Dublin Cycling Campaign,

% Tailor's Hall,

Back Lane,

Dublin 8

29th June 2020

PUBLIC CONSULTATION SUBMISSION TO ABP

Shannon Homes, strategic housing development on a site at Taylors Lane and Edmondstown Road, Ballyboden, Dublin 16

Case Number: 307222

https://www.taylorslaneshd.ie/

1 Introduction

Dublin Cycling Campaign (DCyC) is a registered charity RCN 20102029 that advocates for better cycling conditions in Dublin for over 26 years. We have a vision for Dublin where large numbers of people of all ages and abilities choose to cycle because it is safe and comfortable.Our comments on this application are limited to the walking and cycling facilities as part of this development.

2 Cycling Facilities

2.1 Introduction

General

There is a need to provide safe cycling access, which should be shown clearly on the plans. It is unclear how people who cycle will circulate within the site, access parking facilities and safely utilise the designated cycling access points when entering or leaving the development. It would be beneficial if the scheme documents clearly outlined cycle travel paths, in order to demonstrate how cycling needs have been considered and met in the design.

The Mobility Management Plan (MMP) states (A1.21) that "*the on-site cycle facilities will be linked to the existing off-site cycle routes*". On-site cycle facilities are not fully linked to the off-site cycle routes.

Figure 3.15: Subject Site Linkages for Pedestrians and Cyclists

Extract from the MMP illustrating cycling off-site linkages but not how cycling to/from the development interacts/accesses them

Greater Dublin Cycling Network

The MMP also states that "*improved cycle infrastructure is proposed under the Greater Dublin Area Cycle Network Plan routes which runs in close proximity to this site*". The development proposals for the public road works in fact reduce the width available for cycle infrastructure to be provided for the Greater Dublin Cycling Network (GDCN).

National Cycling Manual

In the Traffic & Transport Assessment Report (TTA), Section 3.0 Policy Framework, the National Cycle Manual (NCM) is not referenced as a relevant design standard. While DMURS is referenced, the NCM should also be directly referenced, as the proposed development includes significant public road works, including junction redesign. These public roads are designated routes on the Greater Dublin Cycling Network (as described in TTA Section 2.6.1).

Mobility Management Plan (MMP)

TTA Section 4.2.2 states that the Mobility Management Plan (MMP), as a sustainable alternative arrangement, "*could be proposed*". It therefore does not explicitly commit to delivering the MMP.

Furthermore, TTA 4.2.7 states "*the MMP will be developed further at operation stage by the management company who will have a more active role than a management company from a traditional apartment developmen*t". Responsibility is therefore delegated to a future third party who cannot influence key aspects of the MMP, aspects which should be addressed at the planning and design stage.

With reference to the MMP Cycling Strategy (MMP 7.4), item CS 5 "*Undertake route audit and implement a review program to ensure appropriate infrastructure is provided/upgraded to meet cycling requirements for external routes to key off-site destinations*" is listed as a long term 5 year initiative. This should be an objective of the design now - not a 5 year goal in an outline document.

Table 7.3 Preliminary Schedule of MMP's Cycling Initiatives

Ref	Initiative	Status / Timescale				Lead Party	Comments
		Completed	Short (1 year)	Medium (3 years)	Long (5 Years)		
CS 1	Set up a 'buddying' scheme to address personal security issues of cycling	-	-	-	✓		
CS 2	Establish a Bike Users Group	-	-	-	✓		
CS 3	Develop a 'Cycling' Accessibility Sheet for the site	-	✓	-	-		
CS 4	Create a calendar of 'Cycling' Events and incentives	-	-	✓	-		
CS 5	Undertake route audit and implement a review program to ensure appropriate infrastructure is provided / upgraded to meet cycling requirements for external routes to key off-site destinations	-	-	-	✓		
CS 6	Provide cycle training	-	-	-	✓		
CS 7	Travel diary with incentive / awards scheme	-	-	-	✓		
CS 8	Bike service / maintenance workshops	-	-	✓	-		
CS 9	Discounted cycle purchase incentives	-	-	✓	-		
CS 10	Provision of bike sharing scheme	-	✓	-	-		

Extract from the MMP outlining the proposed Cycling Strategy

Given that "*promoting sustainable travel….is a vital element for this development*" (TTA 4.2.1), and it is listed as a sustainable transport mitigation measure (TTA Section 6.4), the MMP should be delivered for the project and CS5 should be completed immediately so measures can be incorporated into the design of the development.

Collision Data

TTA Section 2.5.4 states the "*review of the RSA data available reveals that there are no apparent trends in collisions which have occurred in the vicinity of the subject site during the most recent 11-year period (2006-2016)*". However, a cursory review of the provided collision data indicates a clear trend - 12 of the 14 collisions were in the near vicinity of junctions and signalised crossings around the development. Briefly:

- 1, 3: pedestrians crossings
- 2: roadside parking at the location of the proposed cycling access
- 4, 5: T-junction
- 6-11: roundabout
- 12, 13: signalised junction
- 14: existing car park entrance

This emphasises the need for high quality design of the public road works to ensure cyclist safety and comfort.

Figure 2.18: Collision Records - (source www.rsa.ie)

Extract from the Traffic & Transport Assessment Report showing the RSA Collision Records in the vicinity of the development

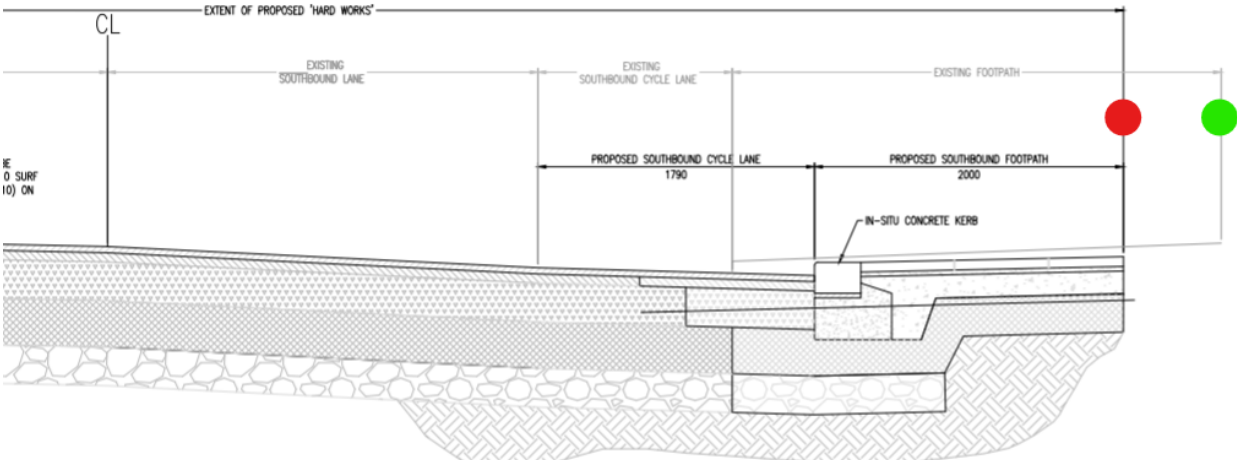
2.2 Public Road Works

Cycle Facilities Along Ballyboden/Edmondstown Road & Scholarstown Road

The kerb to kerb width of Ballyboden Rd is being widened from the roundabout to the proposed development entrance. However the following issues should be addressed;

1. The proposed cycle lane widths are too narrow and do not meet the requirements of the NCM. The existing cycle lane width on the west side is maintained, and while the eastern cycle lane is increased in width, it remains substandard.The cycle lane widths should be increased to meet at least the minimum requirements of the NCM. The general traffic lanes and the footpaths are being provided to standard, the same should apply for the cycle lanes. Both existing cycle tracks are within the red line boundary and are being reconstructed as part of the proposed works. (Refer https://www.cyclemanual.ie/manual/tools/width-calculator-tools/)

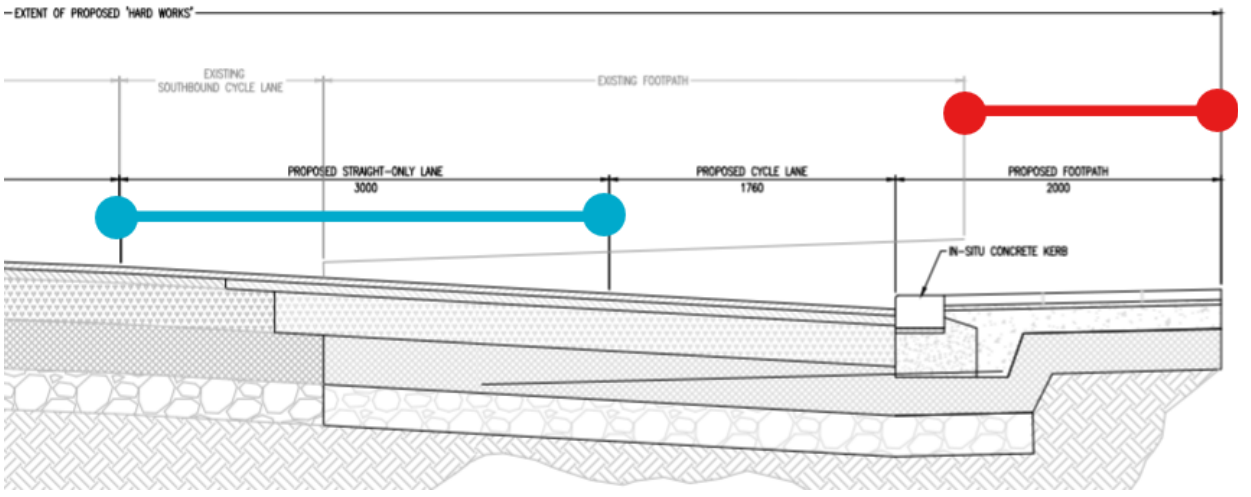
2. The overall width of the public road corridor is actually being reduced south of the roundabout - the development is taking land from the public road corridor, while the proposed cycle lane widths are below standard.



Extract from drawing Proposed Roadworks Cross-sections Sheet 1 of 2 (Section A-A) showing the reduction in overall width of the public road corridor, but with substandard cycle lane widths. Green dot: original width, Red dot: proposed width

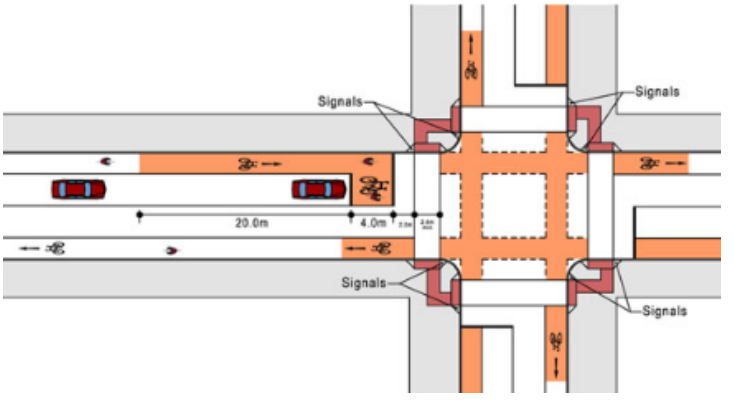
3. Along the section of road where the new general traffic turning lane is added, the corresponding space for this lane is not being provided by the development - refer to the figure below. The net result is that the public road corridor width available for improved cycle infrastructure is reduced. The existing road cross section of ~14m width would have allowed the upgrade to 2m wide cycle tracks (required as a minimum in the NCM

for this road), however the proposed development works would hinder this allocation of space to cycling.



Extract from drawing *Proposed Roadworks Cross-sections Sheet 2 of 2* (Section C-C) showing the increase in width of the public road corridor (red) contrasted against the addition of the new general lane (blue). Red width should be greater than blue. Both cycle lane widths remain sub-standard and there is actually less width available within the road corridor to increase them.

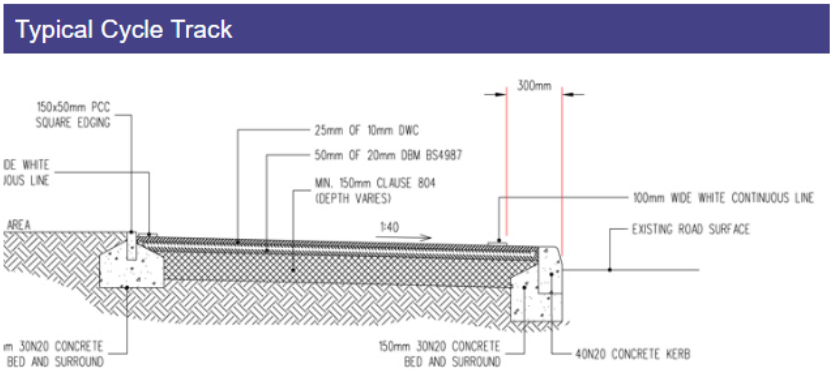
4. No Advanced Stacking Locations (ASL) are provided at the Scholarstown Rd Junction. ASLs are specified in Section 4.4.2 of the NCM. They facilitate stacking of higher volumes of straight ahead cycle movements, and also to accommodate right-turning cycle movements.



Extract fromNCM 4.4.2 showing a typical 4 arm junction with ASLs

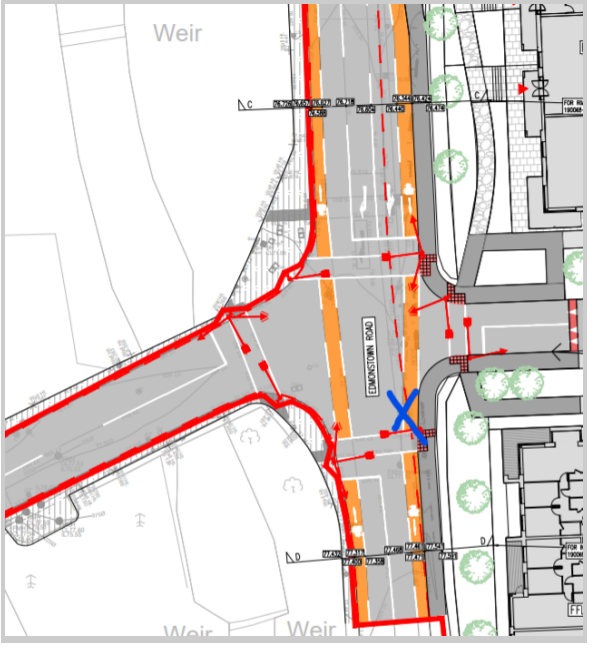
5. The cycle track cross-sections illustrated on the road cross-section drawings do not comply with the requirements of the NCM Section 6.4. The current standard of cycle track design being proposed in Dublin by the NTA is to segregate the cycle track from the general lanes using a kerb, and a typical detail is shown below. As this is a GDCN

route, the cycle tracks should be designed to a similar standard and agreed with SDCC and the NTA.



Extract from the NCM Section 6.4 showing a typical cycle track cross-section

6. The design of Scholarstown Junction results in a dangerous layout for cyclists travelling south toward Edmondstown. Motor vehicles travelling straight through the junctions will be directed toward the cycle track at the exit of the junction (marked in the figure below). The junction design is not in compliance with the principles outlined in Section 4 of the NCM. Further land could be provided by the development on the south of the junction to rectify the issue.



Point 6: Extract from drawing *Roads Layout for Cross-sections*, with the blue X marking where southbound vehicles will be directed into the cycle track due to the poor junction design

Cycle Facilities Along Taylor's Lane

We note that the map provided in the Planning Report indicates the Taylor's Lane cycle lane is segregated from the road (refer to figure below). This is incorrect, the lanes should be designated C2.

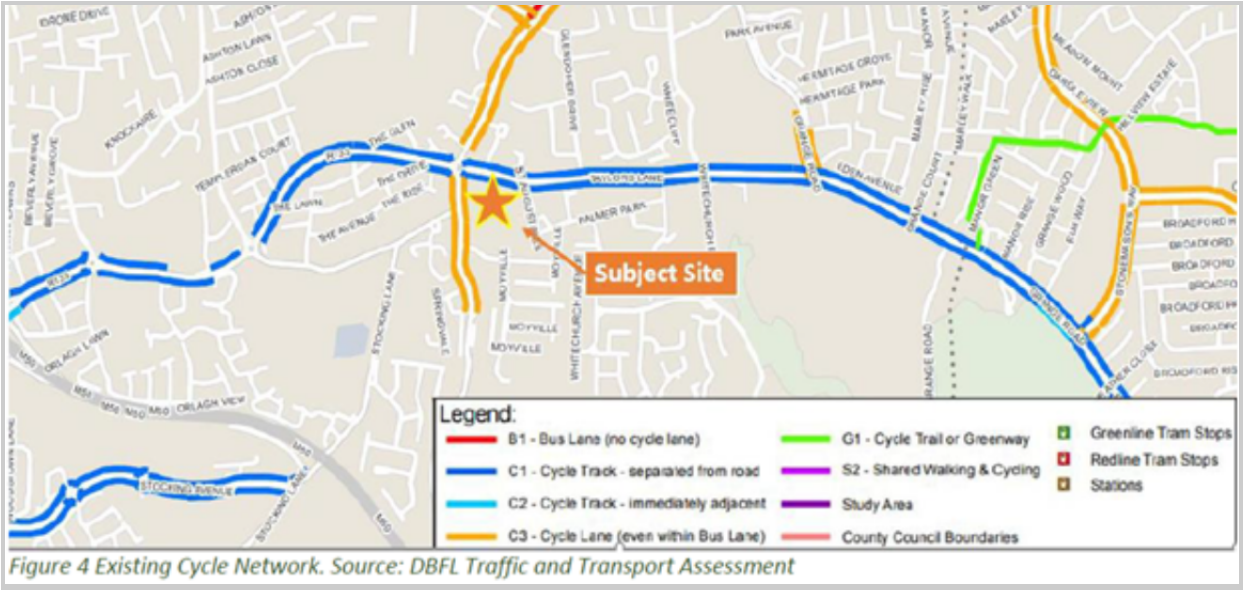


Figure 4 Existing Cycle Network. Source: DBFL Traffic and Transport Assessment

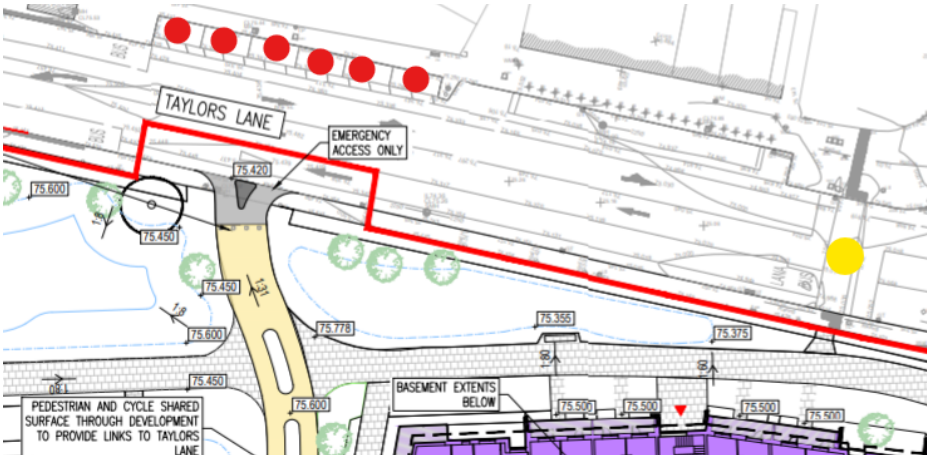
Extract from the Planning Report which incorrectly designates the Taylor's Lane cycle lane

There are proposed footways, within the development, which link to the two existing pedestrian crossings on Taylor's Lane. The two crossings are currently pedestrian only and there is no proposal to upgrade them to cater for cycling.

The Architect's plan drawing calls the entrances at the pedestrian crossings "pedestrian access", while the Engineer's drawing *Roads Layout - Ground Floor* indicates the paths linking to the entrances are "pedestrian and vehicle", with the pedestrian/cyclist path specifically designated as leading to the emergency vehicle access. This access is located between the two pedestrian crossings. There is not a safe crossing specified for cyclists to utilise the emergency vehicle access. For example, exiting the development and turning east on Taylor's Lane, people cycling will have to cross a footpath, cycle lane, bus lane, two general lanes and then contend with vehicles exiting/entering the parallel parking spaces on the north side of the road. The access is also positioned directly beside a bus stop, so anyone using the access could be obscured by a stationary double decker bus, and potentially another bus queueing behind it.

Provision should be made for people cycling to access and use the development pathways leading to the existing pedestrian crossings (with the crossing upgraded to toucan crossings) or a new controlled crossing should be installed for cyclists at the emergency vehicle access. Consideration needs to be given to relocating the bus stop away from the emergency vehicle access.

Extract from the MMP showing the location of the pedestrian crossing facilities on Taylor's Lane



Extract from drawing *Roads Layout - Ground Floor* showing the cycle entrance onto Taylor's Lane. Red dots: parallel parking, Yellow dot: existing pedestrian crossing

Given the applicant's red line boundary includes lands in the charge of South Dublin County Council (purportedly to increase capacity of the Scholarstown Road/Edmondstown Road signalised junction), it is imperative that the proposed design:

1. ensures gain and benefit for sustainable transport;
2. meets the relevant standards (i.e. DMURS and NCM); and
3. is developed in consultation with and approved by South Dublin County Council and the National Transport Authority.

Cycling within the Development

It is unclear what the design intent is for people cycling both within the development and accessing/exiting it, particularly to/from Taylors Lane. Provision should be made for people cycling to access and use the paths leading to the existing pedestrian crossings on Taylor's Lane.

The pathway shown leading to the emergency vehicle access, located between the two pedestrian crossings on Taylor's Lane is not sufficient, because as noted above, the access is unsafe.

It is unclear how people are to cycle within the site, accessing the various bike parking locations. A clear plan should be drawn up, which demonstrates how the needs of cyclists within the development and accessing/egressing it are addressed.

Comments relating to the ramped accesses to the underground bike parking are included in the following section on bike parking.

3 Construction Traffic Management Plan

An initial Preliminary Construction and Environmental Management Plan has been submitted for the development, and includes details of the Preliminary Construction Traffic Management Plan (CTMP) (refer Section 10). It states the traffic management plan details will be amended by the contractor at a later date, but does not commit to the amended traffic management plan being agreed with SDCC or NTA.

3.1 Site Construction Access Points

Item 7.3 specifies the two site entrances to be used for construction traffic. One is off Taylor's Lane, the other Edmondstown Road (note other documents in the planning submission refer to this section of road as Ballyboden Road [R115]), refer to figure below.

Figure 7-1: Construction Vehicle Entrance Plan

Extract from Preliminary Construction & Environmental Management Plan showing the proposed construction vehicle entrances

Section 10 addresses construction traffic and 10.1.1 contradicts 7.3 by stating the " site will be accessed from the existing site entrance from Edmondstown Road and the proposed entrance off Ballyboden Road" (Note it appears the existing site entrance is on Ballyboden Road and the new site entrance may be on Edmondstown Road, however this still contradicts 7.3).

3.2 Construction Traffic & Interaction with Cyclists

Item 7.3 states “specific control measures will be implemented to fully segregate construction traffic from external pedestrian traffic.” Specific control measures should also be implemented to fully segregate construction traffic from people cycling.

Item 7.4 states that “the Contractor shall provide arrangements to provide for vehicular traffic to the site with control measures where crossing the public footpath”, however it should refer to crossing the public footpath and existing cycle lanes.

Item 10.1.1 states “warning signage will be provided for pedestrians and other road users on all approaches in accordance with Chapter 8 of the Traffic Signs Manual and the Contractor’s Traffic Management Plan.”

It is our opinion that solely stating “Warning signage will be provided for pedestrians and other road users” as the approach to mitigating the risks to pedestrians and cyclists from construction traffic is unacceptable. The mitigation measures specified should include:

1. Clearly identify the actual access points and appropriate HGV travel routes, ensuring they do not adversely affect cyclists.
2. Assess turning manoeuvres into and out of the site and on the approach roads/junctions (e.g. the adjacent roundabout) to reduce the risk to people cycling.
3. Ensure pedestrian and cyclist priority/safety at site entrances through design of the site entrances Assess sightlines specifically for pedestrian and cyclist safety (e.g. the Taylor’s Lane entrance could be obscured by a bus at the bus stop).
4. Segregate people cycling from construction HGV traffic, particularly at turning locations or junctions. Specify measures to ensure pedestrian and cyclist safety, for example:
    - segregated and protected cycle lanes (e.g. bollards, orca kerbs). Protect cycle lanes in the vicinity of the site to ensure turning HGVs do not encroach onto cycle lanes e.g. the various arms of the public road roundabout.
    - provide active traffic management controls at access points (e.g. banksmen).
    - provide designated internal compound HGV holding/parking areas, to prevent the use of public road/cycle lanes for holding construction vehicles before/after deliveries.
    - Reinstate the condition, line and level of pedestrian and cycle infrastructure around the site after construction.

Figure 7-2: Proposed Construction Vehicle Entrance off Taylor's Lane

Extract from Preliminary Construction & Environmental Management Plan showing the proposed construction site entrance on Taylor's Lane, with the bus stop highlighted by the yellow dot

4 Cycle Parking

4.1 Quantity

The total number of bike parking spaces provided is 1,144. This is 129 spaces short of the recommended quantity set out in the Government's Sustainable Urban Housing: Design Standards for New Apartments (SUHDS) (Department of Housing, Planning and Local Government, 2018), with a deficit of 96 short-stay cycle spaces and 33 long-stay cycle spaces.

Dublin Cycling Campaign (DCyC) advocate for the Government's targets as set out in the SUHDS to be met as a minimum and thus advise that the deficit above is resolved. The Traffic and Transport Assessment (TA) submitted with the application justifies the reduction in spaces by way of making reference to less onerous requirements set out in the South Dublin County Development Plan 2016-2022 (SDCC, 2016). This is a local-level policy document and DCyC do not view this as a valid justification for the reduction in spaces below what is set out in more recent national policy.

It should be noted that some cycle policy documents stipulate that future expansion beyond the needs arising from a proposed new scheme should be considered. The London Cycling Design Standards (TfL, 2014) recommends that cycle parking should be provided that meets the projected future demand plus 20%, something echoed in the Dun-Laoghaire-Rathdown Standards for Cycle Parking (DLRCC, 2018). Therefore, DCyC sees the targets set out in the SUHDS as being an absolute minimum and would welcome consideration by the design team of how cycle numbers could be increased further in the future.

4.2 Type

Short-stay spaces

Proposed short-stay cycle spaces appear to be uncovered Sheffield stands. A small number of these are labelled as covered (Site Plan PL02). However, these covered stands do not appear in Figure 3.1 in the TA. Therefore, further clarification is needed as to the type of short-stay parking stands proposed. DCyC recommend that 50% of all short-term cycle parking be covered (DLRCC, 2018) and that the indicative specification of the proposed parking stands be set out in the landscape architects information.

Long-stay spaces

All long-stay spaces proposed are provided for via vertical bike lockers located in basement car-parks. Each locker holds two standard bikes. In relation to cycle lockers the following points should be noted:

- The SUHDS (2018) recommends the use of locker facilities as being the preferred approach for cycle storage
- Much other guidance such as the Dublin Cycling Campaigns Bike Parking Infrastructure Guidance (2017) and Dun Laoghaire Rathdown's Standards for Cycle Parking (2018) recommends that Sheffield stands are the preferred gold standard, base-line approach
- The Cambridge Cycle Guide 2010 states vertical lockers are not acceptable due to lifting requirements.
- The London Cycling Design Standards (TfL, 2014) state that cycle lockers can offer secure parking but that more management is needed for this approach and it lists a series of issues that should be addressed such as development of an operation and management system, long term sustainability of that system, access issues, security issues etc.,

It remains DCyCs position that secured Sheffield stands are the most reliable tried and tested form of cycle parking. However, we also recognise that there are potential benefits to individual lockers which may make them a more appealing form of storage for some users. Having reviewed the proposals for Taylors Lane, we advise that it would preferable to offer more than one approach to long-term cycle storage. Aside from the fact that provision should be made for spaces for larger cycles (DCyC, 2017), cyclists with standard bikes also have varying preferences. With 100% of internal cycle storage being provided via lockers on such a large scheme, there is a risk that should it prove unsuccessful then the problem is wide-scale. We therefore recommend that a hybrid approach is taken whereby Sheffield stands are used in combination with bike lockers and, if necessary, a smaller amount of two-tiered stands. A management plan should be devised for the cycle storage from the out-set and a minimum of 5% of spaces should be provided at ground level for larger cycles (DCyC,2017).

4.3 Location & Access

Short-stay spaces

Short stay spaces are located primarily in three locations; within courtyards adjacent to entrances, adjacent to entrances along the ‘ecological corridor’, and adjacent to the crèche along Edmondstown Road. DCyC would welcome clarification as to why short-stay parking is not located at communal entrances along the primary access routes running through the site. Consideration should be given to locating bike parking within the public park. Short-stay parking could be located adjacent to the bus stop on Taylor’s Lane.

Long-stay spaces

All long-stay cycle spaces are stored in basement level car-parks, which are a full story height below ground level. They are presumably accessed via the vehicular entrance ramps. (This should be confirmed by the applicant.) Whilst some spaces are close to the entrance ramp, others are not, with some spaces being in excess of 100 metres from the street.

This is not in line with the SUHDS (2018) which states that cycle storage facilities should be directly accessible from the street and should avoid unnecessarily long access routes. With respect to the concept of ‘inclusive cycling’, step/ramp-free access is key for ensuring that disabled cyclist’s needs can be met (Mayor of London, 2017). DCyC advises that alternative locations for cycle storage should be examined by the design team in order to accommodate easily accessible cycle storage at ground level.

With respect to the strategy proposed whereby all internal cycle storage is at basement level and accessed by ramps, best practice is that separate ramps are provided for cycles which lead directly to cycle stores (Toronto, 2008). DCyC recommends that the applicant examine whether this strategy is feasible. Failing this, the ramps leading to the basements should have separate lanes for cycles at least 1.75m wide (DLRCC, 2018). The gradient of the ramps appear to exceed the recommended maximum for cycles of 7% (DLRCC, 2018) , and look to be roughly 11.5%. This is too steep for cyclists and should be revised so that a maximum of 7% is achieved.

In terms of accessing the basement, an alternative access arrangement could be considered whereby cycles enter into communal lobbies from the street alongside pedestrians, and then enter into the basement via the lift. Cycle stores would be located directly adjacent to lift at basement level. This arrangement would mean cyclists could avoid having to navigate their way through a car-park. It would also increase social interaction in communal lobbies. It should be clarified by the applicant whether lifts and communal lobbies have been designed so that cyclists can travel with bikes in lifts or not.

Access routes from the base of the entrance ramps to the cycle lockers should be reviewed to ascertain whether some routes can be shortened. The location and linear dispersion of some of

the cycle parking should be reviewed in effort to locate as much of the parking as close to cores as possible. DLRCC (2018) states that long stay parking should be situated within 50m of the destination. In several locations, the width of the access route from the primary car-park access route to the bike lockers does not appear to be sufficiently wide to fit a cyclist with a bike.

The security and surveillance strategy for the bike lockers should be clarified. In several locations, long runs of small clusters of lockers are located between lengthy runs of car parking spaces and retaining walls. This may reduce passive surveillance and potentially causes difficulties with respect to wayfinding.

5 Conclusion

We welcome this development with some changes in support of better cycling provision. In our opinion this development needs to address a number of outstanding traffic hazard issues for people walking and cycling. These issues, summarised by subsection, are as follows:

<u>Section 2 Cycling Facilities</u>

Section 2.1 General

- The MMP should be delivered for the project and initiative CS5 should be completed immediately so measures can be incorporated into the design of the development.
- scheme documents clearly outlined cycle travel paths, in order to demonstrate how people cycling may circulate within the site, as well as access/enter from the public roads from all directions.
- Public road works and cycling infrastructure should be designed in accordance with the National Cycling Manual and DMURS.

Section 2.2 Public Road Works

- The cycle tracks and junctions on the public road should be designed in accordance with the NCM.The design should be developed in consultation with the NTA and SDCC and be subject to their approval.
- The proposed public road works should be redesigned to be in accordance with DMURS, the NCM and NTA design standards in order to rectify the following:
    - Cycle track widths are substandard
    - No ASLs are provided at Scholarstown Junction
    - The cycle tracks are not raised and segregated from the general traffic lanes by kerb
    - Scholarstown Junction is unsafe for people travelling southbound onto Edmondstown Rd.
- Maintain the available road space for upgrading cycling infrastructure for the GDCN by:
    - Not reducing the existing width of the public road corridor south of the roundabout
    - The development should provide all the necessary space for the new turning lane and appropriate cycle lane widths for the GDCN.
- Taylor's Lane cycling/emergency access is unsafe and must be reassessed. There is no crossing provided on the public road and the access is adjacent to a bus stop. No crossing points to cater to cycling are provided on Taylor's Lane.
- It is unclear how people are to cycle within the site, accessing the various bike parking locations. A clear plan should be drawn up, which demonstrates how the needs of cyclists within the development and accessing/egressing it are addressed.

Section 3 Construction Traffic Management

- The consideration given to people cycling and the lack of mitigation measures in the preliminary CEMP is deficient. The measures outlined in Section 3 of this document

should be followed when developing the CEMP and construction traffic management plan, both of which should be to the approval of SDCC.

Section 4 Bike Parking

- The total number of bike parking spaces provided should be at least the recommended quantity set out in the Government's Sustainable Urban Housing: Design Standards for New Apartments (SUHDS).
- Short stay bike parking:
    - DCyC recommend that 50% of all short-term cycle parking be covered and that the indicative specification of the proposed parking stands be set out.
    - DCyC would welcome clarification as to why short-stay parking is not located at communal entrances along the primary access routes running through the site. Consideration should be given to locating bike parking within the public park. Short-stay parking could be located adjacent to the bus stop on Taylor's Lane.
- Long stay bike parking:
    - All long-stay spaces proposed are provided for via vertical bike lockers located in basement car-parks. It would be preferable to offer more than one approach to long-term cycle storage.
    - Cycle storage facilities should be directly accessible from the street and should avoid unnecessarily long access routes.
    - Where all internal cycle storage is at basement level and accessed by ramps, best practice is that separate ramps are provided for cycles which lead directly to cycle stores. DCyC recommends that the applicant examine whether this strategy is feasible. Failing this, the ramps leading to the basements should have separate lanes for cycles at least 1.75m wide. The gradient of the ramps should not exceed the recommended maximum for cycles of 7%. An alternative access arrangement could be considered whereby cycles enter into communal lobbies from the street alongside pedestrians, and then enter into the basement via the lift.
    - Access routes from the base of the entrance ramps to the cycle lockers should be reviewed to ascertain whether some routes can be shortened.
    - The location and linear dispersion of some of the cycle parking should be reviewed in effort to locate as much of the parking as close to cores as possible.
    - The widths of the access routes from the primary car-park access route to the bike lockers should be sufficiently wide to fit a cyclist with a bike.
    - The security and surveillance strategy for the bike lockers should be clarified. In several locations, long runs of small clusters of lockers are located between lengthy runs of car parking spaces and retaining walls. This may reduce passive surveillance and potentially causes difficulties with respect to wayfinding.
- Provision should be made for spaces for larger cycles (e.g. cargo bikes and trikes) at ground level and basement level.
- With respect to the concept of 'inclusive cycling', step/ramp-free access is key for ensuring that disabled cyclist's needs can be met. DCyC advises that alternative

locations for cycle storage should be examined by the design team in order to accommodate easily accessible cycle storage at ground level.

Regards,

John Shanahan

Dublin Cycling Campaign,
c/o Tailor's Hall,
Back Lane,
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Registered Charity Number (RCN): 20102029

Encl.: €20 fee, list of abbreviations

ABBREVIATIONS

ASL	Advanced Stacking Locations
CEMP	Construction and Environmental Management Plan
CTMP	Construction Traffic Management Plan
DLRCC	Dun Laoghaire Rathdown County Council
DMURS	Design Manual for Urban Roads and Streets
GDCN	Greater Dublin Cycling Network
MMP	Mobility Management Plan
NCM	National Cycle Manual
NTA	National Transport Authority
SDCC	South Dublin County Council
SUHDS	Sustainable Urban Housing: Design Standards for New Apartments
TfL	Transport for London
TMP	Traffic Management Plan
TTA	Traffic & Transport Assessment Report