



FAO: An Bord Pleanála (Strategic Infrastructure Division)

Re. Planning Application by the National Transport Authority for the construction of the Bray to City Centre Core Bus Corridor Scheme.

The Submission from Dun Laoghaire Rathdown County Council regarding the Bray to City Centre Core Bus Corridor Scheme is set out hereunder.

From: Dun Laoghaire – Rathdown County Council,
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This submission is set out under the following headings:

- Section 1 Introduction and Planning Policy**
- Section 2 Traffic and Active Travel Recommendations**
- Section 3 Landscape, Biodiversity, Heritage & Conservation Recommendations**
- Section 4 Drainage, Road Maintenance, Public Lighting and Pollution Control Recommendations**
- Section 5 Compulsory Purchase Order**

Section 1

Introduction, Planning Policy & Objectives

Introduction

The BusConnects Core Bus Corridors infrastructure projects present a major opportunity for transformative improvements to both cycling and public transport infrastructure within DLRCC and the wider Dublin area. DLRCC is therefore very supportive of the proposed Bray to City Centre Core Bus Corridor scheme and welcomes this opportunity to make a submission to An Bord Pleanála in respect of the proposed development. DLRCC considers it essential to optimise all opportunities for improvements to public transport and cycling infrastructure, so that we can maximise the shift to sustainable mobility modes over the critical years ahead. DLRCC believes that the recommendations set out below in this submission will add further value to the CBC scheme and help to maximise the move to sustainable travel across the city. DLRCC therefore requests An Bord Pleanála to give due consideration to the Council's recommendations.

DLRCC County Development Plan 2022 - 2028

The DLRCC County Development Plan 2022 – 2028 is supportive of the implementation of this Core Bus Corridor. The County Development Plan is underpinned by 5 overarching Strategic County Outcomes.

1. Creation of a Climate Resilient County
2. Creation of a Compact and Connected County
3. Creation of a Network of Liveable Towns and Villages
4. Creation of an Inclusive and Healthy County
5. Creation of a Vibrant Economic County

Each of the five Strategic County Outcomes outlined above are entirely interrelated and in combination can deliver the overall Development Plan Vision over the lifetime of the Plan. Creation of a liveable, connected and compact County will in turn lead to a climate resilient County which will create the opportunities for economic growth. Modal shift is essential to the creation of a compact, connected and climate resilient County and the provision of enhanced public transport and cycling facilities will greatly assist with hastening this change.

The more detailed transport policy approach is set out in Chapter 5 of the County Development Plan and it favours the Avoid - Shift- Improve (ASI) model which is based on avoiding or reducing the need to travel, shifting to more environmentally friendly modes and improving the energy efficiency of transport. The aim is to reduce congestion, create more liveable cities and reduce greenhouse gas emissions. A greater uptake of active travel and public transport through the provision of improved infrastructure is key to the model and to promoting modal change.

Chapter 5 of the County Development Plan 2022 – 2028 sets out a number of detailed policy objectives. Those set out below are relevant:

Policy Objective T3: Delivery of Enabling Transport Infrastructure sets out that:

“It is a Policy Objective to support the delivery of enabling transport infrastructure to allow development take place in accordance with the Core Strategy of this Plan and the settlement strategy of the RSES. (Consistent with RPO 4.40, 10.2, 10.3, 10.11, 10.16 of the RSES)”. Bus connects is one such piece of enabling infrastructure identified in the County Development Plan under Policy Objective T3.

Policy Objective T4: Development of Sustainable Travel and Transport sets out that:

“ It is a Policy Objective to promote, facilitate and cooperate with other transport agencies in securing the implementation of the transport strategy for the County and the wider Metropolitan Area as set out in Department of Transport’s ‘Smarter Travel A Sustainable Transport Future 2009 –2020’, and subsequent updates and the NTA’s ‘Transport Strategy for the Greater Dublin Area 2016-2035’ and subsequent updates, the RSES and the MASP. (Consistent with NPOs 26, 64 of the NPF and RPOs 5.2, 5.3, 8.4, 8.7, 8.8 and 8.9 of the RSES).” Bus service and cycle facility upgrades are a key part of the current NTA strategy.

Policy Objective T5: Public Transport Improvements sets out that:

“It is a Policy Objective to expand attractive public transport alternatives to car transport as set out in ‘Smarter Travel, A Sustainable Transport Future’ and subsequent updates; the NTA’s ‘Transport Strategy for the Greater Dublin Area 2016-2035’ and the NTAs ‘Integrated Implementation Plan 2019-2024’ and subsequent updates, by optimising existing or proposed transport corridors, interchanges, developing new park and rides, taxi ranks and cycling network facilities at appropriate locations. (Consistent with NPO64 of the NPF, RPO 4.40, 5.2, 8.3 and 8.8 of the RSES)”

Policy Objective T6: Quality Bus Network/Bus Connects sets out that:

“It is a Policy Objective to support the implementation of the bus network measures as set out in the NTA’s ‘Greater Dublin Area Transport 2016-2035’ and ‘Integrated Implementation Plan 2019-2024’ and the Bus Connects Programme”. The Bray to City Centre Core Bus Corridor infrastructure project is specifically mentioned under this policy objective.

Policy Objective T28: Road Safety-

It is a Policy Objective to implement a Council Road Safety Plan in line with the emerging Government Road Safety Strategy 2021 to 2030 in conjunction with relevant stakeholders.

Woodbrook - Shanganagh Local Area Plan 2017 - 2028

Policy WS4 sets out that it is the policy of Dun Laoghaire – Rathdown County Council:

“To promote sustainable transport forms such as walking, cycling and public transport as set out in the Government’s ‘Smarter Travel – A Sustainable Transport Future 2009-2020’ and to support planned infrastructure that prioritises public transport, as well as new cycling and

pedestrian interconnections to key public transport nodes, school and amenity destinations in the Woodbrook-Shanganagh LAP Area and wider environs.”

Stillorgan Local Area Plan 2018 - 2024

Section 4.2.6.1 Bus

“The Council will continue to work with and support the NTA in planning and implementing improvements on the Stillorgan QBC, specifically as it moves toward rolling out new bus stops with better signage, information and ticketing facilities.”

Summary of Council Policies

Having regard to the above highlighted policy, it is considered, that the provision of the proposed Core Bus Corridor infrastructure, is a core policy objective of the DLRCC County Development Plan 2022 – 2028 and is key to achieving the Strategic County Outcomes underpinning the County Development Plan.

Relevant Specific Local Objectives (SLO) - DLRCC County Development Plan 2022 - 2028

There are a number of Specific Local Objectives stipulated in the DLRCC County Development Plan, which relate to areas along the route of the Core Bus Corridor Scheme and its environs. The Board is requested to take these into consideration.

SLO 1

To facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities and to support the development of the Future Campus Project. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community, and the business sector in the County.

SLO 4

To implement the requirements of the Dublin Eastern Bypass Corridor Protection Study Booterstown to Sandyford, 2011 and any subsequent updates to same and to promote potential additional future temporary uses of the Dublin Eastern Bypass reservation corridor, including a greenway /cycleway, a pedestrian walkway, biodiversity projects, recreational opportunities - inclusive of playing pitches - public transport provision and other suitable temporary uses, pending a decision from Transport Infrastructure Ireland/Central Government in relation to the future status of the Bypass. Any potential additional future short-term uses of the reservation corridor will be subject to a joint feasibility study to be undertaken by TII and the NTA. In the event that the corridor is no longer needed for the DEBP, a Dún Laoghaire-Rathdown County Council lead study should be carried out to determine the best use of the corridor prior to any development being permitted. This study may be informed by a future NTA study. This should include the consideration of sustainable transport, biodiversity and recreation projects including playing pitches, and engagement with the public.

SLO 7

To identify and address the on-going car parking issues within and surrounding UCD Campus. In particular, the Council will support, work in conjunction with and facilitate the on-going process of Mobility Management Planning for UCD, involving the University and the NTA, in order to achieve more sustainable travel patterns to and from the University and to work towards the implementation of the UCD Travel Plan 2016 – 2021 – 2026.

SLO 88

To liaise with Transport Infrastructure Ireland (TII) to investigate potential improvements to the Loughlinstown Roundabout with any such improvements to be informed by the outcome of the TII's on-going Corridor Studies.

SLO 104

To investigate the potential upgrading of the Wilford Interchange to provide connectivity to lands west of the M11 and Old Connaught Village with any such improvements to be informed by the outcome of the TII's on-going Corridor Studies.

SLO 109

To continue the development of Shanganagh Park in accordance with the Masterplan, and to develop a sports facility and improved recreational facilities in the park.

SLO 111

To provide a DART Station at Woodbrook.

SLO 112

To facilitate the provision of a pedestrian and cycle corridor connecting Cois Cairn to the Dublin Road, in conjunction with the development of the Council owned 'E' zoned lands and the upgrading of the Wilford Interchange, with any such improvements to be informed by the outcome of the TII's on-going Corridor Studies and any future studies.

SLO 148

To protect and safeguard the roundabouts on the approaches into Shankill village at St. Anne's Church and at the junction of Dublin Road (R119) and Quinn's Road.

Specifically in respect of SLO 148, as stated above, it is noted that the proposed CBC scheme involves the change of the roundabouts in question, to signalised junctions. This is not consistent with SLO 148.

The Board is requested to:

Ensure the relevant policies and objectives of the DLRC County Development Plan 2022 – 2028, are considered, weighed up and balanced in the Board's assessment.

Section 2

Traffic and Active Travel Recommendations

General Comments

The Board is requested to:

- **Ensure that all bus stops are adequately distanced from junctions to avoid buses potentially backing up and blocking traffic and to also ensure that visibility of junction traffic signal heads for oncoming traffic is not impeded.**
- **Ensure that adequate stacking space for cyclists is provided, especially at protected junctions, to accommodate cyclists waiting to cross the road and to take into account the anticipated increase in cycle traffic over the years ahead.**

Traffic Signal Phasing

The Junction Design Report shows signal phasing and timings for the signalised junctions along the route. The Council has concerns regarding the design approach at a number of junctions.

The cycle times have been extended to 120 seconds “to maximise the throughput of people through the junction”. In fact, increasing the cycle time increases the throughput of cars only. Pedestrians, cyclists and buses do not benefit from longer cycle time. Pedestrians, cyclists and buses need minimum (or minimal) green time to clear the queues which have arisen during the red phase. It is only cars which require longer green times to clear the queues which have arisen during the red phase.

Where there is a conflict between straight through cyclists, buses and left-turning cars, a number of junctions have separate stages for each mode (presumably for perceived safety reasons). This means that straight through cyclists and buses have red signals while straight through and left-turning cars have green. Typically, in a cycle time of 120 seconds, the cyclist stage would be 7 seconds green, the bus stage would be 10 seconds green and the car stage would be between 20 and 50 seconds. Cyclists would have green for less than 6% of the cycle and buses for less than 9% of the cycle. This would be a very significant reduction in green time for cyclists and buses in comparison with the current situation, where cyclists and buses have green at the same time as cars.

The Council has a particular concern with the phase where straight through cyclists are on red while straight through cars are on green (typically for 20-50 seconds per cycle). The Council is concerned that the level of compliance by cyclists with such a phasing would be very low and that non-compliance would lead to significant safety issues.

The Council understands that a trial of similar junction layouts and signal phasing has been carried out in the Dublin City Council area, but at a junction with low cyclist traffic volumes, and other trials are being considered. The results of any such trials should be used to decide on the final detailed design of the junction layouts and the signal phasing for the Bray to City Centre CBC.

Subsequent to this planning application to the Board, the NTA has published an updated version of the Cycle Design Manual, which we understand will be subject to ongoing review.

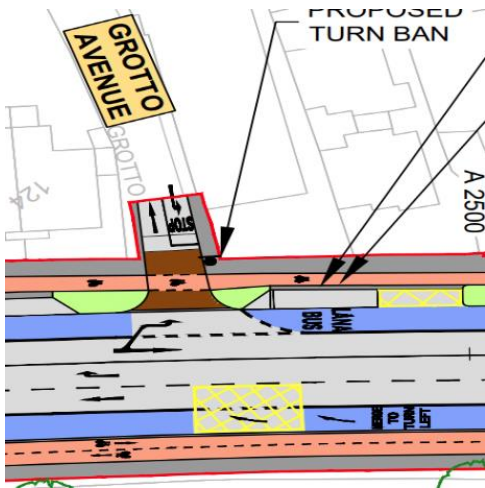
DLRCC requests that the Board include a condition requiring the NTA to implement and monitor a trial junction layout and phasing at a location (or locations) where there are significant volumes of cyclist and car traffic. The new Cycle Design Manual provides more up to date guidance on junction design. A permission for the Bray to City Centre CBC should allow sufficient flexibility for the results of any such trials and/or updates to the Cycle Design Manual, to be used to decide on the final detailed design of the junction layouts and the signal phasing and should require the NTA to agree the final detailed design of the junction layouts and the traffic signal phasing with DLRCC.

Treatment of Junctions with side roads (non-signalised)

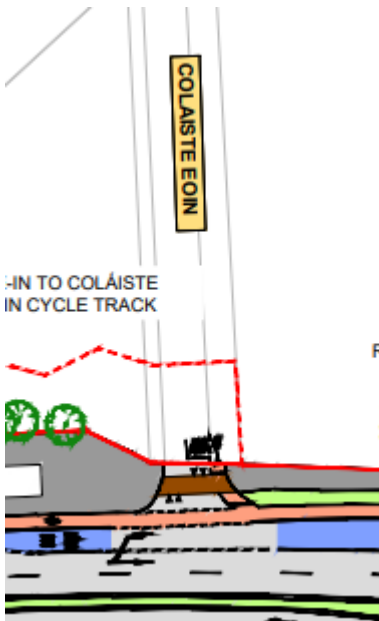
In the interest of pedestrian and cyclist safety, DLRCC has a requirement, where feasible, for the provision of continuous pedestrian and cycle facilities across side roads, similar in design to that proposed under the Blackrock to City Centre CBC scheme at Grotto Avenue (example 1 below). At other side road locations across the Bray to City Centre CBC scheme however, the cycle lane is at grade with the general traffic lane and not accommodated on the raised table (example 2 below).

DLRCC requests that the Board include a condition requiring prior engagement and agreement with DLRCC regarding the final design of the pedestrian and cycle facilities at junctions with side roads in order to ensure an approach which is consistent with the requirements of the Council and the latest version of the Cycle Design Manual.

Example 1

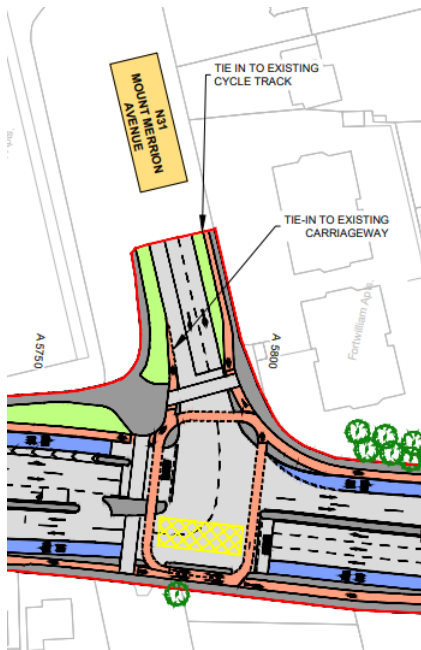


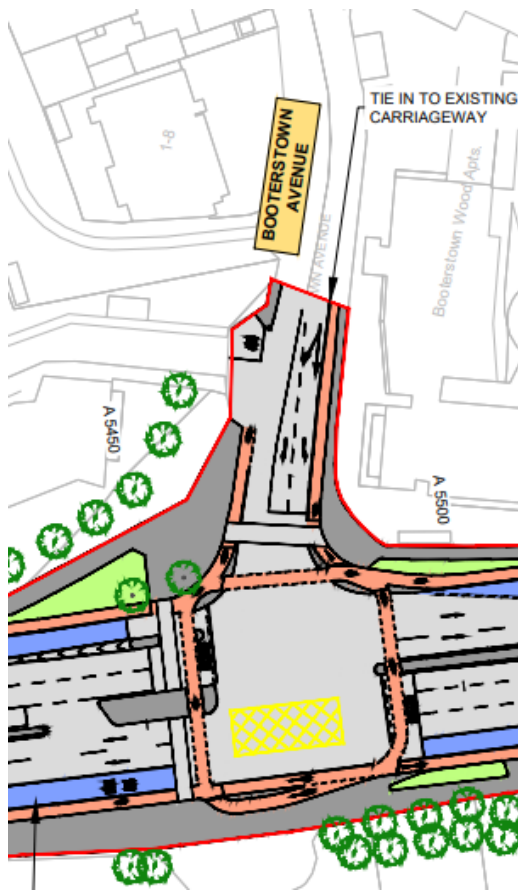
Example 2



Straight Through Cycle Movement

With reference to Sheet Nos. 17 & 18, which include junctions at Booterstown Avenue and Mount Merrion Avenue, shown below, consideration should be given to allowing straight through cycle movements on the side of the junction that presents no motorised traffic conflicts provided that pedestrian movement can be safely accommodated.





DLRCC requests that the Board give due consideration to allowing straight through cycle movements to bypass junctions where feasible.

Shankill Interventions – Junction Proposal at Quinn’s Rd / Cherrington Rd / Dublin Rd

The proposed plans indicate the change of the Quinns Road / Cherrington Road roundabout to a fully signalised junction. DLRCC are concerned that the proposed design does not appear to allow for right turn movements to be accommodated in an orderly manner at the junction without blocking straight through traffic. It is highlighted that Quinn’s Road serves a number of residential estates as well as the Shankill Tennis Club & Pavillion. While it is noted that signalised junctions generally improve pedestrian crossing facilities, it should be noted that compact roundabouts are a reasonable design option in low-speed locations such as this. It is also noted that the bus priority signals are now pulled back from this junction to just north of the entrance to Castle Farm. It is unclear therefore, to DLRCC, what benefits a signalised junction would provide in terms of bus priority and how traffic flows will be managed at this location.

DLRCC requests that the Board gives due consideration to the merits of the proposed roundabout upgrade at this location and to take any potential impact on traffic movements into account. The Board is also requested to have regard to SLO 148, as highlighted above in this submission.

Shankill Interventions – 30km/hr Speed Limit

DLRCC welcomes the proposed reduced speed limit of 30km/h through Shankill village and approach roads. It must be noted that this can only be achieved through a separate legal process under the Road Traffic Act 2004 as amended. This will be essential for pedestrian and cyclist safety, especially in the absence of segregated cycle lanes. In practice though it will be the visual cues and treatments that can be incorporated into the public realm which will generally dictate traffic speed, driver behaviour and the safety of the village environment for pedestrians and cyclists. While it is noted that the proposed plans include pedestrian crossing treatments at either end of the village core area, which help to mark out the start/end of the village area, DLRCC however, considers that a wider suite of traffic calming and public realm interventions are required to facilitate a more attractive and safer environment for pedestrian and cyclists. Such measures could include changes in carriageway surface treatment and colour, landscaping at appropriate locations, raised tables at all access points and carriageway narrowing where feasible to widen existing narrow footpaths. Many of these interventions are set out in the BusConnects Urban Realm Concept Designs brochure.

DLRCC requests that the Board give due consideration to the need for a suite of traffic calming and public realm interventions for Shankill to reinforce the proposed 30km/hr speed limit and facilitate a safer environment for pedestrians and cyclists. DLRCC would welcome a compliance condition in this regard with details to be agreed with the Council, prior to commencement of works.

Cycle facilities between Shankill and Bray

It is noted that the proposed plans indicate bringing the northbound cycle lane through Shanganagh Cemetery and Park to run alongside the southbound cycle facilities (as a two-way cycle track) with Toucan crossings to bring cyclists across the road to leave/re-join the northbound cycle lane. While we understand the constraints that pertain in this area and recognise that tree retention will be facilitated, the revision does however further fragment cycle proposals through the area.

To address this concern, DLRCC requests the Board to give consideration to the provision of a two-way cycle track along the eastern side of the carriageway between Bray and Shanganagh Park. This would eliminate the need for cyclists to cross the Dublin Road to re-join the cycle lane as per current proposals and would generally present a more coherent cycle network for the area.

Rapid Build Active Travel Facilities

The NTA issued an [Active Travel Circular 01/23 Rapid Build Active Travel Facilities Advice Note](#) (February 2023) regarding Rapid Build Active Travel Facilities, to speed up the delivery of active travel infrastructure. On foot of this, DLRCC's Active Travel team are considering a quick build scheme to improve facilities for cyclists and pedestrians to the west of the N11 in the vicinity of Loughlinstown.

DLRCC request the Board to include a condition, requiring prior engagement and agreement with DLRCC regarding the final design to ensure that the two schemes are aligned.

Connectivity to Cherrywood

The Cherrywood Development Agency Project Team (DAPT), welcomes and supports the National Transport Authority's Bray to City Centre Core Bus Corridor (CBC) Scheme under Bus Connects. The Cherrywood Planning Scheme promotes sustainable travel and sets out ambitious but achievable targets for sustainable travel modes (Planning Scheme Table 4.1 Sustainable Travel Targets). Regarding bus services in particular, Specific Objective PI 17 of the Planning Scheme states that *"It is an objective to facilitate and promote the enhancement of bus services through the implementation of CBCs and bus priority measures, and by ensuring that the design and layout of neighbourhoods facilitates the expansion of bus services"*.

Bus services will play an important role in providing public transport to Cherrywood especially for a number of areas not currently served by Luas, including Bray & Environs (as well as parts of North Wicklow) and the wider Dublin area. The Bray to City Centre CBC is critical to serving existing and future passenger demand and the improved infrastructural measures will substantially reduce journey times and improve service reliability on the Bray to City Centre CBC. Whilst the Bray to City Centre CBC is outside the Planning Scheme Area, and it is not currently proposed under these proposals that the bus services between Bray and the City Centre would divert off the Bray to City Centre CBC into Cherrywood, nonetheless DAPT consider that the provision of improved pedestrian and cycle infrastructure associated with these proposals will enhance connectivity to and from Cherrywood for active travel, thereby also supporting integrated sustainable transport usage.

The Board is requested to consider this issue and address as appropriate.

Active Travel User Experience

Input from DLRCC's Architect's Department has highlighted the value of landscaping and trees with aiding differentiation of cycle lanes from bus lanes, limiting pollution and providing a greater user experience for pedestrians and cyclists along the upgraded CBC corridor.

The Board is requested to consider this issue and address as appropriate.

Section 3

Landscape, Biodiversity, Heritage and Conservation Recommendations

DLRCC Parks' Department

DLRCC Parks' Department has prepared detailed reports setting out their concerns and recommendations regarding the impact on trees and landscaping along the route of the proposed CBC. These reports are set out in Appendices 1a & 1b as follows:

Appendix 1a DLRCC Parks' Department – General Policy, Recommendations and Recommended Conditions on the Bray to City Centre CBC

Appendix 1b DLRCC Parks' Department – Specific Comments & Recommendations on the Bray to City Centre CBC

The Parks' Department's reports highlight the importance of maximising tree retention and in particular, instances where this might be achieved through relatively minor modifications to proposals. In addition, it also emphasises that due consideration and safeguarding of root protection zones of nearby trees during construction works, can significantly decrease the likelihood of tree loss further down the line. The Parks' Department's reports also highlight concerns regarding the envisaged tree loss in the vicinity of the Woodbrook housing development, at Dublin Road, Shankill and requests that consideration is given to alternative design solutions such as bus priority signalling to help mitigate the loss of valuable mature trees at this location. DLRCC recognises that a balance must be struck between the provision of quality public transport and cycling infrastructure and the safeguarding of important landscaping features along the route of the CBC. Notwithstanding this, DLRCC is keen to ensure that all reasonable opportunities for tree retention, especially where there is a strong impact on an area's landscape character, are fully considered.

The Board is requested to give due consideration to the concerns and recommendations outlined in the attached Parks' Department's reports: Appendices 1a & 1b, in order to maximise tree retention and landscape integrity, along the route of the proposed CBC, where feasible, especially at locations such as Woodbrook, Dublin Rd Shankill, which have a strong landscape character.

DLRCC Biodiversity Officer

DLRCC's Biodiversity officer highlights that the move to a more sustainable transport system is welcome and very important, however it should be designed and managed so that it leaves biodiversity in a better state than before. Biodiversity underpins our resilience to climate change and that is why we must consider the importance of the protection of biodiversity in all of our climate actions including sustainable modes of transport. Climate action should not be at a cost to biodiversity.

DLRCC's Biodiversity Officer has prepared a detailed report, which is attached as **Appendix 2 – DLRCC Biodiversity Officer's Report on the Bray to City Centre CBC**.

The Board is requested to give due consideration to the concerns and recommendations outlined in the attached Biodiversity Officer's report.

Note on Ecological Data

DLRCC's Biodiversity Officer's report has highlighted that the Council holds ecological data sets on biodiversity within the county, including surveys relating to hedgerows, otters, breeding birds and wintering birds. DLRCC can share this information with An Bord Pleanala, should it be of any assistance in the assessment of the planning application.

DLRCC Conservation Officer

DLRCC's Conservation Officer has reviewed the CBC planning application and the EIAR and has no further comment to make. The Conservation Officer particularly welcome the guidance as set out in Appendix A16.3 Methodology for Works Affecting Sensitive and Historic Fabric.

Age-Friendly County

DLRCC is an age-friendly county, and it is a requirement that public realm interventions are in accordance with Age Friendly Ireland Guidelines, Accessibility Guidelines and best practice. Any proposed seating shall be in accordance with Age Friendly Ireland Seating Guide. Such interventions should be suitable for use by the entire community, supporting people of all abilities and ages in accessing all their local community has to offer.

DLRCC requests the Board to include a condition requiring that public realm interventions are in accordance with Age Friendly Ireland Guidelines, Accessibility Guidelines and best practice requirements for such works.

DLRCC Heritage Officer

The Conservation and Biodiversity Office reports contain feedback in relation to built and natural heritage. In addition to this, please note action 3.3.1 of the dlr County Heritage Plan: "explore opportunities to pilot new heritage hubs by repurposing buildings, spaces and public transport nodes." There is an opportunity to incorporate heritage interpretive elements into new waiting spaces and physical infrastructure along the route. The dlr Heritage Office can advise on locally relevant and engaging interpretive content and design. Any interpretive elements should be in line with the DLRCC County Heritage Plan 2021-2025, available at:

[dun_laoghaire-rathdown_county_heritage_plan_2021-2025_final_screen.pdf \(dlrcoco.ie\)](https://dlrcoco.ie/dun_laoghaire-rathdown_county_heritage_plan_2021-2025_final_screen.pdf)

The Council's Heritage Officer can be consulted on detailed proposals.

The Board is requested to consider this issue and address as appropriate.

Section 4

Drainage, Road Maintenance, Public Lighting and Pollution Control **Recommendations**

Drainage Comments

SuDs

DLRCC's Drainage Section advises that in accordance with best practice, the requirements for SuDs should be thoroughly investigated to ensure that adequate space is provided and that utility checks are undertaken to confirm the feasibility of SuDs proposals. DLRCC is happy to see areas that are currently paved being changed to landscaped areas. However, not all of these areas appear to be utilised for SuDS, and this should be addressed where feasible.

The Board is requested to consider this issue and address as appropriate.

Trees

A lot of new trees are proposed but it is not clear why all of these have not been specified as tree pits for surface water run-off. Redirecting existing footpaths/c carriageway drainage to these tree pits could aid in relieving any localised pluvial flooding and provide interception/treatment of this run-off for water quality improvement.

The Board is requested to consider this issue and address as appropriate.

Hardstanding

It is unclear why all new hardstanding is not specified as permeable/porous surfacing. This scheme presents an ideal opportunity to trial such surfaces in less trafficked areas such as the proposed footpaths/cycle paths. It would reduce the requirement for gully gratings in cycle paths (which in themselves can be a hazard to cyclists, even the "cycle friendly" ones), reducing surface water run-off and risk of icy surfaces in winter.

The Board is requested to consider this issue and address as appropriate.

Recommended Conditions:

DLRCC requests the Board to include the following conditions in relation to Surface Water and Drainage:

1. Prior to the commencement of development, the developer shall submit to the Planning Authority for its written agreement, full details of the drainage proposals for the entire scheme. These proposals must demonstrate that SuDS potential has been maximised across the scheme. This should not be limited to proposed increase in hardstanding areas but provided across all sections of the scheme. Where possible, all trees should be specified as tree pits and biodetention areas incorporated where space is available, such as at junctions. All proposed hardstanding areas must be permeable/porous or drain to an appropriately designed SuDS measure. It should be noted that oversized pipes are not considered SuDS measures.
2. Prior to the commencement of development, the developer shall submit full dimensioned construction details of the proposed SuDS measures to the Planning Authority for its written agreement. Details shall include a construction plan and a post-construction maintenance specification and schedule. Contractors with specialist training in SuDS should be used. Thereafter, the works shall be carried out in accordance with the agreed details. The SuDS measures shall be designed in accordance with The SUDS Manual (C753).
3. Prior to the commencement of development, the developer shall submit to the Planning Authority for its written agreement a construction management plan and programme of works that amongst other items provides for interception, containment and treatment of construction runoff. No construction runoff should be diverted to proposed SuDS measures. Any surface water sewer pipes used to convey construction runoff should be thoroughly cleaned before subsequent connection to SuDS elements.
4. If total infiltration of surface water run-off generated by the scheme is not possible then, prior to the commencement of development, the applicant is requested to submit a design with discharge rate for the scheme limited to Q_{bar} (calculated using site specific data) or 2l/s/ha, whichever is greater, subject to the orifice size of the flow control device not being less than 50mm in diameter. The submission shall include detailed calculations, including modelling results, of the proposed system during all required storm events.

Road Maintenance Comments

DLRCC's Road Maintenance Section requests the Board to include the following conditions:

1. A pre and post PSCI survey shall be carried out by the developer for the access roads along the Core Bus Corridor with active monitoring of the road condition to include sufficient tie in road surface area and effective remediation measures to rectify any potential damage caused by construction traffic.

2. The developer shall submit for prior agreement with DLRCC, detailed design for all elements of the scheme including but not limited to footpaths, cycle lanes, kerb separators between modes, pavement treatment options, drainage details, tree pits etc.
3. The developer shall submit for prior agreement with DLRCC a detailed pavement treatment plan based on the PMS structural evaluation FWD Level 1 analysis and Level 2 report recommendations.
4. The developer shall submit for prior agreement with DLRCC, a detailed ironworks drawing to include the mastic requirement for the existing and new ironworks. Ironworks shall be reinstated with mastic surrounds in accordance with CC-PAV-04012 as follows:
 - a. Where they are in the wheel tracks of a lane
 - b. Gullies in the vicinity of bus stops i.e., approximately 5 no. gullies on either side of a bus stop
 - c. Where the existing ironworks are in poor condition; and
 - d. At any other location identified by the Resident Engineer.

In addition to the above, DLRCC's Cleansing Section requests that the proposed designs, consider the maintenance requirements of servicing gullies and cycle lanes. Alterations to junctions etc need to have consideration for gully trucks or road sweepers being able to complete their tasks.

Regarding the Pavement Treatment Plans, DLRCC advises that the Council is currently progressing a resurfacing scheme on the N11 from Mount Merrion Avenue to Loughlinstown Roundabout. Two of the three phases are complete with phase three to be completed early in 2024. BusConnects should ensure that their pavement treatment plan accounts for this work.

The Board is requested to consider these issue and address as appropriate.

Pollution Control Comments

DLRCC's Pollution Control Section requests the Board to include the following condition:

1. The appointed contractor for the scheme construction, shall engage with the Council's Pollution Control Section, in advance of construction works commencing, to agree the relevant details of the Construction and Environmental Management Plan and the Surface Water Management Plan in relation to the construction compounds.

The Board is requested to consider this issue and address as appropriate.

Public Lighting Comments

As with Active Travel schemes, the biggest impact on street lighting is the re-alignment of footpaths, cycle tracks and road lanes and the requirements to move light columns and alter what lighting classes are needed at each part. For areas where increased conflict is happening (new cycle tracks and crossing traffic) the lighting class and uniformity may need altering which will require a new lighting design. There may also be requirements to push existing lighting back further from the road and the existing lanterns may no longer have enough light to cover the road surface, thus also needing a new lighting design. Every part of the route will need checking for existing lighting locations, planned lighting locations, and alterations to the lanterns (new vs existing), ducting and cabling and (maybe) supply connections as a result. Any alteration of the light column locations should be done under a complete lighting design.

The Board is requested to consider this issue and address as appropriate.

Section 5

Compulsory Purchase Order

DLRCC's Property Management Section has reviewed the Compulsory Purchase Order submitted to An Board Pleanala in respect of the Bray to City Centre Core Bus Corridor. Relevant comments on the Compulsory Purchase Order are set out in **Appendix 3 – DLRCC Property Management Section's Feedback on the Compulsory Purchase Order for the Bray to City Centre CBC.**

The Board is requested to give due consideration to the items outlined in Appendix 3.

Summary

DLRCC believes that the proposed Core Bus Corridor scheme presents a major opportunity for transformative change to both public transport and active travel facilities along this strategic transport corridor. The Council is fully committed to working with the NTA to ensure that the scheme achieves its full potential and to this end, we have highlighted in our submission, a number of items for the Board to consider and which we believe, will strengthen the overall outcomes of the project for sustainable travel.

Specifically, with regard to the design and layout of the scheme and the new junction designs as proposed, DLRCC is particularly keen to collaborate with the NTA on the items raised within Section 2 of this submission. We believe that the successful implementation of

the scheme design will ultimately require good engagement and collaboration between the Local Authority and the NTA.

The Core Bus Corridor works will also impact on the public realm with potential impacts on landscape, conservation, heritage and amenity assets, all of which are highly valued within the county. DLRCC considers that a key determinant of the success of the Core Bus Corridor scheme will be how these assets have been safeguarded with value added to the overall public realm along the route. To this end, we would ask the Board to give due consideration to the items raised in Sections 3 and 4 of this submission and would again highlight that the achievement of a quality outcome for the public realm will ultimately require good engagement and collaboration between the Local Authority and the NTA.