Dublin Cycling Campaign
% Tailor's Hall,
Back Lane,
Dublin 8

14 January 2022

Submission on Dodder Greenway - Dodder Valley Park to Kilvere

1.0 Introduction

Dublin Cycling Campaign is a registered charity that advocates for better cycling conditions in Dublin. Our vision for Dublin is a place with a cycle friendly culture, where everyone has a real choice to cycle and is encouraged to experience the joy, convenience, health and environmental benefits of cycling.

We broadly welcome the proposals to connect the Dodder Greenway between Dodder Valley Park and Kilvere. While also welcoming the presentation of the proposals online, we would like to see in all future online presentations that:

1. Schemes of this nature should also include detailed 3D visualisations, for the average citizen to clearly understand
2. The drawings displayed should be easily readable with clear instructions on how to manipulate them and increase the size

2.0 Essential Elements

Regardless of which option is chosen the following elements - many of which we commented on in our general Dodder Greenway submission of August 2018 - see https://www.dublincycling.com/cycling/dodder-greenway-route - need to be included, to ensure the design is up to greenway standard, and provides safe walking and cycling for all ages and abilities:

- The project team needs to clearly put the sustainable elements of transport, i.e. pedestrians, cyclists, and (in this case) buses first, above all other traffic elements, as outlined in the GDA DRAFT Transport Strategy and DMURS. In other words adequate and safe space to be provided.
- The project team needs to consider the needs and safety of disabled cyclists in any design decisions or when assessing any options and in making design decisions.
- The design needs to consider not only the needs and safety of cyclists on the Greenway, but also those joining or exiting at the various junctions, and locations along the route
- The design for the Blue Haven junction needs to include safe cycling connections to and from the Greenway from all arms of the junction
- Pedestrian and cycling facilities, should be segregated where possible
- Provision of buffer space (preferably vegetated verges) and kerb protection between the cycle facility and general traffic. Buffer space increases safety, gives an enhanced user feeling of safety and comfort, reduces / prevents casual illegal car parking and provides space for people crossing the street / road on foot or bicycle. This type of segregation and buffer space may be particularly necessary on Butterfield Avenue where cars are currently routinely parked in the area of the proposed cycleway.
- Improvement to the public realm, in particular at the Blue Haven junction, such as the use of Sustainable Urban Drainage Schemes (SUDS), planting and landscaping which will make the cycle route more attractive to users
- Provide a high level of priority to sustainable modes of transport at crossings at junctions. Wait times at any push buttons should be minimised and the number of opportunities to progress maximised.
- The sequencing of the traffic signals at junctions is a critical element in ensuring that any new junction designs are successful, particularly in ensuring the safety and coherence of cyclists and pedestrians at junctions.
- Full size bus stop bypassess should be provided at all stops where possible.
- Ensure that clear directional signage is provided throughout, to enable users to navigate the route safely and easily.

- Care needs to be taken with tree planting close to the cycle tracks to ensure that the roots will not interfere with the surface in future years, and that foliage is not an obstruction, bearing in mind that a helmeted cyclist is several cms higher than the tallest pedestrian. Regular cleaning of the cycle tracks and footpaths will be needed to ensure a safe and comfortable surface.

3.0 Principles

We as cycling advocates, want to ensure that the below principles are adhered to in the basic design concept:

Cycling for All

The goal of the cycle routes must be to enable people of all ages and abilities to cycle. Cycling can be an option for many if designed correctly. If the cycle routes do not measure up to international best practices we will not see kids cycling to school with their parents, teenagers cycling to the cinema, commuters cycling to work or older people cycling to the shops. Only by enabling many people to cycle, by making it a realistic choice, can we deliver the potential modal shift changes. Whenever a new person starts cycling, society reaps the benefits of improved public health, reduced congestion, and better liveability for our urban places. The maximum benefits of cycling are only achieved by designing cycle routes that enable the largest cross-section of society to cycle.

Shared Space

Shared paths do not serve either pedestrians or cyclists well and invariably lead to irritation, conflict and the potential for collisions. Increased sales of electric-assisted bikes (or e-bikes) in the locality will mean that average speeds of cyclists (especially those commuting) could be higher than observed previously. Furthermore, the flat, off-road route would be ideal for use by those on electric scooters, which will likely continue to increase in popularity with the introduction of legislation to regulate their use which is being drafted presently, so this is an additional variable that should be considered.

4.0 Scheme Objectives

The stated objectives of the Options Report include *"minimising the impacts [of the Dodder Greenway] to the traffic performance."* We believe a vital, but missing, objective is to encourage a significant modal shift to cycling. The Dodder Greenway runs through populated areas of the city, and will provide a safe, and attractive transport option for commuting, school runs, shopping and leisure trips. Cycles are traffic too, and should be considered as part of "traffic performance".

In Section 10.5 of the NTA's draft GDA Transport Strategy 2022-2042, the NTA specifically calls for local authorities to improve junctions which were *"designed to cater for the maximum throughput of motorised traffic"* and which "*are not conducive to the promotion and facilitation of walking and cycling, in particular for local trips".*

The NTA has recommended ***"the creation of more compact junctions through the removal of slip lanes and/or the narrowing of carriageway entries / exits"***, as well as the introduction of "*all movements*" pedestrian crossings at junctions.

5.0 Option 1 Comments (preferred option)

5.1 Option Choice

Of the three options presented, Option 1 is our preferred option but with a variety of modifications:

- It provides the most direct route for cyclists traveling in either direction
- It continues the greenway experience along this section
- It provides wobble room for inexperienced cyclists and will enable parents to cycle alongside their children

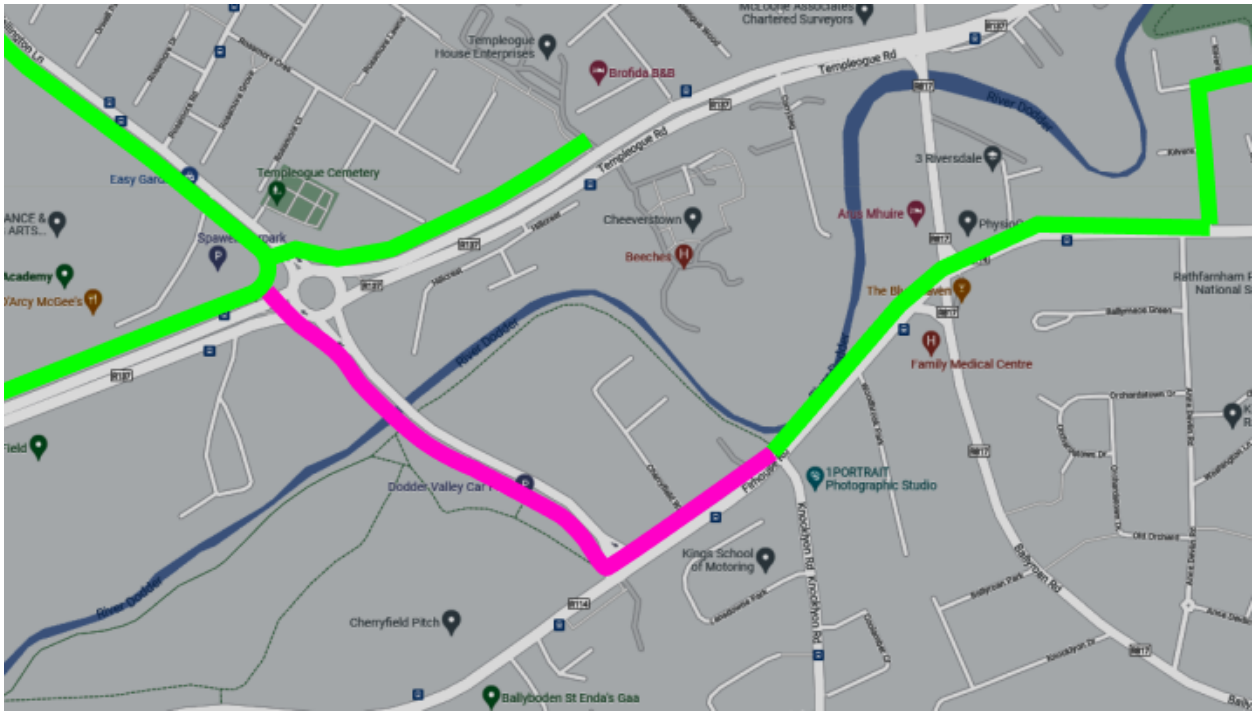
We welcome in particular the following elements of option 1:

- Two-way cycle track along Firhouse Road and Butterfield Avenue
- Segregated cycle tracks on Wellington Lane/Spawell Link Road

We would like to see the following improvements to option 1:

- Cyclops or Dutch style junction at the Blue Haven
- Inclusion of raised off-road cycle tracks on the approach to the Blue Haven junction from Old Bridge Road and Ballyroan Road (as shown in Option 2)
- More space for cyclists at the bus-stop bypasses

- Retention of the existing cycle lane on the south side of the Firhouse Road
- Reduction of the traffic lane widths on Wellington Lane/Spawell Link Road and Butterfield Avenue with the space reallocated to wider cycle tracks, a minimum of 2m.
- Greater priority to cyclists and pedestrians with longer crossing times and and shorter wait times at signalised junctions
- Extending the two-way cycle track to connect Knocklyon Rd to the proposed two-way cycle track at Wellington Lane (see pink line on map below). This would help to connect existing and planned high quality two-way tracks in the area.



In the following sections we give detailed comments on each of the three options presented.

Drawing Number 1501

We welcome

- The inclusion of bus stop bypasses
- The upgrade of the pedestrian crossing to a toucan crossing - but see comment below
- The segregation between the footpath and cycle track
- The separate crossings for pedestrians and cycles at the Wellington Lane junction

Segregation of the cycle track and the bus lane is required, ideally using physical barriers, to make the route safe for inexperienced cyclists and children, many of whom will be using these routes to access the Ballyboden St Endas (BBSE) club facilities. We would like to see a vegetated buffer separating cycling from bus and general lanes where at all possible. There is an existing segregated cycle track between the Spawell Link Rd Junction and Pine Grove (photo below) and we would really like to see this retained but with the cycle track widened. There are many high quality aspects to this section of cycle track including green verges separating cycling from general lanes and pedestrians from cycling. The existing bus stop bypass is also an excellent layout and has operated successfully for years, as the grass verges ensure pedestrians and cyclists can observe and anticipate each other's movements and react accordingly at a clear crossing point. The trees also serve to act as a wind barrier to cyclists heading towards Firhouse. We believe the council should be looking to replicate this level of cycling quality where possible, not relocating the cycle track to directly beside bus and general lanes.

Existing track and bus stop on Firhouse Rd

More space is required for cyclists at the relocated bus stop opposite BBSE. It should cut into the park slightly, as has been done in Options 2 and 3. The other two bus stop

bypasses seem unnecessarily narrow also, given the amount of space to play with. Dimensioning is not provided on the exhibited drawing at these locations.

In all 3 options, stop lines are drawn before the cycle track, which is a welcome priority for cyclists.

We suggest that the location of the Toucan crossing be reconsidered to enable more direct access for cyclists and pedestrians into the BBSE grounds. At the Toucan crossing, ensure that poles for traffic lights are not placed in the cycle track (unlike the setup at the new carpark and bridge into Bushy Park). This crossing is overly wide and crossing distances could be reduced by separating the cycle tracks from the crossing.

The bus lane continues all the way to the traffic lights. We would like to see clear protection of the bus lane leading up to and through the junction to prevent cars from cutting into the bus lane when turning left. This would ensure cars are perpendicular to the cycle lane when they cross it, reducing risk to cyclists of being left hooked. An Advanced Stop Line (ASL) should be provided at Wellington Lane to facilitate experienced cyclists who plan to do a right turn.

The proposed junction protection could be improved and full Dutch design would be far safer.

Provide stacking space for cyclists waiting to turn right onto Wellington Lane. Bus priority at traffic lights could be provided for traffic coming from the Blue Haven direction to enable this. This seems to be the approach taken in Options 2 &3.

Drawing Number 1502

The option 1 design for Wellington Lane/Spawell is preferable to other options, as it maintains segregation and there is no shared space.

The traffic lanes are 3.25m width at the tightest point over the bridge (Section 2-2). We question whether they need to be so wide. A reduction in the traffic lane width to 3m would permit a minimum width of 2m for the cycle track

The location of the Toucan crossing should ensure clear access to the main greenway route. It is not clear from this drawing whether this is facilitated. Ensure there are no poles in the cycle track at the toucan crossing.

A stop line should be painted at the car park exit just before it meets the footpath.

Drawing Number 1503

The bus stop bypass appears to be far too narrow. Dimensions are not supplied. The road alignment needs to be shifted slightly, as there's adequate space available on the opposite side of the road.

The Knocklyon Road junction crossing is a very wide junction, with a long crossing time for pedestrians and a long exposed section with no protection for cycles. The junction width needs to be narrowed/redesigned, with reduced corner radii. Is there a need for two separate main traffic lanes on all arms? We fail to understand why the bus lane feature is not part of the eastern leg of this junction. On the exhibited drawing it is not clear if the existing traffic light system is proposed to be retained. If so, ASLs should be a feature of the Knocklyon Road and western Firhouse Road legs.

We request the Council to examine the option of providing a Dutch or Cyclops junction in line with international best practice at this location. We wish to refer you to a junction document we submitted to the NTA as part of the latest round of Busconnects consultations. The document can be found at this link

On the Wellington Lane/Firhouse Road Junction ASLs should be included on the Spawell/Wellington Lane arm and the Eastern leg of the Firhouse Road, to facilitate cycling right turns. Is there a need for two separate main traffic lanes on all arms?

The two-way cycle track on the northside of Firhouse Road is a good idea, although the removal of the existing (murder strip) cycle lane on the south side is a bad idea. The retention of this south side cycle lane is critical for cyclists coming off Ballyroan Road and taking a left on to Firhouse Road. This should be realigned and segregated as in Options 2 & 3. There is plenty of space available to do both, and no trees will be affected.

We suggest that the major exits from private property along this section should have clear STOP lines behind the footpath, to protect vulnerable road users.

Drawing Number 1504

As this is the preferred option we have assessed it in more detail below.

We welcome the following elements and we would like to see them incorporated into the final design:

- the two-way cycle track provided for the greenway
- the removal of the left slip lanes from Old Bridge Road to Butterfield Avenue, and from Firhouse Road to Old Bridge Road, but recommend that a bike only left slip lane be included from Old Bridge Road to Butterfield Avenue
- the provision of pedestrian crossings across each arm

We request the following and we would like to see these requests incorporated into the final design:

- The overall configuration of the junction arms and the junction design should be reconsidered to make it easier for all vulnerable road users to negotiate it with priority and comfort from all directions.
- The left slip traffic lane from Ballyroan Road to Firhouse Road should also be removed in line with NTA policy, but retained for cycling (as per the latest NTA strategy).
- The cycle lane on Ballyroan Road should continue up to the junction, for cyclists heading to Old Bridge Road. An ASL should be included for cyclists wishing to turn right on to the new Dodder Greenway route.
- We see no clear design for cyclists coming from Ballyroan Road and wanting to connect with the Dodder Greenway. This needs to be rectified.
- As referred to re Drawing Number 1503 a cycle lane should be provided on the south side of the Firhouse Road between Ballyroan Road and Knocklyon Road junctions if possible.
- We request ASLs are provided in all lanes to accommodate people who are cycling on the road.
- On the two-way cycle track 2 sets of stop lines are provided for people cycling in a straight movement, it should be 1.
- Safe and segregated cycling access should be provided from Templeogue Bridge - this is the primary access to the Greenway for many residents.
- Where possible, buffer space (preferably vegetated verge + kerb) should be provided between the cycle tracks and general/bus lanes. The two-way cycle track section on the Firhouse Road and Blue Haven junction should then be widened to 4m where possible.
- The cycle lanes should be upgraded to raised off-road cycle tracks on the approach to the Blue Haven junction from Old Bridge Road and Ballyroan Road (similar to as shown in Option 2 but within the left turn slip at Ballyroan).

- The Bus Lane along Firhouse Road (west of junction) should be continued right up to the junction, and main traffic lanes reduced to 2 lanes.
- Firhouse Rd - The space for the hatching in the median should be repurposed as buffer space to cycle tracks and a bus stop bypass should be provided on the south side of Firhouse Rd. It is illegal to drive onto hatched areas to overtake buses (and other traffic) in any case.

We really like the option of the 2-way cycle track however we feel the junction layout presented in Option 1 does not fully deliver on the 5 needs of cycling outlined in Section 1.2 of the National Cycle Manual, sustainable safety or prioritise users as required by DMURS.

In Appendix A we have assessed the junction according to UK guidance LTN 120, and it emerges with a score of only 20% (fail).

In relation to the junction type and options considered, the Options Report outlines how a Cyclops style junction without a slip lane off Ballyroan was discounted (Option 4), and states "*the main factor affecting the traffic performance was the tight turning radii for the left turns from Ballyroan Road into Firhouse Road. The traffic model showed that the geometry of this arm reduced the estimated speed at which cars performing this manoeuvre clear the junction.*" However the associated diagram indicates an excessively tight turning radius was utilised in Option 4 (and 5) to assess the traffic flows. The UK Cyclops junction and Dutch style protected junctions are capable of being applied to similar junctions as the Blue Haven. The Cyclops was specifically developed to cater for junctions with similar geometry, including where slip lanes are provided and where general traffic flows are a concern. This is a summary table illustrating how a UK Cyclops junction compares against other junction types.

		Forms of Protection for Cyclists at Signal Junctions				
		Early Release	Cycle Gate	Cycle Only Stages	Hold-the-Left with 2-Stage Right-Turn	CYCLOPS
Evaluation Criteria	Conflict	Poor	Moderate	Good	Moderate *	Good
	Capacity	Poor	Poor	Poor	Good	Good
	Delay	Good	Poor	Poor	Moderate	Good* Moderate
	Spatial Efficiency	Good	Moderate	Good	Moderate	Good
		*CYCLOPS can be categorised as 'Good' for 'Delay' as multiple cycle movements can bypass signal control, and, cycle phases may be able to run in multiple stages running in parallel with traffic phases as well as pedestrian phases. Hold-the-left or similar efficient phasing regimes can be designed within the external circulating cycle track.				

Extract from "CYCLOPS – Creating Protected Junctions" Link to Cyclops Guidance Note

The guidance note concludes "*CYCLOPS maximises the opportunities for safe cycling and walking whilst optimising the overall junction performance for all modes.*" We were therefore surprised to see this junction type discounted from consideration on grounds of not being able to provide the traffic flows.

We therefore request the Council to reexamine the option of providing a Dutch or Cyclops junction in line with international best practice at this location, while using an appropriate left turn radius from Ballyroan Rd in the assessment. Both of these junction types can offer the following advantages which can be of benefit to people walking, cycling and in motor vehicles:

1. Decreased pedestrian crossing distances & pedestrians can cross less lanes in one single crossing.
2. Decreased cycling crossing distances.
3. Pedestrian and cycling signalised crossing of the road can be run in parallel.
4. The above then frees up green signal time within the junction cycle , meaning:
    a. more pedestrian & cycling crossing opportunities can be provided, therefore less standing/waiting to cross the road and/or
    b. more green time is available for general traffic flow.

We also wish to refer you to a junction document we submitted to the NTA as part of the latest round of Busconnects consultations. The document can be found at this link

Drawing Number 1505

The width of the main traffic lanes should be reduced to 3m, to allow for a 4m wide two-way cycle track and to increase the width of the northbound footpath.

The existing pedestrian crossing close to Kilvere should ideally be relocated to the east of Kilvere junction and upgraded to a Toucan crossing, to facilitate cyclists travelling westwards on Butterfield Avenue to enter the Greenway. The design of the Kilvere junction should be redesigned, to make it easier for cyclists of all ages and abilities to link into the Greenway from Kilvere. We note that Kilvere is already busy with parked cars for people who are using the greenway.

This is also a critical point for directional signage, as referred to generally in Section 2 above.

What segregation will be provided between the 2-way cycle track and the carriageway? There should be some buffer space between the 2 to provide for inexperienced cyclists. And the cycle tracks need to be protected from illegal parking along this section of the road.

The existing footpaths on either side of Butterfield Ave are not shown in the drawing although they are shown in the cross-section. There appears to be no provision to segregate the pedestrians on the footpath from the cycle track. Both pedestrians (and their dogs) and cyclists will be encroaching on each others' spaces.

Exits from private properties should give a clear right-of-way to cyclists.

6.0 Option 2 Comments

While our clear preference is for option 1 we have included comments on Option 2 and 3 below.

General Comments

We welcome:

- The raised off-road cycle tracks on the approach to the Blue Haven junction from Old Bridge Road and Ballyroan Road.

We don't like

- The Shared Space for Cyclists and Pedestrians proposed along Wellington Lane. This is a disimprovement on the current situation.

Drawing Number 1511

We welcome the bus stop bypasses and the upgrade of pedestrian crossings to toucan crossings.
We are concerned that the filter lane on the inside of the cycle lane will put cyclists at risk from left turning traffic.

Drawing Number 1512

The shared paths for cyclists and pedestrians is a disimprovement on the current situation. Shared paths do not serve either pedestrians or cyclists well and invariably lead to conflict and the potential for collisions.

As discussed for option 1, the width of the traffic lanes should be reduced to 3m, which will allow for segregated footpaths and cycle tracks.

A stop line should be painted at the car park exit just before it meets the footpath.

Drawing Number 1513

We welcome the upgrade of the pedestrian crossing to a toucan crossing.

Better segregation between the cycle track and the bus lane is desirable. For example the 2m grass verge could be split to have a 1m grass verge between the footpath and the cycle track, and 1m between the cycle track and the bus lane.

Similarly, better segregation between the cycle track and bus lane is desirable on the southbound approach to the Knocklyon Road junction.

The Knocklyon Road crossing is a very wide junction, with a long crossing time for pedestrians and a long exposed section with no protection for cycles. The junction width needs to be narrowed, with reduced corner radii.

Drawing Number 1514

We like the raised off-road cycle tracks on the approach from all arms of the junction.

The left slip lane from Ballyroan Road to Firhouse Road should be removed to improve safety for cyclists who are continuing straight on.

Drawing Number 1515

The toucan crossing should be moved to line up with Kilvere to facilitate pedestrians and cyclists traveling from Kilvere westwards.

7.0 Option 3 Comments

General Comments

We welcome:

- Proposed cycle tracks on both sides of Firhouse Road and Spawell Link Road.
- Proposed traffic calming measures at Ballyroan Road left turning slip.

We don’t like:

- The layout pushes cyclists to move through Blue Haven Junction in conjunction with the vehicular traffic.
- Shared cyclist/pedestrian path along Wellington Lane

Drawing Number 1521

We are concerned that the filter lane on the inside of the cycle lane will put cyclists at risk from left turning traffic.

Drawing Number 1522

The shared paths for cyclists and pedestrians is a disimprovement on the current situation. Shared paths do not serve either pedestrians or cyclists well and invariably lead to conflict and the potential for collisions.

As discussed for option 1, the width of the traffic lanes should be reduced to 3m, which will allow for segregated footpaths and cycle tracks.

A stop line should be painted at the car park exit just before it meets the footpath.

Drawing Number 1523

We welcome the upgrade of the pedestrian crossing to a toucan crossing.

Better segregation between the northbound cycle track and the bus lane is desirable. For example the 2m grass verge could be split to have a 1m grass verge between the footpath and the cycle track, and 1m between the cycle track and the bus lane.

Similarly, better segregation between the cycle track and bus lane is desirable on the southbound approach to the Knocklyon Road junction.

The Knocklyon Road crossing is a very wide junction, with a long crossing time for pedestrians and a long exposed section with no protection for cycles. The junction width needs to be narrowed, with reduced corner radii.

Drawing Number 1524

The cycle lanes should be upgraded to raised off-road cycle tracks on the approach to the Blue Haven junction from Old Bridge Road and Ballyroan Road (as shown in Option 2).

The cycle lane from Old Bridge Road should continue and connect with the cycle lane on Butterfield Avenue.

The slip road from Ballyroan Road to Firhouse Road should be removed.

Drawing Number 1525

The toucan crossing should be moved to line up with Kilvere to facilitate pedestrians and cyclists traveling from Kilvere westwards.

8.0 Conclusion

This section of the Dodder Greenway is key to ensuring a continuous, safe greenway through South Dublin. We think there are a number of design possibilities along this route that could be improved for pedestrians and cyclists.

We trust that our observations will be taken into account as the design for this scheme progresses from a concept design to a preliminary design. We would be happy to engage with the council on any of the points raised above. And we look forward to engaging with the council as the design progresses.

Yours sincerely

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Appendix A - Assessment of the Blue Haven Junction against LTN 120

UK guidance document LTN 120 contains a helpful junction assessment tool to assess whether all cycling movements at a junction have been considered. It says that a "junction assessment should consider ALL potential cycle movements through a junction. It is not sufficient to plan a cycle route as a linear corridor from A to B if joining or leaving it midway is problematic, dangerous or impossible." We agree.

An arrow is drawn for each cycle moment at a junction and given a colour. Movements designated as red are the most uncomfortable or unsafe for cyclists, and so on:

- Red: where conditions exist that are most likely to give rise to the most common collision types, then the movement should be represented on the plan as a red arrow
- Amber: where the risk of those collision types has been reduced by design layout or traffic management interventions, then the movement should be coloured amber
- Green: where the potential for collisions has been removed entirely, then the movement should be coloured green. Green movements will exceed the standards that have typically been achieved in the UK (or Ireland in this case) to date.

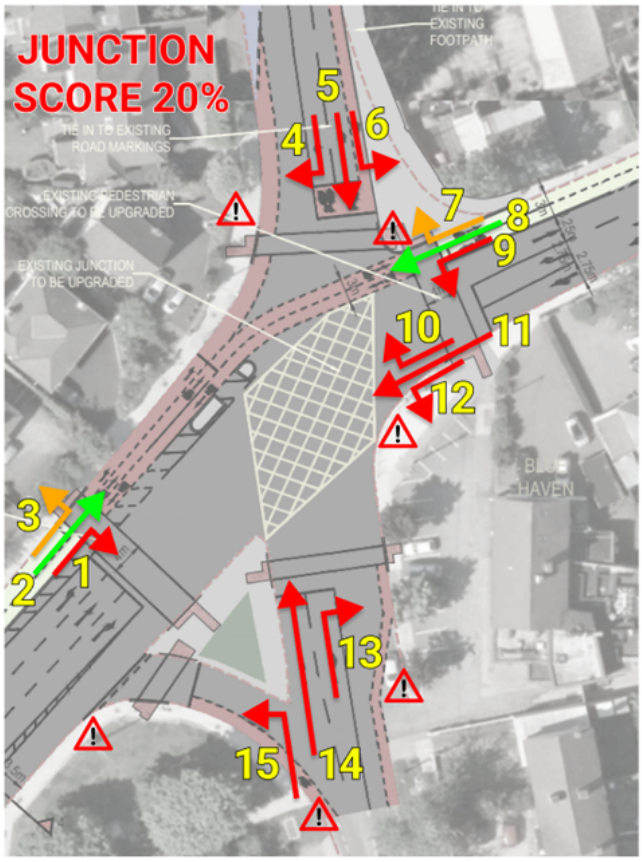
A score of 0, 1 and 2 is then given to the red, amber and green movements respectively. An overall percentage score for the junction is derived by dividing the total score for all of the possible movements with the maximum possible score, if all movements were green.

We assessed the preferred option using this tool and we believe this helps demonstrates how all cycle movements have not been adequately considered in the design. The junction score demonstrates a failure with a 20% score. We believe that, as presented at this early stage option, it would be a junction which is unsafe, uncomfortable to use and wouldn't afford adequate priority to sustainable modes of transport. We believe it is still too large and some crossing distances for walking and cycling are excessively long.

Expecting people cycling to dismount and use pedestrian crossings is unacceptable and amounts to the pedestrianisation of cycling. This type of provision does not deliver national or regional policy, the Development Plan commitments and is inconsistent with DMURS and the NCM. It will not achieve modal shift or help to meet climate

change targets. We do not believe this design adequately accounts for human behaviour. This is a major junction along the greenway and it should be safe, comfortable and afford people cycling adequate priority both on the greenway and from all approaches.

The following figure illustrates the various cycle movements assessed using the LTN 120 method, while the table summarises some of the criteria relevant to each score. Only straight ahead movements on the greenway itself appear to be up to standard and the overall junction score is 20%, which is a failure. Perhaps some movements could be argued to have an alternate score, however the junction would still not achieve the required score to demonstrate quality.



Plan on Blue Haven Junction: Assessment using LTN 120 (UK Guidance)

Blue Haven LTN120 Junction Assessment				
Turn	Rating	Criteria #1	Criteria #2	Criteria #3
1	0	Pinch points on junction entry or exit (lane width 3.2m-3.9m).		
2	2	Assumed segregated in space & time.		
3	1	Cycle lanes through junction meeting appropriate desirable minimum width requirements for the movement under consideration		
4	0	Cycle movement in potential conflict with heavy motor traffic flow.	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	
5	0	Cycle movement in potential conflict with heavy motor traffic flow.	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	Pinch points on junction entry or exit (lane width 3.2m-3.9m).
6	0	Cycle movement in potential conflict with heavy motor traffic flow.	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	Pinch points on junction entry or exit (lane width 3.2m-3.9m).
7	1	Cycle lanes through junction meeting appropriate desirable minimum width requirements for the movement under		
8	2	Assumed segregated in space & time.		
9	0	Pinch points on junction entry or exit (lane width 3.2m-3.9m).		
10	0	Cycle movement in potential conflict with heavy motor traffic flow.	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	Pinch points on junction entry or exit (lane width 3.2m-3.9m).
11	0	Cycle movement in potential conflict with heavy motor traffic flow.	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	Cycle movement crosses wide junction entry or exit: e.g. with merge or diverge taper or slip lane.
12	0	Pinch points on junction entry or exit (lane width 3.2m-3.9m).		
13	0	Cycle movement crosses wide junction entry or exit: e.g. with merge or diverge	Junctions with unsignalised left turn merge/diverge and signalised ahead	
14	0	Cycle movement crosses wide junction entry or exit: e.g. with merge or diverge	Single or multiple queuing lanes with no cycle lanes or tracks on approaches.	Junctions with unsignalised left turn merge/diverge and signalised ahead
15	0	Cycle movement crosses wide junction entry or exit: e.g. with merge or diverge	Junctions with unsignalised left turn merge/diverge and signalised ahead	
30		Total Available Score		
6		Actual Score for the junction		
20%		% Score for the junction		
FAIL				

Blue Haven Junction: Assessment criteria using LTN 120 (UK Guidance)