

Technical note

Project:	Stillorgan Road UCD Cycle Route	To:	Dún Laoghaire Rathdown Co Co
Subject:	Report to Local Area Committee	From:	Darragh Malone, Project Manager, Atkins Consulting Engineers
Date:	22/03/2018	cc:	

Stillorgan Road Cycle Improvements (UCD Accessibility) Scheme

Introduction

This note is intended to provide a summary to the elected members of the Dún Laoghaire and Dundrum Local Area Committees (LAC's). This note is supplemented by preliminary scheme drawings outlining the design proposals developed to date. A presentation to elected members will also follow at the next LAC meetings scheduled for 26th March 2018 and 4th April 2018 respectively.

Background / Need for the Scheme

UCD Estates has developed a proposal to formalise the current informal access routes to the university campus. Such informal routes have evolved in the vicinity of the UCD Nova Building and the existing footbridge over the Stillorgan Dual Carriageway at Seafield / Fosterbrook. Pedestrian and cyclist behaviour has been observed and users tend to cross the dual carriageway on foot in an uncontrolled / unsafe manner, giving rise to safety concerns. This behaviour can be linked to the current pedestrian / cyclist desire lines and inadequacy of existing infrastructure to cater for these.

Similarly, the bus stops located on the Stillorgan Road in the vicinity of Fosters Avenue junction are not adequately linked to nearby catchment areas and hence pedestrian desire lines are not catered for. As observed on site, this is leading to pedestrians attempting to cross the dual carriageway where it is unsafe to do so.

This scheme seeks to address these issues and provide appropriate facilities to safely accommodate pedestrian and cyclist activity in the area and pedestrian / cyclist accessibility to the UCD campus.

Scheme Objectives

The scheme objectives are therefore identified as follows:

- To improve accessibility to / from the UCD Campus for pedestrian and cycle traffic, in particular to address the established desire lines between UCD and the Stillorgan Road (south).
- To provide an alternative entrance to UCD at the Nova Building and link to UCD's planned internal cycle network.
- To provide facilities for pedestrians and cyclists to cross Stillorgan Road at the Fosters Avenue junction to address established pedestrian and cyclist desire lines.
- To enhance cycle and pedestrian connectivity between the proposed UCD entrance and the proposed crossing facilities at Fosters Avenue junction, to provide a target Level of Service 'A' (per National Cycle Manual).

There is a known safety concern at Fosters Avenue with regard to the inbound cycle track where cyclists are in direct conflict with general traffic turning left onto Fosters Avenue. An additional scheme objective has therefore been added as follows:

- To enhance the safety for users on the inbound cycle track at Stillorgan Road / Fosters Avenue junction.

Technical note

Challenges

The primary project challenges can be summarised as follows:

- Impacts on motorised traffic – the introduction of a signalised / controlled crossing of the Stillorgan Road will have a negative impact on traffic. The design solution will seek to minimise this impact as far as possible.
- Impacts on public transport – the scheme will require some modification to existing public transport facilities, e.g. relocation of bus stops. Such items are sensitive to change. Hence the impact of any modifications needs to be understood in full and potential issues addressed as part of the overall design solution.
- Impacts on utilities – extensive existing underground utilities are present in the area, particularly high voltage electrical transmission infrastructure. The interface with such infrastructure needs to be effectively managed so that costly service diversions can be avoided as far as possible. Such diversion requirements can have serious implications on project budgets and timeframes.
- Impacts on the environment – considering the current site character, it is inevitable that some existing screen planting will be lost to accommodate the proposed new entrance. Potential widening of the existing footpaths / cycle tracks may also lead to similar impacts. The extent of these impacts needs to be understood and carefully managed, with mitigation measures included in the overall design solution in terms of ecology, landscape / visual and archaeological impacts.
- Potential for land acquisition – widening of footpaths, cycle tracks and any modifications to Fosters Avenue junction may result in a requirement to acquire privately owned lands. This requirement needs to be fully assessed and the optimum solution identified with the need for land acquisition minimised or eliminated as far as possible.
- Constructability – the ability to physically construct the scheme in a safe manner while at the same time maintaining traffic lanes and pedestrian / cycle routes will be a major concern going forward. Ideally, the identified solution would avoid traffic lane closures, temporary bus stop relocations or closure of footpaths / cycle tracks along Stillorgan Road. Given that the Stillorgan Road is a major arterial traffic route for Dublin City, and considering the high volume of other traffic (e.g. QBC corridor, cycle route), there are obvious benefits in keeping the impact of construction activities to a minimum. [Note 182,737 cycle trips were recorded along the inbound cycle track at this location in 2016 (Source: DLRCC Cycle Counter Statistics 2016)]

Preliminary Design Solution

The development of the proposed entrance is being progressed by UCD Estates Department. It is intended that all works within lands registered to UCD (denoted by the red dashed line on the preliminary design drawings provided) will be subject to a separate planning application to be submitted by UCD. Representatives of DLRCC Transportation Department are collaborating with UCD and the NTA to ensure compatibility of designs and consistency with the subsequent application for planning permission.

The design solution includes for an enhanced cycle track link between the proposed UCD entrance and Fosters Avenue junction. This link will target a Level of Service 'A' as defined in the National Cycle Manual. Essentially, the design seeks to maximise usage of the existing land within DLRCC ownership, converting an existing grassed verge area to accommodate an upgraded two-way cycle track. Some modification will be required to existing utilities, but it is expected this would be limited to relocation of street lighting and road signage only, subject to completion of advance ground investigation works at a later date.

At Fosters Avenue, it is proposed to incorporate a new toucan crossing into the traffic signalling sequence. The crossing will be located on the southern arm of the junction, this being the optimal solution to minimise the impact on peak traffic queues. The existing signalised crossing on Fosters Avenue will be upgraded to a toucan crossing to accommodate both pedestrian and cyclists (currently only caters for pedestrians). This upgrade will also include removal of the traffic island on Fosters Avenue, thereby removing the current two-

Technical note

stage crossing in favour of a single-stage arrangement. It is envisaged all traffic lanes will remain per the current layout/configuration, i.e. no loss in junction queuing capacity. It is noted that this layout will also address the current desire line deficiency between the bus stops at this location and their intended catchment areas.

Finally, to address the current safety concerns for inbound cyclists on approach to the Fosters Avenue junction (i.e. conflict with left turning traffic), it is proposed to modify the layout of the existing cycle track so that cycle traffic is located alongside vehicular traffic sooner (and for longer) in advance of the left turn. This means that approaching motorists will have greater visibility to inbound cyclists and can take cognisance of their presence accordingly. The cycle track will also be placed 'on road' and coloured red to increase driver awareness of the potential presence of cyclists in the area. To accommodate this, the existing inbound bus stop will require a minor relocation by approximately 10 -15m to the south. This in turn will require minor modifications to the existing inbound cycle track in the immediate vicinity of the bus stop. There will also be a knock-on effect for the junction at The Rise / St Thomas Road. However, the modifications required at this location will likely be limited to removal of the left turn splitter island and provision of enhanced cycle facilities to allow integration with the Stillorgan Road cycle tracks. The modifications in this case will also seek to retain the left turn traffic lane.

Preliminary Cost Estimate

It is very difficult to provide accurate project costs at this early stage. However, based on outline information available, an initial preliminary budget of circa €700,000.00 to €900,000.00 (ex VAT) is estimated at this stage. Note - actual outturn costs may be higher or lower than estimated.

Updated / refined cost estimates will be developed as the project progresses through the detailed design and procurement phases of the project.

Next Steps

Following presentations to the Local Area Committees, the project will be progressed per the following indicative programme dates:

- April 2018 – Public Consultation (non-statutory). The scheme proposals will be placed on public display in County Hall and Dundrum Area Office for the month of April and submissions will be invited from the general public. A Public Consultation Report will be compiled with recommendations for amendments to the scheme, where appropriate.
- May / June 2018 – Return to LAC meetings to summarise the public consultation process and any subsequent amendments to the scheme.
- June / July 2018 – Commence Detailed Design and Procurement Phases of the project.
- August / September 2018 – Commence Construction Phase.
- December 2018 – Project Completion (pre Operation Open City).