposed Scheme is contrary to the provisions of the relevant County Development Plan. Further procedural issues are raised in the submission relating to failure of the acquiring authority to justify the land take requirements both in terms of their extent and need having regard to alternatives that could be available, further that it is inappropriate to rely on details of the application file i.e. ABP-314942. In responding to the NTAs comments on their initial submission the trustees sought for reconsideration of the oral hearing decision, and set out a range of procedural issues with which they are concerned, and they have provided further details and analysis relating to adverse impacts arising on the golf course from noise, arboriculture, legal and golf design perspectives prepared by a range of relevant consultants including legal advice.

The matters raised have been considered in full in my report above, and I wish to clarify that it is fully acknowledged that the level of analysis and assessment required for the application and CPO processes are different. While this report has been prepared to cover both processes the consideration of relevant topics is separated as appropriate in order to inform the two decisions/determinations. The issues raised by the Trustees of Hermitage Golf Course have been considered as relevant in both the assessment of the CPO (ABP-314942-22) and the application for the Proposed Scheme (ABP-314942-22). The Board is obliged to consider and decide both processes at the same time, and accordingly the issues raised by the Hermitage Golf Club have been considered where relevant in both. In this regard I refer to the relevant sections of this report above, specifically Sections 4 (setting out the policy context) 5.4.4 (summary of relevant submissions), 8.2 (discussing the policy context

/ principal of the Proposed Scheme), 8.4 (route selection/alternatives), 8.6 (biodiversity), 8.8 (compliance with development plan) 8.9 (discussion of impacts on individual properties including the Hermitage Golf Club), 8.10 (Cultural/Architectural Heritage) and 8.12 (discussion of processes). I note that a concern raised by the trustees relates to inappropriate mixing of the assessments for both the CPO and application processes, and I am aware that the provision and discussion of both the processes within one report could be considered inappropriate in this context. In this regard, however, I wish to clarify that the relevant assessments required for each of the processes have been considered and their differences fully engaged with and in my opinion it is entirely appropriate and beneficial to both processes to cross reference separate discussion sections in order to fully inform, expedite and ensure consistency in the decisions/determinations which must be made at the same time.

Having regard to the issues raised by the Trustees as detailed previously in my report I consider that the provision of the cycling infrastructure as proposed is appropriate, consistent with development plan policy, and entirely justifiable in terms of climate action requirements, community benefits and need, and represents the optimal approach and least impactful route. I therefore consider the permanent land take proposed along the frontage of the Hermitage Golf Course to be appropriate. In terms of the temporary land take requirement referenced 1007(2).2f at the Hermitage Golf Club, I consider that it is excessive and will disproportionately adversely affect the club in terms of its operations and functionality. Accordingly, I recommend that the extent of that temporary land take be reduced to a 15m wide strip as set out in 11.6.2 above. Apart from this alteration I am satisfied that the overall design adopted has minimised land take requirements insofar as practicable while still delivering the overall objectives and minimising impacts.

I note that there will be impacts and disturbance arising from the construction and operational processes, however, the design of the Proposed Scheme includes the provision of a significant retaining wall structure with a greater than 1.5m height at this location, as well as the provision of a wall, and that the N4 is generally set lower than the Golf Course lands at this location. While the Proposed Scheme generally states that boundaries will be replaced on a like-for-like basis, my recommendation includes conditions relating to the provision of appropriate boundaries at this location that will maintain the amenity of the area. Furthermore, noting my recommended

alteration to the extent of the temporary land take, the proposed boundary planting will also be altered. There will be disturbance during the construction phase, however, this will be managed to ensure impacts will be minimised. I note and acknowledge that impacts will arise at the Hermitage Golf Club, predominantly at the construction stage, however, these will be temporary and the overall design of the scheme will ensure the privacy and amenity of the club will be maintained following construction, furthermore, these impacts must be balanced against the wider community needs and benefit of creating sustainable transport infrastructure at this location.

11.7.1.2. **Torcross Unlimited Company (Hermitage Clinic)**

In their objection Torcross Unlimited Company ('the Hermitage Clinic') have raised concerns in relation to the extent of the land take, loss of mature trees, contravention of the County Development plan (zoning and protected view), impact on expansion, construction impacts, heights of wall, new bus stops and interfacing with Metro West. They also request an oral hearing, raise concern in relation to impact on a protected view and question the need for a two-way cycle track. A summary of the issues raised by the clinic is set out in Section 5.4.5 of this report above. These issues have been considered and discussed previously above in Sections 8.2 (discussing the policy context / principal of the Proposed Scheme), 8.4 (route selection/alternatives), 8.6 (Biodiversity), 8.8 (compliance with development plan – including zoning provisions and impact on protected view), and 8.9 (discussion of impacts on individual properties including the Hermitage Clinic). Following review of the application documentation I have concluded that the Proposed Scheme is appropriate at this location, is compliant with Development Plan provisions, addresses an identified community need, and will not significantly adversely affect either the current operations or any future expansion proposals for the clinic given the nature and extent of the permanent and temporary land take required. I am satisfied that the design, construction methodology and mitigation measures provided for will mitigate against significant construction and operational impacts. In relation to the consideration of the CPO, I have concluded that there is a definitive community need for the works and that the project design and route is appropriate at

this location, and therefore any impacts on individual properties must be balanced against the overall benefits arising from the Proposed Scheme.

11.7.1.3. **Knockmaree Management Company CLG.**

The objection received from Knockmaree Management Company CLG. is summarised in section 5.4.3 of my report above and relates to concerns that the Proposed Scheme will have an adverse impact on the residential and general amenities currently enjoyed by the Knockmaree Residential Development. Concerns raised are centred on the need and route selection for the works and in particular relate to the widening of the route on the Chapelizod bypass in the vicinity of Chapelizod Hill Road, the provision of access ramps and steps, the loss of mature planting, and impact on residential amenities. These matters have been discussed in detail previously in this report at sections 8.2 (discussing the policy context / principal of the Proposed Scheme), 8.4 (route selection/alternatives), (8.5 project design), 8.8 (compliance with development plan – including zoning provisions and impact on ACA), 8.6 (Biodiversity), 8.7 (discussing impact on residential amenities), and 8.9 (discussion of impacts on individual properties including the Hermitage Clinic). Having considered the potential impacts, as set out throughout this report I consider that these works are justified and necessary in order to ensure pedestrian, cyclist and traffic safety as well as ensuring the efficiency of operations and access to services are provided for the residents of Chapelizod. While I note that there will be impacts at this location during construction and there will be a change to the character of the area, I am satisfied that these impacts will not create a significant adverse impact on the Knockmaree Residential Estate, nor its residential amenities. The visual effects that arise, while not significantly detrimental, will be further mitigated as the proposed landscaping matures and the design of the scheme will ensure privacy of residential properties in the vicinity. There will be a degree of disturbance during the construction phase, however, when balanced against the overall benefits arising from the Proposed Scheme in terms of improved sustainable transport infrastructure I consider that the works and extent of the CPO are appropriate.

11.8. CPO Conclusion

- 11.8.1. I am satisfied that the process and procedures undertaken by the National Transport Authority have been fair and reasonable, that the National Transport Authority has demonstrated the need for the lands, with the exception of the temporary acquisition Plot 1007(2).2f which should be amended/reduced to extend for a maximum width of 15m north from the northern boundary of the permanent land take [1007(1).1f] along its entire length at the frontage of the Hermitage Golf Club. This plot and all the other lands being acquired are both necessary and suitable to facilitate the provision the Lucan to City Centre Core Bus Corridor Scheme Compulsory Purchase Order 2022.
- 11.8.2. Having regard to the constitutional and convention protection afforded to property rights, I consider that the permanent and temporary acquisition of lands, restriction / interference with public rights of way, acquisition of private rights, and temporary restriction / interference with private rights, as set out in the compulsory purchase order and on the deposited maps pursues, and is rationally connected to, a legitimate objective in the public interest, namely the development of the Lucan to City Centre Core Bus Corridor Scheme.
- 11.8.3. I am also satisfied that the acquiring authority has demonstrated that the means chosen to achieve that objective impair the property rights of affected landowners as little as possible; in this respect, I have considered alternative means of achieving the objective referred to in submissions to the Board, and am satisfied that the acquiring authority has established that none of the alternatives are such as to render the means chosen and the CPO made by the acquiring authority unreasonable or disproportionate (with the exception of the recommended alteration/reduction of the temporary acquisition referred to as 1007(2).2f referenced above).
- 11.8.4. The effects of the CPO (as amended) on the rights of affected landowners are proportionate to the objective being pursued. I am further satisfied that the proposed permanent and temporary acquisition of lands, restriction / interference with public rights of way, acquisition of private rights, and temporary restriction / interference with private rights, would be consistent with the policies and objectives of the Dublin City Development Plan 2022-2028, and South Dublin County Development Plan 2022 – 2028, both of which documents support the provision and implementation of

the BusConnects Core Bus Corridor Schemes. Accordingly, I am satisfied that the confirmation of the CPO as amended is clearly justified by the exigencies of the common good.

12.0 Recommendation

12.1. I recommend that the application under Section 51(2) of the Roads Act, 1993 (as amended) for the Lucan to City Centre Core Bus Corridor should be **approved** for the reasons and considerations as set out in Schedule 1 and consequently that the CPO is **confirmed** subject to amendment as set out in Schedule 2.

Schedule 1 – Application

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

EU legislation, including of particular relevance:

- The relevant provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment,
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set out the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.
- Sustainable and Smart Mobility Strategy 2020 (EU Commission 2020).

National and Regional Policy and Guidance including:

- Project Ireland 2040 encompassing the National Planning Framework and the National Development Plan.
- The Climate Action Plan 2023/24.
- The Design Manual for Urban Roads and Streets, 2019.
- The Greater Dublin Area Transport Strategy, 2022-2042.

- Department of Transport National Sustainable Mobility Policy, April 2022.
- The Cycle Design Manual, 2023, and
- Eastern & Midlands Regional Spatial & Economic Strategy, 2019-2031, and
- Other relevant guidance documents

Local Planning Policy including in particular:

- The Dublin City Development Plan 2022-2028
- The South Dublin County Development plan 2022-2028

Other guidance documents.

The following matters:

- the nature, scale and design of the proposed works as set out in the application for approval and the pattern of development along the route and in the vicinity,
- the entirety of the documentation submitted by the National Transport Authority (applicant) in support of the Proposed Scheme, including the Environmental Impact Assessment Report and Natura Impact Statement, and the range of mitigation and monitoring measures proposed,
- the submissions and observations made to An Bord Pleanála in connection with the 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, environmental impact assessment and proper planning and sustainable development of the area.

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 following sites are the European Sites for which there is a likelihood for significant effects on:

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

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 European Sites, 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 European Sites,

- 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 sites' 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 sites' conservation objectives.

Environment Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

- the nature, scale, location, and extent of the proposed development.
- the Environmental Impact Assessment Report and associated documentation submitted with the application.
- the submissions received during the course of the application.
- the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the planning application.

Reasoned Conclusion for Environmental Impact Assessment:

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, during construction and operation, on the environment are those arising from the impacts listed below.

The Board considered the main significant direct and indirect effects of the proposed development on the environment, both positive and negative are:

- Positive long-term impacts on **population and human health** through facilitation of improved pedestrian and cyclist safety, faster and more reliable bus services, reduced traffic congestion, improved air quality and noise reduction, improved road/ street safety, more social interaction and positive accessibility and amenity impacts for community areas.
- Negative short-term impacts on **population and human health** from the construction phase in terms of access restrictions, noise, vibration, dust, contaminated material, traffic and visual impact. These will be adequately mitigated through compliance with the CEMP and mitigation measures outlined in the Land, Soils, Water, Air and Climate and Material Assets sections of the EIAR.
- Negative impacts on **population and human health** arising from land take (both permanent and temporary) required to facilitate the Proposed Scheme,

from various individual properties. Where properties are directly affected the boundaries will be replaced and access will be maintained throughout the construction process.

- Negative Impacts on **Townscape and Landscape** arising from construction activities (which will be temporary in nature) as well as longer term impacts on **Landscape** from the removal of trees. While these will be replaced where and as possible throughout the Proposed Scheme the loss of mature trees will be a long-term negative impact.
- Positive Impacts on **Townscape and Landscape** arising from the provision of improved public realm and pedestrian facilities throughout the proposed scheme.
- Negative impacts on **Architectural Cultural Heritage** arising from the construction phase in the vicinity of Dr. Steevens' Hospital, this impact will be temporary/short term in nature with the final design of the Proposed Scheme at this location treating the streetscape along the frontage of the hospital in a sensitive manner.
- Adverse impacts on **biodiversity** from the proposed removal of habitat. Mitigation is designed into the Proposed Scheme as it includes the provision of additional trees and hedgerow, which will provide new habitats. The new planting will provide new nesting habitat for birds and the landscaping proposed will reduce the significance of habitat loss. Trees with potential roosting habitats for bats will not be removed and pre-construction surveys will ensure significant impacts on Bats do not arise. Similarly, pre-construction surveys for other fauna (including Badger) and invasive species within works areas will ensure that impacts will not arise as results will inform further mitigation measures. The Proposed Scheme does not include works within designated sites. Suitable mitigation is also incorporated within the CEMP in relation to invasive species. Impacts on biodiversity will therefore not be significant.
- Potential adverse impacts on **land, soils, geology and hydrogeology** from loss or damage of topsoil, excavation of potentially contaminated ground and contamination of parts of an aquifer could arise during the construction

phase. These impacts will be adequately mitigated through the implementation of the various environmental measures and best practice set out in the CEMP and therefore impacts will not be significant.

- Potential negative impacts on **water** quality could arise during construction due to runoff from the works areas containing fine sediments, or accidental spillages/ leakages of contaminants and direct disruption to the local drainage networks. The application documentation (EIAR and associated CEMP) contains a comprehensive suite of mitigation measures which are adequate and will protect water quality and ensure that significant adverse impacts will not arise.
- There is potential for impacts on **air quality** to arise from dust during construction works. These will be minimised with implementation of the appropriate mitigation measures set out within the EIAR and CEMP which will minimise dust emissions arising. During the operational phase there remains the possibility of adverse impact on air quality at the Liffey pNHA, this will arise in both the do nothing and do something scenarios and this impact is not considered to be significant.
- There is potential for **noise** disturbance to arise during the construction phase, works will generally be carried out in daytime hours causing no significant effects and mitigation measures will be applied in relation to works areas proximate to sensitive properties. Where works are required to be carried out at night-time and weekends (to avoid significant traffic impacts) liaison will be held with affected property owners and appropriate mitigation applied as practicable. Furthermore, significant noise abatement and controls are provided for within the CEMP to minimise noise arising from construction activities. During the operational phase the use of the transport corridor will remain consistent with its established use and overall impacts will be negligible, having particular regard to the changes (technological improvements) to the bus fleet and with the reduction in car numbers facilitated by the improved sustainable transport infrastructure being provided in the Proposed Scheme. Accordingly, significant impacts from noise can be ruled out during all phases of the Proposed Scheme.

- Potential for positive long-term impacts on **climate** through removal of the equivalent of approximately 2,180 and 3,460 car trips per weekday from the road network in 2028 and 2043 respectively (these numbers increase with increased uptake in residual bus capacity) and associated reduction in CO₂ / GHG emissions.
- 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 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 Climate Action Plan.
- Positive impacts on **traffic and transport** by maximising the capacity of the Proposed Scheme to move more people by sustainable modes, whilst also providing for general traffic movements and activities.
- Short-term negative impacts on **traffic and transport** arising from the construction phase and the need to adequately divert and control traffic movements in and around works areas. Such impacts will be mitigated through the implementation of the traffic and transportation plan and CEMP.
- Potential adverse impacts on **cultural heritage** due to construction works potentially impacting on underlying archaeology and other cultural or heritage features such as monuments. Mitigation measures including archaeological monitoring and provision for protection / recording / monitoring underlying archaeology and heritage features in the vicinity of works.
- Potential adverse impacts on **Architectural Heritage** could arise from the Proposed Scheme due to the direct construction interventions on lands in the vicinity of protected structures or to protected structures themselves or where infrastructure is proposed within the wider setting of Protected Structures. Where works are proposed to protected structures, I am satisfied that these are necessary to secure the overall wider beneficial impacts of the Proposed

Scheme and that these interventions have been designed to have minimum impact. Where boundaries are to be altered/set back to facilitate the Proposed Scheme I am satisfied that where practicable existing heritage boundary materials can be removed and reused/repurposed in an appropriate manner and using sensitive methodologies. Similarly, where heritage features are to be relocated or altered, I am satisfied that the methodologies and supervision set out are appropriate and will ensure impacts are not significantly adverse.

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 Environmental Impact Assessment Report 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 South Dublin County Development Plan 2022-2028 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 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.

Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

Reason: In the interest of clarity

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

Prior to the commencement of development, details of a time schedule for implementation of mitigation measures and associated monitoring shall be prepared by submitted to the planning authorities for written agreement.

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

3. (a) Prior to the commencement of development at each section of the proposed works, pre-construction surveys shall be carried out to determine the presence of protected mammal, bird or bat species.
(b) Pre-construction mammal surveys will include carrying out a badger survey of the Palmerstown bypass to include all openspace/vegetated lands in the vicinity, and at the location, of proposed construction compound LU2. If badger activity or a badger sett is identified, a Badger Conservation Plan providing for maintaining the badgers at this location

for the duration of the works/use of the construction compound or appropriate alternative management measures shall be prepared and agreed with the Planning Authority following consultation with the National Parks and Wildlife Service. The Badger survey, and any associated conservation plan will be submitted for the written agreement of the Planning Authority prior to the commencement of works and upon agreement will be implemented in full.

Reason: In the interest of environmental and wildlife protection

4. The proposed development shall be amended and provided in accordance with the details set out below.
 - (a) The applicant is to ensure that all timetable information, signage and literature available for the C-spine services notes the inappropriate access inclines and unsuitable conditions for wheelchair users at the Chapelizod Hill Road bus stops and to provide clear information advising wheelchair users of the alternative services that are available to access Chapelizod.
 - (b) Revised plans shall be submitted for the written agreement of the Planning Authority prior to the commencement of development which reduce the extent of the works area, planting provision and landscaping required along the frontage of the Hermitage Golf Club. All works required to facilitate the development here permitted along the N4 frontage from chainage A500 to A840 within the lands designated for temporary acquisition shall be provided within 15m of the site boundary (solid red line) shown on general arrangement drawing BCIDA-ACM-GEO_GA-0006_XX_00-DR-CR-0003, Sheet 03 of 31, Rev. M01. For clarity works within the permanent acquisition lands at this location are consented in accordance with the plans submitted.
 - (c) Prior to commencement of development final detailed design drawings shall be submitted for the written agreement of the relevant Planning Authority in relation to the urban realm materials, planting and any associated street furniture and/or equipment (cabinets, RTP1 signage etc.), including bus shelters in the vicinity of Dr. Steevens' Hospital,

Heuston Station, works within Palmerstown Village including within and in the vicinity of Red Cow Cottages and Wood Farm Cottages ACA, Palmerstown Village, and accessible ramp works at Chapelizod Hill Road. Bus shelters at Heuston Station, Dr. Steevens' Hospital and adjacent to the Red Cow cottages and Wood farm cottages ACA shall not contain advertising panels.

- (d) The full extent of the proposed temporary compounds and their access/egress provisions shall be set out on accurately scaled drawings to be submitted for the written agreement of the relevant Planning Authority prior to the commencement of development. The extent of these compounds will not exceed the boundary extents for the compounds shown in images 5.1, 5.2, 5.3 and 5.4 of the Environmental Impact Assessment Report nor require the removal of any planting/trees that have not already been indicated for removal on the Arboricultural Impact Assessment and/or General Landscape Drawings. The particulars submitted for agreement are to include details of the nature and timing of reinstatement of the temporary compounds following engagement with relevant landowners.
- (e) Design drawings showing the extent of the informal car parking being retained west of St. Philomena's church on the south side of the Old Lucan Road, are to be submitted to the Local Authority detailing the relevant road markings to be provided.
- (f) The final design details of the retaining wall and boundary features, including all walls and landscaping/planting, as relevant, proposed along the frontage of the Hermitage Clinic (including sports netting), Sureweld (SDCC RPS 036), and Hermitage Golf Course shall be agreed in writing with the Planning Authority prior to commencement of development following engagement with the relevant landowners.
- (g) A detailed review by a suitably qualified acoustician of noise barriers within 50m of the start of the entrance and exit slip roads into and out of the new bus stops on the Chapelizod bypass shall be carried out, to fully inform the redesign, replacement, and/or retention of existing

noise barriers at this location in accordance with a design to be agreed with the planning authority, the primary function of which being to optimise noise abatement from the new bus stop while also maintaining the visual amenities of the area.

- (h) During construction activities in the vicinity the existing statue at the junction between the west-bound off-slip to the R833 Con Colbert Road and the R148, and in the vicinity of the Red Cow Cottages and Wood Farm Cottages ACA, and route widening and access ramp provision in the vicinity of the Chapelizod and Environs ACA the methodologies for works affecting sensitive and historic fabric set out in Appendix A16.3 of the submitted EIAR shall be applied.
- (i) The permission here granted does not provide for a bus stop to the west of existing stop 2637 (outbound) along the frontage of the Revenue building (D08NF88), St. Johns Road West.

Revised drawings showing compliance with these requirements shall be submitted to the relevant planning authority for written agreement prior to the commencement of development where stated and the works carried out in accordance with the revised agreed details.

Reason: In the interests of proper planning and sustainable development, conservation of the amenities and character of the areas involved, clarity, and biodiversity.

5. Prior to the 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. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste.

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

6. The construction of the development shall be managed in accordance with the updated Construction and Environmental Management Plan, which shall be agreed in writing with the relevant planning authorities. This plan shall provide details of intended construction practices for the development, including:

- (a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse.
- (b) Location of areas for construction site offices and staff facilities.
- (c) Details of lighting, site security fencing and hoardings.
- (d) Details of the timing and routing of construction traffic to and from the construction site.
- (e) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network.
- (f) Alternative arrangements to be put in place for pedestrians, cyclists and vehicles in the case of the closure of any public road or footpath during the course of site development works.
- (g) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels.
- (h) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained.
- (i) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil.
- (j) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.
- (k) Consultation with the respective Regional Waste Management Planning Office regarding development of the final plans.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

Reason: In the interest of amenities, public health and safety.

7. Prior to the commencement of development, the developer and/or any agent acting on its behalf shall submit an Invasive Species Management Plan to the local authority for written agreement, which includes details of a pre-construction survey to be carried out. The plan shall include full details of the eradication of such invasive species from the development site prior to construction or if discovered during construction as soon as is practicably possible.

Reason: In the interest of nature conservation and mitigating ecological damage associated with the development.

8. 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 relevant planning authorities. 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.

9. 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 Local Authority. Such monitoring information shall be provided in a report to the Local Authority on a weekly basis.

Reason: In the interest of orderly development.

10. Water supply and 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 interest of environmental protection and public health.

11. A suitably qualified ecologist shall be retained by the developer to oversee the site set up and construction of the proposed development and implementation of mitigation measures relating to ecology set out in Natura Impact Statement and Environmental Impact Assessment Report. The ecologist shall be present during site construction works. Prior to commencement of works on any section of the proposed scheme, an ecological report of the proposed scheduling, monitoring and relevant mitigation of the site works shall be prepared by the appointed ecologist and agreed in writing with the relevant planning authority.

Reason: In the interest of nature conservation and the protection of terrestrial and aquatic biodiversity.

12. Prior to the removal/replacement of trees, hedging and planting which is to be altered the NTA shall agree with the relevant landowner the species, size and location of all replacement vegetation. The NTA shall also employ the services of an appropriately qualified arboriculturist and Landscape Architect for the full duration of the proposed works to ensure landscaping and tree works are implemented appropriately.

Reason: In the interest of visual and residential amenity.

13. (a) Trees to be felled shall be examined prior to felling or demolition to determine the presence of bat roosts. Any clearance works shall be in accordance with the TII Guidelines for the Treatment of Bats during the construction of National Road Schemes. Only trees indicated for removal in the submitted Arboricultural Impact Assessment are to be removed subject to the provisions of conditions here attached.

- (b) At the location of the temporary LU2 compound tree removal and replanting/reinstatement shall be carried out in strict accordance with the General Landscaping Scheme provided.
- (c) No ground clearance shall be undertaken, and no vegetation shall be cleared during the bird breeding season, unless otherwise agreed in writing with the relevant planning authority in advance of any such works.
- (d) Sports netting at the frontage of the Hermitage Golf Club will be installed outside the bird nesting season (1st March to 31st August).
- (e) Tree protection measures for all existing trees shall be put in place prior to the commencement of development or phases of development.
- (f) All details of soft landscaping as well as tree planting species and maturity shall be submitted for the agreement of the relevant Local Authority prior to the commencement of development to include post-construction monitoring, maintenance and replacement if/as necessary.

Reason: In the interest of wildlife and biodiversity protection, clarity and to ensure orderly development.

14. Details of all signage shall be submitted to the Local Authority prior to the commencement of development to be held on record.

Reason: In the interest of orderly development

15. 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 9.8 (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.

16. In accordance with the Environmental Impact Assessment Report, all works in the vicinity of Protected Structures, and structures of cultural heritage interest shall be monitored and recorded by an Architectural Conservation Specialist. Construction methodologies, and re-instatement method statements shall be submitted to the relevant Local Authority for written agreement prior to the commencement of works on any relevant section of the scheme. The project Architectural Conservation Specialist shall ensure adequate protection of the retained and historic fabric during the proposed works and across all preparatory and construction phases. Discovery of new architectural heritage shall be made known to the relevant Planning Authority as soon as is practicably possible.

Reason: In the interest of environmental protection

17. 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 and monitoring shall be carried out in accordance with the details specified with the Environmental Impact Assessment Report submitted with the application and to include monitoring in the vicinity of recorded Monument DU018-029 (House) and at the site of Dr. Steevens' Hospital (DU18-020).

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.

18.(a) All lighting shall be operated in such a manner as to prevent light overspill to areas outside of compounds and works areas.

(b) Prior to the commencement of development, the applicant shall submit a detailed lighting plan to be held by the planning authority. The plan shall include the type, duration, colour of light and direction of all external lighting to be installed within the site compounds of the development site.

Reason: In the interests of clarity, and of visual and residential amenity and protection of local biodiversity.

Schedule 2 – Compulsory Purchase Order

Decision

Confirm the Compulsory Purchase Order based on the reasons and considerations set out below, with the following modification:

(1) Plot reference 1007(2).2f (temporary acquisition) as set out in the deposit maps and relevant schedules submitted with the Compulsory Purchase Order shall be altered/reduced to extend along a corridor for a maximum width of 15m north from the northern boundary of permanent land take (ref. 1007(1).1f) along its entire length at the frontage of the Hermitage Golf Club.

Reason: The extent of temporary land acquisition set out as plot reference 1007(2).2f on the submitted deposit maps would have a disproportionate and excessive effect on the landowner and cannot be justified in the context of the extent/scale of works proposed at this location. A reduced temporary land acquisition at this location will ensure the required works can be provided while protecting the interests of the landowner and balancing the proportionality of effect.

Reasons and Consideration

Having considered the objections made to the Compulsory Purchase Order, and not withdrawn, the report and recommendation of the Inspector, the purpose for which

the lands are to be acquired as set out in the Compulsory Purchase Order, and having regard to the following:

- (a) The substandard infrastructure provided for along the existing route.
- (b) The strategic nature of the scheme in the context of reducing carbon emissions and climate change.
- (c) The community need, and public interest served and overall benefits, including benefits to a range of road users to be achieved from use of the acquired lands,
- (d) The proportionate design response to the identified need,
- (e) The policies and objectives of the Dublin City Development Plan 2022-2028 and the South Dublin Council Development Plan 2022-2028,
- (f) The submissions made to the Board and
- (g) The report and recommendation of the Inspector.

It is considered that, the permanent and temporary (as amended) acquisition by the NTA of the lands in question, restriction / interference with public rights of way, acquisition of private rights, and temporary restriction / interference with private rights, as set out in the compulsory purchase order and on the deposited maps are necessary for the purpose stated, and that the objections cannot be sustained having regard to the said necessity.

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.

Jimmy Green
Senior Planning Inspector

15th April 2024

13.0 Appendix I – Summary of Third-Party Objections to the Proposed Scheme

13.1. Phyllis Arlow and Others

- Primary concerns are around Bus Route 26 (which is to become Route 80) and the associated alterations to road layouts along the N4 through Palmerstown and within Palmerstown Village.
- No demonstrated need to change the current bus route, as the 26 bus will not have a shared stop with the C spine route it will not be possible to switch from one to the other, and proposed changes will increase journey time and pollution.
- Infrastructure to facilitate bus entry and exit to and from Palmerstown Village would involve huge unnecessary cost and disruption. Providing bus lanes into and out of Palmerstown will have potential negative impacts on pedestrians and motorists.
- Changes to Kennelsfort Rd./R148 Junction are contrary to Objective SM4 SLO 2 of the South Dublin County Development Plan 2022-2028 to include an underpass as part of any traffic management consideration as a solution to traffic delays on the N4 at Palmerstown village.
- Adverse impact on Woodfarm and Redcow cottages which are an Area of Architectural Conservation.
- Parking changes are inappropriate particularly restrictions in village and for those attending St. Philomena's Church, will have an adverse community impact.
- Traffic problems will be exacerbated by removal of filter lane Kennelsfort Rd. travelling to west/M50. Similarly for removal of Oval filter.

13.2. **Gerald Birney and William Carney**

- Proposed changes will not improve the transport system in Palmerstown and the plan to have the NO. 80 bus route turning into the old Palmerstown village serves no useful purpose.
- The removal of the bus stop at Palmerstown Drive will cause great hardship to those users of the existing services on this route.
- No. 80 bus switching from left to right lane at Palmerstown Drive will adversely impact traffic safety.
- The removal of the left turning filter lane (allowing access into bus lane prior to turn) at the Oval housing estate entrance is dangerous and will adversely affect traffic safety.
- The removal of the slip lane exiting the housing estate at the Oval is a danger to traffic and will cause accidents particularly due to the high levels of traffic at school drop-off and pick-up.

13.3. **Meave Brophy**

- It is not appropriate to remove the left filter lane entering at the Oval Palmerstown. This will only lead to further traffic congestion and hazard.
- Removal of the left filter lane at Kennelsfort Road towards Lucan will increase congestion and extant tailbacks. Similarly proposals to narrow the traffic to one lane only from the pedestrian bridge to the M50 junction is without merit. The proposals do not address the traffic congestion at the junction of Kennelsfort Road and the R148 which is key to the efficiency of the scheme.
- The proposed rerouting of the 26/80 through Palmerstown Village does not offer a useful replaced for the loss of the no.18 and the routing will have an adverse impact on the Red Cow Cottages which are of heritage merit.
- The bus stop at the Drive should not be removed, as its removal will mean that no bus travelling from the city centre will stop at this location and the proposed 26/80 will not serve any of the 3 existing stops.

13.4. Aidan Burke

- Re-routing of the 26 bus through Palmerstown Village is not appropriate and will bring extra traffic into the village. This combined with the provision of a two-way cycle track will adversely affect traffic safety as the existing street cannot accommodate the works, existing and future traffic.
- Potentially a better option would be to leave the 26 route as is and remove one bus stop on the outward journey at the Oval (leaving two insitu).

13.5. Alma Byrne

- Removal of the Kennelsfort Road left turning slip lane will result in additional congestion and tailbacks at this busy junction.
- The proposed bus stop on the old Lucan Road won't benefit residents and will mean more traffic and congestion on Kennelsfort Rd. Lower and the Old Lucan Road. Existing bus stop locations should serve the proposed and existing routes. There is no need for the provision of an additional bus route through Palmerstown Village.
- Removal of left filter lane from the Oval turning westbound on R148 will lead to more congestion and removal of left filter lane and bus lane access into Oval will cause a traffic hazard.
- Removal of existing westbound bus stop on the R148 (near petrol station/Palmerstown Drive) is inappropriate and will lead to a reduction in access and service.

13.6. Deirdre Cahill (& Others)

- Relocating bus stop to the opposite site of the Oval at the petrol station is not practical and will increase difficulties for the elderly in accessing the service.
- Removal of left turning facilities into the Oval will create a traffic hazard.
- Removal of left turning filter lights from Kennelsfort Rd. will cause even more congestion.

- Removal of bus stop at Palmerstown Drive will for vulnerable pedestrians (elderly and kids) to cross busy roads at the Oval to access a bus stop.
- Removal of the left turn into the City from Palmerstown Village will lead to increased traffic in and through the village and more congestion.
- Questions why there is a need for a pedestrian crossing when there is already a footbridge overhead at the same location (Palmerstown Village).

13.7. Chapelizod Residents Association (CRA)

- Requests that permission be refused for the section of the route from Palmerstown exit to the South Circular Road, in favour of providing an improved route through Chapelizod Village, across the Liffey along the Chapelizod Road (R109) up to the South Circular Road by carrying out various amended traffic management measures and design interventions.
- The appropriate number of flights and landings required to comply with part M for wheelchair ramp access cannot be provided between Chapelizod Hill road and the proposed inbound bus stop on the by-pass. This has been confirmed by the Irish Wheelchair Association (IWA) and Muscular Dystrophy Ireland (MDI), who also consider the combination of landings, flights and handrails along or near the footpath at this location to be an unacceptable danger to residents.
- The proposed arrangement on Chapelizod Hill is too long (195m) and too high (15-16m ascent) to allow/facilitate wheelchair access. The gradient on the Chapelizod Hill Road is steep (1:12 to access the proposed ramp for inward stop, and estimated to be 1:10 to access the outward stop). Both IWA and MDI consider that none of the members would be willing to, or capable of, transiting these conditions to access a bus. Potential better alternatives should include provision of lift(s) or moving pavement which would have their own cost and operational difficulties.
- Passengers of busses will be able to overlook the houses and gardens at Chapelizod Court, Chapelizod Hill Road, and Knockmaree apartments, which is an intolerable loss of amenity. Any mitigation attempt would be counter-

productive due to the height of screening which would be required which would result in overshadowing and be visually overbearing. Overlooking from the by-pass has not arisen since it was built.

- NTA did not engage in a meaningful manner throughout their discussions and public engagement with the CRA.
- Bringing the route through Chapelizod and using the proposed alternative route to the South Circular Road reduces the distance, travel time and cost while also improving accessibility/patronage and mitigating village marginalisation.

13.7.1. Chapelizod Residents Association comments on NTA Response

- Continue to assert that an alternative through Chapelizod represents a more appropriate approach.
- Provision of bus stops on the Chapelizod bypass is inappropriate and unsafe, the bypass was designed as a motorway and bus stops will affect its operational capacity and safety. There are no protection measures provided to restrict pedestrian access to traffic lanes.
- The CRA do not agree with the DCC submission which seeks to merge the two straight-ahead general traffic lanes to one prior to the junction at the end of the Chapelizod bypass.
- Questions the independence of the road safety audit team as the authors are employed by the engineering consultant on the project (albeit they are based in different offices).
- The 1.25m high wall seems ineffective in restricting crashing vehicles rolling into properties, inappropriate design standards have been followed (low speed design considered).
- Overlooking arising from proposed bus stops and access ramps remains an unaddressed issue for Chapelizod Court, Chapelizod Hill and Knockmaree apartments.

- The NTA have acknowledged that the bus stops are not accessible to wheelchair users. This arises not only from the existing gradient on Chapelizod Hill Road being too steep but also from the change in level between Chapelizod Hill Road and the R148 by-pass being significantly in excess of the 2m maximum permitted gradient for wheelchair use.
- Requests a formal cost-benefit analysis of the Proposed Scheme.

13.8. Terence Clement Shaw

- Concerned in relation to the impact the proposed scheme will have on Palmerstown Village.
- The provision of a single westbound general traffic lane from Kennelsfort Road Upper to the M50 is not sufficient to cater for traffic loads and will result in congestion and merging two lanes will lead to collisions.
- No traffic survey has been included with the submission of the NTA.
- Omission of the left turn from Lower Kennelsfort Road towards the city centre will result in more traffic using the remaining Applegreen junction, and the traffic alterations will result in more congestion, which will be increased through proposed changes at the Oval as well as permitted and proposed developments coming online. The alterations at the Oval will adversely affect his business access arrangements which have been provided based on a legally binding agreement with SDCC.
- Removal of car parking not appropriate in general nor for his business.
- Inappropriate location for Toucan crossing at lights near pedestrian overpass due to frequent occurrences of traffic breaking lights at this junction.
- Neither the road changes proposed on the R148 to accommodate a bus route into Palmerstown nor the removal of street parking to accommodate a two-lane cycle route can be justified against the adverse impact the works will have on residents of Palmerstown.

13.8.1. Terence Clement Shaw Comments on NTA Response

- Confirms that there is a legal agreement with SDCC in place in relation to the use and access arrangements for his business (Shaw Tree Services) and use of the layby to allow reversing onto the road to emerge with traffic onto the R148. This arrangement has been in place for many years since the junction re-opened. The NTA are therefore incorrect in asserting that there is no legal agreement in place.

13.9. Margaret Cosgrove

- Considers that the NTA has not justified the infrastructure and service changes to Palmerstown, the proposals do not provide any benefits to residents.
- It's unclear whether the NTA have liaised with Stewarts' Care Palmerstown a residential, day/educational service centre for people with intellectual disabilities.
- Infrastructure and service changes will result in residents not being able to avail of the new 26/80 service and will have to rely on the C-route services.
- There has not been a proper ecological survey carried out to confirm whether there are protected species at the location of the proposed temporary construction compound north of the R148, there is local knowledge of badgers at this location, more than a desk study is needed. The loss of trees at this location to facilitate the temporary construction compound is not appropriate and replacement will not provide trees of the same maturity.
- Cumulative effects are not properly considered but habitat losses of hedgerow are noted as not being significant, paying lip-service by giving the impression that impacts are examined when in reality they are not.
- There is no effort to creatively resist habitat loss and fragmentation which cannot be justified particularly in relation to temporary supporting elements of the project such as construction compounds.

13.9.1. Margaret Cosgrove comments on NTA response

- The change to the bus route through the village has significant planning ramifications, has not been justified, or requested by residents and is directly linked to the infrastructure proposals in the Proposed Scheme and therefore the objections to changes in services are of merit and must be considered.
- The location of the LU2 compound is not appropriate due to loss of trees, adverse impact on biodiversity and in particular badgers, and queries why local residents were not asked to contribute any longer-term information.

13.10. Aisling Curley

- Existing bus route serves Palmerstown well and the changed route for the 26(/80) through the village is not justified and will not give any benefit to residents and represents unnecessary construction involving relocation of stops, paths and new lanes.
- Bus stops will be less convenient for residents south of the R148, removal of bus stop at Palmerstown Drive and Applegeen will adversely affect older residents by increasing distances to walk and number of roads to cross.
- The re-routing of the 26(/80) reduces options and flexibility of services available to residents.
- General traffic layout changes proposed such as removal of left turning filter lanes will lead to increased gridlock throughout the Palmerstown area.
- Provision of a bus shelter/stop outside the Red Cow Cottages (protected structures) is not appropriate and will have an adverse impact. Furthermore, resident's amenity and property values could be adversely affected through antisocial behaviour.
- Loss of car parking in the village is inappropriate and will affect churchgoers and businesses.

13.10.1. Aisling Curley Comments on NTAs Response

- States that the NTA response misinterprets the original points made and does not consider the response engages with the points of local knowledge that have been brought forward.

- The residents of dwellings that are located proximate to bus stops will experience increased anti-social behaviour in the form of graffiti, noise, potential damage to property, vandalism, residents being hassled, and property values impacted.
- Splitting bus services between the bus stops and their relocation will discourage people from using public transport.
- Scheme is anti-car and not everyone can use public transport nor benefit from their routes.
- Questions whether there has been a clear calculation of the payback period for the energy used and environmental impact of the Proposed Scheme.

13.11. Suzanne Davis

- The proposed development will have an adverse effect on Knockmaree Estate (Chapelizod) and residents due to:
 - Noise pollution, proposed construction hours of 07:00 to 23:00 are significantly longer than those normally permitted and are inappropriate in or near residential areas, in particular when Sunday and night-time working is also being sought.
 - Operational (traffic) noise will increase, and existing acoustic screening (loss of trees) will have a detrimental impact on residents from loss of noise abatement as well as visually.
 - Negative visual impact from loss of sylvan landscape and its replacement with a large inappropriately scaled concrete (access) structure that will have a detrimental impact when viewed from the Knockmaree resident's perspective (from which no photomontage has been shown). There is no detailed landscaping plan, however, due to the extent of works required it will be impossible to replace like-with-like.
 - Removal of trees and closer proximity to traffic will give rise to additional exposure to air pollution.

- Light pollution from night-time works.
 - Vibration from works and piling will further impact noise and structural integrity of existing buildings.
 - Loss of privacy and security from removal of trees.
 - All of the above contributes to a decrease in visual and residential amenity and will therefore have a significantly negative impact on property values.
- The majority of issues raised could be addressed through the provision of additional acoustic screening and relocation of the layby/bus stop away from the existing apartments.

13.12. Lucy Delaney

- Objects to the proposed move of the pedestrian crossing from the east to the west side of the Applegreen junction at Palmerstown and the removal of the left turn filter from the Oval. This filter lane is extremely important to alleviate congestion from traffic using alternative route for traffic avoiding the traffic jams on the Kennelsfort Road during peak times. The proposed relocation of the pedestrian crossing will further impact and block traffic exiting the Oval to move west.
- Wants to retain a filter right turning lane into the Oval.
- Loss of parking spaces in Palmerstown village will adversely affect shops, church and community centre access. The removal of northern roadside parking in the village will result in there being no facility for public parking in the village, nor is there one proposed.
- Covid has heightened awareness of the importance of local amenities for communities and the proposed works will have an adverse impact on the identity and cohesiveness of the Palmerstown community.

13.13. Deirdre Driver

- Same points made as the submission by Lucy Delaney above.

13.14. Dublin Commuter Coalition

- Supports the proposed development, however a lack of enforcement is a serious concern. There is a need for inclusion of enforcement cameras as all the bus, cycle and pedestrian interventions proposed rely on the rules of the road being properly applied and adhered to. They strongly urge the NTA to implement effective measures to secure the protection of bus lanes from illegal use.
- Recommend that all bus lanes and gates be in operation 24 hrs a day 7-days a week, as this is easier to enforce, will be effective and simple to understand and will demonstrate prioritisation of public transport, and where segregated cycles lanes are not available will improve safety for cyclists.
- Requests that the proposed development adopt Dutch style junctions in lieu of what is proposed as the current proposals are unsafe.
- Concerns are raised in relation to two-stage pedestrian crossings which prolongs the total time pedestrians need to cross a road. In this regard Memorial Road/Con Colbert Road, and Con Colbert Road/ South Circular Road/ St. John's Road Junctions are referenced as examples.
- There are many three and four-way junctions which are missing pedestrian crossings on one or more arms, resulting in further delays for pedestrians who may have to cross more than one road to transition a junction. This is contrary to Section 4.4.3 of DMURS, Junction Design, which states that designers should provide crossings on all arms of a junction, and Section 1.3.2 (Pedestrian Crossings) which states designers should provide pedestrian crossing facilities at junctions and on each arm of the junction.
- Bus stop islands are too narrow, placing cyclists in conflict with bus passengers getting on and off. Bus stops on the Con Colbert Rd. near the junction of Memorial Road are used as an example with the alternative of reducing the number of general traffic lanes from 4 at this location offered as a design option to avoid cyclist and bus passenger conflicts.
- It is inappropriate to rely on out-of-date Irish standards to provide a safe and attractive environment for pedestrians and cyclists in lieu of international best

practice or alternative safe and innovative solutions. It is inappropriate and unsafe to have shared space pavement where turning movements or yield areas are created for cyclists who will be forced into the same space as pedestrians, and it will be an even greater danger/conflict for those with disabilities.

- Chapter 4 of the EIAR does not clearly state where bike parking will be located, it is important to provide best quality bicycle parking facilities at bus stops and public transport interchange locations over the length of the project. In this regard the provisions of SMT08 and SMT012 of the DCC Development Plan 2022-2028 are referenced.
- Lane widths of 3.3m and up to 3.5m are provided for general traffic in the scheme, these excessive widths encourage inappropriate speeds alongside inadequately wide cycle lanes or shared spaces. These general traffic lane widths should therefore be reallocated to cycle lanes and footpaths.
- The scheme misses a significant opportunity to provide for re-design and re-engineering of the of the St. John's West/South Circular Road junction. This junction is effectively a semi-roundabout and the public space/landscaping being proposed will not be a space enjoyed by the general public the use of shared space where turning movements are may be required for cyclists. The opportunity of working with CIE/Irish rail to provide a comprehensive beneficial redesign for all modes of traffic for this location does not appear to have been taken. The removal of a general traffic lane between this junction and the Memorial Road junction would facilitate the design of a more efficient and safer junction in line with decarbonisation goals.
- With the provision of DART+ South west programme of investment being progressed at the same time there is the opportunity to cater for redesign of the St. John's West/South Circular Road junction, as well as at other bridges at Memorial and Sarsfield Roads.
- The provision of bus stops within the Chapelizod bypass is of serious concern. The dual carriageway by-pass is a hostile environment to introduce pedestrians to, requires significant land-take, and removal of established mature planting and hedgerows. There is an opportunity to taper the flow of

traffic or limit lane widths adjacent to the proposed bus stops to reduce normal traffic speeds, and pollution.

- The existing bridge on the by-pass is too low to accommodate vehicles over 2.8m in height. The proposed scheme presents the opportunity to provide a local mobility filter on Chapelizod Hill Road, this could reduce the carriageway for pedestrian and cyclists only and provide traffic calming of the road allowing for a two-way cycle track for local access. The Kylemore Road can be used as an alternative route for HGV and general vehicle access for surrounding neighbourhoods and alternative routes towards the Chapelizod by-pass.
- Do not believe (due to the deficiencies outlined above) that the proposed scheme is compliant with the Climate Action Plan (CAP). The ambition of CAP to achieve a radical change to the way we use our road space is not reflected in the scheme.

13.15. Marie and Martin Duggan (& Others)

- Removal of left filter lane existing at Oval will exacerbate existing congestion at peak hours. Removal of left filter lane into the Oval (i.e. removal of ability to come into bus lane to turn left) will create a traffic hazard and present a safety issue.
- Removal of Bus Stop at Palmerstown Drive will cause significant hardship to residents accessing bus services and vulnerable pedestrians living on Palmerstown Drive, Culmore Road and other roads south of the N4, & Ballyfermot. Furthermore, residents returning to Palmerstown will have to complete a lengthy walk back from Palmerstown Village.
- Moving the bus stop at Applegreen back to Shaws to facilitate the 26/80 alteration (that no one has requested) will require residents to negotiate two sets of traffic lights.
- Removal of the pedestrian crossing from east to west at Oval / Applegreen junction will create safety issues for residents having to cross 2 major junctions (Palmerstown Drive and Palmerstown Avenue both with the Oval).

- Two-way cycle lane is not required or necessary on Lower Kennelsfort Rd. retention and provision of car parking more appropriate.
- The removal of the ability to turn left from Palmerstown Village towards the Oval/City will cause major traffic congestion and delays (even not considering the apartments that are coming on stream.
- Unnecessary and inappropriate to provide an additional pedestrian crossing underneath the existing adequate footbridge is which provides a safe crossing and does not interfere or delay traffic.
- No need for dedicated 2-way cycle lanes on north side of old Lucan Rd. parking is required at this location for residents, businesses and church attendees.

13.16. Lisa Duncan

- Concerns regarding the removal of left turn slip lanes at Kennelsworth Road. upper and lower as well as entering/leaving the Oval as it will increase congestion and give rise to additional emissions/pollution impacting air quality.
- Restricted visibility at junctions and property entrances gives rise to safety concerns and there are concerns regarding the impact on vulnerable pedestrians using the Oval and Kennelsfort Road areas.

13.17. Geraldine Fagan and others

- Concerned in relation to proposed scheme amendments in the Palmerstown area. Removing left turning filter lanes from the Oval and Kennelsfort Road. junctions will increase traffic congestion, increasing travel time and emissions.
- Changing the route of the 26/80 to bring through the village does not serve the community, and removing the bus stop at Palmerstown Drive will make it difficult for anyone around the Oval. Having one bus stop in the Village makes it inaccessible for most people.
- Bus stops in the Palmerstown area should be left where they are. Taking the No. 18 service away will leave a portion of Palmerstown without any bus

service, and will inconvenience residents and discourage them from using bus services.

- The cycle lane should be brought through an area across from the Beehive (Former restaurant) out onto the R148 and onto the village thereby avoiding the damage caused by removing car parking.
- Badgers and bats are resident in and use the natural habitat/green area between Kennelsfort Road and Shaws.
- It would be beneficial if the old Lucan Rd. behind the Applegreen garage was opened to traffic going into Chapelizod.

13.17.1. **Geraldine Fagan and other's comments on response to NTA submission**

- References that they are disappointed there will be no oral hearing, and that they stand behind the issues raised above.
- Removal of the existing bus stop and relocation to the village is inappropriate and will leave a large portion of Palmerstown without a bus service, removal of 18 service will cause delays for service users and force people back into cars.
- Relocation of cycle lane to the village is requested and the need for a cycle track through the village is questioned.
- Continues to have concerns in relation to badger and bat habitats while also stating that the old Lucan Road should be opened for traffic to Chapelizod.

13.18. **Ben Fehily**

- Concerns regarding amendments proposed in Palmerstown area, particularly removal of left turn into Oval, removal of Palmerstown bus stop near Circle K, rerouting of the 26/80 through the village. These amendments will cause obstruction, congestion, lead to a loss of service and reduce effectiveness of bus service for the Palmerstown area.

- Re-routing of 26/80 through Old Palmerstown onto Old Lucan Rd. brings the route through the least populated part of Palmerstown and moves stops further away from the residential centres to the south of the R148.

13.19. **Sorcha Ford**

- Routing of new 80 route through Palmerstown village (having to cross two lanes of traffic) is neither convenient nor necessary and does not serve a large population.
- Removal/relocation of bus stops in the Palmerstown area is not convenient for the majority of the local residents.
- Increased volume of double-decker buses going through the old village is neither necessary nor appropriate.
- Removal of left turning filter lanes (at Oval and Kennelsfort Road) will increase congestion and lead to traffic safety issues.
- The proposed scheme is not consistent with the Climate Action plan as it removes green spaces, caters for diesel powered buses and represents unnecessary construction.

13.20. **Aoibhe Foy and Joseph Lee**

- Raise concerns in relation to the proposed scheme and its adverse impacts on Palmerstown arising from:
 - Removal of bus stop at Palmerstown Drive not justified and will impede safe and integrated transport by limiting access.
 - Additional travel time from re-routing the 80 through the village. This unnecessary re-routing also impedes movements on the R148, will impact residents adversely in the village, the character of protected structures, and has not been justified. Current bus stops on core inbound corridor provide greater accessibility for Palmerstown service users.

- Removing left filter lane onto the R148 at the Oval and moving pedestrian crossing from east to west of junction will cause further congestion (particularly as the area accommodates two primary schools), disrupts the flow of traffic, cause safety concerns, and impede bus movements.
- Reducing general traffic to one lane on R148 will increase traffic and congestion.
- Removal of facility for general traffic to enter bus lane to turn into the Oval represents a traffic hazard and raises safety concerns.
- Use of Green embankment on northside of R148 as a temporary construction compound has not been sufficiently assessed.
- Removal of bus stops on Kennelsfort Rd. lower not appropriate or justified, it's not clear why the bus service is being removed.
- New cycle lane in the village is not necessary and will not be used as the preference is for cyclists to use the R148.
- Removal of left turn from village towards town will have an adverse impact as will the new pedestrian crossing under an extant footbridge will further restrict traffic movement. Removal of left filter from Kennelsfort Road Upper will increase congestion.
- Removal of parking in the village area is inappropriate as it will adversely affect businesses and community.
- No need for two lane cycle path from M50 through village as cyclists prefer to use R148 to access city.
- Not sufficient space to provide for perpendicular parking at Redcow cottages.

13.21. David and Eileen Gaynor

- Submission relates to adverse impact on Palmerstown village.

- Rerouting of 26/80 bus through village is a waste of time and money and not needed/wanted.
- Removal of left turn to town from the village at Kennelsfort Rd. leaves only option for city access from village to be at Applegreen which will lead to tail backs through village.
- Removal of bus stop at the Drive will reduce access and service for users (particularly the elderly) at The Drive, Culmore Road and Glenaulin Road.
- Removal of left filter lane/light at the Oval exist will cause a traffic hazard.

13.22. Cllr. Paul Gogarty

- Generally, welcomes the scheme, however, has concerns regarding potential adverse impacts at Palmerstown.
- Removal of the bus stop coming from the city centre before the Oval will adversely affect users on Palmerstown Drive, reducing the number of stops reduces service provision and will lead to longer walks for people to access services.
- The proposed bus route through the village centre should be abandoned as the existing stops are better located and there will be no improvement of services over a larger population to justify the changes and adverse impacts that would arise.
- The pedestrian crossing at Kennelsfort Rd. needs to be assessed in terms of traffic impact and it is suggested that a grade separated junction is required at this location.
- Concerned the provision of perpendicular parking will impact on the ability of elderly residents to access their cars.
- The need for the cycleway is acknowledged, however, the removal of car parking spaces in the vicinity of the church is questioned as this will have an adverse community impact. There should be a creative way to maintain existing parking availability while allowing cyclists at dedicated directional route.

- The omission of the left turn from Kennelsfort Lower into the City will lead to traffic being directed down the quieter heritage area of Palmerston Village, this is not logical due to the impacts and congestion that will arise, particularly when future plans to develop the potential of Mill Lane via blueway are considered.

13.23. Mairead Harrington

- Submission relates to the Palmerstown section of the proposed scheme the changes set out in the proposed scheme along this section are unnecessary, unwelcome, and unintuitive to both residents and road users.
- The R148 effectively divides the community in two, with the village and associated amenities to the north of the road and a large number of residents living to the south of the road.
- The majority of changes in the proposal are caused by the desire to reroute a single bus route (26/80) through the village by adding an additional 153m to the length of the route, omitting 3 existing bus stops in one direction, 2 in the other and replacing these with one stop in both directions.
- Removal of the bus stop at Circle K/Palmerstown Drive reduces service provision and results in longer access routes to buses for residents.
- Removal of left turning filter light from the Oval will increase congestion, and make it more difficult for people to access village amenities, the provision of an additional pedestrian crossing at the Oval and further on at the right turn into the village will further compound this problem.
- The use of the green area adjacent to the Oval as a temporary construction compound will make a busy and dangerous situation even worse.
- Allowing traffic to access the village directly from the Oval could present a possible solution but this is not proposed.
- Retaining the existing bus stops provides for a greater choice of services than would be allowed in the proposed scheme. The splitting of route 26/80 from C1/C2/C3 bus stops diminishes choice and service for customers.

- The omission of the no. 18 bus route is not appropriate and reduces service and choice.
- Omission of left turn into the city from Kennelsfort road will lead to congestion in the village as the only option will be to use the Applegreen exit. The removal of the left filter lane from the Kennelsfort Upper Rd. junction will also increase congestion on that busy road.
- Not appropriate to provide an additional pedestrian crossing underneath an existing footbridge. The crossing will only cause further delays.
- Proposed scheme does not take account of recent apartment development and parking.
- Perpendicular parking proposed along Redcow cottages does not facilitate accessible parking required for residents and users of Stewarts hospital.
- Removal of parking along north side of the old Lucan Road and in particular at the church is not appropriate and must be reconsidered, as there is space to accommodate both parking and the cycleway.
- Removal of parking on the east site of Lower Kennelsfort Road to accommodate 160m of a cycleway is not justified as it ends abruptly/dangerously at the R148.
- Reduction of the N4 to a single lane over the M50 junction is an unwelcome and unnecessary proposal on the main artery to the west from the City Centre. This will cause significant congestion and further degrade air quality from emissions.

13.24. Conor and Suzanne Haugh

- Concerned that the proposed scheme will give rise to additional cumulative effects due to new apartment complex proposed access/exit remaining under high court consideration, and new hotel development.
- Removal of filter light at the Oval will give rise to traffic issues in local estates in the vicinity. Buses will struggle to turn into the village at Applegreen with the planned cycle lanes and road layout.

- Re-routing of no. 26/80 bus into village will not benefit service users, more choice and quicker at the main R148/N4 bus stops. New bus stops in the village will affect character of protected houses/buildings.
- Changes at Kennelsfort Road/R148 junction (provision of pedestrian crossing under existing pedestrian footbridge, having one general traffic lane on R148 towards N4, and removal of left filter lane towards the N4/M50 are inappropriate, unsafe and will contribute to further delays and greater congestion.

13.25. Cllr. Alan Hayes

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area, and notes current and proposed building developments in the vicinity (Indian Orthodox Church -SD17A/0466, approved 55-bed hotel – SD19A/0218, 133 apartments pre-planning meeting LRDOP005/22, approved 55 apartments - SD21A/0271, and Part 8 development currently under review to increase the density for older persons housing at the Old Lucan Road).
- The re-routing of the No. 80 bus through the Old Lucan Road has not been requested by residents or businesses in Palmerstown and it is this element which is responsible for the majority of concerns.
- Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, create traffic/bus delays, increase noise and air pollution, adversely affect village character, services and amenity, impact adversely on protected wildlife, affect drainage as well as cause inconvenience for residents and bus service users.
 - Removal of left filter entering the Oval from R148.
 - Removal of bus stop parallel to Palmerstown Drive.
 - Removal of U-turn in centre island.
 - Bus no. 80 entering and existing Palmerstown Village at Shaws Tree services too proximate to Shaws Tree services entrance.

- Relocation of bus stop at Applegreen garage to the west of the main junction.
 - Relocation of pedestrian crossing from East to West Side of Oval junction.
 - Use of green embankment to rear of Redcow cottages as a temporary construction compound will have an adverse impact on wildlife.
 - Provision of an additional pedestrian crossing under the existing footbridge at Palmerstown,
 - Removal of left turn east bound from Kennelsfort lower.
 - New staggered pedestrian crossing outside Palmers Gate apartments acknowledges the safety issue at this location and the apartment access is subject to a High Court case. Drawings for the proposed scheme assume an entry only from the Kennelsfort Rd. Lower, permission was previously refused for apartments at this location (ABP-302521-18) for reasons including traffic hazard.
 - Alterations will compound congestion at the Kennelsfort road junction, a grade separated junction is needed at this location.
 - Removal of left filter lane from Kennelsfort Road Upper.
 - Single westbound general traffic lane over the M50 to the N4.
 - Removal of filter lights onto R148 at Oval and Kennelsfort Road.
 - Two-lane cycleway from M50 to behind Applegreen at the Oval junction and ending abruptly at the hill down into Chapelizod (not necessary and seems to be being provided to reduce carriageway width only).
 - Installation of bus stops outside cottages in Architectural Conservation Areas.
 - Provision of perpendicular parking at Redcow Cottages.
- Requests a condition be imposed to ensure bus route 80 does not enter Palmerstown village but is maintained on R148 and that a grade separated

junction should be provided, while maintaining existing layout between Kennelsfort and M50.

13.26. Margaret Hickey

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, impact adversely on protected wildlife, inconvenience for residents and bus service users.
 - Removal of filter light at junction of the Oval and R148.
 - Removal of filter at the junction of Kennelsfort Road and R148.
 - Re-direction of No. 26(80) bus route.

13.27. Brendan Higgins and Others

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, create traffic/bus delays, increase noise and air pollution, adversely affect village services and amenities, impact adversely on protected wildlife, and impede village access, as well as inconvenience for residents.
 - Removal of left filter lane at the Kennelsfort Road junction with the R148,
 - Removal of the 18 Bus service,
 - Increased volumes of traffic,
 - Works along the embankments and natural habitats on the North side of the R148.
- Suggests an alternative cycle lane route through the old Fassnidge Garage and out at the new apartments would be more appropriate and that the needs

of the local area would be better served through providing an underpass at the Kennelsfort Road. R148 junction.

13.27.1. **Brendan Higgins and Other's comments on NTA response**

- References that they are disappointed there will be no oral hearing, and that they stand behind the issues raised above.
- Removal of the existing bus stop and relocation to the village is inappropriate and will leave a large portion of Palmerstown without a bus service, removal of 18 service will cause delays for service users and force people back into cars.
- Relocation of cycle lane to the village is requested and the need for a cycle track through the village is questioned.
- Continues to have concerns in relation to badger and bat habitats while also stating that the old Lucan Road should be opened for traffic to Chapelizod.

13.28. **Chris Jennings**

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, cause traffic delays, adversely affect village character, services and amenity, as well as create inconvenience for residents and bus service users.
 - Removal of left filter lights on to N4 at Oval and into Oval from N4,
 - Removal of left filter lane at the Kennelsfort Rd. junction with the R148.
 - Removal of bus stop from Palmerstown Drive (suggests it would be better to remove the middle bus stop along this route Palmerstown).
 - Bringing the 26 route into/through Palmerstown Village.
 - Removal of left turn from the village towards the City Centre.

- Removal of parking/change to perpendicular parking along Old Lucan Road.

13.29. **Senator Mary Seery Kearney**

- Primary concern is to secure pedestrian connectivity/access from Chapelizod onto the bypass to access the proposed bus stops at this location. Notes no objection to the proposals but requests that a condition prioritising the provision of the pedestrian access points to the bus stops on the Chapelizod By-pass so that they are completed at the earliest possible time within the construction schedule.

13.30. **Gareth Kelly**

- Welcomes the overall intent, however, has concerns regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, traffic delays, loss of parking, adversely affect village character and amenity, as well as inconvenience for residents and bus service users.
 - Re-routing of the No. 26 bus through the eastern side of old Palmerstown Village.
 - Relocation of the pedestrian crossing from the Oval across the R148 to the Applegreen service station and removal of left turning filter lane from the Oval.
 - Increased complexity of the junction to enter old Palmerstown village at the Applegreen.
 - Removal of bus stop at Palmerstown Drive.
 - Removal of left filter lane at the Kennelsfort Road junction with the R148.
 - Provision of a single westbound general traffic lane over the M50 to the N4.

- The provision of a two-way cycle track and pedestrian crossing over existing pedestrian/cycle bridge over the M50.
- The submission considers that there is no substantive data presented to justify the proposed amendments to the Palmerstown area.
- Alternatives are proposed for consideration such as
 - Retaining the No. 26/80 bus through the R148 where it connects with the C-spine routes more readily,
 - The provision of a contraflow bus along the old Lucan Road (along with the two-way cycle track).
 - The provision of additional infrastructure to widen/simplify the pedestrian/cycle bridge over the M50.

13.31. Mick Kelly and Others

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area.
- Temporary building compound on the R148 does not consider impact on badger sett at this location and is not sufficiently assessed in the documentation.
- Similarly, there is a bat colony in this area which relies on the mature *Fagus Sylvatica Purpurea* trees along the embankment for roosting and feeding.
- The removal of slip lanes at the Oval and Kennelsfort Road will result in additional congestion and therefore increased emissions.
- The re-routing of the 26 (/80) bus is of no benefit to the people of Palmerstown, and will cause significant unnecessary upheaval.

13.32. Daniel Kennedy (on behalf of family and D. Kennedy Steel Supplies Ltd.)

- Submission relates to impacts on Palmerstown Village area. The Proposed scheme does not take sufficient account of the Randalswoods apartment scheme (which requires that access be afforded from the Old Lucan Road to

the site via the adjoining commercial lands) or the existing commercial businesses which require access through the village onto the Old Lucan Road, or the recent permission for a hotel development on Kennelsfort Road Lower.

- The impact of the loss of car parking on businesses and the community arising from the scheme (particularly to accommodate the cycleway along the northern side of the old Lucan Road) has not been adequately considered, evaluated or justified nor has adequate consideration or discussion been presented in terms of parking alternatives alternative/replacement parking options.
- Nowhere in the presented analysis is it stated that there is sufficient informal parking retained to deal with the existing demand and no account is taken of immediate future demand from permitted/proposed developments.
- The entrance to D Kennedy Steel Supplies Ltd. is onto the Old Lucan Road and deliveries are made to and from by large vehicles which require the full existing width of the carriageway to execute the necessary 90° turns involved. As the submitted documents do not state the specific carriageway widths proposed at this location there is uncertainty as to how access to the Steel premises might be affected.
- Accordingly, there are concerns that the impact on the business is not clear, if access cannot be guaranteed for deliveries/collections from the premises it will have a profound adverse effect. Due to the nature (size/weight/scale etc.) of deliveries/collections unloading/loading cannot be affected along the roadside due from a health and safety perspective.
- Main concerns in relation to the proposed scheme relate to:
 - The proposals for the cycle track along the Old Lucan Road. Should the vehicular carriageway widths be reduced it will mean access/egress to and from the steel premises will not be possible by the required vehicles.
 - Proposal to provide a dedicated right turning bus lane off the R148 into Palmerstown Village at the Oval for the no. 80 route. Restricts the

ability of steel delivery vehicles to turn east onto the R148. Prioritising the bus entry/lane to the village at this point essentially reduces the capacity of one of the only two junctions from the village. Furthermore, the removal of the option to turn east at the Kennelsfort Road Lower junction will require steel delivery vehicles to go through the eastern village.

- Submission is also sympathetic to the objections to the proposed removal of on-street car parking within Palmerstown, particularly for residents who do not have off-street parking available. It is unreasonable for such residents (Palmerstown is an aging community) to have their proximate parking removed.

13.33. Deborah Kenny

- Submission relates to impacts on Palmerstown and Palmerstown Village, and main concerns relate to:
 - Changes at Kennelsfort Road/R148 Junction, right turning towards the City/Oval is proposed to be omitted which will draw additional traffic through the village and add to congestion and adverse impacts.
 - No sense diverting the 26/80 in through the village as there is no need or demand for this service. Increased traffic will give rise to safety concerns.
 - Changes at Old Lucan Rd./ the Oval, removal of left filter lane onto R148 here will cause further congestion throughout the roads around the Oval and in particular at peak times which is already under pressure due to the two schools. Similarly, removal of filter at Kennelsfort Road will contribute to further congestion. Removal of ability to filter into bus lane to facilitate left turn from R148 into Oval will cause a traffic hazard.
 - Relocation of bus stop to the back of Shaws and removal of Circle K bus stop is inappropriate.

- Removal of parking will put additional pressure on surrounding areas which are already subject to people parking up and getting a bus into town, and overflow church parking will also be required.

13.34. Michael Knightly

- Submission relates to impacts on Palmerstown and Palmerstown Village:
- Cycle lanes at Old Lucan Road are not needed as most cyclists use the R148 to access the city as the most direct route.
- The removal of one lane westbound from the Kennelsfort junction with the R148 will cause tailbacks and congestion throughout the Palmerstown area.
- No need to bring the no. 80 through the village as residents are already adequately served by the core bus corridor on the R148. The proposed re-routing will increase danger for all road users and increase travel times.

13.35. Knockmaree Management Company CLG

- Submission prepared by Marston Planning Consultancy on behalf of the Knockmaree Management Company (KMC) and references the proposed schemes application no. as well as the CPO.
- Concerned solely with the impact the proposed scheme will have on the Knockmaree Residential Development (“the Estate”) in Chapelizod. Lands that form part of the Estate are subject to CPO (both permanent and temporary) to facilitate the proposed scheme, and specifically to accommodate the ramped (accessible/pedestrian) access to the bus stop on the inward leg of the Chapelizod Bypass from the Chapelizod Hill Road.
- The proposed pedestrian access to the bus stop is heavily engineered, and provides 18 ramps to address the c. 10m height differential between the proposed new bus stop and the Chapelizod Hill road.
- The height differential and steepness of the Chapelizod Hill road means it is highly questionable as to how often the accessible ramps will be used and overall, the bus stop will be very difficult to transit for vulnerable users.

- The 26 bus offers a high frequency bus alternative which already exists in the village so the new bus stops will not give adequate or realistic service to local residents.
- The proposed works will result in the loss of c.40 no. mature trees, which have not been considered or surveyed in the submitted EIAR. No details of species quality or condition are provided nor are any details of the impact of the replacement of the mature trees with concrete ramps and railings on the biodiversity of the area and therefore the EIAR assessment is deeply flawed.
- There are no details of any proposed acoustic barriers between the new bus stops and the Estate. Furthermore, the works will necessitate significant cut and fill as well as the provision of large retaining wall structures.
- The proposed section (Drawing DR-CR-0015) provided shows the inability to provide adequate or sufficient tree planting between the works and Knockmaree. No detailed planting scheme is provided to confirm the height, girth and maturity of proposed tree planting, between the works and Knockmaree.
- The proposed ramping works are proposed within lands zoned as Z9 (Amenity/Open Space Lands/Green Network) within the Dublin City Development Plan 2022-2028. Furthermore, the works are immediately adjacent to the ACA and Conservation area on Chapelizod Hill road.
- The profound loss of trees will have a significant negative impact on the setting, visual and residential amenities of the Knockmaree development which will be compounded by the hard landscaping that is proposed (ramps, steps, retaining walls, and railings). This will only be mitigated in the medium to long term (from 7-60 years) and therefore table 17.8 findings are in conflict with the main body of the assessment.
- Arguments that the proposed development requires less land-take than previous publicly displayed options are misplaced as a previous iteration (showing ramps to north of Chapelizod Hill Road were unlikely to comply with universal access and did not provide for a bus-stop lay-by).

- It is noted that Section 3.4.4.5 noted that residents of Chapelizod Court raised concerns over the visual impact of an earlier design iteration (providing ramps to the north of Chapelizod Hill Road), and that the response from the applicant has been to move those visual impacts among other concerns to the south of the road to impact a greater number of properties and residents.
- Proposed development will have a significant adverse visual impact by replacing a mature sylvan landscape with hard landscaping.
- Residents' privacy will also be affected as those waiting at the bus stop will be able to look over and into properties.
- Existing trees help to attenuate traffic noise, proposed scheme will reduce the effectiveness of this and therefore have a significant adverse impact on residential amenity.
- Suggests an alternative solution be proposed such as the provision of a lift system to minimise impact.
- The proposed construction hours and activities will have a completely unacceptable impact on Knockmaree residents both in terms of noise and vibration arising. In relation to vibration a full structural survey of Knockmaree is requested to be undertaken in advance of any proximate works.
- Detailed noise surveys or assessment of the construction or operational noise in relation to Knockmaree have not been carried out. The construction hours sought in relation to piling and louder activities in the vicinity of Knockmaree are excessive (generally 7am – 7pm Mon-Fri, and allowing additional works outside these times) and will give rise to significant adverse impacts, particularly with the recent increase in working from home activities.
- EIAR assessment on noise impacts from construction activities are broad and meaningless. Construction noise mitigation measures (such as 2.4m high screening along boundary) will have little effect on proximate works to Knockmaree which will occur at much higher levels.

- It is requested that works between chainage A5600 and A5900 should be conditioned to only occur between 8am and 6pm given the proximity to the Knockmaree residential development.
- Noise assessment does not adequately consider the noise attenuation provided by the extant compact trees in terms of the operational noise impacts on Knockmaree. Replacement of existing noise barriers is not sufficient for Knockmaree, increased acoustic screening can only be adequately achieved by relocating the bus stop a further distance away from this residential development and placing additional acoustic screens above the proposed 1.2m high boundary wall between chainage A5600 and A5900.
- Loss of trees and increase in traffic will result in reduction of air quality so the bus stop should be moved further away from the largest density of population.
- The material reduction in residential and visual amenity will result in a profound negative impact on property in Knockmaree.

13.36. Frank Lambe

- EIAR does not assess project impacts, and it is unclear why in chapter 10 (population) it refers to Halston Street which is outside the study area. This appears to be a fundamental error and flaw in the assessment of impacts, this along with others throws into question the entire basis on which the applicant has assessed the scheme.
- Final design was not subject to public consultation as many elements were brought forward at the last minute without consulting (such as the single eastern bus access to Palmerstown).
- Requests an Oral Hearing to consider the impacts on the community of Palmerstown.
- Changes of pedestrian crossing facilities at Oval Junction has safety issues, requires more busy roads to be crossed to access services and is unnecessary, it also weakens the connectivity between Palmerstown and Chapelizod.

- Proposed changes will create additional dangers for local school children and family going to and from the two local schools. Removal of filter lanes at Oval will add to congestion and danger and does not take into account SDCC recent Active Travel Plans.
- Proposals adversely affect the ability of residents particularly the elderly to move around the Palmerstown community, including by car.
- The proposal for all east bound traffic to exit Palmerstown village at Applegreen has not been properly assessed and is not sufficient to deal with traffic, and so the left turn out of Kennelsfort Road Lower should be retained.
- Adverse impacts will arise on Palmerstown residents, community and businesses from:
 - Removal of parking on Old Lucan Road and Palmerstown Village.
 - Provision of perpendicular parking in lieu of safer extant parallel parking.
 - Removal of left turning filter lane into the Oval and proposed replacement left turning facilities are dangerous.
 - New bus turning into Palmerstown Village at Oval is not needed, justified and will lead to a significant deterioration in bus options available to the community.
 - Existing pedestrian (and other junction arrangements) at the Oval junction should be retained as they are.
 - Removal of all bus stops in Palmerstown west of the Kennelsfort Road Lower is entirely inappropriate and will reduce the level of service available to residents.
 - Similarly, the removal of bus stops at Circle K (outbound) and Applegreen (inbound) on the R148 are inappropriate and will further isolate older and vulnerable residents in the area. These should be retained in their current locations however, if necessary, could be moved slightly to the west and east respectively.

13.37. Brian and Celine Lee

- Concerns regard the proposed impacts the proposed development will have on the Palmerstown Area.
- Has raised concerns that the population figures used in the EIAR are ambiguous and therefore conclusions in relation to impacts on the Palmerstown population cannot be accurately reached.
- Small area 267109015 has the highest percentage of people with bad and very bad health and is greatly affected with a new bus stop, removal of car parking spaces (north of Old Lucan Rd.), moving left (inbound) turning lane from Kennelsfort to Applegreen junction, changes to bus stop, increase in bus and other traffic. Therefore, it is requested that an independent feasibility report be submitted to accurately determine the impact of the proposed changes.
- Removal of Palmerstown Drive outbound bus stop and its relocation to west by over 300m will result in significant additional distance to be travelled by residents in the vicinity to access services. A total of 856 people (based on small area census results) reside in the vicinity and will be affected.
- Outbound left turn at Oval, traffic sequencing seems counterproductive, and junction should be re-configured.
- No dedicated cycle lanes being provided on the R148, it seems illogical as cyclists prefer to use the by-pass rather than deviating along a longer route over the M50 bridge, through Palmerstown and Chapelizod.
- Concerned that the changes at the Applegreen junction to accommodate bus entry to village and only exit from village to east will not be able to accommodate bus entry and articulated lorry exit at the same time. Increasing traffic (emissions and pollution) into the village at this location could increase impact on those with ill-health.
- Removal of bus stops on Old Lucan Road heading westwards is inappropriate, means residents have to travel further to get a bus and will leave church and Aldi without service.

- Junction design systems (page 8) in EIAR seems to suggest that the left filter from Kennelsfort Rd. Upper is to remain. Submission requests that this filter should remain in place as removal will increase congestion and emissions.
- Provision of cycleway through Palmerstown is neither justified or appropriate as it will result in loss of car parking and cyclists have always shown a strong preference for using the R148 as it is the quickest route. This is referenced in the applicant's documentation and a report on cyclist behaviour/preference is required prior to making such a significant investment in infrastructure that may not be used.
- Proposals do not provide for any bike storage facilities.
- The loss of 108 car parking spaces along the north side of Old Lucan Road will have a significant adverse effect on existing residents (not all have off-street parking available) businesses and future residents of developments under construction.
- Proposed pedestrian crossing at Kennelsfort junction will be a traffic hazard and safety issue arising from slope in road. A better alternative would be to redesign the existing pedestrian footbridge to be more accessible user/friendly.

13.38. Sharon Lyons

- Same points raised as in letter from Deborah Kenny set out previously above.

13.39. Anne Mahon and Roger Berkley

- Concerned in relation to impacts arising from the proposed scheme on the Palmerstown area.
- The proposed scheme differs from that circulated during the public consultation. Concerned that the entrance from the R148 to the village at the Oval is to be blocked off which will require residents to take a very circuitous route to access their homes when approaching from the R148. One-way exit from the Oval will result in this area becoming land-locked for emergency vehicle access and increase traffic at the Kennelsfort rd. junction. The junction

changes will exacerbate issues with rat runs through this area and cause property devaluation.

- The entire estate of Palmerstown is now proposed to be disadvantaged by the proposed scheme due to the inaccuracies provided for in the 250-apartment scheme permitted in the village whose access arrangements must be altered due to landowner/consent misinformation.
- Removal of Circle K bus stop will isolate residents further.
- The proposed scheme will result in shops on Manor Road will lose business due to reduced footfall, access to Palmerstown village will be greatly restricted and additional rat runs will be created.

13.40. **Donna Manning**

- Concerned regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, contribute to additional congestion, create traffic delays, adversely affect village character and amenity, as well as causing inconvenience for residents and bus service users.
 - Bringing the no. 26 bus into Palmerstown village is not justified or required, and will reduce the bus options available to residents in the area.
 - The bus stops adjacent to a two-way cycle lane will cause dangerous conflict between those waiting for buses and bicycles.
 - It is unclear how the Old Lucan Road will accommodate a two-way cycle track, perpendicular parking and all the additional traffic that single access and egress points to the R148 will cause.
 - Removal of left filter lane to east at the Kennelsfort Rd. junction with the R148 and funnelling all eastbound traffic to the Applegreen junction will cause all east bound traffic to have to go through the village and

lead to further congestion. The changes at this junction will exacerbate the use of rat runs at Turret and Glenamaroon Road.

- Removal of left filter off R148 to Oval will cause traffic hazard and further congestion as bus lane cannot be used to filter under the proposed scheme.
- Removal of left filter lane from Kennelsfort Rd. upper onto R148 as well as the loss of a general traffic lane to a bus lane up to and across the M50 will result in a substantial increase in congestion.
- No need for additional pedestrian crossing under footbridge at Kennelsfort junction.
- The proposed changes, loss of filter lanes and lights, will have a significant adverse impact on the community and residents.

13.41. Geraldine McCormack

- Raises concerns regarding the proposed scheme and its potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, create traffic delays, contribute to additional congestion/pollution (adversely impacting air quality), adversely affect village character, services and amenity, as well as cause additional inconvenience for residents and bus service users.
 - Re-routing of the No. 26 bus through the eastern side of old Palmerstown Village, (is not justified or required).
 - Removal of left filter lane at the Kennelsfort Rd. junction with the R148.
 - Removal of bus stop at Palmerstown Drive.
 - Increased complexity of the junction to enter old Palmerstown village at the Applegreen. Relocation of the pedestrian crossing from the Oval across the R148 to the Applegreen service station and removal of left turning filter lane from the Oval.

13.42. Alan and Eileen McQuaid

- Concerned regarding the potential for adverse impact on the Palmerstown area from the proposed scheme.
- Supports the provision of a cycleway but is concerned that the crossing at Kennelsfort Rd. junction and R148 is unsafe as this is already a dangerous junction. A better alternative would be an elevated cycle crossing similar to the existing footbridge.
- A footbridge should also be provided over the R148 at the Oval (in lieu of the proposed toucan crossings) due to the number of pedestrians (particularly school children) that need to access/cross here and the scale of traffic.
- Vigorous enforcement of new parking arrangements will be required to ensure compliance and order.
- The changes to bus stops proposed and routing through the village will restrict the range of choices/access options available to commuters as well as prolonging travel times.
- Proposed changes to (narrowing of) Old Lucan Road to accommodate bus stops etc. will cause traffic hazard/further congestion due to larger vehicles (caravans, trailers etc.) accessing/egressing the common service road to Red Cow and Wood Farm Cottages having to swing out over the two lanes to facilitate turn.

13.43. Maura & Joe Mc Carthy and Brenda Reilly

- Observers are concerned regarding the potential for adverse impact on the Palmerstown area. Submission considers that the following are inappropriate and will cause traffic hazards, create traffic delays, contribute to additional congestion/pollution (adversely impacting air quality), increase noise, adversely affect village character, services and amenity, impact wildlife and protected species negatively, as well as cause additional inconvenience and reduction of options/services for residents and bus users.

- Re-routing of the No. 26/80 bus through the Palmerstown Village (this is neither justified nor required).
- Increased complexity of the junction to enter old Palmerstown village at the Applegreen. A better alternative – should one be necessary – would be to allow the new bus route to exit to Chapelizod by reopening the Old Lucan Road to the rear of Applegreen.
- Removal of bus stop at Palmerstown Drive.
- The proposal to have only one east turning access onto the R148 from Palmerstown Village.
- The siting of the proposed site compound near the footbridge.
- Works within the protected conservation area of the village particularly the proposed bus stop outside Woodfarm cottages.
- Removal of left filter slips into and out of the Oval and at the Kennelsfort Rd. junction with the R148.

13.44. Fred Meagher and Susan Kerrigan Meagher

- Concerned that the proposed scheme does not provide a single positive outcome for the Palmerstown area.
- Proposed scheme only reduces the quality of the available bus service, at a public meeting on the 4th of January 2023 not one attendee supported the re-routing of route 26/80 through the village.
- There is no evidence of demand for the new route, and the proposals will lead to a reduction in options, frequency and choice for residents wishing to use the service.
- The Village is already served efficiently by the extant bus service on the R148 which is highly accessible to residents and Stewarts (staff and visitors) which is being further enhanced with the C-spines. The re-routing will do nothing to improve service but will adversely impact on the amenities of the village, while prolonging journey times.

- Removal of bus stop at the Drive will inconvenience residents in the vicinity and require them to walk further to access services. The removal of the left turn into the Oval is also inappropriate.
- The proposed construction compound to the rear of Woodfarm cottages will impact wildlife adversely including badger, foxes and bats. Locals are aware of the presence of bats at this location, however, there is no bat survey supporting the proposed development. This area should not be used as support facilities for unnecessary and unwanted works. This compounds area is proposed on a greenway and over an engineered soakaway to manage rainwater during the construction of the R148.
- The proposals (including the omission of the ability to turn left/east from Kennelsfort lower into the city) will make bus journeys longer, slower, and not allow interaction with the C-spine routes. Furthermore, the proposals will cause further congestion in the Village and give rise to additional air quality pollution.
- Concerns that the proposed scheme will result in the 18 service being discontinued.
- The loss of car parking in front of the Woodfarm cottages, and provision of street furniture incl. bus stops will adversely affect residents and the heritage value of the village as well as the provisions of the South Dublin County Development Plan. Furthermore, the provision of perpendicular parking is unsafe and will create reversing movements on the main carriageway.

13.45. Cllr. Shane Moynihan

Generally supportive of the scheme, however, has the following concerns regarding the potential for impact on Palmerstown Village.

- Rerouting a bus route through the eastern part of Palmerstown village is unjustified, unnecessary and will increase congestion particularly in relation to local schools through the proposed alterations to the junction at the Oval.
- Bus connectivity will be removed for older residents on the western side of the village.

- Welcomes traffic calming measures proposed in the village.
- Encourages a redesign of the junction at the Oval to enhance safety measures and retention of left filter lanes.
- Requests that bus stops be left as is to facilitate older service users.
- The alterations to the road layout in the eastern side of the village will present significant difficulty to large trucks accessing the manufacturing facility at the bottom of Mill Lane and is unsafe.
- Proposals will lead to difficulties in obtaining road closures to accommodate local events in the eastern side of the village.
- Wants to state their support for the continuation of the no. 18 bus route.
- Encourages the installation of new bus stops on the Chapelizod bypass.
- Notes the proposed scheme does not address SM3 Objective 17 of the South Dublin Development plan which seeks to facilitate the delivery of a grade separated junction at the R148/Kennelsfort road interface. Furthermore, the scheme will result in further congestion and pollution arising from the proposed interventions at this junction.
- No clarity on what segregation infrastructure will be provided on cycleways.
- Concerned that the modelling is flawed as residents of Palmerstown Court, Palmerstown Manor and Whitethorne estate have not been included but are considered resident in Ballyfermot.
- Requests further engagement from NTA in relation to the proposals should they be implemented.

13.46. Helen Mullally

- Concerned regarding the proposed impact of the proposed scheme on Palmerstown Village.
- Use of the green area to the north of the R148 as a construction compound because it would seem to involve the removal of mature beech trees, however, arboreal drawings (DR ES 0014 – sheet 15 of 31 does not show the

removal of trees) this matter would need to be clarified, and the trees not removed. There are badgers in this area and here is a sett at this location which the compound could adversely impact. Similarly, there are hedgehogs and bats present which would be affected.

- If compound cannot be moved full environmental assessment should be overtaken.
- No information has been provided in relation to the proposed temporary compound (materials, hardstanding, lighting, security, reinstatement, etc.) so impacts on residents and nature cannot be considered. An alternative compound location should be found with an existing hardstanding area.
- Removal of 500 trees along the length of the scheme is excessive and is counter intuitive in the context of biodiversity and climate action.
- Plan to remove the 18 route will have an adverse impact on residents particularly vulnerable and older service users.
- The introduction of a new route 80 to the eastern part of the village will impact amenity, restrict the ability to accommodate local events and is not required as it is not servicing a high population area.
- Proposed scheme will adversely impact on the heritage value of the village and buildings. Provision of a bus stop at the front of the red cow cottages is inappropriate.
- Lack of consultation with the residents of Palmerstown as this was carried out during covid and online interactions are not ideal.
- Requests that additional time be afforded so the community can consider this complex application further.

13.47. **Sandra and Laurence Mulvaney**

- Provision of two-way cycle path outside their home on the old Lucan Road (western side of Palmerstown Village) will limit their ability to park on-street outside their dwelling which currently accommodates a 5 adult household who

need cars to get to work. There is no demand for a cycleway of this nature at this location.

- Removal of left turn onto the N4 at the village (Kennelsfort Rd. Junction) will cause congestion throughout the village particularly during mass times, and peaks.

13.48. **Gráinne Ní Mhuirí (and others – Adrienne and John Dunne)**

- Object to the impact the proposed scheme will have on the people of Palmerstown.
- Existing bus routes serving Palmerstown are satisfactory (C-Spine routes along the R-148, 18 route from the west of the village to Sandymount). The 18 is proposed to be removed under the proposed scheme with no replacement, leaving many residents discommoded and having to change buses to get to destinations.
- The re-routing of the 26/80 bus through the village is unnecessary (serving approx. 45 dwellings) as there are adequate services in place and will only serve to prolong this route, its travel time, cause additional congestion in Palmerstown Village and serve as a disincentive to use this service which is already frequently over-subscribed. Similarly, the removal of the outbound bus stop at the Circle K garage will inconvenience a large number of service users.
- The proposed two-way cycle track is expensive and unnecessary, and it will do nothing to enhance the experience of cyclists passing through the village.
- Reducing the number of parking spaces in the Village is already inadequate and with the addition of new apartments a further reduction is highly inappropriate, it is also not accurate to state that there are three car parks in the village as these are all privately owned.
- The proposals will increase congestion both inbound and outbound on the R148 which is already significantly backed-up at peak times. The elements of the proposed scheme which will contribute to increased congestion on the R148 and give rise to safety concerns are – the staggered toucan crossing at

the Kennelsfort junction, the removal of the left turn filters off the R148 at the Oval and onto the R148 at the Oval and Kennelsfort junctions, the proposed right turn into Palmerstown for the new 80 route.

- Overall concern that the cycle track and re-routing of the 26/80 will set back living conditions for residents in Palmerstown by 20 years lead to residents being trapped in their homes by congestion.

13.48.1. **Gráinne Ní Mhuirí (and others) comments on NTA response**

- Notes that the vast majority of submissions in relation to the Proposed Scheme relate to issues with Palmerstown and the re-routing of the 26/80 bus services through the village and removal of the 18 bus route. Notes the NTA assertion that 'the provision or removal of bus services, as well as the routes is not part of the scope of the Proposed Scheme', but disagrees as it is material to the infrastructure being proposed.

13.49. **Gary Nolan**

- Removal of left filter onto R148 at the Oval there will be no possibility of to safely turn right from Palmerstown Drive and then immediately left onto the R148 due to congestion.
- The removal of the ability to briefly filter into the bus lane to turn left into the Oval will exacerbate congestion and create a traffic hazard as general traffic loiters in the main carriageway awaiting the bus lane to clear for access across.
- Re-routing of the 26/80 requires vulnerable service users to cross additional busy carriageways to get to a bus stop. The eastern part of the village does not require additional bus services and has never been required.
- New bus stops at Red Cow and Woodfarm cottages will be an eyesore in this area of Architectural Conservation.
- Removal of left filter at Kennelsfort Rd. junction outbound to M50 will further increase traffic congestion and tailbacks on this route and cause traffic to rat run through residential areas.

- Loss of trees will have an adverse impact on biodiversity.

13.50. **Desmond O'Carroll and Others (Caroline O'Connor and Gorretti Slavin)**

- All residents of Knockmaree and are concerned that the proposed development will have an adverse impact on their residential amenity due to the intensity and duration of construction activities and the overall design of the proposed development which requires land from the residential development to be compulsorily purchased. The construction phase will add to the already high noise and pollution levels the observers state they are experiencing at this location, while the proposed scheme by its design and land-take will also give rise to an increase in operational noise experienced in Knockmaree from the Chapelizod by-pass.

13.51. **Cllr. Guss O'Connell**

- Generally supportive of the proposed scheme, however, has concerns in relation to the potential adverse impacts on the Palmerstown area.
- Acknowledges that bus infrastructure and bus routes are intrinsically linked and requests that the proposed scheme as it passes through Palmerstown should serve the Community but not unduly interfere with or undermine the environment or community integrity.
- Traffic and congestion on the R148 around the Kennelsfort junction creates unwarranted and avoidable noise and air pollution for the Palmerstown area, the proposed configurations both at this junction and at the Oval will only exacerbate an already bad situation.
- The proposed scheme does not reference or mention SM3 Objective 17 of the South Dublin County Development plan 2022-202 referring to facilitating the provision of a separated junction or equivalent solution to maximise the efficacy of the BusConnects project. Any reconfiguring of the Kennelsfort rd. junction should improve traffic flow and reconnect the two sides of the Palmerstown Community and in the process eliminate the Bus/Public transport bottleneck that has been identified at this location in the submitted

EIAR. Accordingly, BusConnects should now take the lead role in providing the segregated junction, or an alternative and in the process eliminate the traffic controls at the Oval.

- The removal of left turning slip lanes at the Kennelsfort junction and at the Oval will result in congestion (and further resultant noise and air pollution) and traffic chaos in the village of Palmerstown and in the wider area. The SDCC development plan sets targets for increasing walking, cycling, bus and rail use. The extant slip lanes should remain in place for the duration of the current plan pending the development plan targets being met.
- The provision of a right turning bus lane (outbound) into Palmerstown village at the Oval should be omitted as it will cause further congestion, create tailbacks and be a traffic hazard. Similarly, the proposal to not allow left turning traffic access the bus lane as a filter.
- The pedestrian bridge crossing at the Kennelsfort Rd. Junction should be modified to provide for safer gradients and more user-friendly approach slipways on both sides. An overbridge or underpass should also be provided at the Oval.
- The two-way cycle track in the western part of Palmerstown is neither necessary or justified and will adversely affect residents, the existing estate road is sufficiently safe and there is an alternative available by running a cycle lane along the verge of the R148 from the cycleway over the M50.
- The 18 route serving the west of Palmerstown village should be retained (the proposed scheme removes its bus stops), as there is huge local support to keep this service.
- There is no demand (or justification) for re-routing the 26/80 route through the village. The removal of the 26 service from the bus stops in both directions on the R148 will disenfranchise a huge number of people across Palmerstown and Chapelizod. The current 26 service provides a vital link with the C bus service also linking to the Liffey Valley service. These linkages will be lost if the diversion through Palmerstown is implemented. The proposal to bring buses through the eastern part of Palmerstown and have only one east

turning exit from the village will cause increased congestion, pollution and traffic hazard (in conjunction with new apartments and hotel) and the arrangement of the bus stops (immediately opposite each other).

- Provision of perpendicular parking will make access to cars more difficult for the mobility impaired.
- The provision of bus stops outside No. 1 to 3 Woodfarm cottages is inappropriate as these are within a designated ACA and the proposed scheme would disfigure this unique streetscape.
- Better alternative would be to reopen that part of the old Lucan Road between Palmerstown and Chapelizod and run the buses in and out of that.
- SDCC development plan AM3 Objective 11 states that in relation to retrofitting bus infrastructure (noting BusConnects) that it must be ensured that village life and livelihoods of any county villages are not adversely affected.
- In relation to proposed bus-stops
 - Proposed inbound bus stop should be moved to the city side of Applegreen for safety reasons,
 - Proposed recessing of Kennelsfort Rd. junction bus stop (outbound) will cause traffic safety issues. The Palmerstown Drive bus stop should be relocated to the green space midway between the current location and the Oval junction (incorporate the Oval Bus Stop)
- The proposed location of the temporary compound (LU2) is not appropriate as there are drainage issues arising, this was traditional swamp land, there is a badger sett present, the trees provide feeding for a bat colony. It is requested that construction compounds not be facilitated within the vicinity of Palmerstown due to the potential to create a health and safety hazard.
- Proposed scheme does not comply with National Policy objective 64 of the NPF in relation to improving air quality through supporting public transport and integrating landuse and spatial planning.
- Requests an Oral hearing.

13.51.1. **Guss O’Connell comments on NTA response**

- Notes the response but considers that the NTA has not justified the routing of bus services through Palmerstown Village nor the provision of a cycleway at a safe cul-de-sac location.
- The Proposed Scheme would have a detrimental impact on village amenities.
- The proposed changes at the Kennelsfort road junction are neither necessary nor beneficial and will cause further disruption. Omission of left-hand turning lanes is not appropriate at this location.
- Construction Compound at LU2 is not appropriate due to impacts on drainage and ecology.

13.52. **Naomi Louisa O’Connell**

- Objects to the CPO of lands from the Knockmaree development at Chapelizod required for the provision of access ramps/steps to the proposed bus stop on the Chapelizod by-pass.
- The CPO and provision of access ramps/steps proposed will result in the removal of a significant number of trees which will have a significant ecological impact as well as completed removing the light and sound pollution screening provided by this mature planting.
- The visual and aural (slowing, stopping and acceleration of buses at the stops) impacts arising from the provision of the bus stops and access facilities at this location will have a very high impact on Knockmaree.
- The proposed bus stops will be approx. three stories above ground relative to Knockmaree and the loss of trees will result in additional noise and light pollution which will adversely affect residential amenities.
- The construction phase will involve the provision of high concrete retaining walls which will be secured with contiguous bored piles, the noise and dust arising will cause negative impacts in Knockmaree and an existing proximate childcare facility.

- No image is being provided of how the stops, access ramps and stairs will look like when viewed from the Knockmaree development, although images from Chapelizod Hill Road indicate it will be significant and adversely affect residential amenities of homes.
- There is a more appropriate alternative available to access this stop from the west of Chapelizod Hill Road.

13.53. Sandra O’Connell and Others (Mairead O’Byrne, Eilis Young, Marian and Mona Murphy)

- The proposal to route the 26/80 through the village is not required/justified and leads to a lot of other changes which will result in the corridor not meeting bus connects stated objectives.
 - Re-routing, two-way cycle path and perpendicular parking will result in additional congestion in the village.
 - Removal of Palmerstown Drive and relocating the Millbrook Apartments stop will mean stops will be more than 400m from Glenaulin.
 - The junction changes at the Oval (right turning bus into Palmerstown, removal of left turning filter lanes (and lights), relocating bus stops and pedestrian crossings) will increase congestion and create traffic hazards.
 - The junction changes at the Kennelsfort Rd. junctions (removal of left turning filters and lights, pedestrian crossings and lack of cycle lanes on both sides of Kennelsfort Rd. Lower) will increase congestion and create traffic hazards.
 - Existing Kennelsfort Rd. bus stop should be retained to retain passenger options.
 - Existing No 18 bus should be retained as it offers access to work, schools and hospitals, discontinuing will force people to use alternative forms of transport.

13.54. Justin O'Conner

- Objects to the following proposals surrounding Palmerstown.
 - Removal of the Palmerstown Drive bus stop, it would make more sense to remove the middle stop (at the Oval) if one of the three serving Palmerstown is to be taken out, as the remaining two are only approx. 280m apart.
 - Removal of left filter lane into the Oval (when outbound) from the R148 will cause a hazard as traffic waits for inside bus and cycle lane to clear and increase congestion.
 - There is neither demand nor justification for additional cycle lanes and bus stops in Palmerstown Village and the removal of car parking does not serve the community or businesses in the area.

13.55. David O'Mahony

- Objects to the following proposals surrounding Palmerstown.
 - Removal of the left turn onto the R148 (inbound) at the Kennelsfort junction will increase congestion at peak times and require all traffic to go through the village, this will be exacerbated by the new apartments and hotel.
 - The provision of pedestrian/toucan crossing under the footbridge at the Kennelsfort Rd. junction is not necessary as this will only further delay traffic and the footbridge is in place.
 - Routing of the 26/80 through Palmerstown is not appropriate, as it will impact on the historic character and result in additional traffic delays at the lights to facilitate buses turning right into the village on the outbound leg.
 - Removal of left filter lane exiting the Oval will cause increased congestion and create a hazard proximate to schools.

- The removal of car parking for additional cycle lane in Palmerstown Village will lead to difficulties for residents at peak and mass times.

13.56. Eoghan O'Neill

- Submission considers that the re-routing of the 26/80 through Palmerstown village does not benefit residents or services in the area and gives rise to a range of adverse consequences including traffic hazards, traffic delays, contribute to additional congestion/pollution (adversely impacting air quality), reduce quality and choice of services as well as cause additional disruption to residents and give rise to unnecessary taxpayer costs. Specific elements listed include the following:
 - Relocation of bus stop at Applegreen to the rear of Shaws
 - Removal of bus stop at Palmerstown Drive.
 - Removal of left filters at the Oval and at the Kennelsfort Rd. junctions with the R148.
 - Removal of no. 18 bus route.

13.57. Mary and David Ong

- Object to the changes set out in the proposed scheme in relation to the Palmerstown area.
- The two-lane cycle way in the village while supported is not using the correct route. The proposed scheme will result in significant disruption to residents and businesses. The existing village is quiet and safe for cyclists as it is, and the works proposed will result in loss of a large amount of parking and will require significant works to the road/street. The lost car parking will not be compensated by the existing privately owned car parks in the vicinity, and additional congestion will arise from recently permitted developments.
- The provision of perpendicular parking is not safe particularly as additional bus and general traffic is proposed to be channelled through this part of the village.

- An alternative route for the cycleway is proposed via a disused laneway opposite the now closed beehive restaurant, to connect to the R148, running alongside this road until the Applegreen station where it comes up onto the Old Lucan Road.
- The proposed routing of the 26/80 bus through Palmerstown is neither supported or necessary and will increase journey times. Existing stops offer maximum flexibility and interchangeability with the C route buses, removing the 26/80 from this route will increase journey time and decrease choice/options.
- The provision of new bus stops in the village are sufficiently close to the existing stops on the R148 that they will not increase the number of users coming from the catchment. Numbers will decrease in favour of accessing C-spine routes.
- Bus stops in the village will detract from the ACA streetscape.
- Removal of Palmerstown Drive bus stop will result in a large catchment area being outside 400m from a bus stop which does not comply with BusConnects objectives.
- The removal of the 18 route from the west of Palmerstown will also decrease the number of people living within 400m of a stop.
- Layout changes to the Oval/R148 junction including the removal of left turning filter into and out of the Oval will cause congestion (/increased air pollution) and create additional hazard. The provision of a toucan crossing on the western arm of this junction will cause further congestion and require pedestrians to cross additional routes and will create conflict between cycle and pedestrian movements.
- It is unsafe for buses to enter the village at the Oval junction due to conflicting traffic movements for larger vehicles using (opening/closing/loitering at) the gate of Shaws Tree services. Pedestrian and cycle activity will also be drawn to this side of the street due to the layout of the Toucan crossings.

- The sharp turn into the village north of Shaws (old Lucan Road) will require buses to cross the centreline which will cause additional congestion and hazard.
- Proposed changes at Kennelsfort Road are inappropriate namely removal of ability to turn left inbound to the City and the left turning filter lane towards the M50 as this will lead to further congestion. Further, there is no need for the toucan crossing the R148 at this location due to the presence of an existing overbridge.
- The two-way cycle way along Kennelsfort Road Lower is not necessary and has an unsatisfactory interface with Kennelsfort Road Upper which has a cycle lane down each side.
- The proposed temporary construction compound will adversely impact an extant badger sett and the beech trees which would need to be removed to facilitate it offers feeding for an important bat colony.

13.57.1. **Mary and David Ong Comments on NTA response**

- The NTA has still not provided any evidence to support the rerouting of No. 26(80) service through the village, and this is absolutely a consideration of this application as it forms the basis for justifying a range of the associated infrastructure.
- NTA has not addressed any of the concerns raised in their original submission as set out above.
- Bus stops in the village will cause congestion, widths are not in place to facilitate proposed parking and required turning movements, and works will adversely affect the ACA and character of the area. NTA has not justified the need to provide these bus stops within 200m of existing stops (at the Kennelsfort Road Junction).
- The removal of bus stop 2201 at south Palmerstown will have an adverse impact on a significant number of residents and service users and the justification provided for its omission does not stand up to scrutiny.

- The removal of left slips and turning from Kennelsfort Road Lower and Upper and the Oval will have an adverse impact on traffic, cannot be justified and is inappropriate. Furthermore, the changes at the Oval will affect the health and safety of school children.
- The need for buses to cross the inbound lanes to access the proposed new stops at Palmerstown will contribute to congestion.
- The Proposed Schemes changes to Palmerstown village loss of and changes to parking provision, provision of cycle track are not appropriate nor required. The schemes geometry will not cater for all required traffic movements and will adversely impact ecology (bats and badgers).

13.58. Cuan Ó'Seireadáin

- Objects to the proposed impact the proposed scheme will have on Knockmaree and raises same points raised in the submission by Naomi Louisa O'Connell summarised previously above.

13.59. Briain O'Shea

- EIA is a desk study using old information in some cases dating back to 2010 and cumulative effects with recently built 250 apartments in Palmerstown have not been considered.
- Removal of left turning lanes at Oval and Kennelsfort junctions are not warranted as there are no cycle lanes proposed at these locations and therefore removal of left turns is not justified.
- Will the cycle lane along the Old Lucan Road be separated from general traffic – it is not specifically stated, if not it will be dangerous due to the presence of larger trucks and traffic.
- New junction layout at Applegreen and provision of perpendicular parking will create additional congestion and not cater for the turning movements of larger vehicles.

- New bus stop layouts proposed in and around Palmerstown is more inconvenient for commuters to use.
- There is nothing shown in the proposed scheme to justify or show any demand for re-routing busses through Palmerstown Village.

13.60. Palmerstown Community Council, Siobhan Garcia

- The Community Council is supportive of the overall goals of Bus Connects but considers that the proposed scheme does not consider nor serve the needs or requirements of the Palmerstown area.
- The Proposed Scheme will not improve congestion at the Kennelsfort junction and will in fact result in further congestion with the removal of the left slip lane, furthermore the removal of the left turn towards the City Centre will cause traffic chaos in the eastern part of the village. The existing left turn and filter should be retained.
- Similarly, the left slip lane from the Oval facilitates traffic existing this area and serves the schools and Manor Road commercial zone in the immediate vicinity.
- A segregated junction is required at the Kennelsfort junction to link the two parts of Palmerstown, as this will alleviate congestion.
- The proposed right-hand turn into Palmerstown Village for buses (outbound) will cause further congestion, is not justified, will create traffic hazards, will not provide any gains to residents and should be omitted.
- At the Oval either an overhead footbridge or an underpass should be provided to facilitate crossing the R148 while cyclists should cross with traffic on a dedicated cycleway. At the Kennelsfort Rd. junction the existing overbridge should be modified to provide a more user-friendly slipway in both directions in lieu of the proposed Toucan crossings.
- The Cycleway through the village will unnecessarily interfere with the residential quality of life for residents as well as impacting private car parking enjoyed by residents and patrons of Churches. A better alternative could be

provided by bringing a link to the R148 from the M50 cycle overpass through the green space and running the cycle route along the verge of the R148 until it reaches the Old Lucan Road at the Applegreen station.

- The 18 route should be retained as it is a valuable well supported local service.
- Re-routing of the 26/80 will disenfranchise the residents at the Oval making the connecting stops more remote for residents to the south of the R148. Residents want to retain the 18 and access all other bus services from the R148 and not bring additional buses into the village.
- Having two bus stops immediately opposite each other at the Redcow/Woodfarm cottages will result in additional congestion if there is a bus at each stop, furthermore the provision of these stops will have an adverse impact on the streetscape at this location which is an ACA.
- Would be preferable to have the inbound R148 bus stop at the Oval relocated to the City side of the service station where pedestrians do not have to cross the service road to the old Lucan Road to get the bus.
- The proposals to recess the outbound bus stop at the Oval will seriously undermine the privacy of residences at Palmerstown Avenue. The Palmerstown Drive bus stop should be relocated to the green space midway between the current location and the Oval (consolidating the two stops into a single recessed location).
- The location of the proposed construction compound LU2 is not appropriate as it is a traditional swamp area that has been undisturbed for in excess of 30 years, furthermore the area contains a long-established badger sett and provides a feeding area for a local bat colony. Similarly, the green space at the Oval is not appropriate for a construction compound due to the proximity of schools.

13.61. Palmerstown Meitheal Tidy Towns (c/o John O’Gorman)

- Rerouting of the 26/80 bus service through Palmerstown will not benefit the residents and buses running through every 15 minutes will change the

character of the village. Should this re-routing not occur the attendant issues arising from pedestrian crossings, road widening etc. would be unnecessary.

- Removal of the left filter at the Kennelsfort Road/R148 junction will cause greater congestion and delays to the 26 bus route.
- The two-way cycle route being provided on one side of the Kennelsfort road will require cyclists to cross the road creating safety concerns.
- Removal of the two left filters at the Oval (to/from the R148) will cause further congestion and be exacerbated as general traffic will have to loiter in its lane waiting for clear space to pass through the bus lane to access the Oval. This loitering period could be quite long considering the bus traffic that will be using this lane (C-spine routes).
- Removal of the Palmerstown Drive and Applegreen service station bus stops will necessitate service users (including school children and the elderly) to walk longer and cross more roads to get a bus.

13.61.1. **Palmerstown Meitheal Tidy Towns comments on NTA Response**

- Level of submissions received in relation to Palmerstown should be of note to NTA and ABP in that the residents of the area have significant concerns and objections to the Proposed Scheme. The NTAs responses show a lack of appreciation of the impact on residents. The Proposed changes at the Kennelsfort junction, the /oval and the routing of the no. 26 through the village are unnecessary and counterproductive.

13.62. **Christina Pieri and Others (Sandra Adams, Monica Gore Laffan, Natasha Lester, Collette Roche)**

- Rerouting of the 26/80 bus route through Palmerstown is contrary to the Dublin Transport Strategy because:
 - Removal of filter lane/light on Kennelsfort Rd. will create further congestion.
 - Bringing more buses through the village will create additional isolation.

- Removal of left turn towards the Oval/City from Kennelsfort Rd. junction will force more traffic up Kennelsfort road.
- There is not sufficient demand for the re-routing. Stewarts Hospital is in fact a care centre and as such does not have the same footfall as a general Dublin hospital.
- Removal of Palmerstown Drive bus stop will give rise to health and safety concerns for the elderly and school children as they will have to cross more roads to access services. Furthermore, this will result in more dwellings being over 400m from a bus stop.
- Removing left filter lane from R148 into the Oval will cause further congestion and tailbacks and encourage more traffic to go on a turn left at Kennelsfort Road and come back through residential areas to access the Oval.

13.63. James Redmond

- Proposal to run new bus route 26/80 through Palmerstown is completely unnecessary and has not been requested by businesses or residents. In the absence of a grade separated junction at Kennelsfort rd. upper/lower this route will take longer and there will be a reduced connectivity with the C. The bus routes should be retained along the R148.
- The removal of the left filter from the R148 entering the Oval is dangerous to cyclists, will force cars to turn left across a bus lane and cause further delays to west-travelling traffic. The existing filter should be maintained.
- The reduction to a single west bound lane for traffic over the M50 to the N4 will cause severe consequences and turn Palmerstown into an even greater bottleneck and further reducing air quality. The reduction in lane will only have a negligible impact on bus journey times as buses aren't usually delayed from the west of Kennelsfort Road junction.
- A separated junction should be provided at the Kennelsfort junction and the existing road layout to the M50 should be retained.

13.64. Residents Association PPN:0158, (Alan McQuaid)

- Represents the residents of east Palmerstown.
- There is no need or justification for bringing a new bus service through the east of the village. No resident has requested this route change and Stewarts Hospital is a care facility not a hospital for the general public so cannot be used as justification for the provision of this bus route.
- Buses and stops should be retained on the R148 as that reduces the distance to walk to bus stops for the majority, allows mixed journeys with the C-spine and reduces safety concerns for crossing at the Oval.
- It is unclear whether buses will be able to clear the 90-degree bend on the old Lucan Road in the event of congestion tailing back on the other carriageway awaiting the left turn into the City.
- There is an existing (keypad) gated access to the rear of St. Fintan's Terrace which is used by residents and the commercial property at this location. When accessing this rear access cars/vehicles can loiter over the carriageway which will further restrict bus movements.
- Bus stops/shelters and associated infrastructure in front of Woodfarm Cottages and Clarkeville Terrace will adversely affect this ACA streetscape and could give rise to anti-social behaviour.
- Unclear how buses will transition from the bus lane on the R148 to the right turning bus lane at the Oval junction without getting caught in traffic and delayed.
- The provision of this bus route through the village and the two-way cycle track were two late additions that were not subject to detailed public consultation.
- The cycle track is not needed as the existing village road is quiet and not heavily trafficked, and is safe for cyclists. A survey the residents carried out noted no more than 10 cyclists per day (February 2022).

- Copy of citizen traffic survey and photographs showing that the extant car parking is fully utilised (February 2022) and any reduction in parking will have a significant impact on businesses and residents.
- The two proposed disabled car parking spaces are too close together and should be better distributed.
- The proposed perpendicular parking will not sufficiently cater for car parking demand from Redcow, Woodfarm Cottages and St. Fintan's Terrace and the wider area (including businesses, workers and religious services).
Furthermore, this format of parking will require drivers to break the rules of the road regarding reversing onto the carriageway. Articulated trucks existing/accessing Mill Lane (Sun Chemicals and Stanlee Steel Services) will not have sufficient clearance to make the turn with perpendicular parking in place. This form of car parking is insufficient and will create a safety hazard for all users.
- Community events that require street closures (at least two annual events) will no longer be possible with the new 80 route requiring access along the road.
- Directing cars to use the local car parks as mentioned in the EIAR is not viable as these are private car parks with clamping in operation.
- Use of the grassed embankment as a temporary construction compound is inappropriate because this area acts as a soakaway for the R148 and is a local swampy/wetland area. It is also an important area for wildlife with a badger sett in place which has been referenced previously in planning applications (SD09A/0021 refers) but is not mentioned in the EIAR. The mature trees at this location are also important for biodiversity and visual amenity, while the commitment to reinstate is noted the trees will not be replaced with similar mature trees.
- Concerned that the proposed changes to the Oval will create congestion and traffic hazard proximate to schools.
- The provision of toucan crossings at Kennelsfort Road junction is not necessary as there is already a footbridge in place.

- Removal of Palmerstown Drive bus stop is not justified and will discommode a large population area.
- Removal of car parking from the northside of the Old Lucan Road from Waterstown Avenue to the M50 footbridge will remove car parking for over 30 businesses within the village.
- In this case the “do Nothing Scenario” should be adopted in relation to the Palmerstown works associated with the 80 route and segregated cycle lanes.

13.64.1. **Residents Association PPN:0158 - Response to NTA submission**

- Notes the significant number of submissions made in relation to the Palmerstown Area and that the two residents association submissions represent approximately 320 homes in the area. Overall, the Residents Association stands by the submission that it initially lodged and considers that the Proposed Scheme will adversely impact the Palmerstown area as outlined above.
- There remains no justification for bringing the bus route and provision of cycling track (as there are limited cyclists and the village route is safe) through the village, these have not been requested by locals.
- The relocation of bus stops and additional works proposed in the village are considered inappropriate and will denude service, resulting in loss of car parking and adversely impact the character [ACA] and amenities of the area, and encourage/increase antisocial behaviour.
- The removal of the left turn eastbound onto the R148 from Kennelsfort Road Lower will add to congestion and there remains no need for the provision of a toucan crossing at this location.
- Projections and modelling used does not consider the different commuting patterns in place following the pandemic.
- They do not agree with the NTA in that the loss of 108 car parking spaces in Palmerstown will have slight impact but will have a dramatic and detrimental effect.

- There are concerns that the carriageway distances set out in the drawings cannot be provided on the ground, and the perpendicular parking proposed is not considered appropriate.
- They continue to have concerns in relation to the location of and impacts from the proposed LU2 construction compound, and do not consider that the badger walkover survey was sufficient (timing and expertise) to identify the location of the sett, and that the loss of trees, impact on drainage and noise will continue to have a significant impact at this location.

13.65. Residents of Redcow Farm Palmerstown c/o Pamela Blake

- Removal of trees from back of houses will result in an increase in noise, dust/dirt pollution on properties as they currently act as a barrier for sound and dust from the busy by-pass.
- Privacy will be adversely affected from the increase in buses and loss of trees for screening.
- Removal of left turning filter onto the R148 from the Oval will lead to increased congestion.
- Should the works proceed privacy fencing needs to be provided.

13.66. Dr. Dan Ring

- Supports the overall initiative, however, has concerns in relation to proposed changes in Palmerstown.
- The two-way bike lane along the old Lucan Road through Palmerstown is unnecessary as the village is already a safe cycling environment. It would be of greater service to all to provide a cycle lane on the N4.
- The loss of 50+ parking spaces from Palmerstown Village to facilitate the two-way cycle lane will only exacerbate an already contentious parking environment, and will have an adverse impact on the community.
- Cumulative effects of proposed traffic changes (decreasing road capacity and changes to filter lights) and additional permitted and proposed developments

in the village will lead to increased congestion and adverse impacts. There is already a 20min wait to exit the village at peak times.

- The re-routing of the 80 bus is neither supported nor required, it is an ineffective change to a bus route.
- The proposed changes at the Oval (removal of U-turn in centre island, removal of left filter lane and channelling the 80 bus into the village at Shaws entrance) will cause more contention with cars, create an unsafe environment for cyclists, add to traffic problems, and cause significant delays to both bus passengers and car users.
- The proposed changes at the Kennelsfort Rd. junction (new pedestrian crossing under the footbridge, staggered pedestrian crossing at Palmersgate apartments, removal of western filter from Kennelsfort Rd. upper, single westbound carriageway from the junction to the M50) are reckless, unnecessary, premature, will compound congestion and is a clear demonstration of the lack of thought given to these plans.
- A proper environmental impact analysis has not been carried out of the proposed temporary compound on the North side of the R148 as there is no reference to the badgers known to be in the area. A condition to reinstate the area with mature trees should be included to minimise damage.

13.67. Riversdale Riverview Old Lucan Road Residents Group

- Supports the objectives of the BusConnects scheme but have concerns regarding the impacts on Palmerstown Village.
- The proposal contravenes some of the NTA objectives, notably:
 - The proposed cycleway through Palmerstown Village is not practical and will not enhance the potential for cycling.
 - Routing of the 80 bus is unnecessary and increases the carbon footprint of the village.

- The current proposals erodes the village centre status of Palmerstown and does not represent careful consideration of the public realm design.
- The Objectives of the SDCC Development plan 2016-2022 (UC3 Objectives 1, 2, and 4) seeks to protect and conserve the village character, promote design standards and densities that are informed by the surrounding village and improve the environment and public realm, respectively. The proposed scheme does not satisfy these objectives.
- The proposed restriction of traffic flow at the St. Fintan's Terrace Junction and extent of removal of car parking spaces contravenes development plan objectives to better utilise road space while ensuring sufficient road capacity remains for the residual trips to be taken by private car and to balance the needs of road users and the local community.
- The reason behind the routing of the 80 bus service through the village is presented in the application documentation as to facilitate access to Stewarts Hospital. Stewarts Care Limited is not a hospital, it is a facility that provides day care and residential services to people with special needs. Ninety-nine percent of their clients who either live at the property or attend daily arrive by private transport as they cannot travel independently on public transport. Similarly, 95% of employees travel by car notwithstanding that the existing 18 bus route and C spine routes serve Palmerstown.
- There is no demand to justify running the 80 bus through the village, there are 11 houses on Mill Lane and no demand from Stewarts Care Ltd.
- Palmerstown Village is hemmed in by extremely high NO₂ levels at the Oval junction, Kennelsfort road junction and the M50 to the west. If the 80 bus runs through the village it will only contribute to raised NO₂ levels (EU annual limit value is 40 µg/m³, with Palmerstown village currently under 28 µg/m³).
- The existing bus stops on the R148 offer a readily accessible and proximate service for the Village, Mill Lane and Stewarts Care Limited.
- There are concerns that buses entering the village from the Oval Junction will not be able to make the sharp left turn onto the Old Lucan Road, NTA are

requested to provide autotrack analysis to confirm these turns can be made without crossing the centreline. Concerns persist that tailbacks onto the Old Lucan Road will cause congestion for buses taking this turn and having to wait blocking access to Shaws commercial premises. Having two-way traffic at this corner over the raised platform endangers pedestrians and vehicles.

- Perpendicular parking at Red Cow Cottages will not provide sufficient space for commercial vehicles exiting Mill Lane (from Sun Chemicals and Stanlee Steel) turning right onto the Old Lucan Road. A swept path analysis should be provided.
- The proposed bus shelters in the eastern part of the village corrode the streetscape and will adversely impact on the events that use the street (festivals and parades).
- The accessible parking space outside no. 8 red cow cottages is not needed as it displaces parking for that residence. A better alternative would be to provide to the rear of the Coachhouse Café/Restaurant owned and operated by Stewarts Care or at the Jazzhub building further to the west.
- The blocking of car movements (westbound along the R148) into the Oval will create risk to pedestrians and push traffic into the Village creating additional congestion.
- Quiet Street treatment should be provided to facilitate cyclists through Palmerstown, there is no need for the two-way cycle track. Previously the Chief Executive of SDCC confirmed that as both traffic speed and volumes were low that using the national cycle manual a shared street arrangement (cyclists and general traffic) would be the most appropriate facility for Palmerstown Village.
- The removal of parking from St. Philomena's Church to Waterstown avenue is not justified, and parking should be retained to cater for residents, religious services and businesses. The NTA should be asked for a cross section of this location showing a 1.8m wide footpath, 2.5m off-road cycle track (as permitted under the National Cycle Manual, 1.8-2.0m wide parking lane, and 5.5-5.7m wide road carriageway as allowed under DMURS).

- Alternative parking could be provided by acquiring land to the rear of no. 2 Redcow Cottages to facilitate parking for the residents.
- If permission is granted a condition should be imposed requiring a perpetual licence be granted to SDCC from third party's allowing residents to use parking spaces at a nominal cost, as well as the provision of a bike stand and water station for cyclists on the north side of the Old Lucan Road.

13.67.1. Riversdale Riverview Old Lucan Group comments on NTA response

- There is no need for an additional accessible space outside the Red Cow Cottages, and the reference to 1-3 red cow in section 2.1.3.2 of the NTA response should read 1-3 Woodfarm Cottages. The group also reaffirms that from liaison with residents that there are badgers living in and using the green area to the rear of the Woodfarm Cottages.

13.68. Saint Philomena's Parish

- Removing the No. 18 bus route will cut most senior citizens out of all community/parish/retail contact as it is the only mode of transport for a large proportion of people accessing local services. A cycle lane or redirected bus route makes no provision for the needs of the vulnerable to access transport to other parts of Palmerstown.
- The elimination of the left turn out of the village (towards City Centre) at Kennelsfort Rd. will cause huge congestion and discommode funerals on progress to cemeteries. This congestion will lead to isolation of services and result in areas, buildings and protected structures becoming disused.
- There is no need or justification for the two-lane cycle track, the existing road through Palmerstown, and in particular to the west of, is effectively a cul-de-sac estates road which is safe to use for cyclists.

13.69. Imelda Scally and Others

- Objects to proposed changes at Palmerstown, namely the removal of left filter lane at the Oval, removal of bus stop at Palmerstown Drive, relocation of bus

stop from Applegreen to behind shaws, relocation of pedestrian crossing from east to west of junction, no filter lane for outbound traffic to turn into Oval. These alterations will adversely affect residents, service users and lead to further congestion.

- Re-routing of 80 bus through village is not appropriate, will impact residents adversely, make it more difficult to get a bus seat and harder to access bus services.
- Changes at Kennelsfort Rd. junction are inappropriate. Removing east bound left turn (towards city) will increase congestion through the village, as well as impact on funeral routes.
- Loss of car parking along north of Old Lucan Road will make accessing services (shops, parish centre etc.) extremely difficult for the community.
- The two-way cycle way proposed through the village is neither justified nor needed. There is no great volume of cycle traffic at this location, and it will impact local residents and services.

13.70. Craig Scott and others (Joanne Butler, Amie Butler and Dawn Woods)

- Removal of bus stop at Palmerstown Drive will result in longer walk times for majority of population to the south of the R148 to access services.
- Re-routing 26/80 bus through Palmerstown requires it to cross two lanes of traffic which will cause further congestion. There is no local need, justification or demand for this service. The provision of bus infrastructure (incl. stops) at Redcow/Woodfarm cottages will have an adverse impact on the village character and ACA at this location. Further these stops are opposite each other and if two buses arrive will block traffic from the only egress point for the village towards the city.
- Removal of slip lane for outbound traffic turning into the Oval will cause delays on N4/R148 and represents a traffic hazard. Removal of filter light for left turning traffic exiting the Oval will create more congestion.

- Plant storage/works area at top of Palmerstown Drive/Oval is a health and safety risk for school students.
- Loss of parking in the village to accommodate a two-way cycle path will result in adverse community impacts, nowhere to park for religious or other services. The proposed perpendicular parking is more difficult for elderly residents to access.
- Additional at-grade pedestrian crossing at Kennelsfort Rd. junction is unsafe and inappropriate, existing footbridge is sufficient and/or could be expanded. Left filter lane (outbound) from Kennelsfort road upper should be retained, its removal will create additional congestion and pollution.
- The reduction of eastbound and westbound traffic between Palmerstown and the M50 to a single general traffic lane will create a hazard, congestion and additional pollution.

13.71. **Nessa Skehan**

- The proposed scheme contravenes the NTAs Permeability Best Practice Guide as it has not sought consensus or engagement with local residents. There are also various other elements that are against best practice in terms of permeability:
 - Removal of Palmerstown Drive bus stop, will require passengers to board and alight further from where they live and therefore have to walk farther along busier roads and crossroads.
 - The proposals remove the pedestrian crossing at the City side of the Oval to the closest bus stop and there is a lack of a dedicated pedestrian crossing at the Oval junction with the N4.
- No rationale provided for bringing the 26/80 bus through Palmerstown, this will cause safety problems and increase congestion, while reducing travel options for bus users by splitting stops, and adversely impacting protected buildings.

- The existing pedestrian footbridge over the M50 is not sufficiently wide to allow two-way cyclist and pedestrians to pass safely, it should be widened or replaced.
- Not allowing left turns to the city from Palmerstown Village at the Kennelsfort Rd. Junction with the R148 will increase congestion through the village and make the Old Lucan Road a busy thoroughfare.
- Removal of left turning filters both into and out of the Oval will create a traffic hazard for vehicles and pedestrians as well as increasing congestion.
- Queries whether the use of the Old Lucan Road (R112) as a contraflow bus route from Chapelizod to Palmerstown given consideration as an alternative to buses having to take a right into the Village off the R148 at Applegreen.
- Reducing the carriageways available to get over the M50 to one from the Kennelsfort Road junction (as well as removing the left turning filter lane) will create increased traffic conflicts with private vehicles having to use bus lanes to get into the general traffic lane and will also create additional congestion.

13.72. Tom Sweetman

- Small business owner in Palmerstown Village and concerned regarding impacts on customer access, the loss of car parking spaces and impact on businesses during the construction phase.
- There do not appear to be any mitigatory measures in place to protect businesses during construction, in the event of permission works should be separated from storefronts by hoarding to protect from debris and noise, agreements should be reached with local businesses and residents to ensure dust and dirt is managed with regular window and street cleaning.
- Opportunity presents itself to get rid of obsolete overhead cables to improve the streetscape and presence of specific heritage streetlamps with county crest and heritage tops must be retained.
- All 60kph signage should be removed from the village as it is misleading, and U-turns should be restricted on the Kennelsfort Lower/Old Lucan Junction in

the interests of traffic safety. Pedestrian crossing of Kennelsfort Lower Road is welcomed.

- Removal of the 18 bus from Palmerstown west will be an inconvenience to the elderly accessing Ballyfermot Primary Health Care Centre at Cherry Orchard Hospital, as well as local post primary students attending Drimnagh and Walkinstown schools.
- Provision of a single lane west bound on the R148 from the village will lead to additional congestion in the Palmerstown area.

13.73. The Fitzgerald Group (c/o Niamh Fitzgerald)

- Owners of Palmerstown House in Palmerstown village and object to the removal of the existing on-street car parking currently available in the village. The submission notes that the car park at Palmerstown house is a private car park with limited parking available for customers.
- The loss of on-street car parking will be of detriment to staff and customers which will have an impact on business operations through loss of revenue and loss of staff. The existing on-street car parking is a valuable resource to businesses and residents in the area.

13.73.1. Fitzgerald Group comments on NTA Response

- Do not agree with the assertion from the NTA that the loss of 108 car parking spaces from Palmerstown will be “slight”, the loss in car parking will significantly negatively impact their customers and employees. Staff alone use 24 vehicles parked throughout the village. The loss in car parking will completely diminish the viability of their business.

13.74. The Trustees of Hermitage Golf Club

- The submitted EIAR appears to not reflect the broad critical obligations to focus on setting out the significant effects both direct and indirect and mitigation measures where adverse effects are identified.

- Raises concerns regarding the extent to which the NTAs Transport Strategy for the Greater Dublin Area 2016 to 2035 is relied upon as the fundamental document guiding the scheme.
- Is concerned that there is no adequate description of the receiving environment, of the nature of the Hermitage Golf Club (HGC), its members, the landscape (incl. its history) and a complete absence of knowledge as to the nature of the receiving environment in the EIAR.
- The absence of data in respect of the receiving environment and specifically that of Hermitage undermines the entire basis of the EIAR and renders any possible analysis of environmental effects impossible.
- The Hermitage has engaged extensively with the promoters of the scheme however, in their opinion only one option was being properly considered (that proposed) and as such adequate consideration of alternatives was not brought forward through the process.
- The level of cooperation provided by the Hermitage should not be considered as acceptance of the scheme as the proposals are devastating to the golf course and it will at a minimum require a complete re-design and additional land if it is to continue to function as a championship golf course.
- The cycleway and pedestrian way (which are of primary impact on the Hermitage) could be provided within the existing N4 corridor by reducing the speed limit to ≤ 60 kph thereby allowing the traffic lanes to be reduced from 3.4m to 3.0m and facilitating the provision of a 2.4m corridor to accommodate a two-way cycle track without any land-take from the Hermitage.
- Another alternative that wasn't considered is the removal of one (or two) traffic lanes from the N4 this would facilitate modal shift, comply with the Climate Action Plan and assist in the 20% reduction in vehicle kilometres travelled.
- The lack of consideration of these alternatives is a clear breach of section 15 of the Climate Action and Local Carbon Development Act 2015, in that the Roads Authority failed to perform its functions in a manner consistent with the matters stated in section 15, including the most recent Climate Action Plan,

the furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions.

- The lack of detail on the receiving environment, coupled with the failure to adequately consider alternatives which require the environmental reasons why the particular alternative was adopted, renders it impossible to properly identify the likely significant adverse effects or comply with the EIA Directive. Accordingly, the EIAR is not fit for purpose, does not comply with the requirements of the EIA Directive, and cannot form the basis of an application under Section 51 of the Roads Act.
- The SDCC County Development Plan does not show an indicative alignment for either the BusConnects or cycle way at HGC's southern boundary or within the golf course. The land use zoning maps do include an orange and green dashed line to denote a cycle way proposal but there is none shown within proximity to the Hermitage's southern boundary at the N4. It is well established that for a major development to proceed it must be provided for in the statutory development plan²⁷, the proposed scheme while referenced in the development plan has not been adequately afforded such status and accordingly it would be ultra vires for the Board to determine the matter.
- As the cycleway route has not been identified in the development plan granting the subject cycleway would constitute a material contravention in accordance with the principles set out in the AG(McGarry) v Sligo County Council [1989] I.L.R.M. 768.
- It is difficult to identify any basis under the definitions in section 47 of the Roads Act that would allow the development of a cycle way as part of the proposed bus corridor scheme. It is submitted that subject development does not fall within the strict definition of a road scheme under section 47 of the Roads Act and accordingly the entire legal basis upon which the application is made is undermined.
- The submission questions the reliance on the 1966 Housing Act for purposes of compulsory purchase, as the NTA is involved (and not a local authority)

²⁷ Roughan V Clare County Council [unreported, High Court, 18 December 1996]

and as it is a Roads Scheme the provisions of Section 49 of the Roads Act should be relied upon. The Roads Act provides for specific acquisition powers vested in the Roads Authority for road construction accordingly it is not appropriate to proceed under Section 76 and the Third Schedule of the Housing Act in relation to the current CPO.

- The Board should have a preliminary hearing in respect of the legal issues that have been raised in order to decide whether it is appropriate to proceed. In this regard it should be decided whether the NTA as a road authority is entitled to CPO lands under the housing legislation. The submission states it would be unacceptable and contrary to appropriate procedures in this case to proceed without first determining this matter, and if the Board are not inclined to carry out such a preliminary hearing, then it is requested that HGC are informed as soon as practicable so that they may argue their position without having the expense of engaging in an oral hearing.
- The EIAR is deficient in considering the impacts on Hermitage and little or no analysis has been conducted of the impact of the construction works or the operational works on the lands and on the operation of the facility. This exercise cannot be completed now, and any future oral hearing does not present an opportunity to amend any lacunae in the EIAR. The Board is urged to reject the application on the basis of the fundamental inadequacy of the EIAR, the Hermitage is a voluntary organisation who should not have the burden of identifying the effects/impacts which the proposed scheme will have on the golf course/club in the absence of detailed findings within the EIAR.
- Cumulative/In Combination effects have not been considered adequately or at all in the NIS, and there is a complete absence of detail in respect of how the proposed scheme is to be implemented, its sequencing and definitive findings. It is requested that the Board considers the application invalid and makes this determination in advance of the Hermitage having to engage a range of expertise at significant cost.
- Applicants await the Boards consideration of these preliminary matters regarding the EIAR and AA before they consider their options in terms of progressing any matters before the High Court. Should the Board consider

that the application can proceed the submission states that they would then be entitled to elaborate on and furnish further particulars.

- The submission formally requests an Oral Hearing.

13.74.1. **Trustees of Hermitage Golf Club Comments on NTA Response**

- Disagree with reviewing the CPO and application at the same time, as these are two separate processes with different assessment criteria. The Hermitage requests the Board to reconsider holding an Oral Hearing due to the complexity of the issues involved.
- Questions are raised in relation to the persons listed as having an interest in the Hermitage lands within the CPO and that this points to an inadequate level of investigation throughout.
- Queries why the original gate lodge has been omitted from assessments, and states that there is a lack of analysis of the impacts on a number of protected structures which lie within the curtilage of the Hermitage including the estate wall which is to be demolished.
- Concerned that the specific property rights to be extinguished in the CPO have not been identified.
- EIA has failed to assess the impact on the Hermitage, loss of trees, impact of safety netting (which is proposed on lands within the temporary land take for the CPO), the excessive amount of lands required within the CPO (both permanent and temporary) which overall will render the 16th hole unplayable. The CPO involves the lands between the 16th fairway and the boundary, this 'rough' is part of the 16th hole and its loss temporary or otherwise will render the 16th hole unplayable. Similarly, the location of the 7th and 17th holes t-boxes are too proximate to the proposed works areas, these will also be unplayable due to noise, dust and risks.
- Safety netting is proposed on lands outside the permanent land take area (proposed as temporary and handed back to the HGC) which is considered inappropriate.

- The Proposed Scheme is a busway for the purposes of Section 51 of the Roads Act and therefore should be considered under a different consent procedure.
- The Proposed Scheme has not been assessed against the current Climate Action Plan, and the traffic volumes that are being designed for are not appropriate and do not necessitate the level of infrastructure proposed at the Hermitage lands.
- There has been no effective assessment of the Hermitages proposed alternative to cater for the works proposed within the existing road corridor and it should be acceptable to propose alternative speed limits.
- Significant legal argument is presented stating that the Board cannot and should not determine whether or not to hold an Oral Hearing until such time as all submissions have been made. They have requested all details and letters from the Board in relation to the determination to not hold an Oral Hearing and are of the opinion that not holding a hearing is prejudicial to their clients' rights and constitutional protections. They note that there is conflict of evidence between the NTA and Hermitage positions that can only be resolved through an Oral Hearing.
- The NTA have not clarified the extent to which the requirements of the SEA of the Transport Strategy have been incorporated into the Proposed Scheme.
- If the scheme is subthreshold in terms of EIA as asserted by the NTA the information to determine significant effects has not been provided.
- The CPO process and application process are different, the Board does not have the information to properly conduct the type of assessment required for the purposes of section 49 of the Roads Act which is wholly different to that under section 51.
- The NTA response does not accurately show the full extent of the Hermitage landholdings and therefore level of impact and assessment of alternatives to provide the least impactful cannot be determined.

- The Proposed Scheme will adversely impact Hermitage House which is a protected structure and its attendant grounds, old gate lodge, landscape and demesne wall, these impacts have not been properly assessed nor impacts addressed. The works therefore constitute a material contravention of the SDCC Development Plan and accordingly the CPO cannot be confirmed.
- The CPO does not contain full and complete information in relation to the potential impacts on the Hermitage Golf Club/Course, and therefore the CPO cannot be confirmed. The application has failed to consider the importance of Hermitage Golf Club, and its standing as an internationally recognised championship standard course.
- The assessment contains no golfing expertise, the temporary acquisition of lands ('rough') between the 16th fairway and existing road boundary will render the hole unplayable, resulting in the course being a 17-hole, non-championship course for at least the duration of construction activities, with no definitive construction period in place. The club will lose members and become unviable in this context as a 17-hole golf course will not draw visitors or members. The works will require the course to be completely redesigned which will have planning and environmental implications for the club.
- Dust, Noise and Vibration assessments do not consider the unique nature of the use of the Golf Club and its sensitivity and viability. Significant excavation and rock removal is required, along with tree removal. No details of the methodology for rock removal have been provided (i.e. whether blasting or ripping). Golf cannot be played with high levels of noise, and it appears that the golf course has not been identified or treated as a noise sensitive location.
- Hermitage has engaged consultants who have estimated that there will be an increase of 10dB in the operational noise effects from the Proposed Scheme, however, no noise attenuation has been incorporated and accordingly this proposal cannot be considered the "least bad" option in terms of confirming the CPO. Construction noise will be even more impactful given the nature of excavation and rock removal required.
- Reference to the EIAR does not provide the required detail for providing the least impactful approach on lands subject to CPO the procedures and

assessment criteria are different. The Board must therefore either convene an oral hearing in relation to the CPO or alternatively refuse the application.

- The submission includes additional written reports from environmental consultants (in relation to noise), consulting arborists (discussing tree felling) as well as from Golf Ireland (relating to the overall status and significance of the Hermitage Golf Club) and from a senior member of the European Institute of Golf Course Architects (in relation to a design analysis of the 16th hole).

13.75. Torcross Unlimited Company

- Submission is made in relation to the land-take associated with the proposed development (plot no's 1010(1).1i, 1010(2).2i and 1013(1).1f (relating to lands along the frontage of the Hermitage Clinic along the N4, and lands to the north west of the roundabout at the clinic entrance). The submission raises concerns in relation to the effects of the proposed scheme, implications for proper planning and sustainable development of the area and likely significant effects on European Sites.
- The extent of land-take set out for the proposed scheme is excessive, unnecessary and could detract from the delivery of Healthcare services by the Hermitage Clinic. The submission queries whether the effects on the clinic and alternatives to the size of the land-take have been adequately assessed in the EIAR. It is requested that further information be sought in this regard and Torcross be afforded the opportunity to make additional comments at that stage as the lack of these assessments has hampered their ability to engage.
- The land-take areas are between the Clinic and the N4, this is the general area of the site which has been ear-marked for expansion of medical services and are essential to it.
- The proposed scheme may be contrary to the zoning at this location and represent a material contravention of the Development Plan zoning and designation of a significant view to be protected/preserved. No before and after views of the project and its impact on this significant view are presented for consideration.

- The Clinic is a sensitive receptor and has raised concerns previously with the NTA in terms of any proposed works adjacent to the medical facility and their need to comply with the National Guidelines for the Prevention of Nosocomial Aspergillosis. The EIAR states that the NTA will liaise with the clinic in this regard, however, additional detail and confirmation on this is sought.
- There has been no consultation by the NTA and Torcross regarding the reinstatement/planting works to be carried out in relation to the retaining wall structure proposed along the clinic frontage with the N4 which is shown to be over 8m on the clinic side and will involve the removal of a number of significant trees.
- The submission seeks the application to facilitate the servicing of the Clinic by bus services and requests that additional information be requested in this regard, the nearest bus stop to the clinic is 500m distant which will be difficult for patients to undertake. Also, the routes to the bus stops are poor as there is a lack of pedestrian crossings across busy roads, better design is needed to facilitate patient access to the only acute hospital facility on the N4 corridor (incl. signage). The NTA is asked whether it would be willing to direct bus routes through the clinic site if a suitable bus stop location was identified.
- The NTA has failed to take account of/plan for the integration of the proposed scheme with Metro West, and this is a critical flaw which disregards policy SM3, Objective 13 of the adopted SDCC County Development plan.
- The clinic raises security concerns in relation to antisocial behaviour on part of the clinic property that is subject to CPO, as such any works should prevent unauthorised access to the wooded area along the frontage with the N4 and provide for adequate lighting.
- Existing access point to the facility should be retained for maintenance purposes.
- Torcross confirms that should further information be requested it wishes to have the opportunity to make a further submission and should the board hold an oral hearing that they wish to attend.

13.75.1. **Torcross comments on NTA Response**

- Requests that the Board reconsider its decision to not hold an oral hearing as the NTA submission has not addressed their concerns raised above this is not a case that can be dealt with adequately through written procedure.
- Torcross is of the opinion that the Proposed Scheme is too wide and that a 3.9m wide 2-way cycle track is not required nor justified,
- Impact on protected view has not been addressed, nor has the impact of the land take on future expansion and the need for additional planting to mask views of the retaining feature.
- Works could have an adverse impact on clinic operations due to site conditions, level differences, sensitivity of receptor (Nosocomial Aspergillus). The NTA do not have a binding obligation to ensure works do not affect medical operations or procedures. The NTA have not committed to a timeframe for works or commitments for operations to ensure no impact on the Clinic.
- Notes that the proposed bus stops are too distant from the clinic to service the facility, there has been no consideration for interface with Metro West and there is no detail as to the soil depths to facilitate tree planting post construction.
- Torcross restates that it would like to be involved in any future Oral Hearing and re-engage again in the event of a Further Information Request.

13.76. **Sean Treanor**

- Raises concerns in relation to Palmerstown. The R148 is not a by-pass, it cuts through the heart of the village and the speed and noise of traffic is already intolerable and should not be added to by the proposed development.
- The removal of the green area along the south of the R148 between the Oval and Kennelsfort road is not appropriate, it is the only buffer in place between dwellings and the main road that helps ameliorate noise.

- Previous commitment by the authorities to provide a sound barrier was never realised and green area/trees was the only compensation provided. These are now to be removed.
- The levels of noise and light on the main road are already intolerable and represent a serious health risk.
- EIAR only addresses proposed construction works and not the ongoing impact of the R148.
- Requests that a scientific measurement of noise and light levels is carried out.

13.76.1. Sean Treanor Comments on NTA Response

- The existing road gives rise to excessive noise levels and any alterations should ensure that no additional excessive noise is generated.

13.77. James Ward

- The U-turn in the centre island just prior to the Oval from the Dublin City direction offers the only means of accessing their dwelling on the one-way portion of the Old Lucan Road. Its removal will cause huge inconvenience to them and will impact their amenity and value of their dwelling.

13.78. Kevin and Carmel Whelan & Others (Eamon and Patricia Whelan, Austin and Natalie O'Farrell)

- The following alterations at Palmerstown are not appropriate, will cause hazards and increase congestion.
 - Removal of the ability to filter into the bus lane to turn left into the Oval outbound from the City.
 - Removal of the left turning filter from the Oval.
- The by-pass should be tunnelled through Palmerstown.
- The changes at the Oval will cause congestion and be dangerous for the school children attending the two schools at this location.

