

BusConnects Core Bus Corridors Infrastructure Works

DLRCC Submission on 3rd round of Public Consultation

**Prepared by the Municipal Services Department, with cross-departmental input
December 2020**

Introduction

The BusConnects Core Bus Corridors infrastructure projects present a major opportunity for transformative improvements to both cycling and public transport infrastructure within DLR and the wider Dublin area. The initiatives will dictate the form and use of these strategic transport corridors (Route 13 & Route 15) for the next 20 to 30 years and with the urgent need for measures which will mitigate the impact of climate change, it is critical that we get the optimal outcome to support and maximise the shift to sustainable modes within this timescale. It is essential therefore that all reasonable opportunities for improvements to public transport and cycling infrastructure are incorporated into the schemes in order to realise the full benefit of the substantial expenditure and to promote and cater for a major increase in cycling and public transport usage over the coming years.

DLRCC understands that over the coming months, the projects will move to more detailed design stage as planning applications are being prepared. DLRCC requests involvement & dialogue during this stage of the process and prior to design details being finalised, especially with respect to the issues and areas of potential improvements highlighted below in our submission. We request that this dialogue be carried out in a structured way to ensure a comprehensive engagement and suggest this be arranged through DLRCC's BusConnects liaison lead.

The items raised in this submission can be broadly categorised as set out below. Please note that items in respect of CBC Route 13 – Shankill to Bray Section, are categorised separately. This reflects the significantly different character and set of constraints that pertain to this area as opposed to Route 13's N11 section and Route 15 – both of which are major strategic transport corridors through the county.

Submission Categories

- 1. Cycling Infrastructure**
- 2. Traffic, Rd Maintenance & Public Lighting**
- 3. Bus & Coach Stop Facilities**
- 4. Coach Facilities & Commercial Public Transport Services**
- 5. Shankill – Bray (Route 13)**
- 6. Conservation, Amenities & Public Realm**

1. Cycling Infrastructure

The Bray to City Centre and Blackrock to Merrion routes already facilitate high numbers of cyclists, from seasoned commuter cyclists to significant numbers of younger cyclists accessing educational and leisure / sports facilities. DLRCC believes that significant improvements to existing cycling infrastructure are required if we are to take advantage of the strong propensity to cycle evident in the county. DLRCC's recent experience of introducing quality segregated cycle facilities has been an overwhelming success and strongly supports our belief that if quality cycle infrastructure is provided we can bring about a major modal shift towards cycling in the county and a corresponding reduction in car based transport.

BusConnects presents an exceptional opportunity for transformative improvements to cycling facilities and DLRCC strongly welcomes the commitment to providing segregated cycle lanes and much improved overall cycling infrastructure – including significant junction redesigns, as part of the CBCs infrastructure projects. To help build on the design work done to date and realise a major modal shift towards cycling, DLRCC asks that the following items be given careful consideration as the design of the CBCs is progressed over the coming months.

Pedestrian – Cyclist Conflict

BusConnects, through the provision of segregated cycle lanes will help to significantly reduce the potential for pedestrian cycle conflict alongside the CBC routes. There are locations however, particularly in the vicinity of bus stops, pedestrian crossings and large trip attractors, where care needs to be taken to design out as much as possible, the potential for conflict between cyclists and pedestrians and provide for overall safer and higher quality pedestrian and cycle environments.

Bus & Coach Stops

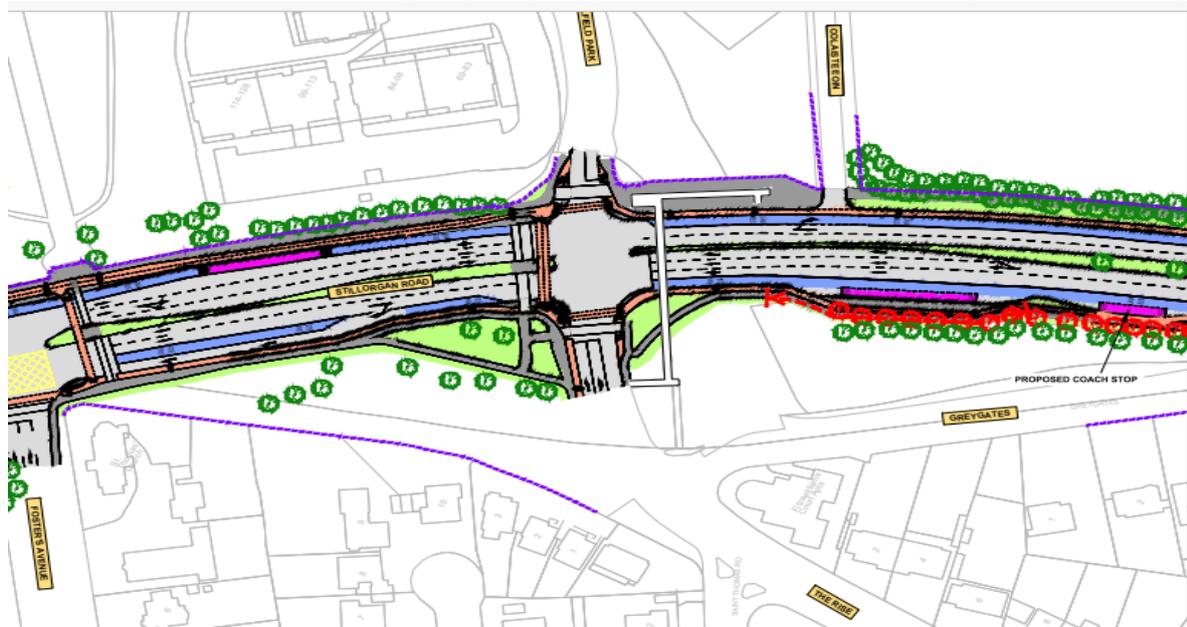
One of the main areas of conflict between pedestrians and cyclists with existing cycle facilities particularly on the N11 & Frascati Rd / Rock Rd is undoubtedly at bus/coach stops. It is very welcome therefore that the CBC initiatives are seeking to design out these conflicts through more extensive use of the bus stop island design where feasible. While it is understood that it will not be possible in all instances to provide the preferred bus stop island solution, there would appear however to be instances where a potential is available but not being utilised to allow better separation of cyclists from boarding and alighting passengers. There are also a number of instances where bus stop islands proposed in the previous design iteration (Round 2 Consultation), have been designed out in the current plans. This is considered a particular problem at the busier bus/coach stop locations where pedestrian activity is high and therefore the corresponding potential for conflict with cyclists is also high. It is also important to note that under the bus network redesign initiative, service frequency along the N11 between Foxrock Church and the City Centre is set to increase with 4min service frequencies planned. This together with continuing growth in the commercial bus market (see section on Coach Facilities & Commercial Public Transport Services) will certainly lead to increased use of bus/coach stops and a corresponding increase in potential for conflict with cyclists, especially along the N11 inner corridor (Foxrock Church to City Centre). Hence the need to ensure all opportunities are fully availed of with the CBC initiatives to provide good separation between cycle lanes and bus/coach stop boarding & alighting areas.

Examples of locations where these issues arise include the following:

Map 17 Adjacent to UCD – Previously proposed bus stop islands removed at both north and southbound stops. These are double bay bus stops at busy locations where there seems to be potential for the bus stop island solution to be implemented.



Map 18 – Previously proposed bus stop island omitted and unused potential for bus stop island at proposed coach stop



Map 19 – Previously proposed southbound bus stop island omitted



Map 21 – Proposed coach stop at hotel with cycle way realigned to between the hotel and coach stop. With proximity to the hotel and difficulty with regulating the use of hotel coach stops, we have concerns that this could be used extensively for hotel coaches outside of regular commercial services and result in excessive conflict between cyclists and coach passengers and associated loading /unloading of luggage.



Map 29 – Proposed northbound coach stop with unused potential for bus stop island solution and removal of previously proposed bus stop island at southbound stop.



Stops at this location adjacent to Foxrock Church are heavily used (both buses & coaches – note interchange point with Dun Laoghaire E2 services) and it is an area of high pedestrian movement. The CBC plans already include for a land-take at this location as well as some tree removal. There would appear to be good potential to allow for a cycle lane set back from the coach stop similar to the adjacent bus stop. While coach frequency is lower compared with local buses, luggage compartments opening onto the cycle lane nonetheless has the potential to be very disruptive to cycle movements, especially at locations such as this where there is high pedestrian activity. Also, given the high frequency bus services envisaged on this section of the N11, it is possible that buses may also use the coach stop when the bus stop ahead is occupied. There would also appear to be potential to facilitate cycle parking at this location – see comments under section on Bus & Coach Stop Facilities.

There is also an instance on Map 8 CBC Route 15 shown below where the previously proposed bus stop island has been omitted in the scheme's current iteration. We request that the reinstatement of the previous design be given due consideration.

Map 8 – Rock Rd



Blackrock – Map 10 – Proposed northbound bus stop with unused potential for bus stop island solution



Pedestrian Cyclist Conflict at Major Trip Attractors UCD/Belfield – N11 – Map 15

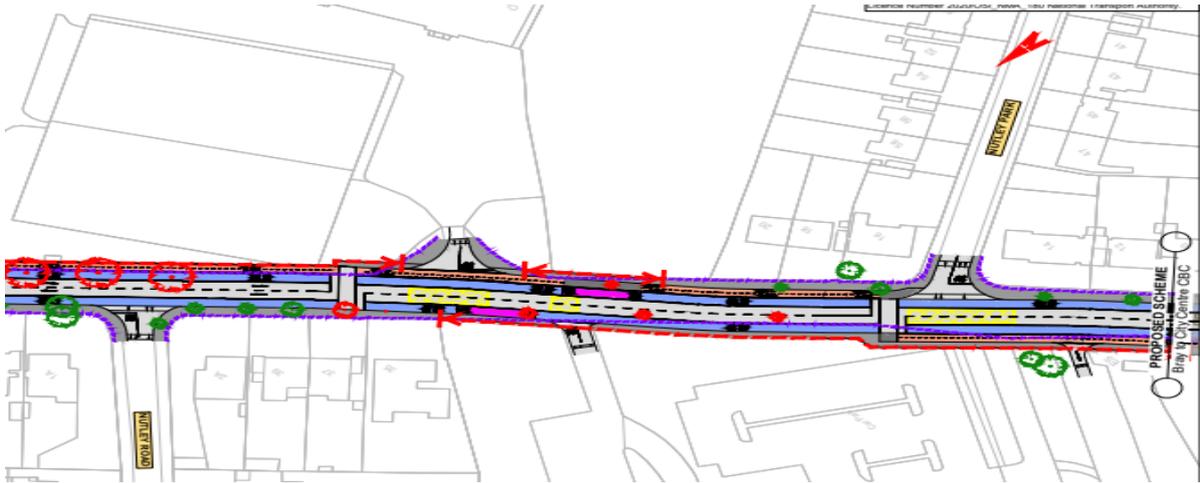
Map 15 Opportunity to route cyclists away from heavy pedestrian areas – see text below



The main entrance to UCD is a very busy location with pedestrians, cyclists, buses, coaches and general traffic all interacting within a relatively confined area. Of particular concern here is the routing of all southbound cyclists directly through the area of greatest pedestrian activity - i.e. movement between the over-bridge and the bus & coach stops. A regularly observed resulting behaviour at this location is southbound cyclists entering the bus & traffic lanes to avoid the inevitable conflict and disruption which results from the high volumes of pedestrian movement in the vicinity of the cycle lane and this in turn leads to safety issues in an area of high bus, general traffic & pedestrian movements.

Given the area of land which is available adjacent to the east of the carriageway at this location, it would seem there is good potential for the southbound cycle lane to branch into two as it

approaches the southbound on ramp and thereby allow good separation of the straight through southbound cyclists by keeping them well east of the busier and often quite congested areas adjacent to the over-bridge and bus stops. Potentially the two way cycle facilities proposed as far as Belfield Park could be extended north of this location to tie in with the quiet street – Nutley Park, which in turn leads to the proposed two way cycle facilities on the south side of Nutley Lane (CBC Route 14 copied below). It is likely that this route to the east of the Belfield overpass and along Nutley Park will become a strong cycle desire line between UCD & St Vincent’s University Hospital. Adding the additional cycle lanes as suggested above would provide the missing cycle link.



DLRCC is concerned that as long as all southbound cyclists, as per the current design, are routed through such a busy pedestrian environment, pedestrian – cyclist conflict will persist at this location. Given the significant increase in cycling which DLRCC envisages over the coming years, we would urge the design team to put in place a solution which addresses this concern in a substantial way- i.e. through the provision of the suggested separate cycle lane for straight through southbound cyclists.

Pedestrian Cyclist Conflict at Major Trip Attractors – UCD Residences & Colaiste Eoin

Maps 18 & 19 N11 Belfield Park to Booterstown Avenue





Extending the two way cycle facilities to Colaiste Eoin would help reduce pedestrian cyclist conflict at this busy pedestrian location by providing clearly defined routes. There would also appear to be significant potential to extend the two way cycle facilities to Booterstown Avenue and connect with its residential hinterland. There is already strong contra flow cycle use along the footpath at this location for access to Colaiste Eoin and the planned two way cycle facility from Beechfield Park will most likely increase such activity. There appears to be potential at this location to regularise the situation by extending the two way cycle facilities to Booterstown Avenue.

Pedestrian Cyclist Conflict at St Brigid's Church Road

Map 24 Previously proposed southbound bus stop island removed and need to separate footpath from the proposed cycle lane alongside St Brigid's Church Rd to lessen potential conflict with cyclists



DLRCC acknowledges the design revisions in the Stillorgan area on Maps 23 & 24. The proposal to close off vehicular access to the Hill from the N11 (Map 23)will allow significant safety benefits for both cyclists and pedestrians while the relocation of the cycle lane (Map 24) to alongside St Brigid's Church Road will also provide enhanced cycling facilities. It is recommended that consideration be given to minor design amendments to allow for greater separation between the proposed pedestrian footpath and the proposed relocated cycle lane. This could be achieved by carrying the cycle lane over to St Brigid's Church Rd at a point further north and allowing an intervening area of planting to separate the pedestrian area from the cycle lane and thereby reduce the likelihood of pedestrians continuing onto the cycle lane and leading to conflict. Noting the nearby school it may also be worth designing in a treatment, which prevents cars from mounting the cycle lane during drop off and collection times.

Cyclist – Motorised Traffic Conflict

There are a number of areas where we believe the CBC initiatives can achieve more in terms of designing out areas of potential conflict between cyclists and traffic. As highlighted above, the N11 interchange with the entrance to UCD is a very busy location with heavy traffic, cycling and pedestrian movement. Our concern here is with the northbound off ramp cycle facilities where cyclists have to cross the path of arriving and departing buses. With an increase in bus movements planned at the proposed interchange under the BusConnects network redesign, this will further exacerbate safety concerns for cyclists at this location. In addition, there is a lack of clarity with respect to the two way cycle facility on the over bridge and how this will connect with the overall cycle network in the immediate area.



DLRCC also request the design team to consider altering layouts where left in – left out arrangements are in place in order to reduce traffic speed and improve cyclist safety. Two examples of such locations are shown below at Stillorgán Grove and St John of Gods. The redesign of the N11 Junction with Stillorgán Park Rd and the removal of the left turn slip at that location could potentially draw more traffic through the Stillorgán Grove junction and further exacerbate safety concerns.



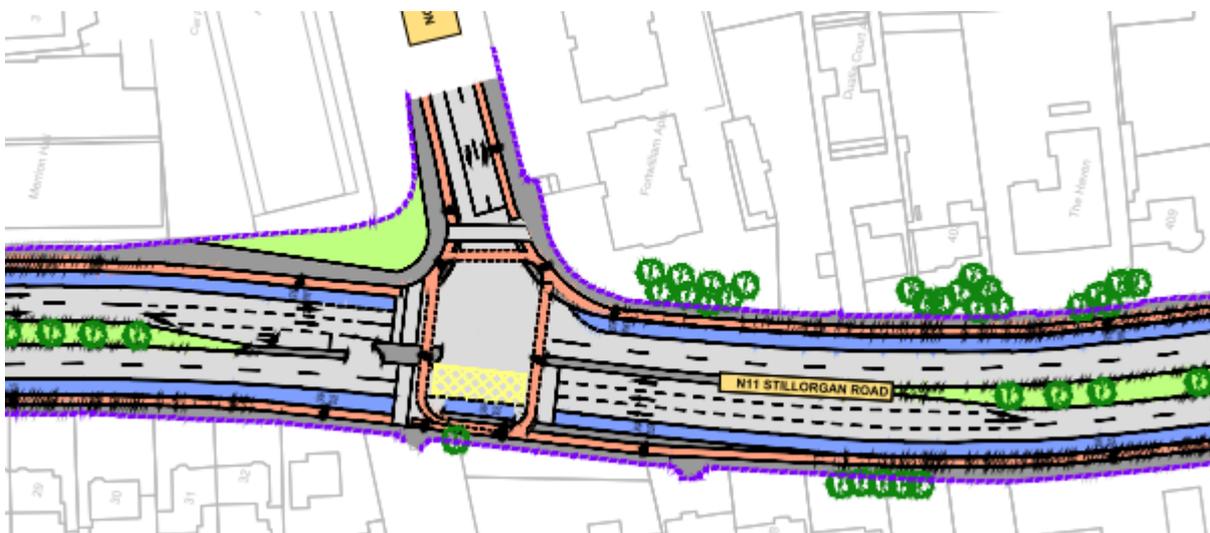
North west of the Loughlinstown roundabout, the existing poor layout where the cycle lane ends at the start of the service road at point where traffic enters at speed from the N11 has not been addressed. It also unclear at this general location, how cyclists to the south west of the N11 access the two way cycle facilities on the opposite side of the CBC.



Junction Design & Cycle Lane Alignment

DLRCC recognises that significant junction redesigns are being proposed along both corridors and that this forms part of the wider BusConnects approach across the city (see also comments under Traffic, Section 2). The junction reconfigurations result in the removal of the left turn lane for car traffic in most locations, which simplifies junctions for cyclists and improves safety. We have concerns however regarding the protection afforded to straight ahead cyclists at junctions given the lack of confidence we have in left turning traffic yielding to these cyclists. DLRCC also has reservations regarding the use of “chicanes” at these redesigned junctions, which appear to prohibit cyclists from straight through movement at junctions as per the current road design. It is unclear to us how this design will work, especially for the large and growing cohort of commuter cyclists en route to and from the city centre and in particular at junctions such as at Mt Merrion Avenue / N11 shown below – Map 20, where a significant deviation from the straight through desire line for cyclists is proposed on the southbound cycle lane. We understand that the treatment of conflicts at junctions has yet to be fully resolved and we request engagement on this as plans are finalised over the coming months.

Map 20



Also, with reference to the above map 20, showing the Mount Merrion Avenue junction with the N11, we request that in such instances, across both CBC routes, consideration be given to allowing straight through cycle movements on the side of the junction that presents no motorised traffic impediments provided that pedestrian movement can be safely accommodated.

In addition to the cycle lane chicanes at junctions, there are also areas such as below where cycle lane alignment could be improved. In this instance, the proximity of bus stops, junctions and trees results in the cycle lane having to chicane significantly over a relatively short period. There would appear to be potential at this location, albeit with the removal of some relatively small street trees, to improve the cycle lane alignment along this stretch.



The issues outlined above have the potential to significantly impede the progress, especially of faster cyclists and may result in cyclists opting to use the bus lane instead, resulting in the slowing of bus movement. The growing use of ebikes by commuters may also result in more cycle use of the bus lanes if cycle lanes cannot adequately accommodate forward progress without undue impediments. This would further impede bus movement.

DLRCC is strongly of the opinion that the CBC cycling infrastructure needs to accommodate both the stronger commuter cyclists as well as providing facilities which will encourage and safeguard more vulnerable and younger cyclists. We request engagement with the design teams in order to better understand proposals and work towards improvements where possible. DLRCC understands that the **National Cycle Design Manual** is to be reviewed over the coming months and we request that this is coordinated with and informs the design of the CBCs' cycling infrastructure.

Cycle Lane Connectivity to Adjacent Streets

There are a number of opportunities for the proposed cycle lanes to connect into side streets, which have no direct vehicular access onto the CBC route. It is considered important that these details are properly considered and incorporated into the final design and should include for access and egress cycle movements with potential for cycle – pedestrian conflict designed out as much as practicable.

The cycle lane egress arrangement as copied below at George's Avenue Blackrock is an example of how this can be achieved



Some examples of where cycle lane connectivity is required would include on the N11: Sycamore Crescent, Greenfield Rd, Roebuck Avenue, Greygates, the Hill Stillorgan, Rocwood, Clonkeen Rd (west of N11 adjacent to Monaloe Court), Old Bray Rd (southern approach to Cabinteely village),

Integration with other DLR Cycle Schemes

There are a number of cycle schemes currently being progressed within DLR and we request that the CBCs cycle infrastructure plans takes these into account so as to ensure good integration. These schemes include:

- Stillorgan Park Road cycle facilities are currently being redesigned by DLRCC.
- At Belmont / Galloping Green DLRCC's Active Travel Cycle routes scheme being progressed will interact with the N11.
- DLRCC is currently constructing facilities between the Rise and UCD.
- Any potential future scheme at Strand Rd needs to integrate well with both CBC Route 15 and cycle initiatives in the area, including the Merrion Gates to Booterstown Avenue scheme.
- Noting recent changes to cycling facilities in Blackrock village and along the Coastal Mobility Route, it may be worth reconsidering the cycle provision layout to provide two way infrastructure along the coastal side of the corridor. This may also reduce the need for CPO.

Cycle Lane Design

Though a more detailed design issue, it is still important to note that a lot of the cycle infrastructure is shown as 2m wide. If it is going to be segregated with a kerb for example this could take up to 250mm off the width of the cycle track. Having 1.75m wide facilities on the Rock road or N11 could have capacity issues and would not be wide enough for passing cyclists. The inability to safely accommodate passing cyclist is an issue at present along certain stretches of both the N11 and Rock Rd cycle lanes, which carry substantial numbers of commuter cyclists. All efforts should be made to resolve this issue in the CBCs' design and we request that the **National Cycle Design Manual** review is coordinated with and informs the design process.

Having regard to the significant modal shift towards public transport and cycling modes, which DLRC envisages over the coming years, we consider it vital that public transport and cycling facilities being provided are future proofed to absorb significant increases in these mode shares. It is the Council's view therefore that the CBC initiatives need to take full advantage of all reasonable opportunities to design out areas of potential conflict between pedestrians, cyclists and traffic and give due consideration to the measures and issues highlighted above in order to ensure that increasing numbers of bus passengers and cyclists can be safely and efficiently accommodated on these strategic transport routes.

2. Traffic, Road Maintenance & Public Lighting

Junction Redesign

DLRCC acknowledges that work is on-going with the redesign of junctions along the CBCs and the modelling of traffic flows. We also note that a review of the National Cycle Design Manual is pending, which will also inform junction design. We understand that there will be further engagement with DLRCC on junction performance, design and signal phasing once this work is completed over the coming months. In particular, DLRCC is keen to engage with the design team on the proposed junction redesigns in order to understand junction performance and signal phasing as well as implications for traffic flows through the area and how cycle movements are to be managed. To assist with the on-going design work, some feedback on the current design iteration from DLRCC traffic engineers is copied hereunder:

- A separate cycle phase appears to have been introduced at some junctions along the N11 such as at the Stillorgan Road/Boosterstown Avenue junction. This could have a big impact on the junction capacity and could adversely impact the bus service and cyclist priority.
- It is not clear how vehicles will turn left at junctions given it appears they are required to share with buses over a small part of the bus lane at many of the junctions. In addition, this arrangement could also adversely affect straight ahead or left turning cyclists.
- The phasing at the left turn into Leopardstown Road should ensure there is limited conflict between left turning vehicles and straight ahead cyclists.
- As part of the protected cycle route proposals, in particular the route around each junction, it is not clear how the cycle stage will fit into the overall phasing without adversely impacting on the bus service. Also, it is not clear that there will be adequate waiting area at the corner of each junction to accommodate queuing cyclists.

Given the significant departure in design terms, which the proposed reconfigured junctions represent, it is suggested that a trial of the new junction layout be undertaken in advance to inform understanding and issues with the new approach.

The Hill - Stillorgan

As already highlighted in this submission, DLRCC considers the closing of vehicular access onto the Hill from the N11 to have significant safety benefits for cyclists and pedestrians at this location. Notwithstanding this, we request that the potential traffic impact on Stillorgan village and

surrounding area be fully assessed and the findings shared with DLRCC. In particular, we are keen to understand if the proposed intervention will increase traffic flow through the village and if there will be adverse implications for access to St Brigid's Church Rd.

Footpath Provision

There are certain sections of the N11 where there is currently no footpath provision. The CBC plans indicate that footpaths will be provided in some but not all of these areas. DLRCC requests engagement on this item in order to contribute to the discussion on where footpath provision is warranted. In particular, we have concerns that no footpath provision is shown to link development at Cherrywood (junction Q) with Cabinteely village.

Road Maintenance

DLRCC have knowledge and records of problem maintenance and public lighting areas that interact with the CBC plans. These can be shared with the NTA at the appropriate stage to ensure they are dealt with appropriately at that point.

DLRCC Road maintenance is already engaging with the CBC design team on both the TII pavement works scheme (Mt Merrion Ave to Loughlinstown roundabout – N11) and the UCD Belfield over bridge where the parapet repair works requirement will be subject to the final road layout.

It is also recommended that Michael Stanley, TII Archaeologist be consulted regarding potential heritage impacts along the N11 and in particular where road widening is proposed.

Public Lighting

DLRCC requests consultation in relation to Public Lighting along the CBCs prior to any plans for proposed changes being finalised.

New Development Sites

Significant developments are planned, anticipated and in progress at various locations along the CBC routes. DLRCC requests that there is ongoing engagement between the CBC design teams, the developers and the Local Authority in order to ensure good coordination between the schemes and allow local opportunities for improved outcomes to be fully realized where possible.

3. Bus & Coach Stop Facilities

Bus continues to remain a poor relation in public transport terms compared with rail based provision. The CBCs initiatives present an excellent opportunity however to significantly improve the performance and public perception of bus based public transport, especially through the provision of quality bus & coach stop facilities, which have a major role to play in quality of service offering.

Bus & Coach Stop Shelters

Of primary importance at bus stop locations are bus shelters to provide waiting facilities. These will become even more important with the roll out of the BusConnects network redesign, which places greater emphasis on passengers interchanging to reach their destinations. In this respect, we would highlight the importance of providing bus stop shelter facilities not just along the CBC routes themselves but also on adjacent roads at the interchange locations. An example of this would be the provision of bus stop shelters on both Leopardstown Rd and Newtownpark Ave adjacent to White's Cross to facilitate interchange onto the planned S8 orbital route.

Bus Stop Islands

As already highlighted above in this submission, DLRCC is concerned about the number of locations, where previously proposed bus stop island solutions have now been designed out with the cycle lanes in these locations to run through the passenger boarding/alighting areas. In addition to the issues with pedestrian – cycle conflict already raised, a further issue arises with the incompatibility of this revised design with the provision of bus stop shelter facilities. This will make the provision of shelters at a significant number of busy bus stops more difficult. In the interest of providing quality bus stop facilities and addressing the issue with pedestrian – cycle conflict highlighted above, we request that the CBC initiatives take full advantage of all reasonable opportunities to design out areas of potential pedestrian cyclist conflict and also facilitate quality bus stop shelter facilities.

Cycle Parking at Public Transport Stops

Cycle parking at public transport stops promotes the combined use of cycling and public transport within one trip and can offer a strong alternative to car use on longer distances and thereby encourage a shift to sustainable modes. All our main public transport stops should therefore be considered as potential interchange points between the public transport network and the cycle network. Integrating public transport networks and the cycle network brings benefits for both cycling and for public transport as they are generally complementary modes and can easily be combined as links in a door to door trip chain. For the cyclist, cycling to or from a public transport stop is an efficient way of making longer trips and the propensity of cyclists to use public transport depends not only on the quality of public transport itself but equally on having cycle-friendly interchange conditions at the stop. This means high quality, safe and easily accessible cycle parking options. For public transport, cycling is a valuable feeder mode, whose potential should be developed as it increases the catchment area of stops more than tenfold compared to walking. The potential is high. In the Netherlands for example, approximately 14% of bus passengers use the bicycle as their access mode.

While there is already a level of cycle parking provision at some of the stops on our main bus routes, the overall amount and quality of provision is poor and not conducive to achieving the potential highlighted above. It is therefore requested that as part of the CBC initiatives, appropriate provision for quality sheltered cycle parking in close proximity to bus stops and key interchange locations be incorporated into the CBC design. While current cycle parking provision on the N11 is focussed on the north/city bound carriageway, there is however equal benefit in providing cycle parking at appropriate locations on the south/outbound stops as well. Provided there is good accessibility across the carriageways at inbound & outbound stop locations, a bicycle parked at the southbound

stop in the morning will be available when the passenger alights at that stop in the evening. Quality cycle parking provision would also facilitate potential for integration with rental ebike schemes and further increase the options for onward connectivity by sustainable modes.

4. Coach Facilities & Commercial Public Transport Services

The last decade has seen significant growth in the licenced bus passenger services public transport market. In 2019, approximately 10% of public transport journeys nationally were on commercially operated licenced services and this represents a 21% increase in passenger journeys on commercially licenced services from 2016 – 2019. These are services which operate at no cost to the state and which provide valuable public transport options for consumers. The commercial bus sector is therefore considered a vital element of the overall public transport network and once the market recovers post Covid 19, it is expected that this sector will see further growth and expansion.

Within DLR, commercial bus services play a very important role in the provision of public transport options. These services include airport buses, which operate along both CBC Routes 13 & 15, while both Bus Eireann and Wexford Bus operate regular daily regional services along the N11 connecting towns in Wexford and Wicklow with several destinations along the N11 within DLR, providing valuable public transport services to students and commuters accessing employment in locations such as Cherrywood and Sandyford and education at UCD & IADT. Pre Covid 19, there was a total of approximately 60 daily regional services each way along the N11 corridor linking centres in the south east with destinations in DLR and Dublin City. In addition to this, a significant number of regular commercial services operating from the wider region including the midlands & the north east provide valuable public transport access direct to UCD.

All of these services will rely on the infrastructure being provided through the CBC initiatives and in order to support and encourage the participation and growth of the commercial bus sector in the public transport market, it is essential that the CBC initiatives seize the opportunity to provide the required quality infrastructure at the necessary locations along the CBCs. It should also be noted that the M11 corridor is one of the most congested transport routes in the Dublin region, which heightens the need to promote and prioritise public transport options for those travelling from the south east to education and employment destinations within DLR. In this regard the Council is very encouraged to see the incorporation of coach stops at a number of locations along the route, which should help to promote regional public transport reduce conflict and congestion with buses at the local bus stops, especially during peak travel times and in particular along the N11 inner corridor (Foxrock Church to City Centre) where bus service frequency is planned to increase. There are however a number of areas where we believe further improvements can be made, particularly with regard to coach stop location and opportunity for onward public transport connectivity and we request that consideration be given to the following:

Coach Stop Locations

The N11 is a critical public transport corridor through DLR and serves a hinterland which is generally remote from both the Dart line to the east and the Luas line to the west. The N11 CBC is therefore the area's main access to both regional and airport public transport services and it is essential that

coach stops are prioritised at locations which optimise proximity to the main centres along the route and which also provide opportunities for onward connectivity by existing or planned public transport. We strongly welcome the addition in the current design of a northbound coach stop on the N11 at Cherrywood and note the provision of a combined two bay southbound bus/coach stop on the opposite side adjacent to the Wyatville Road junction. Coach stops are also being provided at priority locations such as Cabinteely (village and employment centre) and Foxrock Church (interchange with E2 services to Deansgrange, IADT and Dun Laoghaire) and these facilities are welcomed.

White's Cross – Sandyford



At White's Cross the current drawings now indicate that combined coach & local stops are being provided both north and southbound. While we welcome the intent here, we do however consider that at minimum, combined coach stops, which provide for two bus bays (similar to the combined stops proposed at both Stillorgan northbound and Cherrywood southbound) rather than the single bay stops indicated, should be provided at this strategic location, which is within reasonable proximity of Sandyford and at the junction of the N11 CBC and the planned Orbital Route S8, which is to operate between Dun Laoghaire, Sandyford and City West with 15min service frequencies during peak travel times. In addition, Sandyford is one of the largest business and employment centres in the Dublin region and is a major trip attractor. The Sandyford Urban Framework Plan has set very ambitious targets for smarter travel within the area and public transport interchange facilities on the N11 at White's Cross can play an important role in achieving these targets. It is noted from the scheme drawings that there appears to be good potential at White's Cross for provision of two-bay combined bus/ coach stops and we request that this design be provided at this strategic location. While it is noted that separate coach stops are proposed further north at Galloping Green, these would not facilitate an acceptable interchange with the S8 orbital route and onward connectivity to Sandyford. We would also highlight that White's Cross may have potential to facilitate ebike parking facilities, which would further strengthen connectivity options for onward travel to the wider Sandyford area (see also section on Bus & Coach Stop Facilities).

Stillorgan

Stillorgan is a District Centre within DLR and is an important retail and service centre with significant growth potential. It is also located at the junction of the N11 CBC and the planned bus service L25, which will provide important local services between Dun Laoghaire – Stillorgan and Dundrum with

15min service frequencies planned. We highlight the need to prioritise coach stop facilities for regional and commercial public transport services at this strategic location and welcome the provision of a combined two bay coach and local stop for northbound services. We also acknowledge and welcome the relocation of the southbound local stop to north of the Kilmacud Rd junction and adjacent to Patrician Villas, which is in line with the Stillorgan LAP & Movement Strategy objectives and will tie in with and promote the envisaged urban form for Stillorgan village. We request however that this local stop at Patrician Villas be extended to allow for a two bay combined coach and local stop for all southbound public transport services at this strategic location. While we note the provision of a southbound coach stop further to the north at the Talbot hotel, this is not adequate for the purposes of serving Stillorgan district centre and public transport interchange with L25 services.

UCD/Belfield

As already highlighted above a significant number of regular commercial services operating from the wider region including the midlands & the north east provide valuable public transport access direct to UCD. This involves significant coach movements during peak travel times at the UCD/N11 interchange. While the plans indicate one proposed coach stop on the southbound off ramp, it is not clear from the plans if any other specific provision for coach stops, coach parking/overlaying is proposed to support and promote the provision of commercial public transport services for students. In particular, it is not clear if coach services, many of which will require overlay parking, will be accommodated within the proposed bus interchange facility. DLRCC requests clarity regarding the extent to which provision for coach services is to be accommodated at this strategic location.

Blackrock village

While there are fewer commercial coach services using the Rock Rd corridor, it is nonetheless an important route for airport public transport services. It is recommended that the proposed new bus stops on Frascati Rd, adjacent to the junction of Frascati Rd and Temple Rd, shown below, be extended to provide combined two bay bus & coach stops with the intention of providing for the village's airport services from this location and easing pressure on the busier bus stops adjacent to the Frascati Shopping Centre.

Map 10 – Blackrock (Route 15) – Potential to provide combined two bay coach & local stops



5. Route 13 - Shankill to Bray

The Shankill area will experience significant population growth over the next 10 years with the coming on stream of both the Shanganagh Castle and Woodbrook residential developments. Notwithstanding the construction of a new DART station at Woodbrook, Shankill will still require significantly improved bus services and cycling facilities if it is to cater for its growing population in a sustainable manner and avoid the severe congestion which would result from an over dependence on car borne travel. It is in this context that DLRCC strongly supports and understands the need for significant improvements to public transport and cycling infrastructure through Shankill.

Shankill presents a substantially more challenging environment than the N11 section of the corridor for the implementation of the required bus priority and cycling infrastructure and we acknowledge the work of the CBC design team and the significant amendments which have been made to the scheme since the initial design proposals. Clearly a balance needs to be struck between achieving the aims of the project while also safeguarding the character of the area and responding to local community needs and concerns. To assist with this, DLRCC requests engagement with the design team over the coming months on the items set out below.

Cycle & Pedestrian Infrastructure

As already highlighted above in this submission, DLRCC believes that significant improvements to existing cycling infrastructure are required if we are to take advantage of the strong propensity to cycle evident in the county. DLRCC's recent experience of introducing quality cycle facilities strongly supports our belief that if quality cycle infrastructure is provided we can bring about a major modal shift. The need to achieve a transformative shift towards cycling and walking is as important in Shankill as it is elsewhere in the county and indeed the potential for these modes to reduce traffic in the area should be considered critical to the success of the CBC scheme and its objective of improving bus movements through the area. While it is acknowledged that physical and environmental constraints within Shankill make it more challenging to provide a coherent and useful cycle network for the area, there are however a number of measures, set out below, which DLRCC believes would both improve cycling and pedestrian facilities locally while also giving the cycle proposals a crucial steer towards forming part of a more coherent overall cycle network for the Shankill area.

Village Accessibility

Pedestrian and cycle facilities for access to the village from immediate residential areas are currently quite poor. There are no cycle lanes and footpath width is very restricted, especially over the bridge on the approach to the village from the north and at the village side of the Quinn's Rd roundabout on the approach from the south. The resulting proximity of pedestrians and cyclists to high volumes of traffic makes the pedestrian and cycle environment unattractive and does not promote active modes for village access, especially for children & families and more vulnerable road users. As a result, many people opt to use their cars for access to village services. This was reflected in the Consultation Round 3 Community Forums, where the reliance on the existing roundabouts at either end of the village for turning was highlighted. It is worth noting that Shankill Village (Lidl Shopping Centre excepted) is a neighbourhood centre with only small scale retail & service offerings and only minimal demand for car borne access to facilitate weekly grocery shopping or transport of bulky /

heavy goods etc. It stands to reason therefore that an improved pedestrian and cycle environment would encourage more people to walk and cycle to the village and DLRCC believes that such improvements should be an integral component of the CBC project (fewer cars in the village improves bus movements).

While we welcome the proposed reduced speed limit of 30km/h for the village, in practice 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 overall village environment. The CBC plans for Shankill indicate public realm improvements and we understand that the design details may not yet be finalised. While it is recognised that the existing physical constraints limit the potential for segregated cycle facilities, there are still however a suite of public realm improvement measures, which would benefit the village's public realm, calm traffic and make it a more attractive and safer environment for pedestrian and cyclists. Such measures could include changes in surface treatment / landscaping at appropriate locations, marking out entrances to the village, changes in surface treatment / kerb treatment to calm areas adjacent to restricted footpaths, changing of surfacing at side road access to main road for pedestrian priority, pocket greening and well designed and located pedestrian crossing points as well as suitably located cycle parking. Many of these interventions are set out in the BusConnects Urban Realm Concept Designs brochure. We would also highlight the recent public realm and traffic calming interventions that DLRCC have implemented on a trial basis in other villages around the county, including Dundrum, where the streets continue to accommodate significant bus traffic, but in a more traffic calmed environment, which affords greater safety for those cyclists who have to share the carriageway with traffic. While a one way traffic system is not possible for Shankill, careful attention to public realm improvements nonetheless has the potential to calm traffic through the village to the benefit of both pedestrian and cyclists.

DLRCC is very keen to engage with the design team over the coming months to progress a public realm strategy for Shankill village, which would address the issues above and also, crucially, support the overarching objective of the CBC initiative which is to bring about transformative change for public transport, cycling and pedestrian environments.

Schools Access & New Junction at St Anne's Church

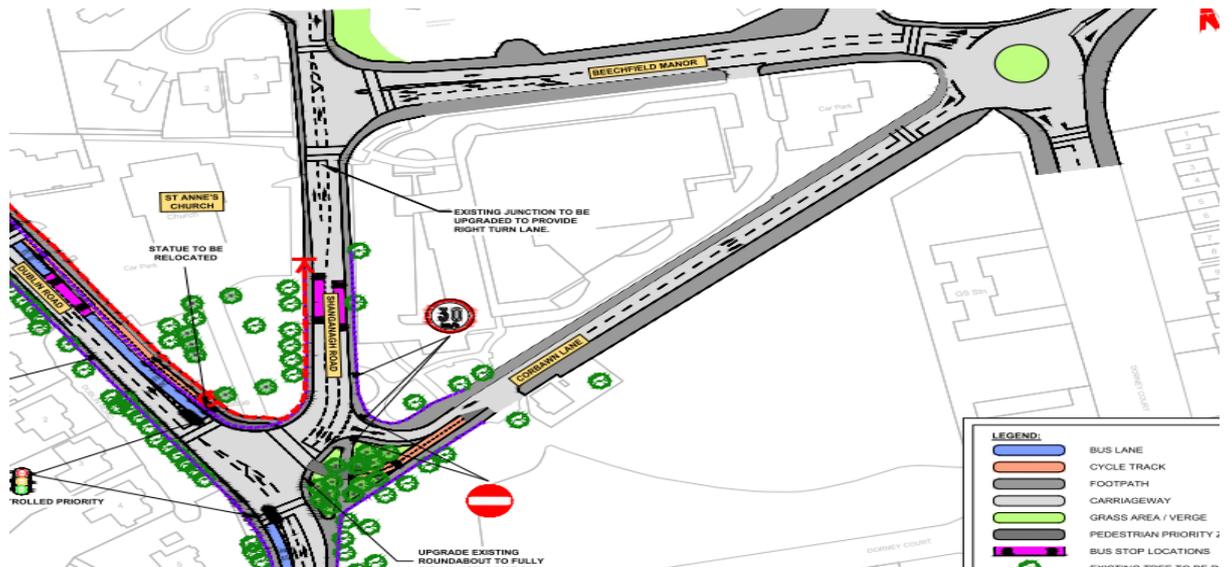
There are 3 primary schools and 1 secondary school within Shankill. The primary schools in particular are highly car dependent for access due to the inadequacy or absence of appropriate infrastructure to promote and facilitate walking & cycling. This results in traffic congestion at school drop off and collection times and adversely impacts on the movement of buses. DLRCC therefore welcomes the inclusion of new pedestrian and cycling infrastructure to provide access to the two primary schools on Stonebridge Rd. To build on these proposals, DLRCC requests that the following amendments be considered:

- Continue the two way cycle lane & footpath on the Dublin Road a little further to the north towards Rathmichael Park and cross the road at the Stonebridge Rd junction to tie in directly with the proposed cycle lane & footpath which runs along the north side of Stonebridge Rd. This would mean just one road to cross as opposed to the two proposed and would also help ensure that schoolchildren use the new facilities as opposed to continuing on the existing restricted footpath over the bridge as they presently do.

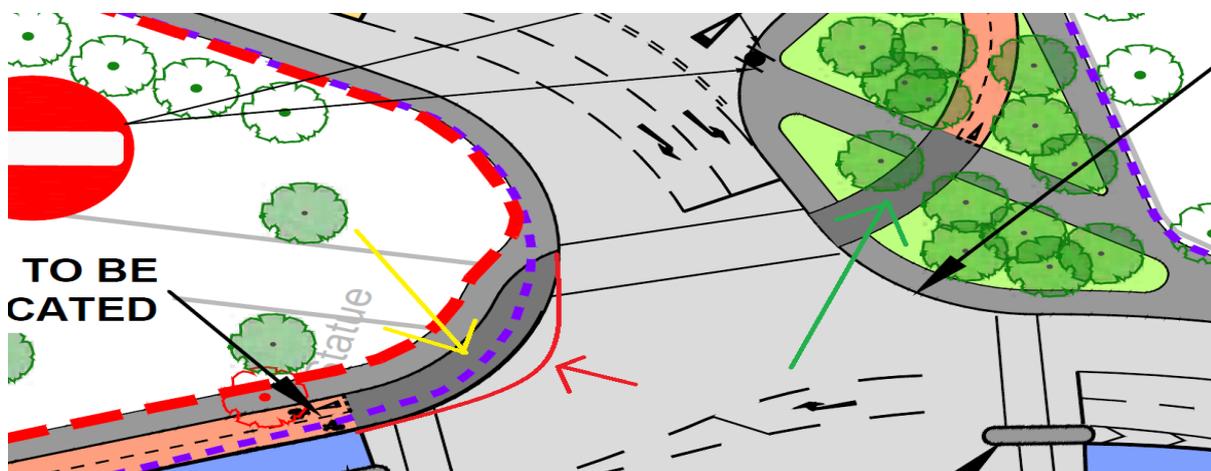


NOTE: It is unclear whether the new Stonebridge Rd cycle lane, footpath and adjacent green / planted area is to be taken in charge by the Council and form part of the public realm at this location. Clarity on this in advance of the design being finalised is requested.

- The CBC plans propose that a section of Corbawn Lane is to become a one way street. This presents an excellent opportunity to extend the proposed two way cycle lane as far as the Corbawn Lane junction with Dorney Court from where there is good accessibility to quiet streets for cyclists. This would provide safe cycle connectivity from a substantial residential catchment direct to the schools on Stonebridge Road and would play a major role in promoting active mobility with school children. It would also improve connectivity between the anticipated strategic cycle routes – Cherrywood to Shankill to the west and the Coastal Route to the east. In addition, the extension of the cycle lane as suggested would enhance cycle connectivity to the village if the junction design at St Anne’s church was improved to provide the cycle lane from Corbawn with a signalised tie in to the traffic lane entering the village (see also comments above on improving the pedestrian and cycle environment through the village).



- The proposed signalised junction at St Anne’s church will offer significant improvements for pedestrian movement though the area. In order to similarly accommodate and promote cycle movement, we request that the design incorporates amendments to allow southbound cyclists using the new cycle lane, continue on, not just to Corbawn Lane but south to the village and on to Shanganagh Road as well. As currently configured, our concern is that the layout invites cyclists to bypass the village, when what we need to do is encourage people to access the village by bike.
- Also at St Anne’s Church and as shown in the drawing copied below, we are concerned that the cycle lane terminates in advance of the pedestrian crossing. There would appear to be scope here to reduce the radii at this location and maintain the two way cycle track to the pedestrian crossing. At a minimum, consideration should be given to reducing the radii and allowing more space for both pedestrian and cyclist at this busy crossing location. Also, at the Corbawn Lane side of this junction, there would appear to be potential to extend the cycle lane to the crossing point with additional adjacent area allowed for pedestrians.



Cycle facilities between Shankill and Bray

It is noted that the plans now propose bringing the northbound cycle lane through Shanganagh Cemetery and Park to run alongside the southbound cycle facilities 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 that consideration be given to relocating the proposed northbound cycle lane for its full length from Bray to Shanganagh cemetery to run alongside the southbound cycle lane on the eastern side of the carriageway. This would tie in with cycle routes through the former Bray Golf Course lands and would provide good cycle connectivity via routes in Shanganagh Park to the wider residential catchment. It would also eliminate the need for cyclists to cross the Dublin Road to re-join the cycle lane as per current plans and would generally present a more coherent cycle network for the area.



Public Realm in Shankill

In addition to the comments above on the public realm improvements required in Shankill village, DLRCC also requests that particular attention be paid to safeguarding the public realm and character of the wider Shankill area. In particular, the CBC works will require road widening and junction reconfiguring – all of which have the potential, without good mitigation measures, to result in an overly engineered environment and loss of character. This in turn would have a significant impact on how people perceive their environment and reduce their willingness to walk or cycle locally. A softer environment, which retains its character and presents a human scale, is more likely to encourage walking and cycling. We would highlight the area in the vicinity of St Anne's church as being in particular need of sensitive treatment – located at the entrance to the village and a strong community & civic focal point. There are a number of measures that we request are included in the

final design, both locally at St Anne's Church and as part of works to the public realm in the wider area, including:

- A restrained use of road markings & signage especially at junctions
- The use of soft traffic calming measures instead of an overly engineered look and feel
- Appropriate planting and soft features designed in from the outset to ingrain a human scale
- Retention of existing stone walls where feasible and the use of complementary, high quality materials and finishes
- Use of new public realm areas to inform and improve local legibility through visual and artistic expression of local heritage and place names.

We would welcome early engagement with the design team on these items.

Shankill Traffic Items

DLRCC acknowledges that work is on-going with the modelling of traffic flows at junctions where significant redesign work is proposed and we understand that there will be further engagement with DLRCC on junction performance once this work is completed over the coming months. In particular, DLRCC is keen to engage with the design team on the proposed upgrade of the existing roundabout at St Anne's church to a fully signalised junction in order to understand junction performance and implications for traffic flows through the area.

The proposed plans also indicate the upgrade 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 in particular serves a number of residential estates as well as the Shankill Tennis Club & Pavillion. While it is noted that the junction will improve pedestrian crossing facilities, the main pedestrian desire lines are however to/from the village rather than across the road at this point. In addition 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. We are keen therefore to gain a better understanding from the design team of the benefits a junction would allow and how traffic flows will be managed. DLRCC also request that the design team gives consideration to the provision of right turn facilities where warranted by the scale of existing and proposed development.

Bus Priority through Shankill

Central to the success of the CBC scheme in Shankill will be the extent to which bus priority can be achieved through the village areas where bus lanes cannot be provided. On the approach to the village from the north, a combination of the significant extent of bus lane being provided together with the signal controlled priority at junctions, should allow substantial priority for southbound bus movements. On the approach to the village from the south, it is noted that the bus priority signals have been pulled back from the Quinn's Road junction to just north of the Castle farm entrance. While this is likely to make bus priority more challenging for northbound buses it is noted that it allows the retention of a stand of mature trees at Cherrington Drive. Achieving good bus priority for northbound buses however will be critical to the success of the project and may require smart solutions such as standalone traffic signals at the main traffic infiltration points within the village –

i.e. Quinns Rd, Cherrington Rd and Lower Rd. Such signals, designed to hold back traffic during peak travel times from entering the main street for a short period ahead of buses passing through, could assist with achieving bus priority over the distance now required. This could be critical for preventing delays for northbound buses at the proposed signalised junction at St Anne's church where only limited bus lane and right turn provision is possible.

Coach Stop Facilities in Shankill

Commercial coach services operating to and from Dublin Airport provide valuable public transport services to Shankill residents. It is noted that Map Nos. 48 – 49 indicate the provision of north and southbound coach stops at Shanganagh Park, which will be in reasonable proximity of new housing developments areas at Woodbrook and Shanganagh Castle. Airport services currently stop at Shankill village where there is combined coach/local use of the existing bus stops. It is unclear whether or not the proposed plans will continue to facilitate combined coach and local use of the stops within the village. To facilitate airport services being provided for the residential areas adjacent to the village, it is requested that coach services continue to be catered for at the village stops. It is highlighted that airport services along this corridor typically operate at very low frequencies – 1 service per hour, and are unlikely therefore to result in any significant disruption to local bus services.

Wilford Junction

DLRCC requests that consideration is given to realigning the southbound bus and cycle lanes at Wilford to allow for straight through movement, which bypasses the signalised junction. There is also a Roads Objective in the current County Development Plan to provide a vehicular access to land located immediately to the south west of the Wilford roundabout. The access is required onto the Dublin Road, just to the south of the proposed signalised junction at Wilford. DLRCC requests that provision for this access is incorporated into the final scheme drawings in consultation with DLRCC.

New Development Sites

Major new development areas are due to be developed in Shankill over the coming years at both Shanganagh Castle and Woodbrook. DLRCC requests that there is ongoing engagement between the CBC design team, the developers and the Local Authority in order to ensure good coordination between the schemes and allow local opportunities for improved outcomes to be fully realized where possible.

6. Conservation, Amenities & Public Realm

The CBC initiatives will involve major infrastructure works along the proposed routes and there will be potential impacts on conservation, heritage and amenity assets, all of which are highly valued by residents and visitors and are integral to the richness and quality of life enjoyed within the county. DLRCC considers that a key determinant of the success of the CBC projects will be how these assets have been safeguarded and the value added to amenities and the public realm. It is crucial to the success of the CBC projects therefore that the necessary mitigation measures are put in place and that the overall design is of a very high standard.

Conservation

To facilitate architectural conservation, DLRCC requests that all items listed as protected structures in the vicinity of the CBC routes, be superimposed on the drawings as they are finalised in order to facilitate ease of recognition and assessment of potential impacts. Of particular concern to our Conservation Division is the potential for impact on the site boundary walls of protected structures, some of which may already be in a poor state of repair and most of which will have poor or substandard foundations. This makes these walls very susceptible to damage from works being carried out on adjacent roads and footpaths. To address this issue, DLRCC requests that a pre-works appraisal is carried out in respect of the boundary walls and any other relevant structures associated with protected structures along the routes of the CBCs. This appraisal work must be carried out by an accredited conservation architect and must then be used to inform any required mitigation measures.

As a general note, our Conservation Division has highlighted that the CBC drawings presently available do not show the level of detail necessary to inform an assessment of the impact the works may have on protected structures and it is anticipated that there will be further engagement once more detailed design drawings are available. In addition to this, the following items are advised to the CBC design teams as areas to be aware of in terms of potential conservation impacts:

- Map 41 – N11, Loughlinstown River bridge under the N11 – listed on the Industrial Heritage Survey
- Map 44 & 44A – Stonebridge Rd, Shankill, bridge being considered for listing as a protected structure
- Map 45 & 45A – Dorney Lodge at Dorney Court Shankill, lodge and adjacent gate & piers being considered for listing as a protected structures
- Map 46 – Protected plaque on wall in Shankill village
- Map 49 – Shanganagh Park entrance piers - being considered for listing as a protected structures
- Map 49 – Dublin Rd, Shankill, Memorial Hall and adjacent Milestone marking both protected structures
- Map 4 – Rock Road – Milestone marking on boundary wall to southbound carriageway – listed as a protected structure.

Further details on relevant conservation items are set out in **Appendix 2 – Excerpts from the Industrial Heritage Survey**

Blackrock College Entrance

DLRCC Conservation Division notes that works are also proposed at the entrance to Blackrock College on the Rock Rd. The works description on the public consultation brochure however is unclear and clarity is requested regarding the exact details of the proposed interventions at this location.

Public Realm

DLRCC requests that particular attention is paid to safeguarding the public realm and character of areas impacted. In particular, the CBC works will require road widening and junction reconfiguring at many locations – all of which have the potential, without good mitigation measures, to result in an overly engineered environment and loss of character. This in turn would have a significant impact on how people perceive their environment and reduce their willingness to walk or cycle locally. A softer environment, which retains its character and human scale, is more likely to encourage walking and cycling. In particular, it is noted that the proposed junction redesigns along the CBCs involve removal of left turn facilities and tightening of radii, both of which will result in opportunities for developing a softer and more human scaled public realm in the vicinity of these junctions. There are a number of measures that we request are included in the final design as part of works to the public realm, including:

- A restrained use of road markings & signage especially at junctions
- The use of soft traffic calming measures instead of an overly engineered look and feel
- Appropriate planting and soft features designed in from the outset to ingrain a human scale
- Retention of existing stone walls where feasible and the use of complementary, high quality materials and finishes
- Use of new public realm areas to inform and improve local legibility along the CBCs through visual and artistic expression of local heritage and place names.

We would welcome early engagement with the design team on these items.

Biodiversity, Climate Change & Landscape Character

One of the most urgent issues facing humanity is loss of biodiversity and it is incumbent on all major development projects to ensure that their ecological footprint is minimal and that all opportunities to strengthen biodiversity are fully capitalised on. The CBC initiatives have potential to deliver truly green transport corridors, not just in the extent to which they will promote and accommodate a transformative shift to sustainable transport modes but also in the planting and greening opportunities that will be presented on a city wide scale.

Impact on Trees

DLRCC acknowledges that the development works will necessitate a certain amount of tree removal at various locations and we understand that a balance has to be struck between safeguarding these amenities and also providing appropriate sustainable transport infrastructure, which will meet the mobility needs of the county over the critical next 20 to 30 years. This is the timescale within which climate change mitigation must happen if it's to be impactful. To ensure that an appropriate balance is struck, we understand that as part of the CBC initiatives tree surveys are being carried out to assess the quality of trees along the routes and inform the design process. This is welcomed and DLRCC is keen to ensure that where mature trees of high quality and landscape value are identified, every effort is made to facilitate their retention.

DLRCC's Parks' Department also advises that where trees are proposed to be removed and other neighboring trees are shown as retained or where there is an indication of a change of boundary position near existing trees being retained, a Tree Condition Survey in compliance with BS5837: 2012, should be carried out, and also address the potential impact of the works on the neighbouring trees to be retained. The proposed project works relating to the above could result in additional trees being removed, over and above those indicated in red, on Health & Safety Grounds.

Our Parks' Department has also highlighted the following queries:

- Are trees above a certain DBH only considered? Clarification of symbols in relation to trees should be provided.
- Will a tree constraints plan be drawn up before any removal takes place following the above suggested tree condition survey?
- How are incursions into the Root Protection Zone of remaining trees being redressed?

Remaining trees must be left in a safe condition both above and below ground. All of these constraints should be considered and until they are it is likely that additional trees to those highlighted will be impacted and lost.

As with all planning and construction works, a post completion tree survey should be provided with all recommended tree works carried out prior to DLR Co. Co. taking trees adjacent to works or boundary changes back in charge.

Insignificant replanting of trees is proposed along these routes although there is significant opportunity for more trees to be planted. Care should be taken not to visually decimate silvan areas by the removal of too many trees. We would welcome consultation on this before the next stage of the Bus Connects process

Where tree removal is required, quality replacement planting, which seeks to soften the boundaries between the CBCs and adjoining residential areas and maintain a strong landscape character, should be provided where possible. DLRCC also requests that replacement planting and new planting proposals optimise opportunities for biodiversity through the use of appropriate species, which provide greatest benefit to local ecology. DLRCC is keen to engage with the CBC design teams on these items as the plans progress to a more detailed design level.

A full list of the concerns and recommendations of our Parks' Department is set out in **Appendix 1** on a map by map basis and we request that these are taken into account in the preparation of the final design for the CBCs.

Summary

DLRCC believes that the CBC Infrastructure Works initiatives present a major opportunity for transformative improvements to both public transport and cycling facilities and we are committed to working with the NTA to ensure that the projects achieve their full potential. To this end, DLRCC requests dialogue and engagement with the design teams as scheme plans are finalized over the coming months. In particular, DLRCC requests engagement on the issues and areas of potential improvements highlighted in our submission.

With respect to cycling infrastructure we strongly support the current proposals but believe there is room for further improvement with respect to designing out areas of potential conflict between cyclists and pedestrians and cyclists and motorized traffic. We have also highlighted a number of items with respect to bus & coach stop facilities, which we are confident, will afford significant added value to the CBC initiatives through promoting public transport interchange and sustainable mobility. With respect to the potential impact on general traffic, we have indicated a number of areas for the design teams to consider and we understand that there will be further engagement with DLRCC over the coming months specifically regarding junction design and impact on cycle, bus and traffic movement.

Our submission also highlights the significantly different constraints and issues that pertain to the Shankill area and we have put forward a number of proposals, which we believe will be critical to the success of the scheme. We are especially keen to ensure that both cycling and walking are facilitated and promoted through the area including within the immediate village environment.

Finally, DLRCC would like to thank the CBC design teams for having taken on board proposals put forward by the Local Authority in previous consultation rounds. We look forward to structured engagement and consultation with the design teams over the coming months and are confident that together we can make further significant improvements to the Core Bus Corridor projects.

Appendix 1 DLRCC Parks Department's Recommendations

Route 13 Observations and recommendations on_outbound East and West side of N11 and onto Bray.

Map 22

East side

Impact on trees along N11 at Patrician Villas. Remedial planting & landscaping required. Design and location consultation on final route of path & ramp to under pass required to limit impact on existing trees.

West side

No accounting for understorey planting along routes. Reiteration of comments above in relation to tree condition and constraints due to removal and impact of adjacent works on remaining trees.

Map 23

East Side

There is a significant loss of trees to rear of back gardens of Stillorgan Park Avenue, along roadside margin of N11. Not clear what area is left for possible replanting of replacement trees. Consultation required at detailed design stage as to remedial landscaping if this can be facilitated.

West Side

It would appear that almost all public trees on lands within the boundary of Bus Connects are to be removed with no proposed replanting. The overall result of the extent of tree removal on this stretch of the N11 would leave a very hard landscaped route, with little vegetation, removing screening, noise and air filters for residents on both sides. Some landscaping solutions including replanting and screening should be provided.

Map 24

West Side

Impact of removal of trees on remaining group requires redressing - these trees are also on a slope. Replacement tree planting should be provided.

Map 25

East Side

There is a loss of trees indicated on an existing bank/ sloped area on the RHS of entrance to Farmleigh Estate. Consultation required at detailed design stage as to remedial landscaping if this can be facilitated.

Map 26

East Side

"Possible Coach stop" location will result in removal of hedging/trees near Belmont Grove entrance. Requires provision of remedial landscape proposal for the area.

Map 29**West Side**

Removal of trees within a group at the base of a slope, will require assessment as to how remaining trees will be affected and made safe and in good condition in relation to above and below ground. Post completion condition survey a necessity as with all previous areas where tree works are to take place. Replacement tree planting to be provided.

Map 30**East Side**

Loss of conifers & screen planting – remedial landscape proposals required. Impact of tree removals on adjoining trees to be assessed.

Map 31**East Side**

It is noted that it is proposed to remove trees along roadside planting between South Park & junction of N11 & Old Bray Road and also to create a pedestrian link path to South Park. Remedial replacement planting required, if not on site at other suitable location nearby. Impact of tree removals on adjoining trees to be assessed.

West Side

Impact on tree removals and construction works on tree group remaining all of which is on raised land therefore bigger impact on RPA. Replacement tree planting to be provided.

Map 33**East Side**

Proposed Coach Stop will impact on adjoining trees and result in removal. Remedial replacement planting required, if not on site at other suitable location nearby.

Map 35**East Side**

Proposals will impact on trees along boundary with Maple Manor. Remedial landscape proposals required. Impact of tree removals on adjoining trees to be assessed.

West Side

Existing Trees in New Footpath around proposed Coach Park – Would need to clarify if these tree symbols should actually be highlighted as Trees for Removal as they are in the center of footpath. If so replacement tree planting to be provided

Map 36**East Side**

Tree loss – remedial planting required. Impact of tree removals on adjoining trees to be assessed.

Clarification needed in relation to a “new proposed bus stop/ layby” (not labeled on plans) where trees are proposed for removal on the raised bank to RHS of existing pedestrian lane into Shrewsbury Lawn.

Map 39**East Side**

Proposed pedestrian link – possible impact on trees in Shanganagh Vale. Final location of possible link to avoid impact on existing trees.

Map 42**East Side**

Existing carriageway consists of two lanes going south bound beside kerb. New proposal to include an additional bus lane and stop and may impact on existing landscaping. Remedial landscape proposals required. There is an impact on 10 existing trees on the roadside verge east of the roundabout which though not indicated on the plans (young trees), remedial tree planting required.

Map 43**East Side**

Significant tree removal and boundary relocation along the west side of the R837. Remedial tree planting/ landscape proposals required. Impact of tree removals on adjoining trees to be assessed.

Map 44**East Side**

Significant tree removal and boundary relocation along the west and east side of the R837. Impact of tree removals on adjoining trees to be assessed. Remedial tree planting /landscape proposals required.

Map 44A**East Side**

Proposed new footpath through existing trees located near school on North side of Stonebridge road may impact on trees. Impact of new path on adjoining trees to be assessed.

Map 45**East Side**

Tree removal and boundary relocation along the east side of the R837 (Dublin Road). Impact of tree removals on adjoining trees to be assessed. Remedial tree planting /landscape proposals required.

Map 45A**East Side**

Significant loss of trees and grass margins on Beechfield manor road, around the roundabout and into Dorney Court, Existing trees and verges not shown on map 45A (as being removed). Would object to the proposal to removal of trees and grass verges along this road. Existing path is a good width. Also, significant impact on existing small area woodland trees along Dorney Court side of

Corbawn Lane (Opposite shopping Centre). Consideration should be given to an improved pedestrian crossing near the Dorney Court roundabout and retain the sylvan/ lane nature of the road on the Dorney Court side.

Map 46**East Side**

Clarification required regarding existing herbaceous beds around base of trees within village on east side of road. These should be retained.

Landscape proposals required for landscape bed on RHS of entrance onto Quinn's road. There may be impact on existing trees, therefore adjoining trees to be assessed for impact.

Map 47**East Side**

Boundaries are being impacted on/ relocated and also loss of trees on both sides of the Old Dublin road. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal.

New pedestrian entrance/relocated path on open space in Castle Farm to be reviewed and consideration given the close proximity to Heritage site on open space.

Map 48**East Side**

Boundaries are being impacted on/ relocated and also loss of trees on both sides of the Old Dublin road. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate potential tree removal.

Map 49**East Side**

Replacement tree planting to be provided for in vicinity of existing locations where possible. Land between road and proposed new boundary to Shanganagh Park to remain as part of Shanganagh Park and in Council ownership. New boundary to cemetery to be agreed with DLR. Removal of trees and boundary relocation indicated on both sides of the road will impact on adjoining trees shown as being retained. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal.

Map 50**East Side**

Removal of trees and boundary relocation indicated on both sides of the road will impact on adjoining trees shown as being retained. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do

not properly indicate total potential tree removal. Replacement tree planting to be provided for in vicinity of existing locations where possible.

Map 51**East Side**

Removal of trees and boundary relocation indicated on both sides of the road will impact on adjoining trees shown as being retained. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal. Replacement tree planting to be provided for in vicinity of existing locations where possible.

Map 52**East Side**

Removal of trees and boundary relocation indicated on both sides of the road will impact on adjoining trees shown as being retained. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal. Replacement tree planting to be provided for in vicinity of existing locations where possible.

Route 15 Observations and recommendations**Map 6**

Loss of tree lined boundary planting along the road, in hardstand area in Blackrock Park, to east of motor showroom require revised landscape plan in keeping with proposed Blackrock Park Master Plan.

Map 7 & 8

There is a loss of existing trees in the vicinity of Blackrock Clinic entrance / Blackrock College may impact on adjoining trees shown as being retained. Adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal. Replacement tree planting should be provided for in vicinity of existing locations where possible. Adjoining trees in Blackrock Park may be impacted upon by revised boundary. Again adjoining trees to be assessed in relation to these works as may result in additional trees being removed on Health & Safety grounds and current proposals do not properly indicate total potential tree removal. Replacement tree planting should be provided for in vicinity of existing locations where possible.

Map 9

Impact on median verge along bye pass not clear and may result in revised landscape plan. Impact to be clarified.

Map 11

Remedial planting to be provided for loss of a number of trees

Appendix 2 Industrial Heritage Survey Items

Dun Laoghaire-Rathdown Industrial Heritage Survey, 2005-6

Site No: 176

Description:	Milestone		
Location:	On northern side of Rock Road adjacent to Booterstown Marsh		
Note:			
Category: Milestone	Map sheet: 23a	OS six-inch sheet: 23	
Townland:	Intake	Parish:	Booterstown
OS 6":		OS 1:2500	
Fair plan		1860s	MS Dublin 4
1843		ca. 1910	
1870s		1930s	
1900s		ca. 1970	
1930s		5-foot	
Rocque, 1760:		Duncan, 1820:	
Taylor, 1816:		Other:	
Written source:			

Site details:	On northern side of Rock Road adjacent to Booterstown Marsh		
Public access: Public land with access	Visibility: In public place		
Rating: Regional	Merit: Technical Historical		
Remains:	Present	Survival:	Original survives
Condition:	Fair	Ownership:	Dun Laoghaire-Rathdown County Council
Past function:	Milestone	Present function:	Milestone
Threats:	Impact by vehicles		
Comment:	This is a prismatic milestone of granite, marking a four-mile distance from Dublin Castle and three miles to Kingstown. The distance is in Statute miles, which were adopted in Ireland in 1826, and the name Kingstown was adopted in 1821.		

Site no: 176



Dun Laoghaire-Rathdown Industrial Heritage Survey, 2005-6

Site No: 654

Description:	Bridge		
Location:	Southern side of main road at Loughlinstown		
Note:	Bridge over Bride's Glen river		
Category:	Bridge	Map sheet: 26b	OS six-inch sheet: 26
Townland:	Loughlinstown Commons	Parish:	Rathmichael
OS 6":		OS 1:2500	
Fair plan	Bridge	1860s	
1843		ca. 1910	
1870s		1930s	
1900s		ca. 1970	
1930s		5-foot	
Rocque, 1760:		Duncan, 1820:	
Taylor, 1816:		Other:	
Written source:			

Site details:	Southern side of main road at Loughlinstown		
Public access:	Public land with access	Visibility:	In public place
Rating:	Regional	Merit:	Technical Architectural
Remains:	Present	Survival:	Original survives
Condition:	Fair	Ownership:	Dun Laoghaire-Rathdown County Council
Past function:	Bridge	Present function:	Bridge
Threats:			
Comment:	The old bridge survives as the southern end of the present bridge. It is very similar to the other bridge at Loughlinstown and may have been built at the same time.		

Site no: 654



Dun Laoghaire-Rathdown Industrial Heritage Survey, 2005-6

Site No: 857

Description:	Milestone		
Location:	On west side of old Dublin Road at Crinken		
Note:	Nine-mile stone, from 18th century.		
Category: Milestone	Map sheet: 26i	OS six-inch sheet: 26	
Townland:	Aske	Parish:	Old Connaught
OS 6":		OS 1:2500	
Fair plan		1860s	
1843		ca. 1910	
1870s		1930s	
1900s		ca. 1970	
1930s	Mile Stone	5-foot	
Rocque, 1760:		Duncan, 1820:	
Taylor, 1816:		Other:	
Written source:			

Site details:	On west side of old Dublin Road at Crinken		
Public access: Public land with access	Visibility: In public place		
Rating: Regional	Merit: Technical Historical		
Remains:	Present	Survival:	Original survives
Condition:	Fair	Ownership:	Dun Laoghaire-Rathdown County Council
Past function:	Milestone	Present function:	Milestone
Threats:			
Comment:	Nine mile stone, marking nine Irish miles from Dublin Castle. An 18th century stone, in the form of a granite post of rectangular section and bearing the inscription "CD 9". The top is pyramidal. The stone is built into the boundary wall, standing slightly proud of the wall surface. There is a diagonal break in the lower half of the stone.		

Site no: 857

