Technical Note



Date:

01/09/2021

Subject:

Fonthill Road Corridor - Design Amendments Pre/Post Planning

Introduction

In September 2019, Liffey Valley Management Ltd. Submitted a planning application (Ref: SD19A/0320) for a new bus interchange facility at the Liffey Valley Shopping Centre. In addition to the bus interchange, the application included enhancements to the walking, cycling and bus infrastructure on the local road network; with a view to improving sustainable access to the centre and wider Greater Dublin Area. SDCC provided a notification to grant planning permission in December 2019 and a final grant of planning permission was received from ABP on 30th September 2020.

Following receipt of the planning permission, a detail design was prepared for the scheme in close coordination with the National Transport Authority (NTA) and South Dublin County Council. Through the detail design process, a number of minor changes were made to the scheme which require planning permission in order to adhere to the NTA's Preliminary Design Guidance Booklet for Bus Connects Core Bus Corridors and the outcome of the Road Safety Audit.

The following technical note outlines the main changes to the proposed Fonthill Road corridor between the originally approved scheme and the final detail design.

In order to inform the below list of amendments, the original approved scheme drawing PL001-A has been included within **Appendix A** to give overall context to the scheme, in addition to the specific corresponding detailed design drawings showing the locations of the highlighted road amendments with the specific locations of the amendments denoted on the drawings for clarity.

1. Addition of Toucan Crossing

- 1.1. As one of the key objectives of the BusConnects guidance there is an emphasis on delivering safe cycling and pedestrian facilities along the corridor. As such, the proposed corridor from the outset included a number of toucan crossing points located at strategic areas of higher pedestrian/cyclist activity to cater for the envisaged movements to and from the Liffey Valley development and beyond to the wider road network.
- 1.2. The Stage 2 road safety audit undertaken for the design highlighted the issue of the transition between the existing bi-directional cycle provision at the southern tie in of the scheme and the proposed unidirectional cycle provision on both sides of the road along the corridor.



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Figure 1. Planning Layout – No Crossing Point

Figure 2. Proposed Layout – Additional Crossing Point

1.3. In order to overcome this conflict, the existing bi-directional cycle track was extended approximately 20m into the proposed scheme to tie in with a proposed new proposed toucan crossing beyond the north western exit from the existing roundabout. The rationale for inclusion of this design change was that this will remove ambiguity between the old/new cycle facilities and provide a needed connection from the single cycle track on the east side of Bóthar na Life to the existing bi-directional arrangement on the south west side.

2. Change from 'Staggered' to 'Straight across' Toucan Crossings

2.1. During the detailed design phase, the NTA instructed the design team to include 'straight across' pedestrian crossing points in line with the BusConnects guidance document paragraph 5.7, as opposed to 'staggered' pedestrian crossing points which were originally shown in the planning layouts.

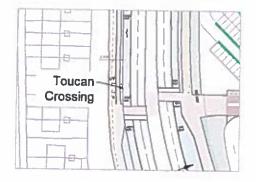




Figure 3. Planning Layout – Staggered Crossing

Figure 4. Proposed Layout - 'Straight Across' Crossing

2.2. Following discussions with the NTA and SDCC on the matter it was recognised that this type of arrangement is commonly implemented nationwide, and given that there are examples of 'straight across' type crossings currently in place in and around Dublin, agreement was reached on the inclusion of this type of crossing throughout the corridor.

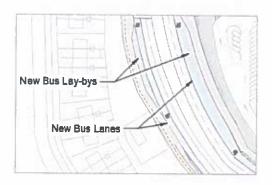
3. <u>Inclusion of Bus Islands</u>

3.1. The initial layout provided for inset bus layby's at bus stops along the perimeter road. However early on in the design process the NTA confirmed that only in-line bus stops (i.e. no inset bay) are required at the south west section of the corridor as per the BusConnects guidance document paragraph 11.1 and Figure 5 extract.



Figure 5. CBC Island Bus Stop Arrangement





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Figure 6. Planning Layout - Inset Layby's (South)

Figure 7. Proposed Layout – In Line Bus Islands (South)

- 3.2. It should be noted that 2 no. new bus shelters are being proposed in this location (1 no. on each side of the road) as denoted on Figure 7 above. Each shelter shall include 1 no. mounted RTPI unit and 1 no. advertisement box and be as per JCDecaux drawings TEL-B653-SK-013A 'Reliance Shelter 3 Bay Reliance Mark' included for information as part of the application drawing pack.
- 3.3. This type of 'in line' bus stop arrangement has also been replicated to the north of the shopping centre adjacent to the existing N4 footbridge as per Figures 8 and 9 below. The NTA however confirmed that this area is only intended as a 'set down' area for users exiting the buses and therefore will not require bus waiting areas/shelters.

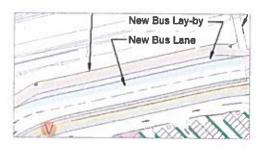


Figure 8. Planning Layout – Inset Layby (North)

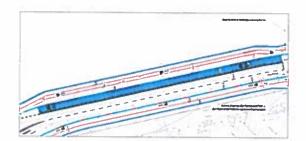


Figure 9. Proposed Layout – In Line Bus Island (South)

4. Removal of 'Left Slip' Lane

- 4.1. The original planning layout assumed retaining the existing segregated left slip lane on the southern arm of the proposed signal junction for vehicles wishing to travel westbound along Bóthar na Life. Following new design criteria set out within the BusConnects guidance document, the NTA requested that Systra undertake a review of bus priority at the signal junction in addition to removing the left slip lane.
- 4.2. Following a process of re-design of the southern arm of the junction in addition to further modelling work being undertaken to assess the optimum layout from a traffic perspective, the layout in its current format was accepted by the NTA and SDCC.

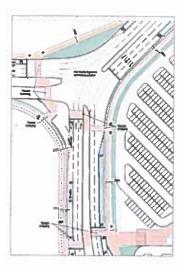


Figure 10. Planning Layout – Existing Left Slip

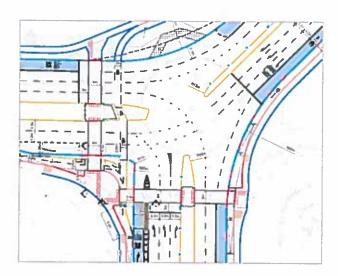


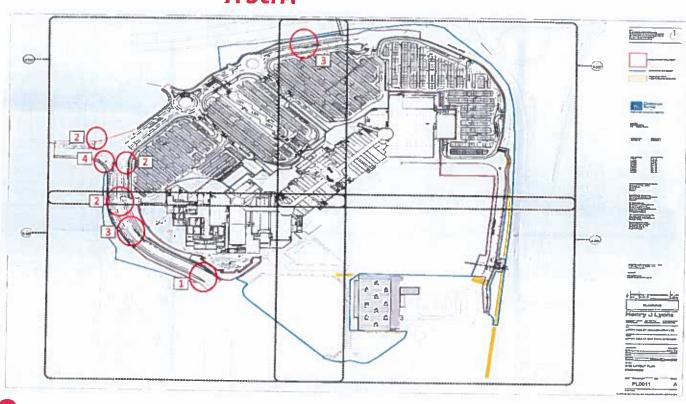
Figure 11. Proposed Layout – Removal of Left Slip with Additional Bus Priority



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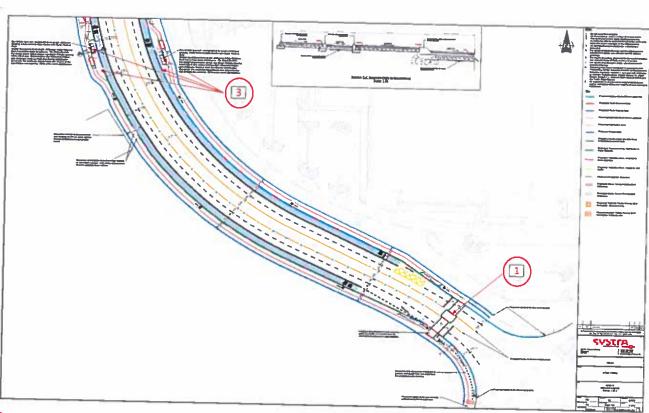
Appendix A - Drawings

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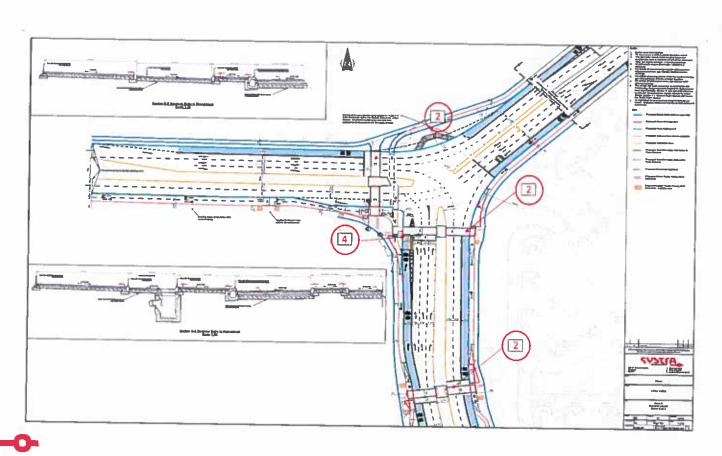


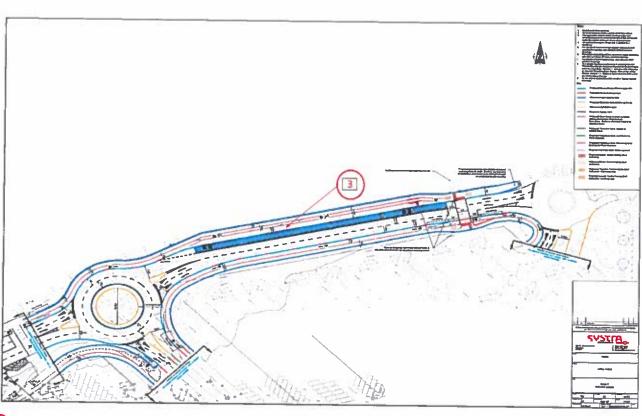
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