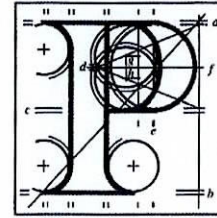


Our Case Number: ABP-316272-23



**An
Bord
Pleanála**

Paula & Ray Moore
124 Rathgar Road
Rathgar
D06 W2T0

Date: 11 July 2023

Re: Bus Connects Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme
Templeogue/Rathfarnham to City Centre

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above-mentioned proposed road development and will take it into consideration in its determination of the matter. Please accept this letter as a receipt for the fee of €50 that you have paid.

Please note that the proposed road development shall not be carried out unless the Board has approved it or approved it with modifications.

The Board has also received an application for confirmation of a compulsory purchase order which relates to this proposed road development. The Board has absolute discretion to hold an oral hearing in respect of any application before it, in accordance with section 218 of the Planning and Development Act 2000, as amended. Accordingly, the Board will inform you in due course on this matter. The Board shall also make a decision on both applications at the same time.

If you have any queries in relation to this matter please contact the undersigned officer of the Board.

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Eimear Reilly
Executive Officer
Direct Line: 01-8737184

HA02A

Tel	Tel	(01) 858 8100
Glaos Áitiúil	LoCall	1800 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

An Bord Pleanála (Strategic Infrastructure Division),
64 Marlborough Street,
Dublin 1,
D01 V902

17th June 2023

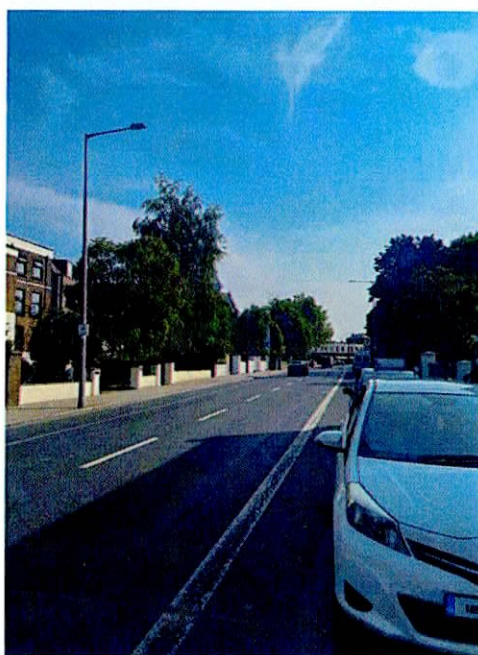
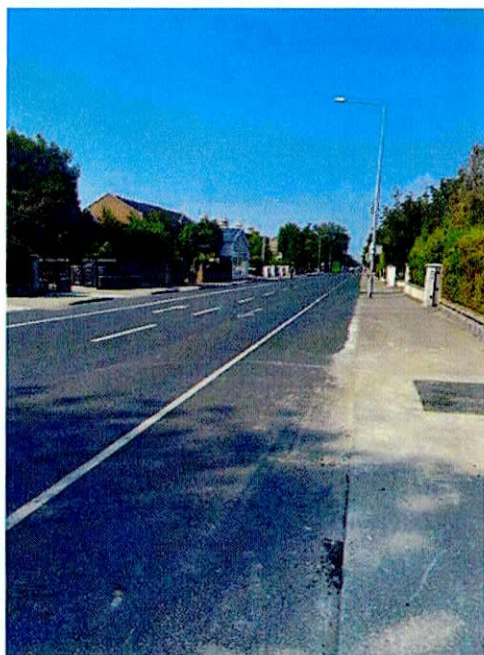
Submission re Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme

To An Bord Pleanála Board,

The National Transport Authority has applied to An Bord Pleanála for approval for a proposed road development consisting of the BusConnects Corridor for Templeogue/Rathfarnham to the City Centre. This proposed bus corridor would cut through Rathgar and has very significant negative impacts for Rathgar Village and all of the surrounding roads and indeed many other urban villages and roads in South West Dublin. The claimed gains to the overall average speed of buses are too small to justify the burden being placed on Rathgar and the surrounding area. The proposed changes will have a drastic impact on Rathgar Road where we live with our young family.

We submit that the price is too high for so little gain: heritage, trees and wildlife are threatened across Dublin. Key concerns for the Rathgar area include the impact on environment including increased emissions, noise and loss of trees, Compulsory Purchase Orders on Terenure Road East (and further afield on Rathfarnham Road), traffic implications on all local streets and roads, the negative impact on the public realm and streetscape, the bus gate at St Mary's College in Rathmines, one way traffic, right/left turn bans and the impact on the businesses in Rathgar during construction phase and due to loss of parking in the village and in the area. We are enormously concerned about the proposed reduced width of footpaths in the Rathgar area including on Rathgar Road and we also question the overall safety of the proposed cycle paths.

We strongly oppose road-widening, which threatens the architectural layout of our streets and will require the felling of mature trees. Residents on many of our smaller streets and roads will suffer as a result of increased traffic flows and parking issues. Many villages across Dublin are at risk of losing their identity due to the proposed Busconnects design which is based on outdated road widening and indeed outdated traffic count data which was collected in November 2019 and February 2020. This data is no longer indicative of the traffic flows in and around Rathgar as residents can attest (see photos attached below). CSO statistics reveal the change in commuter traffic and in the continuation of working from home patterns by so many workers. We submit the following images taken on Friday the 9th June at 5pm showing Rathgar Road inbound, with our home 124 Rathgar Road on the right and another showing Rathgar Road outbound towards Rathgar Village junction taken on the same day moments later. Both show how little traffic is on Rathgar Road even at rush hour on a Friday which is the completely different to the traffic flows and congestion on the road pre the pandemic when the NTA's traffic modelling for the road was conducted.



We also object to the proposed relocation of the city bound bus stop on Rathgar Road to outside no. 77-no. 80 Rathgar Road. This moves the bus stop away from the village leading to diminished accessibility to Rathgar Village for bus users. Relocating this bus stop to circa 95-96 Rathgar Road would be preferable for the businesses in the village which would struggle under these proposals due to lack of parking. Locating the bus stop circa 95-96 Rathgar Road would also have the advantage of being close to the proposed pedestrian crossing, which is far preferable than bus users darting across 5 lanes of traffic (two bus lanes, two cycle lanes and one general traffic lane) to access the bus stop if the proposed bus stop is relocated to outside no. 77-no. 80 Rathgar Road as per the NTA submission. Also, the proposed relocation of the bus stop so close to Winton Avenue is questionably on safety grounds as this is a dangerous junction where accidents have occurred especially involving cyclists who will still be able to access Rathgar Road from Winton Avenue in both directions. It is noteworthy that all traffic speeds up at this point due to the long downhill stretch outside no. 77-no. 80 Rathgar Road as we have observed for years as the proposed bus stop is close to our home at 124 Rathgar Road across the road.

Rathgar Road and Terenure Road East are not bus corridors. They form a residential area with schools, hospitals, places of worship, shops and a vibrant community. Spanning out from these roads are a myriad of smaller roads and streets which have their normal ebb and flow. BusConnects' plans propose a total change in the dynamic of these roads, in particular Highfield Road which will now see an increase of traffic and the introduction of a new Orbital bus route. Many other side streets in our area will suffer devastating knock on effects including increased traffic, increased emissions due to congestion, one way systems and parking issues. What the NTA has refused to do, however, is to the trial the proposed traffic changes.

We believe that a comprehensive underground metro would allow Dublin's residents, commuters and visitors to access the city and its environs whilst saving Dublin's environment,

built heritage and special character. The introduction of school buses would also make a vast improvement to the lives of both families and residents across Dublin.

The NTA admitted in its own material (page 3 public consultation January 2019) that:

"Growth areas can only be served in the short and medium term by the bus as opposed to the long-term projects such as rail and luas."

Four years have passed since that statement was made. The NTA admits that this is a short term solution which cannot possibly deal with the real issues; so why fell mature trees? Why CPO land to widen roads? Why undermine established communities? Why permanently destroy the Georgian and Victorian heritage of niche urban villages?

As a short-term solution there are many changes that could be made to make the current bus system more efficient at no cost to community and villages. These include policies aimed at reducing private cars on our roads; for example, implementing congestion charges and comprehensive park and ride facilities. Contactless payment has not been introduced despite being in use in neighbouring jurisdictions. In an age when payments are made via smart phones and/or Revolut, for example, the NTA has consistently failed and/or delayed the introduction of such measures in Dublin.

It is also noteworthy that the NTA has not proposed a new park and ride facilities at the Tallaght/Templeogue M50 turn-off to encourage car drivers out of their cars and onto more environmentally friendly bus services (in the absence of a metro). The NTA is making no actual effort to take cars out of the system in South West Dublin nor is it encouraging commuting traffic to swap to bus services as they enter Dublin City which. Either would ease congestion on our streets and improve South West Dublin's air quality without requiring infrastructural changes.

There are steps that could be taken now which would improve bus times. It is impossible to understand why the NTA has delayed measures which would prioritise buses over other traffic. The NTA should also be required to introduce non-invasive measures to improve bus journey times for example by introducing priority bus lights, cashless fare on buses and other technical advances. It is exasperating – and frankly cynical- that these measures, in particular cashless fares, have been linked to this BusConnects planning vehicle.

One is left with the impression that the NTA is artificially attempting to obscure that these costly infrastructure changes will provide little improvement in time saving to the bus commuter journey by bundling the tried and tested non-invasive time saving measures in with the bus corridors in an effort to ensure that some positive time saving can be pointed to. This can be the only logical reason for the NTA's refusal to deploy effective modern computer-led solutions to bus time savings. There is simply no sound basis for resorting to archaic road widening and tree removal. Jennifer McElwain, Professor of Botany at Trinity College Dublin, made a submission to the NTA against tree felling. We rely on that submission as hugely valuable trees are still to be lost unnecessarily. (See submission attached for your convenience.)

We urge that all non-invasive improvements be made before any irreversible and detrimental changes are made to our villages, streets and the environment of Dublin and the Greater Dublin

Area. We also believe that any proposed measures should be trialled before planning is granted to fully ascertain the impact of the BusConnects' proposals, particularly as traffic modelling has been performed in a piecemeal fashion. The traffic implications of all 12 corridors running concurrently have not been modelled let alone trialled in real time.

The true cost of the environmental fallout of traffic and congestion cannot be understood until traffic modelling for the entire Busconnects project is performed. Therefore, the Environmental Impact Assessment (EIA) submitted by the NTA for this corridor is fundamentally flawed and is not fit for purpose as it does not take into account the fall-out of other bus corridors in the area for example the Kimmage to the City Centre Corridor etc.

Given that the NTA has not proposed any new park and ride facilities for this bus route- and in view of the fact that it is the NTA's own stated aim is that BusConnects is intended to make it more difficult to drive a car in Dublin- an inevitable impact of this proposed corridor (with the traffic changes) is that there will be more not less car traffic; it will simply be rerouted. The NTA proposal offers no alternative parking solutions for commuters. Therefore, they will be forced to make enormously circuitous routes to the city centre thereby increasing emissions, and causing further negative environmental and congestion impacts. The traffic implications for residents and commuters alike have not been modelled; we fear that that is a deliberate lacuna in the data as it would reveal the chaos that will ensue.

In an age where AI is capable of so much and where there have been huge technical advances, traffic modelling is essential prior to any major road infrastructure project. If the NTA does not have access to the technical capability to model all 12 corridors across the wider Dublin area and has not performed this task, then planning permission cannot be granted. The data has simply not been collated. The plans are based on outdated traffic count data, fragmented and disjointed modelling, and a wholly inadequate EIA. We have been asking for this to be done from the outset.

We submit that the current plans overburden Rathgar village and surrounding roads with an increase of bus frequency which will be detrimental to the liveability of our village and area. The NTA's insistence on routing all buses from Templeogue/Tallaght and Rathfarnham through Rathgar Village puts a disproportionate burden on Rathgar (and on Rathmines). These bus routes could have easily been separated with a bus service interconnection in Terenure Village and separate bus services along Terenure Road East (towards Rathgar) and, alternatively, along Terenure Road North and Harolds Cross Road. Indeed, the interconnection of bus services lies at the centre of the Busconnects ethos so it is very difficult to understand the proposal to route all those buses along one route only (through Rathgar).

Moreover, it should be noted that all NTA Busconnects infrastructure public consultations separated the Tallaght/Templeogue to Terenure Village and Rathfarnham to City Centre corridors into two distinct separate consultations and are only now joining both corridors together for the ABP planning process.

Forcing all buses through Rathgar has the direct impact of overwhelming Rathgar village and community. The route had previously been designated as a cycle route, but that too has been reversed by the BusConnects proposals.

The NTA proposals will also lead to an inadequate public transport service for Harolds Cross Road which is experiencing a huge growth in housing and education facilities.

A major flaw in the BusConnects' plan for this corridor is that the N81 and R137 have been inexplicably bypassed. For years, the Rathfarnham to City Centre Quality Bus Corridor (QBC) has used the Harolds Cross Road as its route into the city centre. The R137 was identified as a QBC because it is a shorter, more direct, unconvoluted, and wider route to the city centre. Instead, BusConnects plans to have buses turning down the mainly residential Terenure Road East.

Signage in Terenure currently directs incoming city traffic via Harolds Cross Road. The NTA's decision to totally discount the Harolds Cross Road has the effect of leaving a large wedge of the city underserved by public transport while overburdening Rathgar and Rathmines, the latter which is already serviced by the Luas (at Beechwood and Charlemont).

Prior to BusConnects, there was BRT – Bus Rapid Transport. The Rathfarnham to City Centre Core Bus Corridor Report titled 'CBC FEASIBILITY STUDY AND OPTIONS ASSESSMENT REPORT' and dated December 2017 written for the National Transport Authority by DBFL Consulting Engineers and Transportation Planners and which can be found in the NTA Busconnects documents supporting this planning application on the NTA's website <https://templeoguerathfarnhamscheme.ie/> is a key document in this planning application. It is the scoping and feasibility study that the entire corridor is based on. It states:

"The Clongriffin – Tallaght BRT is of particular relevance to section 2 of the Rathfarnham CBC route. The CBC route should complement the BRT service but should not duplicate the potential routing of the Clongriffin – Tallaght BRT route, which is likely to travel via the Harold's Cross corridor as per the Transport Strategy for the GDA (2016 – 2035) and identified in Figure 1.2 of this report."

The above section of the feasibility and options report has huge implications for this planning application. The Clongriffin – Tallaght BRT project while viable in 2017 when the report was written - has since been abandoned. However, the fact that the Harolds Cross Road was **excluded at the earliest stages of this current BusConnects project and never fully assessed and analysed is a fundamental flaw of this project.**

During public consultations with the NTA, the above flawed analysis was highlighted to the NTA by our family and other residents in the Rathgar area. An alternative routing of this proposed corridor via Harolds Cross Road was proposed, but the submission was dismissed by the NTA with a few paragraphs of generic text in the submission analysis. Failure to consider the Harolds Cross Road comprehensively – in circumstances where it was originally identified by the same agency for BRT – wholly undermines this planning application. A full rescoping feasibility study and option assessment, including population growth and access to bus services, is required. A refusal to acknowledge the flawed exclusion of what is a major traffic route from consideration when selecting routes leaves huge gaps in the credibility and soundness of this planning application.

We support the submissions of our neighbours and all Rathgar residents especially on Rathgar Road, Auburn Villas and Terenure Road East.

Regards,

Ray and Paula Moore
124 Rathgar Road,
Rathgar,
Dublin 6
D06 W2T0

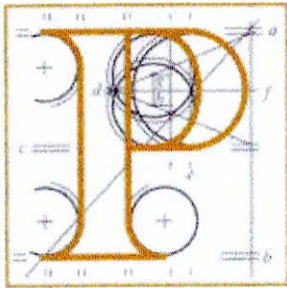
Your Observation Reference: **SID-OBS-000903**

1 message

An Bord Pleanála <no-reply@pleanala.ie>

Sat, Jun 17, 2023 at 11:02 AM

To: Paula Moore



An
Bord
Pleanála

Strategic Infrastructure Observation Confirmation

Your reference	SID-OBS-000903
An Bord Pleanála case number or brief development description as provided	316272
Name	Paula Moore
Fee	€50.00
What happens next?	Our staff will process your observation. This will take about five to seven working days. We will send a letter in the post to tell you if your observation is valid — or not.
Further information	You can get further information on Strategic Infrastructure on the An Bord Pleanála website . This includes the Strategic Infrastructure Applications Public Guidance Document .

AN BORD PLEANÁLA

LDG- _____

ABP- _____

20 JUN 2023

Fee: € _____

Time: _____ By: *Res*

An Bord Pleanála (Strategic Infrastructure Division),
64 Marlborough Street,
Dublin 1,
D01 V902

17th June 2023

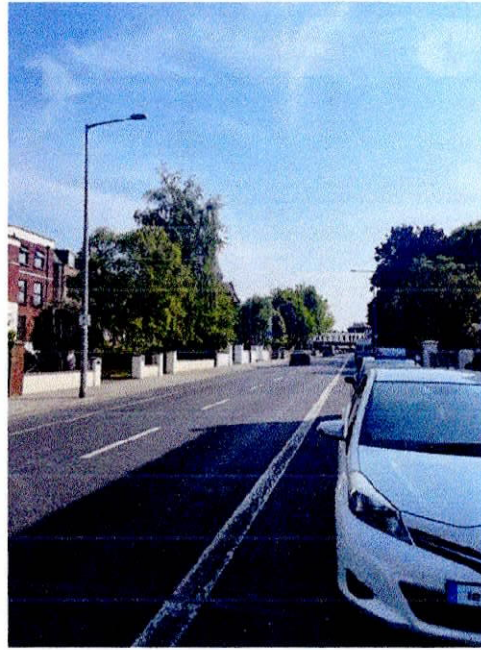
Submission re Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme

To An Bord Pleanála Board,

The National Transport Authority has applied to An Bord Pleanála for approval for a proposed road development consisting of the BusConnects Corridor for Templeogue/Rathfarnham to the City Centre. This proposed bus corridor would cut through Rathgar and has very significant negative impacts for Rathgar Village and all of the surrounding roads and indeed many other urban villages and roads in South West Dublin. The claimed gains to the overall average speed of buses are too small to justify the burden being placed on Rathgar and the surrounding area. The proposed changes will have a drastic impact on Rathgar Road where we live with our young family.

We submit that the price is too high for so little gain: heritage, trees and wildlife are threatened across Dublin. Key concerns for the Rathgar area include the impact on environment including increased emissions, noise and loss of trees, Compulsory Purchase Orders on Terenure Road East (and further afield on Rathfarnham Road), traffic implications on all local streets and roads, the negative impact on the public realm and streetscape, the bus gate at St Mary's College in Rathmines, one way traffic, right/left turn bans and the impact on the businesses in Rathgar during construction phase and due to loss of parking in the village and in the area. We are enormously concerned about the proposed reduced width of footpaths in the Rathgar area including on Rathgar Road and we also question the overall safety of the proposed cycle paths.

We strongly oppose road-widening, which threatens the architectural layout of our streets and will require the felling of mature trees. Residents on many of our smaller streets and roads will suffer as a result of increased traffic flows and parking issues. Many villages across Dublin are at risk of losing their identity due to the proposed Busconnects design which is based on outdated road widening and indeed outdated traffic count data which was collected in November 2019 and February 2020. This data is no longer indicative of the traffic flows in and around Rathgar as residents can attest (see photos attached below). CSO statistics reveal the change in commuter traffic and in the continuation of working from home patterns by so many workers. We submit the following images taken on Friday the 9th June at 5pm showing Rathgar Road inbound, with our home 124 Rathgar Road on the right and another showing Rathgar Road outbound towards Rathgar Village junction taken on the same day moments later. Both show how little traffic is on Rathgar Road even at rush hour on a Friday which is the completely different to the traffic flows and congestion on the road pre the pandemic when the NTA's traffic modelling for the road was conducted.



We also object to the proposed relocation of the city bound bus stop on Rathgar Road to outside no. 77-no. 80 Rathgar Road. This moves the bus stop away from the village leading to diminished accessibility to Rathgar Village for bus users. Relocating this bus stop to circa 95-96 Rathgar Road would be preferable for the businesses in the village which would struggle under these proposals due to lack of parking. Locating the bus stop circa 95-96 Rathgar Road would also have the advantage of being close to the proposed pedestrian crossing, which is far preferable than bus users darting across 5 lanes of traffic (two bus lanes, two cycle lanes and one general traffic lane) to access the bus stop if the proposed bus stop is relocated to outside no. 77-no. 80 Rathgar Road as per the NTA submission. Also, the proposed relocation of the bus stop so close to Winton Avenue is questionably on safety grounds as this is a dangerous junction where accidents have occurred especially involving cyclists who will still be able to access Rathgar Road from Winton Avenue in both directions. It is noteworthy that all traffic speeds up at this point due to the long downhill stretch outside no. 77-no. 80 Rathgar Road as we have observed for years as the proposed bus stop is close to our home at 124 Rathgar Road across the road.

Rathgar Road and Terenure Road East are not bus corridors. They form a residential area with schools, hospitals, places of worship, shops and a vibrant community. Spanning out from these roads are a myriad of smaller roads and streets which have their normal ebb and flow. BusConnects' plans propose a total change in the dynamic of these roads, in particular Highfield Road which will now see an increase of traffic and the introduction of a new Orbital bus route. Many other side streets in our area will suffer devastating knock on effects including increased traffic, increased emissions due to congestion, one way systems and parking issues. What the NTA has refused to do, however, is to the trial the proposed traffic changes.

We believe that a comprehensive underground metro would allow Dublin's residents, commuters and visitors to access the city and its environs whilst saving Dublin's environment,

built heritage and special character. The introduction of school buses would also make a vast improvement to the lives of both families and residents across Dublin.

The NTA admitted in its own material (page 3 public consultation January 2019) that:

"Growth areas can only be served in the short and medium term by the bus as opposed to the long-term projects such as rail and luas."

Four years have passed since that statement was made. The NTA admits that this is a short term solution which cannot possibly deal with the real issues; so why fell mature trees? Why CPO land to widen roads? Why undermine established communities? Why permanently destroy the Georgian and Victorian heritage of niche urban villages?

As a short-term solution there are many changes that could be made to make the current bus system more efficient at no cost to community and villages. These include policies aimed at reducing private cars on our roads; for example, implementing congestion charges and comprehensive park and ride facilities. Contactless payment has not been introduced despite being in use in neighbouring jurisdictions. In an age when payments are made via smart phones and/or Revolut, for example, the NTA has consistently failed and/or delayed the introduction of such measures in Dublin.

It is also noteworthy that the NTA has not proposed a new park and ride facilities at the Tallaght/Templeogue M50 turn-off to encourage car drivers out of their cars and onto more environmentally friendly bus services (in the absence of a metro). The NTA is making no actual effort to take cars out of the system in South West Dublin nor is it encouraging commuting traffic to swap to bus services as they enter Dublin City which. Either would ease congestion on our streets and improve South West Dublin's air quality without requiring infrastructural changes.

There are steps that could be taken now which would improve bus times. It is impossible to understand why the NTA has delayed measures which would prioritise buses over other traffic. The NTA should also be required to introduce non-invasive measures to improve bus journey times for example by introducing priority bus lights, cashless fare on buses and other technical advances. It is exasperating – and frankly cynical- that these measures, in particular cashless fares, have been linked to this BusConnects planning vehicle.

One is left with the impression that the NTA is artificially attempting to obscure that these costly infrastructure changes will provide little improvement in time saving to the bus commuter journey by bundling the tried and tested non-invasive time saving measures in with the bus corridors in an effort to ensure that some positive time saving can be pointed to. This can be the only logical reason for the NTA's refusal to deploy effective modern computer-led solutions to bus time savings. There is simply no sound basis for resorting to archaic road widening and tree removal. Jennifer McElwain, Professor of Botany at Trinity College Dublin, made a submission to the NTA against tree felling. We rely on that submission as hugely valuable trees are still to be lost unnecessarily. (See submission attached for your convenience.)

We urge that all non-invasive improvements be made before any irreversible and detrimental changes are made to our villages, streets and the environment of Dublin and the Greater Dublin

Area. We also believe that any proposed measures should be trialled before planning is granted to fully ascertain the impact of the BusConnects' proposals, particularly as traffic modelling has been performed in a piecemeal fashion. The traffic implications of all 12 corridors running concurrently have not been modelled let alone trialled in real time.

The true cost of the environmental fallout of traffic and congestion cannot be understood until traffic modelling for the entire Busconnects project is performed. Therefore, the Environmental Impact Assessment (EIA) submitted by the NTA for this corridor is fundamentally flawed and is not fit for purpose as it does not take into account the fall-out of other bus corridors in the area for example the Kimmage to the City Centre Corridor etc.

Given that the NTA has not proposed any new park and ride facilities for this bus route- and in view of the fact that it is the NTA's own stated aim is that BusConnects is intended to make it more difficult to drive a car in Dublin- an inevitable impact of this proposed corridor (with the traffic changes) is that there will be more not less car traffic; it will simply be rerouted. The NTA proposal offers no alternative parking solutions for commuters. Therefore, they will be forced to make enormously circuitous routes to the city centre thereby increasing emissions, and causing further negative environmental and congestion impacts. The traffic implications for residents and commuters alike have not been modelled; we fear that that is a deliberate lacuna in the data as it would reveal the chaos that will ensue.

In an age where AI is capable of so much and where there have been huge technical advances, traffic modelling is essential prior to any major road infrastructure project. If the NTA does not have access to the technical capability to model all 12 corridors across the wider Dublin area and has not performed this task, then planning permission cannot be granted. The data has simply not been collated. The plans are based on outdated traffic count data, fragmented and disjointed modelling, and a wholly inadequate EIA. We have been asking for this to be done from the outset.

We submit that the current plans overburden Rathgar village and surrounding roads with an increase of bus frequency which will be detrimental to the liveability of our village and area. The NTA's insistence on routing all buses from Templeogue/Tallaght and Rathfarnham through Rathgar Village puts a disproportionate burden on Rathgar (and on Rathmines). These bus routes could have easily been separated with a bus service interconnection in Terenure Village and separate bus services along Terenure Road East (towards Rathgar) and, alternatively, along Terenure Road North and Harolds Cross Road. Indeed, the interconnection of bus services lies at the centre of the Busconnects ethos so it is very difficult to understand the proposal to route all those buses along one route only (through Rathgar).

Moreover, it should be noted that all NTA Busconnects infrastructure public consultations separated the Tallaght/Templeogue to Terenure Village and Rathfarnham to City Centre corridors into two distinct separate consultations and are only now joining both corridors together for the ABP planning process.

Forcing all buses through Rathgar has the direct impact of overwhelming Rathgar village and community. The route had previously been designated as a cycle route, but that too has been reversed by the BusConnects proposals.

The NTA proposals will also lead to an inadequate public transport service for Harolds Cross Road which is experiencing a huge growth in housing and education facilities.

A major flaw in the BusConnects' plan for this corridor is that the N81 and R137 have been inexplicably bypassed. For years, the Rathfarnham to City Centre Quality Bus Corridor (QBC) has used the Harolds Cross Road as its route into the city centre. The R137 was identified as a QBC because it is a shorter, more direct, unconvoluted, and wider route to the city centre. Instead, BusConnects plans to have buses turning down the mainly residential Terenure Road East.

Signage in Terenure currently directs incoming city traffic via Harolds Cross Road. The NTA's decision to totally discount the Harolds Cross Road has the effect of leaving a large wedge of the city underserved by public transport while overburdening Rathgar and Rathmines, the latter which is already serviced by the Luas (at Beechwood and Charlemont).

Prior to BusConnects, there was BRT – Bus Rapid Transport. The Rathfarnham to City Centre Core Bus Corridor Report titled 'CBC FEASIBILITY STUDY AND OPTIONS ASSESSMENT REPORT' and dated December 2017 written for the National Transport Authority by DBFL Consulting Engineers and Transportation Planners and which can be found in the NTA Busconnects documents supporting this planning application on the NTA's website <https://templeoguerathfarnhamscheme.ie/> is a key document in this planning application. It is the scoping and feasibility study that the entire corridor is based on. It states:

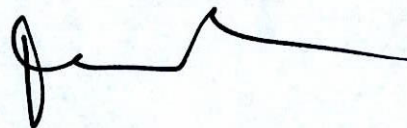
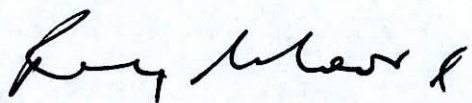
"The Clongriffin – Tallaght BRT is of particular relevance to section 2 of the Rathfarnham CBC route. The CBC route should complement the BRT service but should not duplicate the potential routing of the Clongriffin – Tallaght BRT route, which is likely to travel via the Harold's Cross corridor as per the Transport Strategy for the GDA (2016 – 2035) and identified in Figure 1.2 of this report."

The above section of the feasibility and options report has huge implications for this planning application. The Clongriffin – Tallaght BRT project while viable in 2017 when the report was written - has since been abandoned. However, the fact that the Harolds Cross Road was **excluded at the earliest stages of this current BusConnects project and never fully assessed and analysed is a fundamental flaw of this project.**

During public consultations with the NTA, the above flawed analysis was highlighted to the NTA by our family and other residents in the Rathgar area. An alternative routing of this proposed corridor via Harolds Cross Road was proposed, but the submission was dismissed by the NTA with a few paragraphs of generic text in the submission analysis. Failure to consider the Harolds Cross Road comprehensively – in circumstances where it was originally identified by the same agency for BRT – wholly undermines this planning application. A full rescoping feasibility study and option assessment, including population growth and access to bus services, is required. A refusal to acknowledge the flawed exclusion of what is a major traffic route from consideration when selecting routes leaves huge gaps in the credibility and soundness of this planning application.

We support the submissions of our neighbours and all Rathgar residents especially on Rathgar Road, Auburn Villas and Terenure Road East.

Regards,



Ray and Paula Moore
124 Rathgar Road,
Rathgar,
Dublin 6
D06 W2T0

DELIVERY BY HAND

April 30th 2019

National Transport Authority
Dún Scéine
Harcourt Lane
Dublin 2

**RE: BusConnects Core Bus Corridors
Route 12: Rathfarnham > City Centre**

Dear Sir/Madam,

This is a submission by the Rathgar Road and Area Residents, c/o Stephen Bailey, 137 Rathgar Road, Rathgar, Dublin 6 to the National Transport Authority (NTA) in relation to the proposed Core Bus Corridor 12, Rathfarnham to City Centre route in the BusConnects Core Bus Corridors Proposals.

This submission was prepared by John O'Malley, Chartered Town Planner, Kieran O'Malley and Company Limited, Town Planning Consultants in conjunction with Julian Keenan, Chartered Engineer, Trafficwise Transportation Planning Solutions, Suite No. 5, Gowra Plaza, Bracetown Business Park, D15 R59T.

1.0 INTRODUCTION

- 1.1 We represent our clients who are a large group of residents of the Rathgar Road and side roads, including both residents in the area whose properties are potentially the subject of potential Compulsory Purchase Orders ('CPOs') and also residents whose properties would appear not to be subject to CPOs based upon information available to date in relation to the emerging preferred route for the proposed Core Bus Corridor 12. Our clients are vehemently opposed to this proposal because of its devastating impact not just on their properties but also because of the significant adverse impact on the environment, the wider community and the large scale destruction of a Conservation Area which forms an important part of Dublin's heritage.
- 1.2 Our clients live at Rathgar Road, which forms part of the emerging preferred route of the proposed Core Bus Corridor 12 (CBC). In its emerging preferred form, this bus corridor will "impact" adversely upon a large number of family homes on Rathgar Road including many of the 124 no. properties, which are included on Dublin City Council's Record of Protected Structures. By "impact", the term used by the National Transport Authority in

Its correspondence with the relevant home owners, the NTA means the compulsory acquisition of a parcel of their private property at Rathgar Road. You will therefore appreciate our clients' real concerns regarding these proposals.

- 1.3 Our clients object to the proposed road widening and the consequent serious negative impact upon their properties and the wider local community. In addition to this group submission, individual home owners and occupiers will be writing separately to the NTA to set out their specific and particular concerns. We urge the NTA to have due regard to these submissions and to reconsider the route selection assessment for this core bus corridor and the basis for the current emerging preferred route proposal.

2.0 CONSULTATION

- 2.1 Our clients welcome the opportunity to review the current proposals referred to by the Authority as the "emerging preferred route" and they also are encouraged by the status of the project as being at "concept design stage" in other NTA media communications. We note the emphasis in the consultation brochure to the role and importance of these public consultations as follows.

These public consultations phases will be the start of a detailed process of engagement and communication. All of which will take place prior to detailed designs being finalised and planning permissions sought.

- 2.2 Thus, our clients note the NTA's commitment to meaningfully consider these submissions and we note that these consultations are taking place prior to the completion of detailed design work. It is in this vein that their input is therefore being brought to your attention at an early stage in this process so there is ample time and opportunity for the NTA to properly consider, and, we hope, to address their concerns regarding the proposed core bus corridor 12.

3.0 PLANNING APPLICATION

- 3.1 Ultimately, after the closure of this consultation phase and any subsequent round of consultations, the NTA will finalise the route and commence detailed design leading to the preparation of a planning application and if necessary, a CPO. This application will be then submitted to An Bord Pleanála for its Approval pursuant to the provisions of Part XI of the Planning and Development Act 2000, as amended.
- 3.2 Any such planning application must be accompanied by an Environmental Impact Assessment Report [EiAR], which requires, inter alia, that the Applicant (i.e. the NTA) includes a description of the reasonable alternatives studied in the preparation of the application. These alternatives must be relevant to the project and its specific characteristics and the developer must indicate the main reasons for the option chosen taking into account the effects of the project of the environment in accordance with the Directive 2014/52/EU [see Schedule 6(1)(d) and 6(2)(b) of the Planning and Development Regulations, 2001-2018].

- 3.3 This requirement is particularly relevant here because there are reasonable alternatives and combinations of alternatives involving bus lanes with or without cycle lanes to be considered within the corridor study area. An essential part of the EIA process to be undertaken by the NTA is to identify the reasonable alternatives considered and to explain the rationales for the selection made taking into account the direct and indirect effects of the development proposal upon the following environmental factors at Article 3 of the Directive/Section 171A of the Act:
- (a) Population and human health
 - (b) Biodiversity with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC
 - (c) Land, soil, water, air and climate
 - (d) Material assets, cultural heritage and the landscape, and
 - (e) the interaction between the factors referred to in points (a) to (d)
- 3.4 The current core bus corridor proposals at Rathgar Road will have serious implications under several aspects of the environment, and particularly residents, local community, land, material assets and cultural heritage as well as the interaction of same. The onus will be on the NTA to identify and consider the reasonable alternatives and to justify the route option chosen taking into account the effects of the project of the environment.
- 3.5 While the assessment of the EIAR is a matter for An Bord Pleanála at the Approval stage, the analysis below highlights real shortcomings in the Feasibility Study and Options Assessment Report (FSOAR) for Core Bus Corridor 12. Specifically, the route assessment fails to adequately identify and consider reasonable alternatives. The main findings are summarised to show their relevance to the consideration of alternatives.
- 3.6 The potential route from Rathfarnham to the City Centre through Terenure via Terenure Road North and Harold's Cross is disregarded at an early stage in the FSOAR because it is considered to duplicate the BRT route. In circumstances where the BRT plans have been replaced by the Core Bus Corridors proposals, the reasoning for this critical decision is seriously flawed. This decision is at odds with an earlier determination that this [i.e. the route via Harold's Cross] is a suitable route between the city centre and the southwest suburbs [Corridor E in the Transport Strategy for the Greater Dublin Area 2015-2035]. It is also the shortest and most direct route to the city centre. In the absence of any material change in the underlying conditions to support a different finding, and where this decision is not justified in the Feasibility Report, there is no objective basis for dismissing this reasonable alternative.
- 3.7 It is our contention that the assessments of cycle routes and bus lanes in the FSOAR is not comprehensive and fails to consider viable reasonable alternatives and combinations of alternatives. For example, the FSOAR does not consider potential cycle route options involving segregation between cycle lanes and bus lanes within this core bus corridor area [paras. 5.18 and 5.19]. Segregating bus and cycle traffic should reasonably be preferred in the general case over combined cycle and bus routes/traffic where feasible because it is safer and more convenient. A segregated option also has the potential to attract new cyclists because of the segregation from other modes.

- 3.8 Furthermore, the manner in which cycle lanes are assessed together with bus lanes, and not independently of bus lanes, is a factor in the assessment and in the option chosen. Potentially valid cycling route options are not adequately considered because they are only evaluated in tandem with a bus lane in the study scoring poorly on environmental and on costs grounds because of the width of overall land take required to facilitate the provision of cycle lane and a bus lane [paras. 5.41 and 5.42]. Such considerations do not arise where the cycle lane is provided separately from the bus lane.
- 3.9 Cycling routes following separate alignments from bus lanes have considerable potential to improve cycling safety, and to avoid or minimise road widening thereby reducing costly land acquisition by CPO [particularly relevant at Rathgar Road], and delivering considerable public planning gain through the avoidance of permanent damage to the architectural heritage of the area. These are material considerations, which deserves careful consideration having regard to the proper planning of the area and to the aspects of the environment identified in the Directive (paragraph 3.3 above). The NTA's current core bus corridor proposals would entail the substantial loss of curtilage at hundreds of Protected Structures along the route causing incalculable and irreversible damage to the amenity and character enjoyed within this mature residential area.
- 3.10 Consequently, there are reasonable alternatives, which are not identified in the FSOAR from which it follows that there is a real and substantial risk that the route assessment study in its present form may not be in accordance with the EIA Directive.
- 3.11 These serious negative consequences associated with the emerging preferred route, not to mention the very substantial compensation implications provide a basis to re-examine the corridor 12 proposals. Failure to do so increases the risk that An Bord Pleanála will consider the EIA based upon the current FSOAR does not adequately assess reasonable alternatives requirements for this sector of the BusConnects project. Indeed, it was on similar grounds that the Board refused to approve the proposed civic plaza and ancillary traffic management measures at College Green (ABP Ref. No. 29S.JA0039) because An Bord was not satisfied that the impacts of the proposals were adequately assessed.

4.0 PLANNING POLICY CONTEXT

4.1 An Bord Pleanála will assess the NTA BusConnects proposals having regard to a suite of applicable planning policies set out in national, regional and local plans as well as the Ministerial Guidelines issued by the Department including as follows.

- National Planning Framework Project Ireland 2040
- Regional Planning Guidelines for the Greater Dublin Area [soon to be replaced by the Regional Spatial and Economic Strategy for the Eastern Midlands Assembly (includes Dublin City)]
- Dublin City Development Plan 2016-2022
- Architectural Heritage Protection Guidelines for Planning Authorities
- Sustainable Urban Development Guidelines for Planning Authorities
- Urban Design Manual - A Companion Document to the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Department of Environment, Heritage and Local Government)
- Design Manual for Urban Roads and Streets [DMURS] Department of Environment, Community and Local Government and Department of Transport, Tourism and Sport, 2013).

4.2 The Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas published by the Department in 2009 distils a range of national policies into a series of high-level aims for successful and sustainable development in urban areas. This includes the creation of high quality places which:

- Prioritise walking, cycling and public transport, and minimise the need to use cars;
- Deliver 'quality of life' in terms of amenity, safety and convenience;
- Present an attractive, well-maintained appearance, with a distinct sense of place and a quality public realm that is easily maintained;
- Are easy to access and way find for all;
- Enhance and protect the built and natural heritage.

4.3 Transport has an important place within the wider spectrum of elements that contribute to proper planning and place making. However, transport goals and objectives must always be weighed against other key planning considerations. The unique character and identity urban villages of Terenure/Rathgar are recognised in the statutory development plan, which designates these areas for protection against inappropriate forms of development. Planning control is typically asserted on a site by site basis, and it is rare that a project of the scale of the emerging preferred bus corridor route arises which threatens the character of an entire area, in this case focused at Rathgar village and extending to Terenure and Rathmines. For this reason, it is necessary to emphasise the wider objectives and principles in the statutory documents and planning guidelines.

4.4 In transport, the following documents in no particular order apply.

- Smarter Travel, A Sustainable Transport Future 2009-2020
- Transport Strategy for the Greater Dublin Area 2016-2035
- National Cycle Manual
- National Cycling Policy Framework
- Greater Dublin Area Cycle Network Plan 2013

4.5 A key tenet of all the above documents is the prioritisation of the needs of cyclists and pedestrians over vehicles and the promotion of a modal shift from cars to walking, cycling and public transport modes. It is not proposed to examine those policy and guidance documents in detail, save the Dublin City Development Plan 2016-2022, which defines the following vision for Dublin City at page 18 of the Written Statement.

Within the next 25 to 30 years Dublin will have an established international reputation as one of Europe's most sustainable, dynamic and resourceful city regions. Dublin, through the shared vision of its citizens and civic leaders will be a beautiful, compact city, with a distinct character, a vibrant culture and diverse, smart, green, innovation-based economy. It will be socially inclusive city of urban neighbourhoods, all connected by an exemplary public transport, cycling and walking system and interwoven with a quality bio-diverse green space network. In short, the vision is for a capital city where people will seek to live, work, experience, invest and socialise as a matter of choice.

4.6 Dublin City Council is clearly thinking big with its vision for the city, which references public transport, walking and cycling but also emphasises the importance of providing socially inclusive urban neighbourhoods and a compact city with a distinct character so that it is attractive for residents to work, rest and play, the classic planning triangle of needs. Five key principles underpin a sustainable approach to the development of a more compact and resilient city and provide the over-arching philosophy, which informs the Vision and Core Strategy in the City Development Plan [section 1.3].

- Economic
- Social/Residential
- Cultural/Built Heritage
- Urban Form, and
- Movement.

4.7 Movement is identified as one element of an integrated and holistic approach to the delivery of essential infrastructure and services including transport proposals within an over-arching sustainable framework. The core strategy is intended to achieve the vision for the city in a manner consistent with the guidance and policies at all levels. The core strategy is shown in Figure 1 below [Dublin City Development Plan 2016-2022].

4.8 BusConnects core bus corridor proposals must be properly assessed within this broader urban planning context, and not solely by reference to the provision of better bus lanes through established suburbs. Whereas the emerging CBC12 proposals would improve

priority for buses on this route to some extent, at what cost? Is the benefit worth the cost? The emerging preferred bus corridor route would effectively create a bus highway between the urban villages of Terenure, Rathgar and Rathmines destroying their distinct character. The proposed widened roads and bus lanes would represent a significant barrier to the safe and easy movement of residents within the neighbourhood severing local communities. This is of particular concern to residents with children attending the local Rathgar National and Rathgar Junior schools who are required to cross the road. The impact upon the existing housing stock particularly the loss of curtilage at hundreds of protected structures along the route, the erosion of historic fabric and the permanent destruction of the architected heritage of the area is not justified having regard to the vision for Dublin outlined above.

Fig.2 Core Strategy

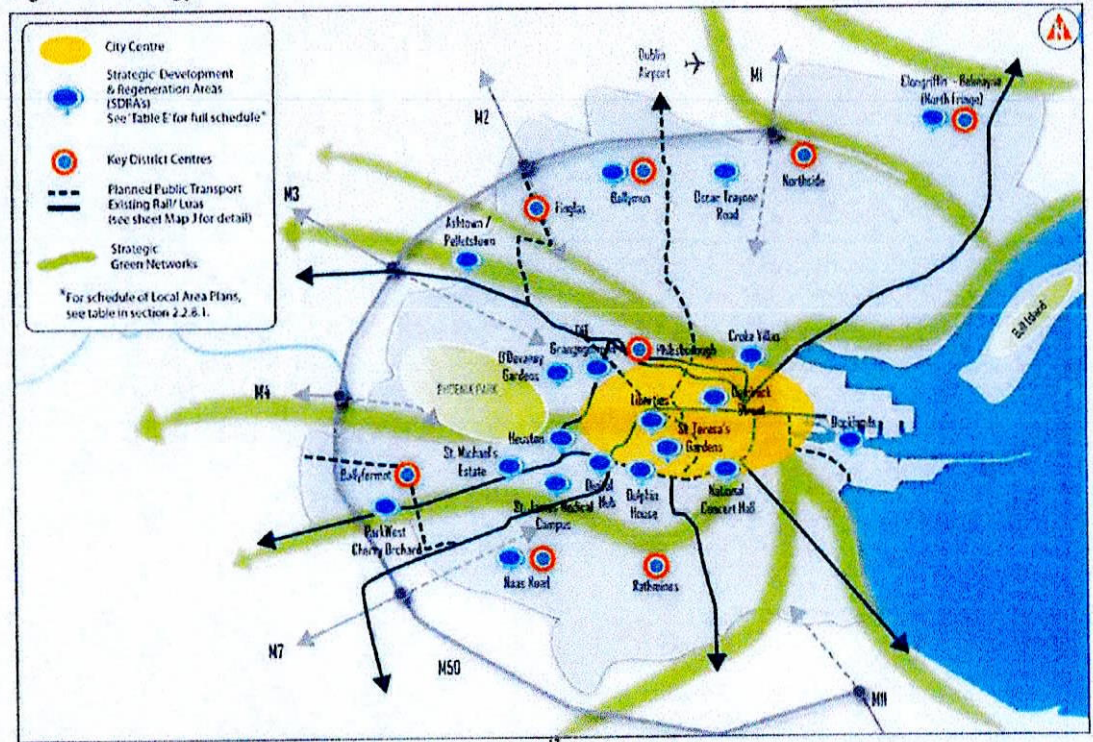


Figure 1 – Core Strategy Dublin City Development Plan 2016-2022

4.9 Ten main themes are set out in the chapters of the City Plan to deliver the Vision and the Core Strategy. Two themes are considered in detail below and are particularly relevant to an assessment of proposed core bus corridor route 12. These are:

- 4. Shape & Structure of the City
- 11. Culture and Heritage

4.10 Chapter 4 sets out the Council’s approach to the shape and structure of the city and recognises the unique character and identity of the existing built environment as is clear from the following extract at section 4.1.

The spatial structure of Dublin is provided by both its natural setting and man-made features. The River Liffey, along with the canals, contains both

the 'old' city and the unique Georgian squares and streets. Together with the larger areas of Victorian and Edwardian architecture both north and south of the canals, and urban villages, these features underpin the city's strong character and identity, which is recognised internationally.

...The development plan aims to protect and enhance the unique character of the city, derived from both the natural and built environments, while providing opportunities for new development. Dublin's character is derived from its historical layers, ranging from its medieval origins to substantial new contemporary interventions in the built environment in emerging areas such as the Docklands. The basic building blocks of this unique urban character consist of individual buildings, streets (both vibrant and sedate), urban spaces, neighbourhoods and landscapes. New development will be required to respect the unique character of the city by taking account of the intrinsic value of the built heritage, landscape and natural environment.

- 4.11 Dublin City Council considers that these areas of architectural heritage are internationally significant and this unique character forms part of the attraction of this island to many of the approx. 11.2 million visitors to Ireland last year. The extract above recognises the character and distinctiveness of the city's urban villages including Rathgar, Rathmines and Terenure and underpins the policies and objectives intended to safeguard them from inappropriate development at Section 4.5.2.1 of the City Plan. These include policies SC10 and SC12 as follows.

It is the policy of Dublin City Council :

SC10: *To develop and support the hierarchy of the suburban centres, ranging from the top tier Key District Centres, to District Centres/Urban Villages and Neighbourhood Centres, in order to support the sustainable consolidation of the city and provide for the essential economic and community support for local neighbourhoods, including post offices and banks, where feasible, and to promote and enhance the distinctive character and sense of place of these areas.*

SC12: *To ensure that development within or affecting Dublin's villages protects their character*

- 4.12 Section 4.5.5 emphasises the role of a high-quality public realm in enhancing urban places and improving the quality of life for residents, workers and visitors. Policies SC19, and SC20 are relevant in this regard, and support development which enhances the urban environment.

SC19: *To promote the development of a network of active, attractive and safe streets and public spaces which are memorable, and include, where appropriate, seating, and which encourage walking as the preferred means of movement between buildings and activities in the city. In the case of pedestrian movement within major developments, the creation of a public street is preferable to an enclosed arcade or other passageway.*

SC20: *To promote the development of high-quality streets and public spaces which are accessible and inclusive, and which deliver vibrant, attractive, accessible and safe places and meet the needs of the city's diverse communities.*

4.13 With regard to SC19 and SC20, the impact of this emerging preferred bus corridor route would be highly significant in terms of the reduced footpaths and the loss of on street parking and loading bays. Such changes would have a considerable adverse impact upon local businesses and would undermine their vibrancy and vitality of the urban villages. The widened roads and increased bus frequencies would create a less pedestrian friendly environment and would seriously damage the existing high quality public realm.

4.14 Finally, I refer to Policy SC28, and invite you to consider that the emerging preferred route CBC 12 entails profound and permanent intervention in the curtilage of many of the 202 separate protected structures on Rathgar Road and Terenure Road East cannot reasonably be considered to be compliant with this policy.

SC28: *To promote understanding of the city's historical architectural character to facilitate new development which is in harmony with the city's historical spaces and structures.*

Protected Structures

4.15 Part IV of the Planning and Development Act refers to Architectural Heritage, and within this Part of the Act, Chapter 1 is dedicated to Protected Structures. Irish planning law places considerable weight upon the protection and safeguarding of the State's architectural heritage. As an EU member state, Ireland is a signatory to the Granada Convention, the main purpose of which is to reinforce and promote policies for the conservation and enhancement of European architectural heritage, so our domestic planning law is underpinned by European law.

4.16 Chapter 11 of the City Plan deals with built heritage and culture. The Plan recognises the important role of the built heritage of "the city's identity, to the collective memory of its communities and to the richness and diversity of its urban fabric". Section 11.1 explicitly refers to the larger areas of Victorian and Georgian architecture to the north and south of the canals including the properties at Rathgar Road/Terenure Road East, which contribute to the "city's character, identity and authenticity" and which form a key social, cultural and economic asset for the development of the city.

4.17 The Council's planning approach to the conservation and protection of the areas and structures of special interest is made up of two inter-related components described at Section 11.1.3 as follows.

- *To protect the special character of the existing designated Architectural Conservation Areas and Conservation Areas of Dublin City...*
- *To protect the structures of special interest which are included on the Record of Protected Structures...*

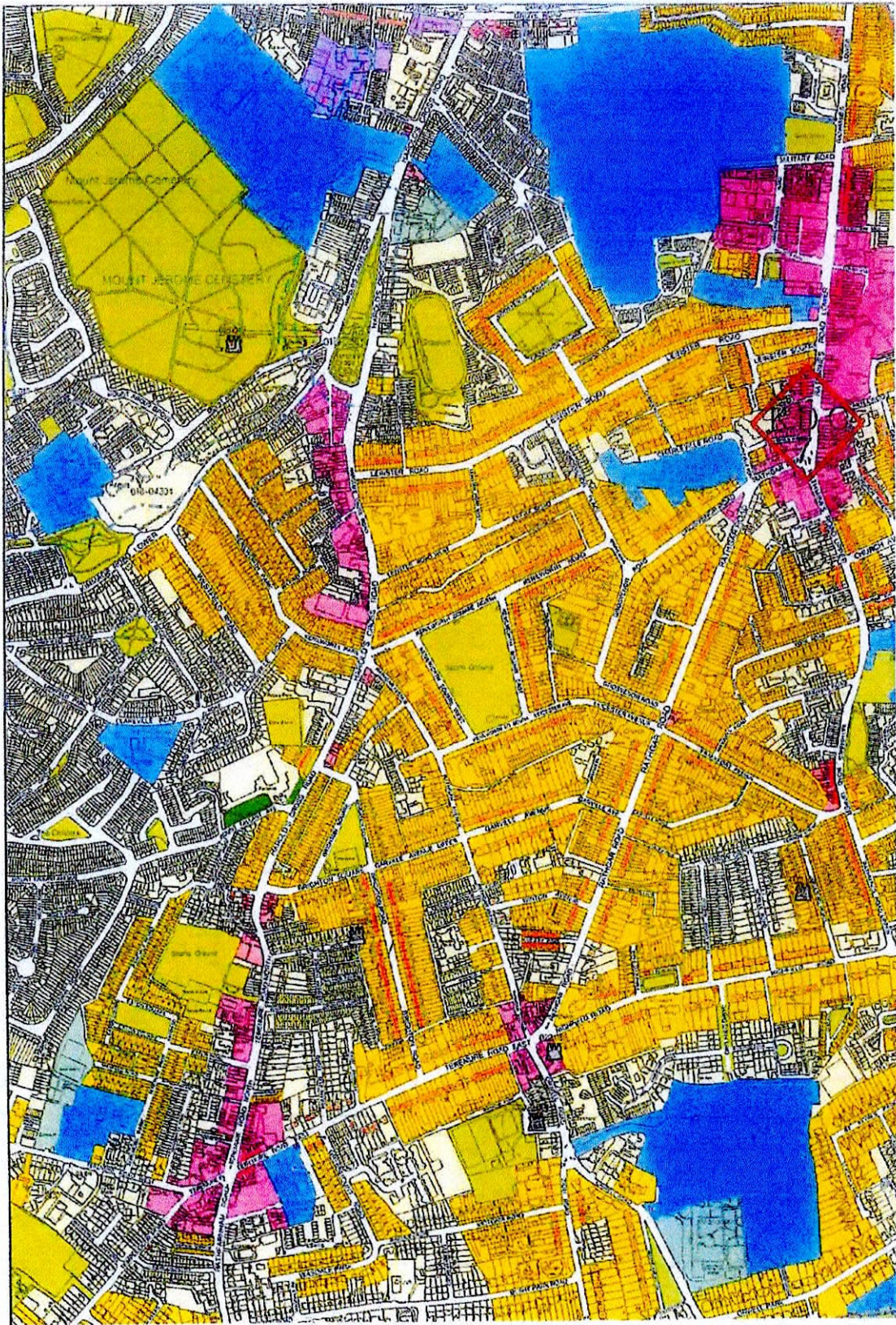


Figure 2 – Extract Map H Dublin City Development Plan 2016-2022

4.18 Figure 2 above is an extract from Map H of the City Plan, and shows the area in question extending from Terenure at the west along Terenure Road East and along Rathgar Road Rathmines at the north east. The bright yellow shading indicates use zoning objective Z2 denoting a residential Conservation Area, and the red dots on the properties along both roads indicates that the subject property is included on the Council's Record of Protected Structures. Both roads comprising the section of the emerging preferred route for CBC 12 between Terenure and Rathmines enjoy the protections under both designations in the City Plan, confirming the significance and the sensitivity of the existing environment in architectural heritage and conservation terms. As the emerging preferred bus corridor route extends the length of both roads and passes through the urban villages, the impact upon the historic fabric will be profound and seriously injurious.

4.19 Policy CHC1 states as follows.

It is the Policy of Dublin City Council:

CHC1: *To seek the preservation of the built heritage of the city that makes a positive contribution to the character, appearance and quality of local streetscapes and the sustainable development of the city.*

4.20 It is stated at Section 11.1.5.1 that the purpose of the protection is to manage and control future changes to these structures (i.e. on Record of Protected Structures) so that they retain their significant historic character. This is elaborated in detail through Policy CHC2, which states, inter alia, as follows.

It is the Policy of Dublin City Council:

CHC2: *To ensure that the special interest of protected structures is protected. Development will conserve and enhance Protected Structures and their curtilage and will...*

(d) not cause harm to the curtilage of the structure; therefore the design, form, scale, height, proportions, siting and materials of new development should relate to and complement the special character of the protected structure...

4.21 The current proposals entail the acquisition of lands at every protected structure on the east side of Rathgar Road between Christ Church and Frankfort Avenue before switching to the west side of the road with the proposed acquisition shown extending to each and every protected structure from Leicester Avenue to 21 Rathgar Road at the Rathmines end. The road widening involves the loss of curtilage including front gardens and mature trees at many protected structures, which is contrary to Policy CHC2 above. In addition to the damage caused by the road widening to the integrity and setting of protected structures, the proposed bus lanes and associated works would be seriously detrimental to the existing character and visual amenity of the conservation area.

- 4.22 Section 11.1.5.2 elaborates the policy rationale in respect of Protected Structures, which is the conservation and protection of the 8,500 (approx.) protected structures in Dublin, which is a key objective of the City Council and will assist in the delivery of the Core Strategy and Vision. The number of protected structures along the emerging preferred route at Rathgar Road and Terenure Road East is 202, which is equivalent to almost 2.4% of the entire stock of protected structures within the functional area of Dublin City Council. All are impacted by the acquisition of curtilage or by the proximity of the works proposals. Thus, the impact of these proposals on this section of the proposed core bus corridor are significant at a city-wide level in architectural heritage terms.
- 4.23 Policy CHC2 above expressly refers to the conservation and enhancement of Protected Structures and their curtilage. Curtilage is further considered at Section 11.1.5.3, which explains the application of the policy, and states, as follows.

The curtilage of a Protected Structure is often an essential part of the structure's special interest. In certain circumstances, the curtilage may comprise a clearly defined garden or grounds, which may have been laid out to complement the design or function...

Any development which has an adverse impact on the setting of a protected structure will be refused planning permission. The removal of rear gardens to permit underground accommodation is permitted only in limited circumstances. A garden size appropriate to that of the structure should be retained. The total removal of historic boundary features or subdivision of rear gardens or original communal front gardens will generally not be permitted. Car parking will be permitted within the curtilage in accordance with policy CHC8 and standards set out in the development plan, Section 16.10.18

- 4.24 The extent of the NTA's emerging preferred route for CBC12 will adversely affect 124 no. protected structures on Rathgar Road, and 202 protected properties altogether when taken in conjunction with the impact at Terenure Road East at the west side of Rathgar village. Although the proposed works are shown in indicative form on the scheme proposals, the order of magnitude of the land take shown is approx. 6m at the front of many of our clients' properties. The loss of significant curtilage from these protected structures individually and collectively will have profound permanent negative impacts upon those structures, and indeed the wider residential area as a whole.
- 4.25 As shown on Figure 2 above, the majority of the residential areas centred around Rathgar village and extending from the village westwards on Terenure Road East, eastwards along Highfield Road, northeast on Rathgar Road and north along Rathgar Avenue are classified as Conservation Areas where the use zoning objective is Z2. These areas are shown bright yellow on Figure 2 and have been designated as Conservation Areas to recognise "their special interest or unique historic and architectural character and important contribution to the heritage of the city."

4.26 Section 11.1.5.4 states as follows.

Designated Conservation Areas include extensive groupings of buildings or streetscapes and associated open spaces.... The special interest /value of Conservation Areas lies in the historic and architectural interest and the design and scale of these areas. Therefore, all of these areas require special care in terms of development proposals and works by the private and public sector alike, which affect structures, both protected and non-protected in these areas.

Dublin City Council will thus seek to ensure that development proposals within all Architectural Conservation Areas and Conservation Areas complement the character of the area, including the setting of protected structures, and comply with development plan standards.

4.27 Policy CHC4 applies in Z2 Conservation Areas so it is relevant along the entire length of the proposed bus corridor route between Rathmines village and Terenure village, which includes our clients' homes at Rathgar Road.

It is the Policy of Dublin City Council:

CHC4: *To protect the special interest and character of all Dublin's Conservation Areas. Development within or affecting a conservation area must contribute positively to its character and distinctiveness, and take opportunities to protect and enhance the character and appearance of the area and its setting wherever possible...*

Development will not:

- 1. Harm buildings, spaces, original street patterns or other features which contribute positively to the special interest of the Conservation Area*
- 2. Involve the loss of traditional, historic or important building forms, features and detailing including roofscapes, shop fronts, doors, windows and other decorative detail*
- 3. Introduce design details and materials such as uPVC, aluminium and inappropriately designed or dimensioned timber windows and doors*
- 4. Harm the setting of a Conservation Area*
- 5. Constitute a visually obtrusive or dominant form*

4.28 The policy rationale is that the conservation of Z2 Conservation Areas is a key objective of Dublin City Council and will assist in the delivery of the core strategy strand for a compact, quality, green well-connected city with a dynamic mixed use environment for living, working and cultural interaction. Section 11.1.5.6 explains the application of this policy and reinforces the importance of design being appropriate to the context and based upon an understanding of the city's distinctive character areas.

- 4.29 Dublin City Council's policy with regard to the protection of the character and identity of the city's Conservation Areas is robust and it emphasises that new development must contribute positively towards the protection and where possible enhance Z2 areas. Irrespective of any public transport improvements from this corridor route, the proposed road widening and associated works along Rathgar Road would not contribute positively or enhance the character of the area. On the contrary, these plans will have serious negative implications in terms of the significant loss of character in this conservation area. Having regard to the policies in the City Plan whereby the impacts of development proposals are evaluated with regard to the character of the Conservation Area, the loss of curtilage at a large proportion of the 124 protected structures within the Rathgar Road residential conservation area is serious, permanent and irreversible. In addition to the extensive loss of curtilage at protected structures, the creation of a six lane 16m wide bus highway through the area will destroy its period character and distinctive identity.
- 4.30 The route assessment report does not indicate whether the NTA sought the views of the City Council's Conservation Officer regarding the implications of the emerging preferred route on the architectural heritage and urban fabric of the roads and village at Rathgar. We await a reply from Dublin City Council in this regard. These houses together with their built form, period features and the spaces around and between the buildings give this inner suburb its unique character and distinctive identity, which policy CHC4 and the Z2 use zoning objective are designed to protect. BusConnects as envisaged in the current CBC12 proposals would eviscerate the character of Rathgar Road and would materially contravene key provisions and conservation policies in the City Plan. The proposed works also contravene materially the Z2 residential conservation zoning objective and are contrary to the proper planning and sustainable development of this area.
- 4.31 It is useful to compare and contrast the use zoning objectives and the extent of protected structures along both principal routes within Corridor E of the GDA Transport Strategy. Both routes are seen on Figure 2 above. As noted already, most of the residential areas along Terenure Road East and virtually the entire of Rathgar Road is zoned Z2. The works envisaged will affect up to 202 protected structures in total on both roads, or more than 302 if the protected properties at Rathmines Road Lower are also included.
- 4.32 In contrast, the "BRT route" from Terenure along Terenure Road North via Harold's Cross to Parnell Road passes through a mix of use zonings with mainly Z6 commercial zoning in the villages, two pockets of Z2 zoning with other lands mainly zoned with the general Z1 residential zoning. There are less than a handful of protected structures along this route, at the junctions with Kenilworth Square and Leinster Road. This analysis reveals that these routes have a very different character particularly in terms of their architectural heritage and conservation sensitivity.
- 4.33 If the CBC 12 route assessment included an appropriate weighting to safeguard the integrity of protected structures and protect the character of Z2 residential Conservation Areas as per the City Plan provisions, all other considerations being equal, the Harold's Cross route may emerge from the modelling as the preferred route for core bus corridor 12. It is obviously superior to the current proposals at Terenure Road East and Rathgar Road because it avoids the serious negative impact of the works upon the architectural heritage and character of the built environment along the preferred route. However, it is

a matter for the NTA to re-examine the modelling and decision analysis to ensure that it has had regard to all reasonable alternatives in its CBC 12 route assessment.

5.0 SELECTION OF EMERGING ROUTE OPTION

Feasibility Study and Options Assessment

General

- 5.1 The selection of the Emerging Preferred Route is based upon the "Core Bus Corridor Feasibility Study and Options Assessment Report" (Dec 2017) prepared for the National Roads Authority by DBFL Consulting Engineers and referred to herein as the Feasibility Study and Options Assessment Report (FSOAR). In brief the objective of the FSOAR is ultimately to make a recommendation on a preferred route.

Existing Strategic Planning

- 5.2 The FSOAR references the Transport Strategy for the Greater Dublin Area 2016-2035 (TSGDA) and elects to selectively quote the following from the TSGDA in setting out the structure of the Core Bus Network identified in that document:

"Arising from this analysis, a "Core Bus Network" was identified for the overall region. This core network represents the most important bus routes in the region, and are generally characterised by a high frequency of bus services, high passenger volumes and with significant trip attractors located along the route. The identified core network comprises sixteen radial bus corridors, three orbital bus corridors and six regional bus corridors. While this network represents the core high frequency bus routes, it is supplemented by other bus services operating on lower frequency routes and by local buses running on other routes.

The Core Bus Network will serve significant origins and destinations in the Dublin Metropolitan Area and throughout the GDA, particularly those locations not directly served by rail and light rail. It will also provide greater opportunity for reliable and convenient interchange with these services.

In order to ensure an efficient, reliable and effective bus system, it is intended, as part of the Strategy, to develop the Core Bus network to achieve, as far as practicable, continuous priority for bus movement on the portions of the Core Bus Network within the Metropolitan Area. This will mean enhanced bus lane provision on these corridors, removing current delays on the bus network in the relevant locations and enabling the bus to provide a faster alternative to car traffic along these routes, making bus transport a more attractive alternative for road users. It will also make the overall bus system more efficient, as faster bus journeys means that more people can be moved with the same level of vehicle and driver resources."

- 5.3 It is noted that the TSGDA includes both radial and orbital bus routes that are set out in Figures 5.5 and 5.6 of that document. There are three radial routes along the south-west axis Tallaght-Walkinstown-Crumlin, Tallaght-Rathfarnham-Terenure and Marley Park-Rathmines. It is noted that to the south of Terenure all three routes intertwine and converge on Rathfarnham Road. At Rathgar Village the three routes continue toward the city centre. TSGDA Figure 5.6 shows the orbital routes which also form part of the strategy but are not part of the current Core Bus Corridor Scheme (CBC). These orbital routes are an important part of the overall public transport strategic network since disincentives toward bus use arise from a hub-centric radial network which gives rise to extraordinarily long journeys for those wishing to travel between one radial route and another. None of the orbital routes identified in the strategic document have been included for corridor assessment as part of the current Core Bus Corridor scheme.
- 5.4 TSGDA identifies the Tallaght-Rathfarnham-Terenure corridor as one of the bus routes where passenger numbers are forecast to be approaching the limits of conventional bus route capacity and thus proposes the development of Bus Rapid Transit (BRT) along this route. TSGDA describes BRT as a high-quality bus based transit system that delivers a service with **higher speeds** and quality of service than traditional bus services, further stating that this is achieved by improved road infrastructure and the provision of **appropriate vehicles**. The BRT is described as representing a major step-change in the provision of bus services on **some of the busier bus corridors in the GDA**.
- 5.5 It should be noted that the TSGDA states the following at page 75 *"The routes of these two BRT schemes are indicative and subject to design development. Such design development may include changes to the indicated alignments and /or terminal points of the schemes, including further extension of the routes."* It is reasonable to infer that all core bus routes identified in the TSGDA strategic transport plan are all indicative. As per the BRT route, these indicative core bus routes are subject to change and revision during the scheme planning and design stages and are required to undergo rigorous assessment of impacts both direct and indirect not only arising from the preferred route but also arising from reasonable alternatives. The BRT envisioned in the TSGDA has in fact been subject to the ultimate change in that it has been confirmed as abandoned. The TSGDA in considering possible strategic routes and the FSOAR in assessing suitable CBC scheme routing both give weight and significance to the indicative BRT route which in the case of the latter has resulted in a bias route selection process.
- 5.6 It is worthwhile when evaluating the FSOAR to bear in mind the TSGDA summary of existing bus services, cycling network and pedestrian environment with particular regard to the existing shortcomings identified in the highlighted text:

Bus Network

"At present, the GDA is heavily reliant on the bus network. The region's existing bus infrastructure consists of a network of bus lanes of varying standards and of varying levels of continuity. While in certain locations, relatively competitive journey speeds and journey time reliability can be achieved, the network is generally characterised by discontinuity, whereby bus priority is provided only along certain sections of each

corridor. This has a major impact on the attractiveness of the bus as a mode of transport, as the delays caused by even a small number of pinch points in specific places can have a significant negative impact on the performance of the affected services as a whole, and discourage people from using the bus. (TSGDA section 3.2.3)

In recent years, major changes to the core bus routes and in the customer interface have enhanced the image and perception of the bus. However, issues related to frequency and reliability, and the legacy of the overly complex network and fare structures which persisted for many decades up to recent years still remain for many people, particularly potential users.” (TSGDA section 3.2.3)

Cycle Network

“As set out in the following sections, there has been a significant increase in the numbers cycling in the GDA, particularly in central areas of Dublin City. This has occurred against a background of sub-optimal infrastructural provision, where there is a lack of safe, convenient and continuous cycle routes, particularly high-quality and/or segregated facilities. While progress has been made in some locations, the concept of a comprehensive cycle network for the GDA has not yet been realised.” (TSGDA section 3.2.4)

Provision for Pedestrians

“At present, while footpaths are provided in the vast majority of built-up areas to provide for pedestrian movement, the quality of this provision is often poor. Footpath widths are often substandard and surfaces can be uneven. There are often many obstructions on footpaths such as advertising, redundant poles and other clutter, which causes particular problems for those with mobility impairments or those walking with buggies and prams. At many junctions across the GDA, pedestrian crossings are not provided, or are provided only on some arms. The amount of time given to pedestrians to cross, and the time they must wait to cross, also renders the walking experience sub-optimal. While these issues affect all parts of the GDA, they are particularly critical in Dublin City Centre where the number of pedestrians is highest.” (TSGDA section 3.2.5)

- 5.7 The design of the FSOAR emerging preferred route fails to meaningfully address significant pinch points in Rathgar Village and Rathmines Village, most particularly where Rathfarnham Road meets Terenure Road East. This location is in fact the perfect storm of all the above highlighted sub-optimal infrastructural characteristics where the CBC emerging preferred route design, incorporates a pinch point and substandard provision for both cyclists and pedestrians.
- 5.8 The study area of the FSOAR overlaps with Corridor E of the TSGDA which lies along the southwestern axis from Dublin City Centre to Rathfarnham, South Tallaght and N81 Settlements. The following is stated in respect of TSGDA Corridor E.

"The car mode share for all trip purposes is 73%.

The public transport mode share for all trip purposes is 9%.

The principal areas of transport demand in Corridor E, outside of the M50, are concentrated in the southern part of Tallaght, beyond which there are few settlements of significant size and relatively low rural population densities. Up to 2035, the population growth in this corridor as a whole, is expected to be low, by comparison with most other corridors.

Further development on Tallaght's southern fringe, including Ballycullen and Oldcourt area, is constrained by the limited road network capacity." (TSGDA p.42)

5.9 In apprising Corridor E the TSGDA states the following:

"For the Metropolitan parts of this corridor, the performance of the Rathfarnham Quality Bus Corridor is poor relative to others and requires enhancement. As such, a number of options, including Light Rail, have been examined. However, due to the land use constraints in the corridor and owing to the pressure on the existing road network, a Luas line was not deemed feasible. Instead, the emerging solution comprises a BRT to Tallaght via Rathfarnham and Terenure. This will result in a significant increase in capacity and reliability compared to existing public transport services and will balance public transport requirements with those of the private car.."

Core Bus Corridor Objectives

5.10 The objectives of the Core Bus Corridor are set out in FSOAR p.5 and include the following two stated objectives:

- *"Deliver the on-street infrastructure necessary to provide continuous priority for bus movements along the Core Bus Corridor. This will mean enhanced bus lane provision on the corridor, removing current delays in relevant locations and enabling the bus to provide a faster alternative to car traffic along the route, making bus transport a more attractive alternative for road users. It will also make the bus system more efficient, as faster bus journeys means that more people can be moved with the same level of vehicle and driver resources; and*
- *Provide any cycle facilities along the route that are required under the Greater Dublin Area Cycle Network Plan (published by the NTA, 2013) to the target Quality of Service(s) specified therein and to give consideration to further providing cycle facilities along sections of the route where they may be not expressly required under the Cycle Network Plan."*

5.11 In the above extract, only the cycle route network has been defined and is set out in the Greater Dublin Area Cycle Network Plan (CNP). The FSOAR objective with respect to the Core Bus Corridor (CBC) is, through suitable assessment, to select the route of the CBC.

The development of the CNP differs from the route identification process used in the TSGDA. The TSGDA routes were identified without the level of detail or consideration of alternatives appropriate to the current scheme in prospect. Thus, the CNP is a project level or planned approach whereas the TSGDA outlines a strategy with the objectives to ideally be translated into specific proposals and projects to meet stated goals or targets. As with the BRT scheme further examination of the TSGDA strategic alignments at a more detailed project stage can show that route realignment is required in the context of scheme specific infrastructural requirements. Routes currently suitable for a bus route may not be suitable for providing or accommodating BRT or CBC route infrastructure.

Study Area

- 5.12 Figure (i) FSOAR p.6 defines a study area within which it is proposed that the preferred route of the CBC may be established through assessment based upon relevant parameters including engineering, environmental and cost considerations etc.
- 5.13 In the opening paragraph in which the study area is described the FSOAR states that the route will include *"Rathfarnham Castle and numerous education facilities as well as the villages of Rathfarnham, Terenure, Rathgar & Rathmines"* which supports an interpretation that the study is orientated towards the achievement of that route already pre-determined in the TSGDA, a route prepared without the benefit of rigorous route assessment or the consideration of appropriate alternatives.
- 5.14 In defining the study area, the FSOAR also highlights that the BRT route identified in the TSGDA *"may serve a portion of the route"* with the CBC capable of acting as a feeder to widen the BRT catchment.

Route Options Assessment Methodology

- 5.15 The FSOAR is based upon a two-stage 'high level' route options assessment which claims to appraise various roads within the study area rating each in terms of a subjective appraisal of its ability to achieve scheme objectives. By reference to the stated objectives of the scheme, it is reasonable to expect therefore that the Stage 1 process should identify all routes that are suitable for bus services and all routes identified in the GDA Cycle Network Plan (CNP) together with 'further' cycle facilities not identified in the CNP. The initial objective is to provide the CNP routes and to then consider further cycle facilities beyond those already identified in the CNP.
- 5.16 Routes that satisfy the criteria applied in Stage 1 are taken forward to what is described in the FSOAR as a more detailed, Stage 2 assessment.
- 5.17 The Stage 1 assessment is a relatively subjective process where the sifting or narrowing down process in the number of options is described as being based upon *"a high level qualitative method based on professional judgement and a general appreciation for existing physical conditions/constraints within the study area"*. The focus of the Stage 1 assessment is stated as being based on engineering constraints, a desktop study and high-level environmental constraints and considerations of population. Various physical constraints to the selection of route options are identified and include Rathfarnham

Castle and Grounds, Terenure Village Centre, Rathgar Village Centre and Rathmines Village Centre. It is noted that the FSOAR states that the route options selection has in mind a further objective to integrate with the Luas and with the Clongriffin to Tallaght BRT and the 'proposed' orbital bus routes. The FSOAR states that the Clongriffin to Tallaght BRT "is of particular relevance to the Rathfarnham CBC route" further stating that the CBC route should "**compliment the BRT but should not duplicate the potential routing**" of the BRT as shown in the TSGDA. This confirms the significance of the BRT route in the determination of the preferred route in the FSOAR.

- 5.18 One of the stated objectives of the CBC scheme is to provide for cycle facilities along specific routes identified in the CNP and the FSOAR indicates that where the cycle facilities cannot be provided along the CBC route and where it is considered "inappropriate" to alter the CBC route option then the cycle route will be re-routed. This appears to suggest that the FSOAR methodology prioritises the bus corridor route selection over the objective to provide the CNP cycle routes within the CBC scheme. It appears from the FSOAR that the CBC route selection, where considered appropriate, simply trumps the CNP cycle route objectives. The primacy of the selection of a CBC route, and in our opinion a particular and specific route, in this instance appears to surpass other strategic and important planning objectives most especially, but not exclusively those relating to architectural heritage, community, public safety by reason of traffic hazard and the promotion of a culture of walking through the city. None of these considerations are calibrated in the Stage 1 assessment.
- 5.19 The FSOAR acknowledges that the CBC route, and presumably the combination of all 16 proposed CBC routes will give rise to impacts upon traffic capacity. The FSOAR acknowledges those impacts as "inevitable". The traffic impact of the CBC routes which include restrictions on turning, one-way restrictions and the closure of various routes to private vehicle traffic will inevitably have a profound impact upon the distribution of traffic within the CBC study area(s). Such impacts are again not evaluated in any meaningful way and are dismissed on the grounds of the perceived overall benefits arising from CBC scheme, or derived by the CBC scheme. In determining the suitability of the various route options and the configuration of cycle routes in accordance with the National Cycle Manual, appropriate footway provision and the number of crossing facilities etc., the likely volume and speed of traffic on any of the CBC route options should reasonably be a key factor in the identification of suitable routes in the first instance and the later determination of emerging preferred route(s).
- 5.20 Following the completion of the Stage 1 assessment various sections of roads were combined to form end to end route options which were subject to more detailed assessment. The Stage 2 assessment is a multi-criteria analysis. However, the Stage 2 assessment provides no cost benefit analysis. The multi-criteria used in the Stage 2 assessment are set out in FSOAR Table 4.1 and include: (1) Economy, (2) Integration, (3) Accessibility, (4) Safety and (5) Environmental. These criteria are sub-divided as follows:
- 1a. Capital Cost
 - 1b. Transport Reliability and Quality (Journey Time)
 - 1c. Level of Bus Priority Provision
 - 2a. Land Use Policy

- 2b. Residential Population and Employment Catchments
- 2c. Transport Network Integration
- 2d. Cycle Network Integration
- 2e. Traffic Network Integration
- 3a. Key Trip Attractors (Education/Health/Commercial/Employment)
- 3b. Deprived Geographic Areas
- 4a. Road Safety
- 4b. Pedestrian Safety
- 5a. Archaeology and Cultural Heritage
- 5b. Architectural Heritage
- 5c. Flora & Fauna
- 5d. Soils, Geology & Hydrology
- 5e. Landscape and Visual
- 5f. Air Quality
- 5g. Noise & Vibration
- 5h. Land Use Character

5.21 The FSOAR sets out that for the purposes of route options comparison and assessment, the extent of land acquisition required for each route option has been calculated by developing an outline design for each option. At a fundamental level the FSOAR document does not provide details of the outline designs to assist third party evaluation of the assessment criteria let alone the direct comparison of various route options. Some of the criteria are considered likely to skew the selection process, these include the following.

5.22 **1a. Capital Cost:** The land acquisition cost estimate is overly simplistic in that it uses a standard rate for all route options and for all private lands. Land acquisition costs are highly unlikely to be standard throughout the study area for the route options. For example, the cost of acquiring lands within protected properties and the associated costs of accommodation works to take down, catalogue, store and reconstruct protected boundaries is likely to incur significantly more cost than properties not protected. Roads in Rathgar and Rathmines and particularly Terenure Road East, Rathgar Road and Rathmines Road Lower are acknowledged to have a considerable number of protected properties and certainly more than alternative routes. It is reasonable to expect that in the interest of a meaningful comparative assessment between competing route options that some weighting would have been applied to address this important difference in potential route costs. Areas where expensive intervention in terms of property and any additional cost elements specific to particular routes or route options should have been identified and added to the cost per km rate for use in the comparison of route options and ultimately the selection of an emerging preferred route option. In particular the costs associated with interference with protected properties should reasonably have been factored into any suitably rigorous route options assessment. The information regarding land acquisition is unclear from the documents available online. Figures in the FSOAR show land acquisition from protected properties on both sides of Rathgar Road whilst other drawing information prepared on behalf of DBFL shows land acquisition from only one side of the road. It is not clear which, if either informed the route

selection process and to what degree associated costs have been factored into the route selection process.

- 5.23 **1b. Transport Reliability and Quality (Journey Time):** The assumption of free-flowing conditions along each route may give rise to a general and theoretical comparator. It is not clear if the configuration of bus stops and the blocking of bus lanes has been examined on any of the routes. Bus lanes can be blocked by other buses, by taxis and other road users. A word search of the FSOAR does not show mention or consideration of taxis.
- 5.24 **2d. Cycle Network Integration:** It is stated that routes where CBC and designated Cycle Routes overlap have been given a higher designation in terms of benefits arising where cycle infrastructure can be provided as part of the proposed scheme. It is important to consider how this parameter has been applied and its effect on the assessment of reasonable alternatives. It appears highly probable that this parameter is prejudiced somewhat against options that can provide CBC on one route whilst achieving cycle routes as per the CNP on those routes already identified. Segregating bus and cycle traffic should reasonably be the preference over combining cycle and bus routes/traffic where feasible as it is safer and more convenient. It also has the potential to attract new cyclists because of the segregation from other modes.
- 5.25 **2e. Traffic Network Integration:** The basis of evaluating impact to general traffic on the network is not clear. This appears to be a completely subjective assessment without reference to the other CBC routes or road closures and turning restrictions.
- 5.26 **4a. Road Safety:** The report states that the introduction of the CBC will result in a reduction in road incidents due to people switching from private car to public transport. Nevertheless, this remarkable and unfounded claim does not appear to be a decisive parameter in the assessment of options, which is worrying because it is indicative of a lack of objectivity in the route selection exercise. The assessment of road safety is based upon the number of junctions along the route on the grounds that the number of junctions is a measure of the potential conflicts on the route. This fails to consider the wider road safety implications of the scheme including the number of bus stops that interrupt the cycle route, the frequency of bus services, the frequency of bus stops, the number of pedestrian crossing points. The safety criteria also fail to consider the scheme implications and impacts on driveways and parking areas to the front of properties foreshortened by the land acquisition envisaged under the current emerging preferred CBC route. Based upon the detail of the emerging preferred route option, access from properties at Rathgar Road will become hazardous when exiting manoeuvres are required to be undertaken in reverse gear due to the reduced curtilage because of the land acquisition. Hazard associated with property accesses will be exacerbated by virtue of a significantly widened carriageway with additional traffic lanes accommodating more cyclists and more frequent bus services.
- 5.27 **4b. Pedestrian Safety:** The FSOAR states that this criterion assesses the safety of passengers accessing the stops along the route and is concerned with the proximity of bus stops to crossing facilities and the presence of footpaths along desire lines to bus stops. Pedestrian safety should reasonably include the ability to access bus stops

through the inclusion of new pedestrian crossings. The report does not consider the significant barrier to movement and accessibility arising directly from the creation of a very wide public road (16m) with cycles, cars and buses travelling in both directions. Given the road width and peak hour traffic volumes, bus stops on one side of the road will be virtually inaccessible from the other side. Even on the one route option for which a preliminary design has been prepared there is no detail whatsoever of any additional pedestrian crossing facilities which are certainly warranted. It is reasonable to assume that were new crossing points considered for each of the routes this would have affected a number of the assessment criteria including Capital Cost, Transport Reliability, Transport Network Integration, Cycle Network Integration, Traffic Network Integration and Road Safety.

- 5.28 **5 Environmental:** The environmental parameters should include socio-economic factors and should reasonably consider the impact the proposed road cross-section (cycle lane, bus lane and traffic lane in both directions) will have on community and community severance. The loss of existing on-street car parking and goods loading bays in the villages within the scheme will have manifest negative economic consequences. Community severance is not meaningfully considered in the FSOAR. The emerging preferred route drawings show there is a severe impact from the loss of numerous mature trees and mature hedging etc.
- 5.29 **5b. Architectural Heritage:** The FSOAR states that the detailed design of the proposed scheme will seek to avoid and minimise impacts on architectural heritage. The initial objective should be to avoid impact and minimising the impact should only apply where no other option is feasible. It is also stated that an architectural heritage desktop study was undertaken to investigate the feasibility of developing the CBC route from Rathfarnham to Rathmines.
- 5.30 Notwithstanding the shortcomings of that architectural heritage desktop study, which appears to have been carried out by an archaeologist, the study focuses on three roads, Terenure Road East, Rathgar Road and Rathmines Road Lower. The analysis invites the question as to why a similar assessment was not carried out for each of the route options under consideration. On the face of it this is consistent with an approach which appears to suggest a preference for a particular route at an early stage in the selection process. The FSOAR and the architectural heritage desktop study acknowledge that the protected properties designation relates to the curtilage of the entire property and boundary. The desktop study recommends that the protected properties should be seen as key constraints and avoided by any proposals to widen the road. The study explicitly recommends that consultation should be undertaken with Dublin City Council Conservation Officer in the first instance to discuss the viability of works affecting Protected Structures and the lands within their curtilage.
- 5.31 We understand there have been no such consultations with Dublin City Council in the course of the FSOAR report preparation or in the course of evolving an emerging preferred route. We made enquiries at Dublin City Council in this regard and await its reply in due course. The desktop study directs that consideration should be taken of the various points once the footprint of the proposed scheme is 'decided'. Equally, these critical matters need to be considered at the initial route selection stage and they should

also be evaluated in detail in the consideration of reasonable alternatives to the preferred route when it is eventually selected. The ultimate advices in the architectural heritage desktop study appear to have been entirely disregarded in the FSOAR and in the selection of an emerging preferred route. Consequently, the emerging preferred route for CBC 12 would entail the acquisition of land compulsorily from many of the owners of more than 200 protected structures on Terenure Road East and Rathgar Road.

Section 2 – Route Options Assessment

- 5.32 FSOAR Figure 6.1 shows that there are two principal routes through the study area from Terenure Cross to the City Centre. These are identified as a route through Harold's Cross and a route via Rathgar/Rathmines. It is acknowledged in the FSOAR that there are several route options within these two principal routes which are both identified to *"primarily serve the residential catchments of the villages of Terenure, Rathgar and Rathmines"*.
- 5.33 Two principal routes are identified in the FSOAR and these two principal routes are stated as both serving the villages of Terenure, Rathgar and Rathmines so they both satisfy the objective of the scheme and the objective of the TSGDA. The route through Harold's Cross is not however progressed beyond Stage 1 of the FSOAR assessment process on account of a stated objective not to duplicate the Bus Rapid Transit (BRT) corridor identified in the TSGDA. It is understood that the BRT scheme is not proceeding along the corridor identified in the TSGDA and accordingly it should not be 'the' deciding factor in the elimination of one of the two principal routes for the current CBC scheme. It is understood that the BRT indicative route and indeed the BRT scheme as set out in the TSGDA is abandoned. At a high level the CBC route selection scheme is flawed because it fails to consider a principal route within the study area and any route options within or arising from appropriate consideration of that principal route.
- 5.34 It is worth looking more closely at the analysis in the NTA report 'Bus Rapid Transit – Core Dublin Network' (October 2012). The BRT study selects a single route for appraisal which is predominantly based upon the existing QBC network. The BRT report acknowledges that the purpose of that study was not, to identify the preferred route for a BRT system on a particular corridor, nor was it to suggest the preferred design on any section or alignment considered. The BRT report states that there are alternatives and that such alternatives would be examined in further detail should a decision to proceed with further work be made on the scheme. Alternatives would be examined during the 'route options' phase of a future BRT project. The BRT report expressly states that *"It is important to note that these route alignments chosen for this assessment do not reflect what a final route might be for a BRT line along these corridors"*. Nevertheless, the selected routes are reflected in the TSGDA report to which the current CBC report has regard. In our opinion, the BRT route in the TSGDA should not have been taken in the current CBC study as a fixed and final route. There is no objective basis for excluding one of the two principal routes in the FSOAR from any further consideration solely on account of the BRT indicative route. The BRT route has not been progressed as a scheme and has not been submitted for planning approval and thus has no more status than any of the indicative routes that appear in the TSGDA.

- 5.35 The CBC 12 FSOAR is therefore deficient because it has not examined any options for an identified principal route option which satisfies the general scheme criteria in the Stage 1 route assessment process. Having been identified not only as a reasonable alternative but as a principal route, this route will eventually need to be properly assessed and its route options will have to be considered in the assessment of reasonable alternatives in advancing the proposed CBC 12 scheme in any case. The BRT is no longer under consideration which is a significant and material change in the transport planning landscape, it is reasonable to expect that this principal route previously selected as the route for the BRT through Harold's Cross, including route options should have been properly considered in the CBC 12 route options study. It wasn't and it is our considered opinion therefore that the FSOAR is an incomplete route assessment on this transport corridor and it should be re-visited to address this important matter of alternatives in a more comprehensive and robust way.
- 5.36 The report states at 6.1.4 and 6.1.5 that *"The Core Bus Network, as defined in the 'Transport Strategy for the Greater Dublin Area 2016 – 2035', identifies 'Marlay Park – Rathmines' as one of the Core Radial Corridors." "Therefore, the subject CBC route should serve Rathmines Village as this is a primary trip attractor on the CBC network. The anticipated travel demand between this point and the City Centre would justify the level of infrastructure proposed as part of the Transport Strategy for the GDA."* In our opinion, the level of demand between Rathmines and the City Centre does not justify the provision of a CBC route from Terenure. Besides the TSGDA identifies Marlay Park to Rathmines and not Marlay Park to City Centre. Whilst the CBC network identified in the TSGDA may represent the core high frequency bus routes, the Core Bus Corridor study cannot reasonably be limited to those existing bus routes. The eventual network when fully designed will be supplemented by other bus services operating on lower frequency non-CBC routes and by local buses running on other routes. Given the above rationale for the route it is likely that were the CBC to follow the more direct route along Terenure Road North and Harold's Cross this CBC route would serve Rathmines (as stated in the FSOAR) whilst Rathmines village could also benefit from other bus services and other public transport services. The Rathmines catchment is planned to be served by a new Metrolink stop and the Luas. The current emerging preferred route for CBC 12 might reasonably be considered to duplicate this 'planned' and existing infrastructure. The FSOAR considered employment and residential population catchment areas served as being those within a 10-minute walk distance so it follows that Metrolink and Luas serve large areas to Rathmines.
- 5.37 As opposed to an objective study of the reasonable alternatives and options the FSOAR appears to favour a pre-determined principal route derived directly from TSGDA which is based upon existing high frequency bus routes. As in the case of the BRT study, it should be noted that the TSGDA does not consider alternatives and it does not provide any evaluation of the suitability of routes for CBC. In the context of the consideration of route options and alternatives for the CBC infrastructure, it is reasonable to point out that the TSGDA route alignments are indicative and do not reflect what a final route might be for a CBC along the corridors identified in the FSOAR. In other words, the TSGDA merely identifies the desire for the route but does not prescribe specific route alignments, such matters being appropriately considered at the route selection project level stage.

- 5.38 Notwithstanding the limitations of the BRT study, the study assessed different scenarios to determine which corridors would have sufficient capacity to cater for both current demand and predicted future demand based on growth in population and an investment in public transport infrastructure. Such demand forecasting analysis played a key role in determining the feasibility of the BRT network. The feasibility of this principal route through Harold's Cross should be further investigated in the context of the current CBC 12 project and in the routes considered for detailed assessment. In relation to demand arising from future population it is worth noting that the FSOAR is not based upon future population but is instead focussed on CSO 2011 population figures which is a fundamental shortcoming.
- 5.39 The FSOAR Stage 1 process identifies three radial type routes through Section 2 of the overall CBC route. These are (1) Terenure Road North-Harold's Cross Road; (2) Terenure Road East-Rathgar Road-Rathmines Road Lower; and (3) Highfield Road-Rathmines Road Upper-Rathmines Road Lower. The first route through Harold's Cross is excluded from the Stage 2 assessment mainly to avoid duplication of the BRT. The first route is also discounted on the grounds that the CBC route is required to serve Rathmines Village. It is stated in the FSOAR that *"There are several route options between these 2 principal routes which primarily serve the residential catchments of the villages of Terenure, Rathgar & Rathmines"*. Since both of the principal routes (1) and (2) 'serve' Rathgar and Rathmines it is not clear why the Harold's Cross route is discounted at this early stage on this basis. The FSOAR appears to constrain the route options by insisting that the CBC must not only serve Rathmines Village but that it must also run through the village. This factor seems to unfairly predetermine the route and prejudice the route selection process further.
- 5.40 The Stage 2 Options Assessment starts with the selection of seven cohesive bus route options all of which follow Terenure Road East-Rathgar Road-Rathmines Road Lower axis save for one route which uses Highfield Road-Rathmines Road Upper. The initial selection of the bus routes is independent of any consideration of other modes of transport. Six cycle route options are then considered along the same principal route from the Dodder Crossing to the Grand Canal. It is noted that the cycle routes are considered only in tandem with the selected bus route. An independent evaluation of cycle routes is however published in the GDA CNP which identifies the Rathgar Road-Rathmines Road Lower as Primary Cycle Route 10, which is acknowledged in the FSOAR as one of the busiest radial cycle routes in Dublin.
- 5.41 In the selection of cycle routes in the FSOAR it is noted that CR6 which is CNP Primary Route 10 satisfies practically all the main criteria (Table 6.4) scoring well in all assessment criteria save for cost and environmental factors which are reported as significant disadvantages. Both these negative criteria in respect of Option CR6, i.e. cost and environment, are understood to arise principally from a requirement for additional land take from 45 protected properties on Rathmines Road Upper. It is noted that such cost and environmental considerations only apply when the cycle route is considered in tandem with the bus route and in circumstances where the bus route appears to be given priority. CR6 or Primary Route 10 would be the preferred stand-alone cycle route option if it were considered separately from the CBC route. This cycle route option should reasonably have been identified and considered in the FSOAR, and the failure to

do so undermines the comprehensiveness and rigour of the FSOAR in terms of the considerations of reasonable alternatives.

- 5.42 FSOAR Stage 2 considered seven combinations of the various bus routes and cycle routes as part of a consideration of Principal Route Options for Section 2 of the CBC route. All but one, Option CB7, involve buses and cycles using the same route along Rathgar Road. Option CB7 involves buses routing along Highfield Road and cycles using Rathgar Road segregated from buses. Albeit that Highfield Road is ultimately deemed unsuitable as a bus route Option CB7 introduces the principle of segregating buses and cycles onto separate routes. This concept is welcome and should have been explored further in the route assessment analysis. Given the relatively high volume of buses on the CBC route and the high volume of cycles on CNP Primary Route 10 we believe that this principle of segregated routes warrants further consideration as part of the CBC study. If the principal route through Harold's Cross had not been excluded at Stage 1 and was subject to a Stage 2 assessment, it is reasonable to expect that a greater variety of route options for buses may have satisfied the scheme criteria and indeed that an alternative route option would have warranted greater merit than the current emerging route option. If the identified principal bus route along Terenure Road North and Harold's Cross were included in a Stage 2 assessment it would introduce additional combinations of bus route and cycle route options thereby enabling the identification of a potentially improved CBC route for both modes.
- 5.43 There is merit in modifying the overall scheme to include the CNP Primary Route 10 constructed in its entirety, and separately, form the parallel CBC bus route along the route through Harold's Cross, a principal route already identified though the current study area as suitable for a scheme involving high capacity bus service in the form of BRT.
- 5.44 The route selection process of the FSOAR appears somewhat imbalanced in favour of the emerging preferred route. If the two principal routes were both progressed to Stage 2, we believe a different preferred route may have emerged from the route assessment process and this may yet prove to be the case in a robust assessment of reasonable alternatives as the scheme progresses. Given the shortcomings in the route selection and route options assessment study, we consider it is appropriate at this public consultation stage to revisit the FSOAR and to re-evaluate the route options taking into consideration all reasonable options. We further consider the re-assessment should not rigidly adhere to the TSGDA which after all is merely a strategic level document where the routes identified are not subject to detailed route assessment. Accordingly, the TSGDA cannot be relied upon for the selection of a preferred route.
- 5.45 If this route assessment were re-done having due regard to the above considerations, the emerging preferred route for CBC 12 may be the principal route through Harold's Cross (i.e. the BRT route) with a segregated cycle lane along Terenure Road East and Rathgar Road (i.e. primary cycle route 10 in GDA CNP). This scenario delivers the strategic transportation planning outcome in the TSGDA, it provides safe and convenient segregated cycle routes as per the Cycle Network Plan and avoids the permanent loss of architectural heritage due to extensive acquisition of land from within the curtilage of hundreds of protected properties on Terenure Road East and Rathgar Road.

6.0 EMERGING PREFERRED ROUTE CBC 12

- 6.1 Individual submissions from many of our clients along Rathgar Road will highlight specific issues as the current proposals affect their properties.
- 6.2 Notwithstanding the critique of the assessment of the emerging route option for CBC12 at Section 5 above, and without prejudice to our contention that this assessment is based upon a flawed and incomplete analysis, we wish to make some further comments with respect to certain aspect of the emerging preferred route.
- 6.3 Whereas the proposed section of the core bus corridor along Rathgar Road is shown widened to 16m, the emerging preferred route does not satisfactorily address “pinch points” along the route notably at the villages of Rathmines and Rathgar at each end of Rathgar Road and also at the junction at Frankfort Avenue. Bus priority signalling is the only solution proposed to address these restrictions.
- 6.4 A cursory examination of the NTA core bus corridor proposals reveals the geometric limitation of the existing junction at Terenure. I understand from the NTA papers that the existing road width of Terenure Road East at Vaughan’s public house measures approx. 7.8m. [see Figure 3 below] and that the right turn from Rathfarnham Road into Terenure Road East has been prohibited for many decades. Unless buildings were demolished at the west end of Terenure Road East (which is highly unlikely because the buildings on both sides are protected structures – see Figure 2), so there is no real scope to widen this road to accommodate three 3m lanes as proposed on Map 6. In any event, no in-bound bus lane is indicated on this section of Terenure Road East in the emerging preferred route on Map 6 so buses entering this road must share the single road lane with cars and other vehicles.



Figure 3 Existing View at Terenure Road East

- 6.5 This restricted available road width is corroborated by the termination of the cycle lanes at Rathfarnham Road. These cycle lanes are not continued onto Terenure Road East until they resume east of the junction at Ferrard Road [Maps 6 and 7 in emerging preferred CBC12 route]. Thus, cyclists are expected to make right turns alongside buses and then compete for limited road space until the cycle lane is resume further along Terenure Road East. This state of affairs contradicts the message in the current NTA marketing campaign which invites the general public to "Imagine safer Cycling for Everyone".
- 6.6 The inherent serious difficulties for cyclists at this junction confirm that the emerging preferred route will not achieve one of the two key objectives in the core bus corridor scheme, which is stated as follows.

Provide any cycle facilities along the route that are required under the Greater Dublin Area Cycle Network Plan (published by the NTA, 2013) to the target Quality of Service(s) specified therein and to give consideration to further providing cycle facilities along sections of the route where they may be not expressly required under the Cycle Network Plan.

- 6.7 If this proposal is intended to align with primary cycling route 10 as indicated on the GDA Cycle Network Plan, it fails miserably. There are other clear conflicts between cyclists and buses and between cyclists and residential property along the route, which are not identified or assessed in the FSOAR. In particular, there are 10 bus stops along the emerging preferred route at Rathgar Road. I am informed the frequency of bus services on this bus corridor envisaged in the network re-design will be up to one bus per minute at peak times, so this level of bus traffic combined with multiple bus stops will seriously disrupt the free flow of cyclists. In addition to the obvious danger to the well-being of cyclists, inevitably cyclists will vote with their feet, or their wheels, and find safer alternative routes to that proposed in the emerging preferred route.
- 6.8 Another significant potential hazard to cyclists arises from the land acquisition indicated in the scheme drawings to widen the road to accommodate the core bus corridor route. A site inspection will confirm that the land take involved will substantially reduce the curtilage of many of our clients' properties where there is existing surface parking. Not only will the acquisition eliminate parking from some properties altogether, in many instances, the effect will deprive home owners of the ability to drive in and drive out in a forward gear so as not to give rise to a traffic hazard, the safest means of access/egress and a requirement for off-street parking under the City Plan Development Management Standards [Section 16.10.18]. Instead, our clients will have to execute hazardous reversing manoeuvres at a busy road creating serious conflict with the safe movements of pedestrians on footpaths, cyclists on the nearest lane and the free flow of buses passing at significantly increased frequencies as envisaged in the network redesign.
- 6.9 None of these aspects is examined in the FSOAR, which is overly focused upon delivering improved bus lanes. If these material considerations were properly assessed, it provides grounds for the re-examination of the entire approach to this core bus corridor. In this context, we reiterate that it is an objective of the feasibility study to deliver cycle lane facilities as per the GDA Cycle Network Plan. An obvious reasonable alternative occurs and warrants real consideration by the NTA at this time. This is described below.

7.0 SUGGESTED ALTERNATIVE CORE BUS CORRIDOR ROUTE 12

7.1 In response to your invitation for comments on the emerging preferred scheme, we respectfully request you to examine the following suggested alternative for core bus corridor 12. We believe there is a viable alternative whereby the core bus corridor between Rathfarnham and the City Centre passes through Terenure village and Harold's Cross village with the cycle lane provided on a separate alignment following the primary cycle route 10 in the GDA Cycle Network Plan [see Figure 4 below].

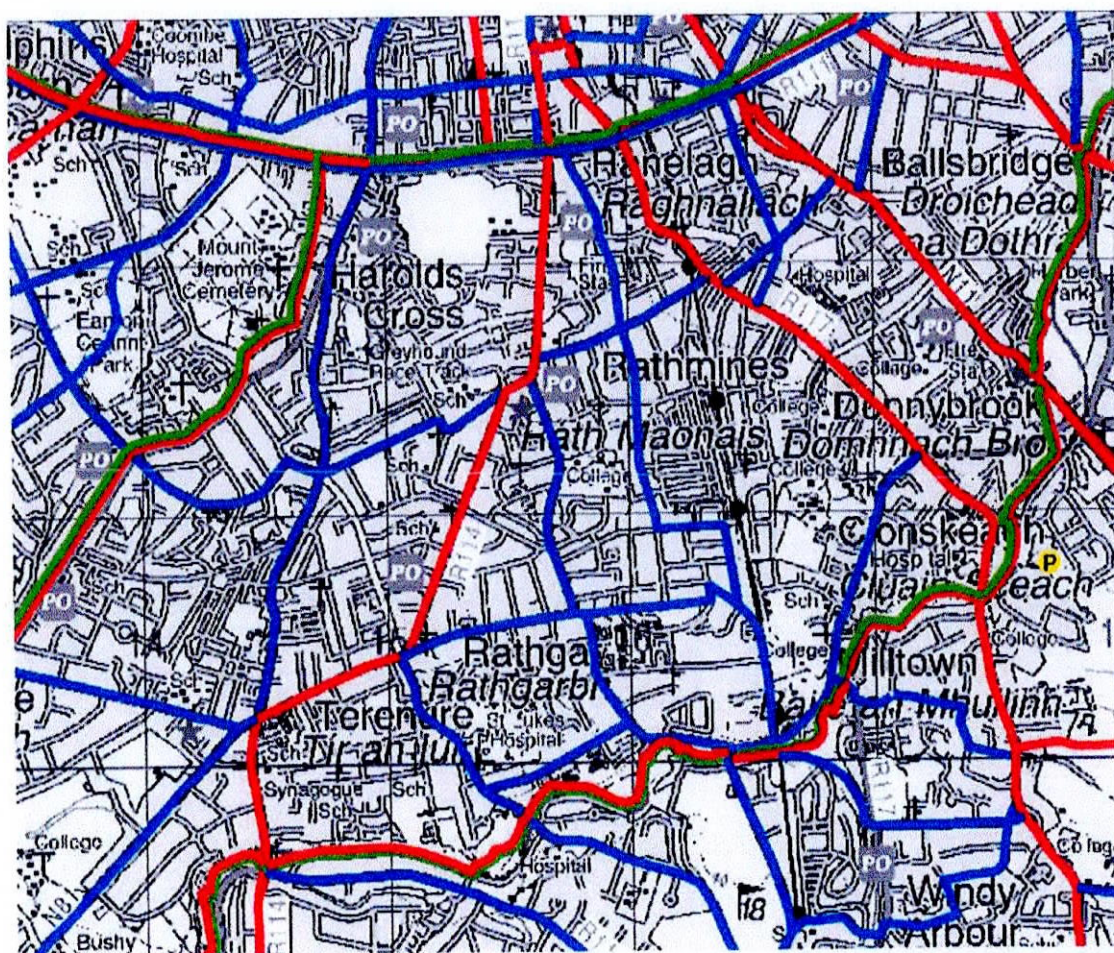


Figure 4 Extract GDA Cycle Network Plan [NTA 2013]

- 7.2 Primary Cycle Route 10 is denoted by the solid red line from Rathfarnham to Terenure turning onto Terenure Road East passing through Rathgar village and along Rathgar Road to Rathmines. Secondary routes are indicated in blue and include options for cyclists at Terenure via Terenure Road North and at Rathgar via Highfield Road and Rathmines Road Upper for city-bound cyclists or other local variations as shown above.
- 7.3 A segregated bus lane via Harold's Cross together with the primary cycle route 10 along Terenure Road East and Rathgar Road achieves both objectives in the core bus corridor scheme, and also addresses many if not all of the disadvantages of the current emerging preferred route. The suggested alternative for this core bus corridor is shown in Figure 5 below. Some advantages of this alternative are set out below.

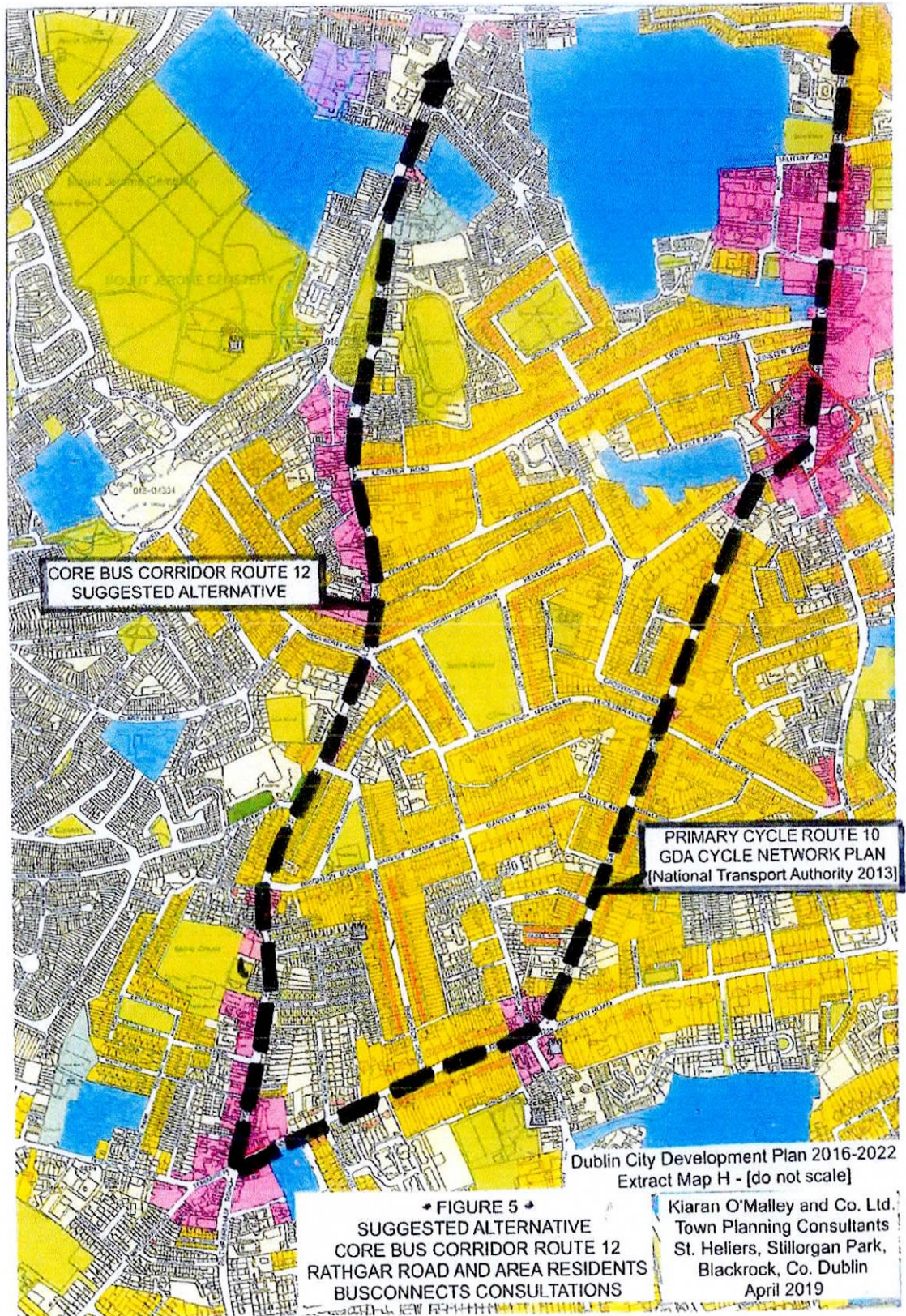


Figure 5: Suggested Alternative Core Bus Corridor 12

Advantages

- 7.4 Figure 5 shows the suggested alternative with core bus corridor route 12 continuing straight onto Terenure Road North at Terenure village, avoiding the right hand turn at Terenure Road East for city bound buses from Rathfarnham. This routing also eliminates the conflict between cyclists and buses in the current proposed route.
- 7.5 Terenure Road North is wider than Terenure Road East at this junction and it appears capable of accommodating bus traffic. As the Primary Cycle Route 10 is at Terenure Road East and Rathgar Road as per the Cycle Network Plan, the extent of land take along Terenure Road North may be reduced if that road does not include 2 x 2m cycle lanes.
- 7.6 In the event it is decided to provide two cycle lanes at Terenure Road North, any land acquisition if required, does not involve the extensive loss of curtilage from hundreds of protected structures or the permanent damage to architectural heritage and urban fabric associated with the emerging preferred route. Virtually none of the areas alongside the suggested alternative route are classified as residential conservation areas. Together with the avoidance of incalculable damage to the built environment, there may be considerable cost savings due to the reduced land take involved. The quantum of any reduction in acquisition costs and accommodation works savings are subject to detailed survey and project design.
- 7.7 Another benefit of the suggested alternative routing is that the segregated cycle lane on Terenure Road East and Rathgar Road can be provided within the existing carriageway without the need for costly road widening and environmental damage on a city-wide scale. Moreover, the resulting cycle lane would deliver the route identified in the Cycle Network Plan, which has the potential to become a major radial cycle route for large volumes of cyclists accessing the city. This cycle route will pass through an inner suburb recognised for its distinct character and identity and it can contribute positively to the attractiveness of the area satisfying another requirement of the City Development Plan. A safe segregated route through Terenure, Rathgar and Rathmines to the city centre is also likely to attract new cyclists and help drive greater modal shift from private vehicles, which is at the heart of the over-arching planning policy and sustainable transport plans. We submit therefore that the suggested alternative as shown on Figure 5 is consistent with the proper planning and sustainable development of the city.
- 7.8 One alternative that has been raised in recent forums is the possibility of extending the one-way traffic flow as envisaged at Rathmines Road Lower in the emerging preferred route to Rathgar Road. Our clients see no real benefit to such modifications because it will not address their particular concerns at Rathgar Road, which are materially different. The dimensions of the route along Rathgar Road range between 10m and 11.3m.. A typical section of road width of 16m is required to facilitate the proposed six lanes core bus corridor route comprising a 2m cycle lane, 3m bus lane and 3m vehicle lane in each direction. Thus, the proposed land take required from property owners is up to 6m. Removing one carriageway of up to 3 metres wide from the proposed bus corridor would still result in up to 3 metres of proposed property boundary removal, which would still ultimately affect the heritage features and protected curtilages of the Protected Properties that flank Rathgar Road, to which the residents are strongly opposed.

7.9 Even if the proposed road were reduced in width by one 3m wide lane to allow vehicular movement in one-direction only, as at Rathmines Road Lower, the effect merely reduces the land take at protected properties on Rathgar Road. A significant acquisition of land within the curtilage of these protected structures would still be necessary and the integrity of these properties together with the character of the overall residential area would be permanently compromised albeit to a slightly lesser extent. Nonetheless, the negative effect would extend along the entire road and the damage done to the existing architectural heritage would be equally severe.

8.0 SUMMARY

8.1 The emerging preferred route for core bus corridor 12 envisages significant road widening at Rathgar Road and the acquisition of approx. 6m deep parcels of land at the front of our clients' properties to facilitate the construction of bus lanes and cycle lanes along this road. Our clients object to the proposed road widening at Rathgar Road, which will have serious negative impacts upon their properties and the local community for the following main reasons.

- (a) Loss of curtilage, mature trees and front gardens at protected structures;
- (b) Serious permanent damage to the character of the retained lands at each protected structure where the land is acquired;
- (c) Destruction of architectural heritage and historic fabric of urban villages noted for their contribution towards the identity and character of the city;
- (d) Creates a bus highway through a residential conservation area;
- (e) Reduced front gardens endanger safe movement of cyclists and pedestrians.

8.2 Our clients support the general planning policy to improve public transport facilities, but BusConnects core bus corridor proposals must be assessed within a broader land use planning context and not only by reference to the provision of better bus lanes. The emerging preferred route proposals for corridor 12 contravene policies in the City Plan and are contrary to the proper planning and sustainable development of the area.

8.3 The current proposals do not comply with policies SC10 and SC12 in the City Plan, which protect the character of the city's urban villages from inappropriate development. The emerging preferred route is seriously injurious to the existing high quality public realm in terms of reducing the footpath widths and removing on street parking and loading bays undermining the vitality of the urban villages. In addition, the proposed road widening will effectively create a bus highway between the villages of Terenure, Rathgar and Rathmines destroying their unique character and creating a less pedestrian friendly environment in contravention of policies SC19, SC20 and SC28.

8.4 The emerging preferred route also contravenes both strands of Dublin City Council's approach to the conservation and protection of areas and structures of special interest, which are denoted by the Z2 residential conservation area zoning objective and the Record of Protected Structures.

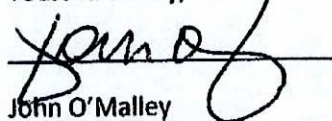
- 8.5 Most of the residential areas around Rathgar village extending northeast on Rathgar Road and west on Terenure Road East through which the proposed core bus corridor passes are designated as Conservation Areas where the Z2 residential conservation area zoning applies. The road widening and associated works do not contribute positively or enhance the character of these Z2 areas as per Policy CHC4.
- 8.6 At the individual property level, the road widening involves the loss of curtilage including front gardens and trees at large numbers of protected structures on Rathgar Road and is therefore contrary to Policy CHC2, which requires that development will conserve and enhance protected structures and their curtilage. It is unclear whether the NTA sought or obtained the views of the City Council's Conservation Officer yet but this is a critical input as Dublin City Council is the competent authority in conservation matters.
- 8.7 The Feasibility Study upon which core bus corridor route 12 is chosen is seriously flawed because the assessment has insufficient regard to the following relevant considerations.
- (a) A principal route identified in the Tallaght-Rathfarnham-Terenure corridor of the GDA Transport Strategy is disregarded at Stage 1 of the route assessment because it is considered to duplicate the Bus Rapid Transit proposals on that route. As the BRT is not proceeding, this decision is not justified.
 - (b) The Feasibility Study does not consider potential cycle route options involving segregation between cycle lanes and bus lanes within this core bus corridor. Where feasible, segregating bus and cycle traffic should be favoured over combined cycle and bus options because it is safer and more convenient.
 - (c) The methodology does not distinguish between the impact upon protected structures and non-protected structures. The assessment has no regard to the adverse impact upon the architectural heritage of Rathgar Road.
 - (d) Inadequate consideration is given to the implications for road safety and the for safe movement of pedestrians (including schools children) and cyclists on the widened Rathgar Road.
 - (e) The study cannot reasonably be limited to existing bus routes.
 - (f) Potential cycle route options are not identified or assessed because cycle lanes are only evaluated in tandem with a bus lane.
 - (g) The design of the FSOAR emerging preferred route fails to meaningfully address significant pinch points in Rathgar Village and Rathmines Village, most particularly where Rathfarnham Road meets Terenure Road East.
- 8.8 The route selection process appears imbalanced in favour of the emerging preferred route for this corridor. The Feasibility Study is therefore not fit for purpose and does not provide a proper basis for an application for Approval and a CPO to An Bord Pleanála. There are reasonable alternatives, which are not identified in the FSOAR from which it follows there is a real risk that the route assessment study in its present form may not be in accordance with the EIA Directive.
- 8.9 Given the above shortcomings in the route selection and route options assessment, it is appropriate to revisit the Feasibility Study and to re-evaluate the route options taking into consideration all reasonable options. Our clients submit therefore, and we invite the NTA to agree, that the assessment ought to consider additional reasonable alternatives

Including the suggested alternative where the principal bus corridor route is via Harold's Cross (i.e. the former BRT route) and cycling route options involving segregated cycle lanes are considered. If this route assessment were re-done, and having due regard to the obligation to indicate the main reasons for the option chosen taking into account the effects of the project on aspects of the environment, we consider that the principal route through Harold's Cross may become the new emerging preferred core bus corridor route for CBC12 with a segregated cycle lane along Terenure Road East and Rathgar Road (i.e. primary cycle route 10 in GDA CNP).

- 8.10 It is our clients' belief the transportation planning objectives on this core bus corridor route can be achieved by separating the bus lanes and cycle lanes. Bus lanes between the city centre and Rathfarnham will continue through Terenure via Terenure Road North/Harold's Cross with Rathgar Road/Terenure Road East becoming Primary Cycle Route 10 in accordance with the GDA Cycle Network Plan 2013 as published by the National Transport Authority.
- 8.11 Terenure Road North is the most direct route to the City Centre from Terenure and it would join CBC 11 from Kimmage at Harold's Cross. This potential core bus route can be improved to accommodate bus lanes and passes virtually no protected structures so it avoids the devastating adverse impact on protected structures at Terenure Road East and Rathgar Road. A dedicated cycle lane on Terenure Road East/Rathgar Road will create an attractive safe cycling route to and from the city and can be provided within the existing road width. Crucially, this approach avoids road widening, compulsory land acquisition and protracted expensive compensation claims on Rathgar Road/Terenure Road East, and it also delivers in planning terms by safeguarding architectural heritage on both roads for future generations.
- 8.12 Cycling routes following separate alignments from bus lanes have considerable potential to improve cycling safety and avoid or minimise road widening thereby reducing land acquisition by CPO [particularly relevant at Rathgar Road], and delivering considerable public planning gain through the avoidance of permanent damage to the architectural heritage of the area. This reasonable alternative delivers the strategic transportation planning outcome in the GDA Transport Strategy, it provides a safe and convenient cycle route as per the NTA's Cycle Network Plan and avoids the extensive loss of curtilage at so many protected structures at Rathgar Road and Terenure Road East. As a minimum, the suggested alternative described on Figure 5 warrants real consideration by the NTA in its assessment of the potential route options for core bus corridor 12.

We invite you to have regard to this submission and to modify the proposed core bus corridor route 12 to the suggested alternative segregated bus and cycle route option outlined above.

Yours faithfully,



John O'Malley
Kieran O'Malley and Company Ltd.



Coláiste na Tríonóide, Baile Átha Cliath Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin

28th April 2019

Dear Sir/Madam,

We are writing to express our general concern regarding the level of provisions in place within the Bus Connect Programme for the protection of the ecosystem services provided by mature trees in the urban and suburban areas of Dublin that will be directly impacted by the NTA's Core Bus Corridor Project. As Professors in the Botany and Zoology Departments at Trinity College Dublin, we oversee research and teaching on the importance of trees in urban environments as part of a larger portfolio of research in botanical, zoological and environmental sciences. The Botany Department coordinates one of the largest EU projects in Europe, Connecting Nature led by Dr Marcus Collier, which is focused on quantifying the impacts and values, culturally and economically of trees and other green and blue infrastructures in cities, particularly in the context of anthropogenic climate change. Members of our department founded the Irish Forum on Natural Capital (www.naturalcapitalireland.com), which aims to value, protect and restore natural capital in Ireland, and to support the adoption of natural capital concepts in public policy and corporate strategy, promoting informed public and private sector decision-making. We are also leaders of a broader group of researchers from across Trinity called Nature+ <https://naturalscience.tcd.ie/natureplus/>, which has an overall vision to live in a world where "Natural Capital stocks, such as urban trees, with multiple benefits for the economy, society and businesses are valued, sustainably used, renewed and restored." To explain this vision a little further, Nature+ undertakes research on a broad range of natural capital stocks – from forests, bogs and wildflower meadows to disturbed urban environments – to quantify their ecological and cultural benefits and values for people (often referred to as ecosystem services). From this quantitative research we can then derive robust estimates of the total economic, biodiversity, cultural and aesthetic value of natural capital stocks such as urban street trees and the woody stocks of trees and shrubs in suburban and urban gardens. While it is recognized that trees on public land provide important public goods and services it is less recognized that trees and shrubs in private gardens also provide substantial public goods and services.

From our reading of the literature on the Core Dublin Bus Corridor Project, we are very encouraged to learn of the ambition to increase cycle ways to ~200km and public transport throughout the city. We agree that this is an essential requirement of planning needed to increase the sustainability of our transport system. Increased bike use will certainly reduce greenhouse gasses and other

particulate air pollutants providing a direct means of addressing the UN Paris Climate Agreement by reducing Irelands transport related carbon emissions.

We are however deeply concerned with the lack of adequate consideration given to the removal of garden and street trees and shrubs throughout the proposed core bus corridors, particularly in those neighbourhoods of Dublin which have considerable mature stocks of trees in their streetscapes and gardens. We are particularly concerned by the lack of scientific definition provided for the term 'appropriate mitigation measures' in the following statement from the BusConnects literature and public consultation:

"Where there is simply no viable alternative, and where we know we have to remove trees, portions of gardens, driveways or parking, we will ensure appropriate mitigation measures are put in place, wherever practicable."

The following statement regarding the proposed planning for trees is also unsatisfactory.

"3.3.4 Trees Where trees are removed from roadsides and footpaths we will put in place a comprehensive replanting programme. This programme will use mature or semi-mature ready-grown trees where appropriate and, where it is feasible, plant them as close as possible to the original locations."

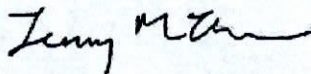
There is an opt out with the phrase 'where it is feasible, plant them as close as possible to the original locations'. We would like to see a detailed development of what is proposed when it is not feasible to replace a mature tree close to its original location. Will there be a provision to plant a woodland with equivalent carbon sequestration potential in the same neighbourhood/ area where very mature trees are going to be removed? A planting replacement plan of a single 50 to 100 year old tree with young (5 to 10 year old) container grown trees is not equivalent in terms of natural capital stock replacement and the services provided. We request that a detailed natural capital plan for the bus corridor is carried out so that the true economic, ecological and cultural value of the proposed corridor is assessed so that an appropriate and equivalent replanting plan can be designed.

Urban and suburban street and garden trees reduce overall energy consumption (mainly fossil fuels in Dublin, with some solar) in winter and reduce electricity use for air conditioning in summer in warmer climates. Woody natural capital stocks in urban environments drastically reduce annual stormwater run-off due to rainwater interception by trees. The magnitude of interception increases with both above and below ground biomass and hence with the age of the tree. Urban trees actively improve the local air quality by adsorbing particulate pollutants such as PM10, PM2.5 which are particularly harmful to human respiratory health. Different species have different capacities to act as air pollution filters; species with rough micro-surface relief on their leaf surfaces remove more particulate matter than species with smooth leaf surfaces. Mature trees, due to their greater overall biomass remove vastly more particulates than young trees. The exact amount of particulate pollution removal can be directly quantified using tree allometry scaling relationships and species leaf traits. Urban and suburban tree and shrub stocks sequester carbon in secondary growth (wood) removing it from the atmosphere. They are therefore an important urban carbon sink for greenhouse gasses released from transport, home and business energy use. The larger and more mature the tree the greater its carbon sink capacity. Carbon sequestration potential can be calculated for every tree in the city from simple calculations of wood specific density (which is

species dependent) and above and below ground biomass estimates (can be calculated from diameter of trunk at chest height and tree trunk-height allometry equations). Every tree of course also has an aesthetic and cultural value to the communities/owners of the streets or garden in which it grows. This is much harder to put an economic value to, but projects such as *Connecting Nature* led by Dr Marcus Collier at Trinity are attempting to develop appropriate metrics.

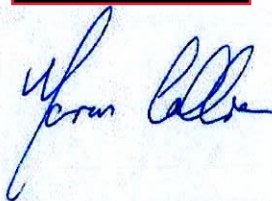
A recent tree survey for Fingal County (using iTree and Curio) using the methodology described above estimated the summed yearly economic value of 27,683 trees in Fingal amounted to €2,476,725 a year, with a replacement value of €23,605,852. Equivalent surveys should ideally be undertaken on all the proposed core BusConnect bus corridor routes so that the economic, biodiversity, cultural and aesthetic value of mature tree loss can be evaluated against the value gained via expansion of cycle routes and bus lanes and where necessary, appropriate mitigation can be designed and implemented. This should be undertaken particularly in relation to carbon and particulate pollution as it would provide a more comprehensive environmental accounting for the bus corridor project than is currently evident from the literature provided as part of the consultation process. There are many digital tools which allow such a quantitative assessment of the economic value of street and garden trees to be carried out (e.g. <https://www.itreetools.org/index.php>).

Sincerely,



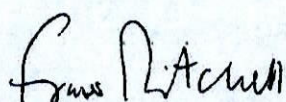
Professor Jennifer McElwain
Professor of Botany (1711)
Head, Botany Department
Trinity College Dublin
College Green
Dublin 2

Tel: [REDACTED]
Em: [REDACTED]

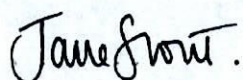


Dr. Marcus J. Collier
Assistant Professor of Urban Nature-based Innovation
Connecting Nature Coordinator
Trinity College Dublin
College Green
Dublin 2
Tel: [REDACTED]
Email: [REDACTED]

Professor Yvonne Buckley
Professor of Zoology (1871)
Head of Discipline, Zoology & Co-Director Nature+
Trinity College Dublin
College Green
Dublin 2
Tel: +353 1 8963172
Email: bucklevy@tcd.ie



Professor Fraser Mitchell
Professor in Quaternary Ecology
Botany Department
School of Natural Sciences
Trinity College Dublin
Dublin 2
Tel: +353 1 8961811
Email: fraser.mitchell@tcd.ie



Professor Jane Stout
Professor in Plant-Animal Interactions
Botany Department
School of Natural Sciences
Trinity College Dublin
Dublin 2
Tel: +353 1 896 3761
Email: jane.stout@tcd.ie