RYCO
CONSULTING ENGINEERS

QUALITY AUDIT REPORT

CLIENT: DUN LAOGHAIRE RATHDOWN COUNTY COUNCIL

PROJECT TITLE: DUNDRUM LIVING STREETS

REV 0

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1.0 Introduction & Description of the Scheme

This report is a Quality Audit of the Dundrum Living Streets scheme with works carried out on Sandyford Road and Main Street Dundrum.

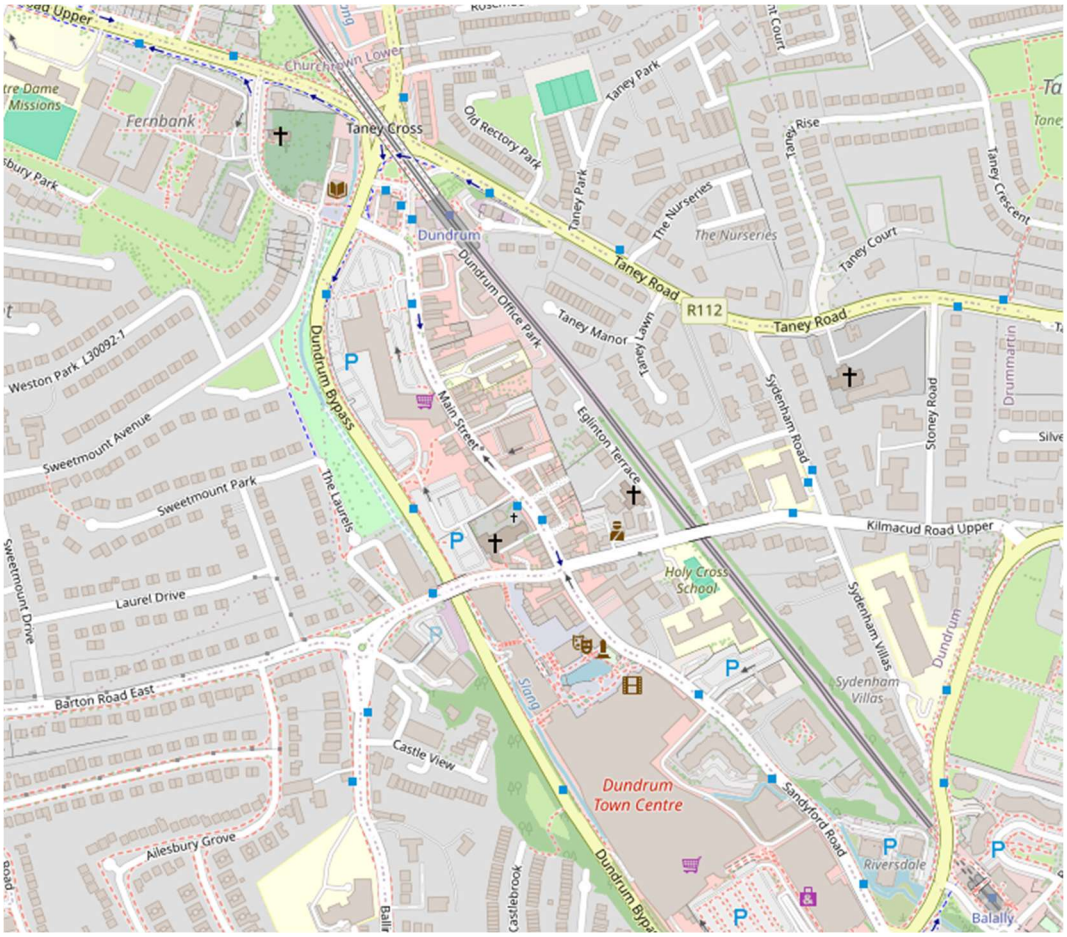

Figure 1 Site Location

2.0 Quality Audit Team

The Quality Audit Team members were as follows:

Position	Name	TII Auditor Number
Team Leader	John Ryan BEng CEng MSc BE FConsEI	JR*101
Team Member	Michael Condon BEng CEng MIEI	MC877434

3.0 Quality Audit Information

The audit comprised an examination of the drawings supplied by DBFL Consulting Engineers, and a daylight site visit undertaken on 31st October 2026 where the area was driven and walked in all directions. During the visits there was no rain, and the surface was dry. Traffic was light, pedestrian and cyclist numbers were low.

4.0 Information provided to the Audit Team

The following documents were provided to the audit team as part of the audit.

Document Number	Document Title	Revision
250116-X-0100-Z00-DTM-DR-DBFL-CE-1201	SANDYFORD ROAD - LAYOUT 1	0
250116-X-0100-Z00-DTM-DR-DBFL-CE-1202	SANDYFORD ROAD - LAYOUT 2	0
250116-X-0100-Z00-DTM-DR-DBFL-CE-1203	MAIN STREET - LAYOUT 1	0
26DR02-DR-0201	Landscape Arrangement Plan- Sheet 01	-
26DR02-DR-0202	Landscape Arrangement Plan- Sheet 02	-
26DR02-DR-0203	Landscape Arrangement Plan- Sheet 03	-
26DR02-DR-0204	Landscape Arrangement Plan- Sheet 04	-

5.0 Previous Road Safety Audits

Details of previous Road Safety Audits have not been provided to the Audit Team as part of this audit process.

6.0 Collision History

The Road Safety Authority's collision mapping shows any reported collisions in the vicinity of the site during the period 2016 to 2024. A significant number of collisions resulting in serious and minor injuries have been recorded along this section of road, with the majority involving vulnerable road users, particularly cyclists.

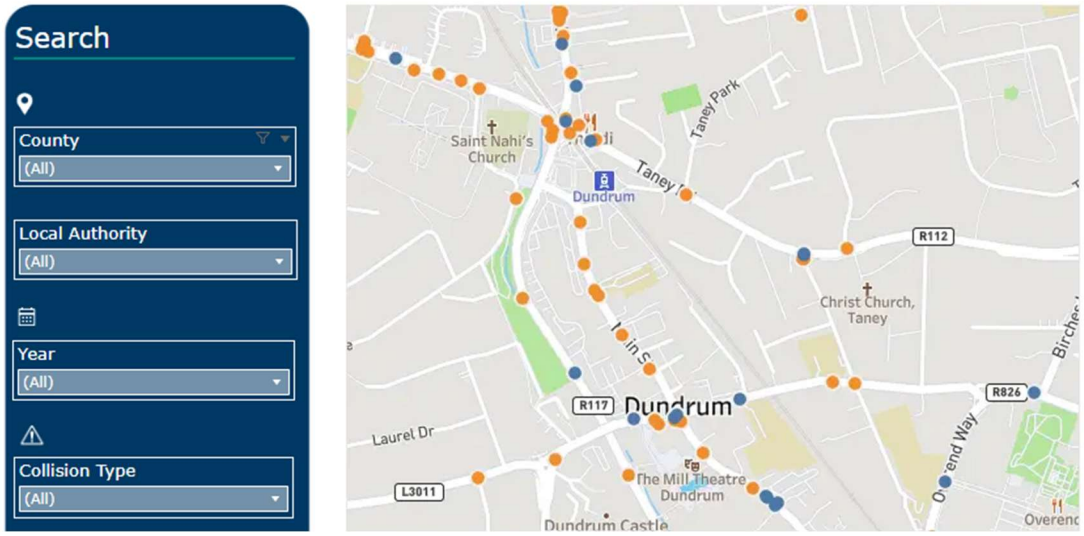

Figure 2 Extract from RSA Road Safety Collision Mapping

7.0 Terms of Reference

The audit has been carried out following the guidance issued in TII documents GE-STY-01024 Road Safety Audit and GE-STY-1027 Road Safety Audit Guidance, DMURS and DMURS Advice Note 4.

The Quality Audit consists of the following audit sections:

- Walking, Cycling and Access Audit – focusing on accessibility requirements of vulnerable road users (and in particular, those with visual or mobility impairments), and on the movement and place function of pedestrians and cyclists.
- Road Safety Audit – focussing on issues relating directly to road safety.

8.0 Issues relevant to more than one audit type

The following issues have been identified in the Road Safety Audit and are also relevant to other elements of the Quality Audit. For clarity and brevity, these issues are addressed within the Road Safety Audit only and are not repeated in the other audit sections unless additional commentary is considered to be of value.

Problem Reference	Road Safety Audit	Access Audit	Walking Audit	Cycling Audit	DMURS Audit
11.1	✓	✓	✓	✓	✓
11.2	✓	✓	✓	✓	✓
11.3	✓				✓
11.4	✓	✓	✓		✓
11.5	✓	✓		✓	✓
11.6	✓				✓
11.7	✓	✓	✓		✓

9.0 Walking, Cycling and Access Audit

Best Practice Guidance

This Quality Audit has been carried out in accordance with general best practice guidance set out within the following documents:

- The Disability Act 2005
- Building Regulations 2022, Technical Guidance Document M – Access for People with Disabilities (Department of the Environment, Heritage and Local Government)
- Buildings for Everyone Access and use for all citizens (National Disability Authority)

- Access Auditing of the Built Environment Guidelines (National Disability Authority)
- Traffic Management Guidelines (Irish Government Publications 2003)
- Guidance for the use of Tactile Paving Surfaces: UK Department for Transport
- Design Manual for Urban Roads and Streets (Department of Transport)
- Cycle Design Manual (National Transport authority)

Objectives of the Walking, Cycling and Access Audit

The objectives of this Walking, Cycling and Access Audit are as follows:

- To ensure a high level of accessibility to the development site for all vulnerable road users and, for visually and mobility impaired users.
- To ensure the current and future access needs within the scheme are recognised and developed.
- To ensure that advantage is afforded to walkers and cyclists at every opportunity.

General Accessibility Recommendations

Following delivery of the Walking, Cycling and Accessibility Audit, the design team should consider all issues related herein for inclusion into the final design. It is less costly to make the changes now, pre-construction, than later after the scheme has been commissioned.

The client should consider setting up a dedicated access team for the project, responsible for the long-term management of universal access throughout the development.

This process should be facilitated by an Access Plan, which is a strategy for improving accessibility developed from the Audit and can ensure that access is an on-going concern and help identify opportunities for change.

The Access Plan should incorporate planned maintenance programmes, a schedule of works that has been devised to take into account the priority information in the Audit, processes to allow regular updating of the Audit information and links to maintenance and management procedures.

It should also set out procedures to ensure that when opportunities for access improvement arise, they are recognised.

Specific Walking, Cycling and Accessibility Recommendations

A summary of the design features, together with recommended actions to be taken during the relevant stage of the design or operation of the scheme have been detailed in the following Table.

ID	Location	Feature	Action	When
Recommendations to Encourage Walking				
W1	Scheme extents	Pedestrian Provision / Universal Access	The issues identified in the Road Safety Audit Report should be addressed to encourage walking throughout the scheme.	Design Stage
Recommendations to Encourage Cycling				
C1	Church street	Cycle route	The issues identified in the Road Safety Audit Report should be addressed to encourage cycling throughout the scheme.	Design Stage
C2	Scheme extents	Cycle Crossings	More cycle parking spaces should be provided within the scheme to promote cycling.	Design stage
Recommendations to Provide for Universal Access & Accessibility				
A1	Scheme extents	Universal Access & Accessibility	The issues identified in the Road Safety Audit Report should be addressed to encourage cycling throughout the scheme.	Design Stage
A2	Disabled parking bays	Universal Access & Accessibility	Drop kerbs or similar should be provided to ensure mobility impaired users can access the footpath from the disabled parking bays.	Design Stage
A3	Tactile Paving	Universal Access & Accessibility	Tactile paving at controlled crossing should be extended to the rear of the footpath to ensure it is identifiable by all users. 	Design Stage
Recommendations on Materials				
M1	Scheme extents	Cyclist provision	Ensure cycle friendly paving and gullies are selected.	Design Stage
M2	Scheme extents	All road users	Materials and colour of materials should be selected to ensure sufficient contrast between	Design Stage

			cycle tracks, shared surfaces, pedestrian only and vehicle interface areas.	
M3	Scheme extents	Paving Design	It should be ensured that suitable bedding is provided for locations where paving will be trafficked to ensure it remains in good condition and does not develop rutting.	
M4	Ch365 to 395	Paving in cycle lane	Particular care should be given to the design of paving within the cycle lane which create a risk of loss of control for cyclists.	

10.0 DMURS Street Audit

Best Practice Guidance

This Street Audit has been carried out in accordance with general best practice guidance set out within the following documents:

- Design Manual for Urban Roads and Streets (DMURS)
- DMURS Advice Note 4
- DMURS Street Design Audit Template

Objectives of the DMURS Street Audit

The objective of this DMURS Street Audit is as follows:

- To ensure a high level of connectivity to and through the development site for all users.
- To ensure a safe and comfortable environment is created for pedestrians and cyclists.
- To ensure that appropriate layout and materials are chosen to create a self-regulating streetscape with an appropriate level of visual quality for the proposed development.

Items in orange require action.

Connectivity		
Key Issues	**Key DMURS Reference**	**Auditor Comment**
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network	This project adheres to DMURS guidance on integrated street networks.
	3.2.1 – Movement Function	This project caters for greater numbers of cyclists and pedestrians to move through the area. Refer to the road safety audit and cycle, walking and accessibility recommendations for commentary on improvements to movement function.
	3.3.1 – Street layouts	Appropriate to the location.
	3.3.4 - Wayfinding	Appropriate to the location.
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts	Multiple points of access are provided for sustainable transport modes. Refer to road safety audit for commentary on cycle access.
	3.3.3 – Retrofitting	The scheme is well connected to existing facilities at tie ins.
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts	Refer to road safety audit for commentary on cycle access. Particular care should be given to the design of paving within the cycle lane from ch365 to ch395 which create a risk of loss of control for cyclists.
	3.3.2 – Block Sizes	N/A
	3.4.1 – Vehicle Permeability	Refer to road safety audit for commentary on vehicle access issues.
Through movements by private vehicles on local streets are	3.2.1 – Movement Function	Refer to road safety audit for commentary on vehicle access issues.
	3.2.2 – Place Context	Appropriate to this area.

discouraged by an appropriate level of traffic calming measures.	3.4.1 – Vehicle Permeability	Refer to road safety audit for commentary on vehicle access issues.

Self-Regulating Street Environment		
Key Issues	**Key DMURS Reference**	**Auditor Comment**
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function.	Appropriate traffic calming measures are in place to ensure low speeds on the route.
	3.2.3 – Place Context.	As above
	4.1.1 – A Balanced Approach to Speed	As above
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	4.2.1 – Building Height and Street Width	Appropriately selected street widths for this setting.
	4.2.2 – Street Trees	Street trees are existing and proposed throughout the site to calm traffic and provide a softer environment.
	4.2.3 – Active Street Edges	Existing.
	4.2.4 – Signage and Line Marking	Further detail at detail design stage on proposed signage should be provided.
	4.2.7 – Planting	An appropriate level and type of planting has been proposed.
	4.4.2 – Carriageway Surfaces	Limited detail has been provided on pavement selection however it appears to be asphalt, paving and concrete. Care should be taken to ensure paving in heavily trafficked areas is adequately bedded.
	4.4.9 - On-Street Parking	Refer to commentary in the Road Safety Audit on loading bay provision.
	Advice Note 1 – Transitions and Gateways	Appropriate to location.
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	4.4.1 - Carriageway Widths	Appropriate to location.
	4.4.4 – Forward Visibility	Appropriate to location.
	4.4.5 – Visibility Splays	Appropriate to location.
	4.4.6 – Alignment and curvature	Refer to commentary in the Road Safety Audit on radii at accesses.
	4.4.7 – Horizontal and Vertical Deflections	Appropriate to location.
	Advice Note 1 – Transitions and Gateways	Appropriate to location.

Pedestrian and Cycling Environment		
Key Issues	**Key DMURS Reference.**	**Auditor Comment**
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width	Appropriate to location.
	4.2.3 – Active Street Edges	Existing.
	4.2.5 – Street Furniture	Appropriate to location.
	4.4.9 - On-Street parking	The scheme would benefit from additional cycle parking.
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised.	4.3.2 - Pedestrian Crossings	Refer to commentary in the Road Safety Audit on pedestrian crossings.
	4.3.3 – Corner Radii	Refer to commentary in the Road Safety Audit on corner radii.
	4.4.3 - Junction Design	Refer to commentary in the Road Safety Audit on corner radii.
	4.4.7 - Horizontal and Vertical Deflections	Appropriately designed.
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function.	Appropriately designed.
	3.2.3 – Place Context.	Appropriately designed.
	4.2.5 – Street Furniture	Appropriate to location.
	4.3.1 – Footways, Verges and Strips	Appropriately designed.
	4.3.2 - Pedestrian Crossings	Refer to commentary in the Road Safety Audit on pedestrian crossings.

11.0 Road Safety Audit – Stage 1

The following road safety problems were identified by the audit team when studying the provided information and on the subsequent site visit.

11.1 Problem: Vehicles cutting corner

Location: Chainage 340 RHS

The combination of the narrow street and the raised pedestrian crossings may result in vehicles turning out of the access cutting the corner and mounting the raised crossing to the left when entering the street or accessing the parking. This increases the risk of conflicts with pedestrians waiting to cross.

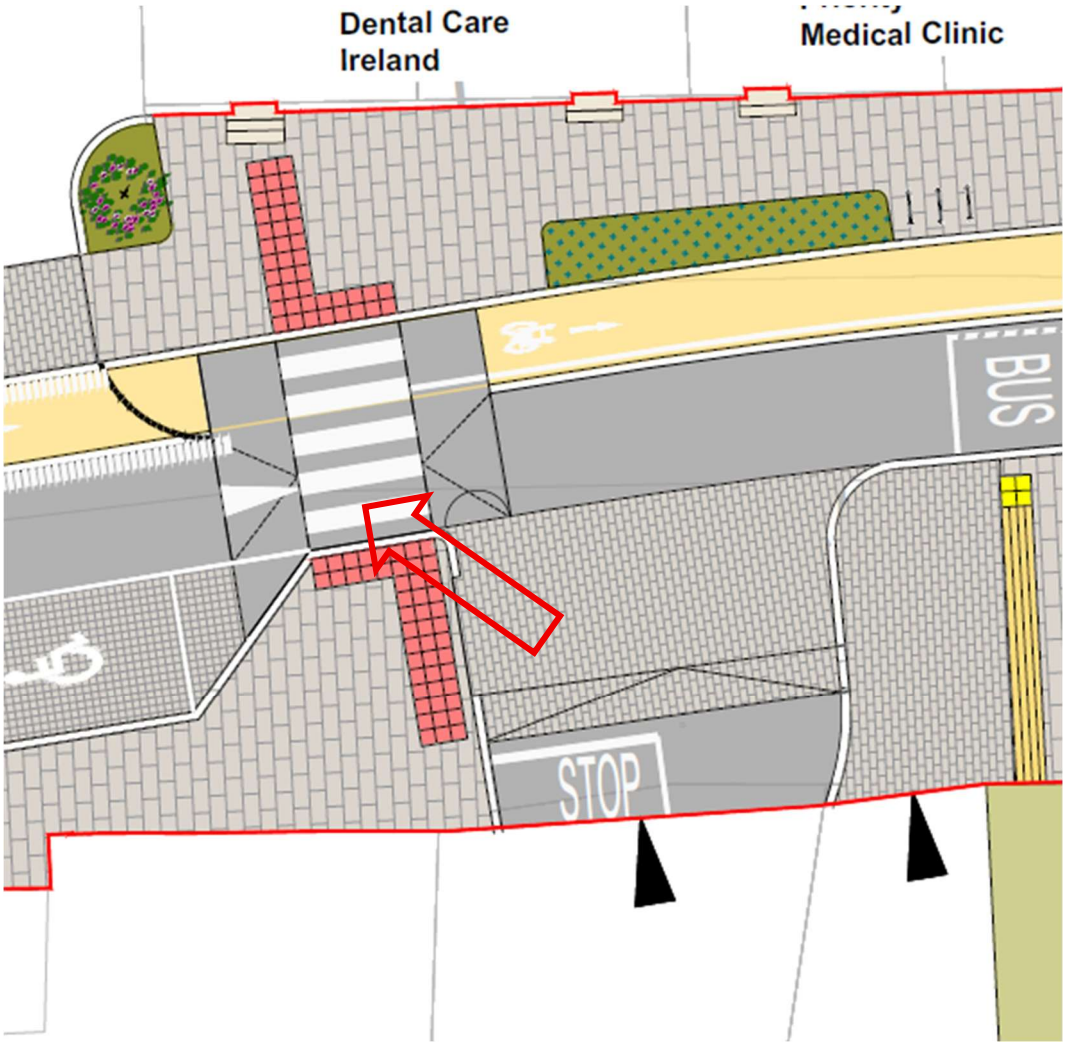

Figure 3 Proposed Layout

Recommendation

The layout should be updated to discourage vehicles from cutting the corner.

11.2 Problem: Loading proposals

Location: Throughout the scheme

A limited number of loading bays have been provided throughout the scheme. This may result in delivery vehicles stopping or parking within the cycle track or on the footpath to service businesses along the street, increasing the risk of conflicts with pedestrians and cyclists and creating obstructions for vulnerable road users.



Figure 4 Existing Layout

Recommendation

The number and locations of loading bays proposed throughout the scheme should be reviewed to ensure adequate provision is made to accommodate the servicing and delivery requirements of businesses along the street. Time-restricted loading facilities should also be considered within designated parking and taxi bays to maximise the efficient use of the available kerbside space.

11.3 Problem: Radii at accesses

Location: Throughout the scheme

The proposed kerb radii may not sufficiently guide drivers or clearly communicate that left/right turns onto the one-way street are prohibited. This may result in drivers entering the street in the wrong direction, increasing the risk of head-on collisions with opposing vehicles.

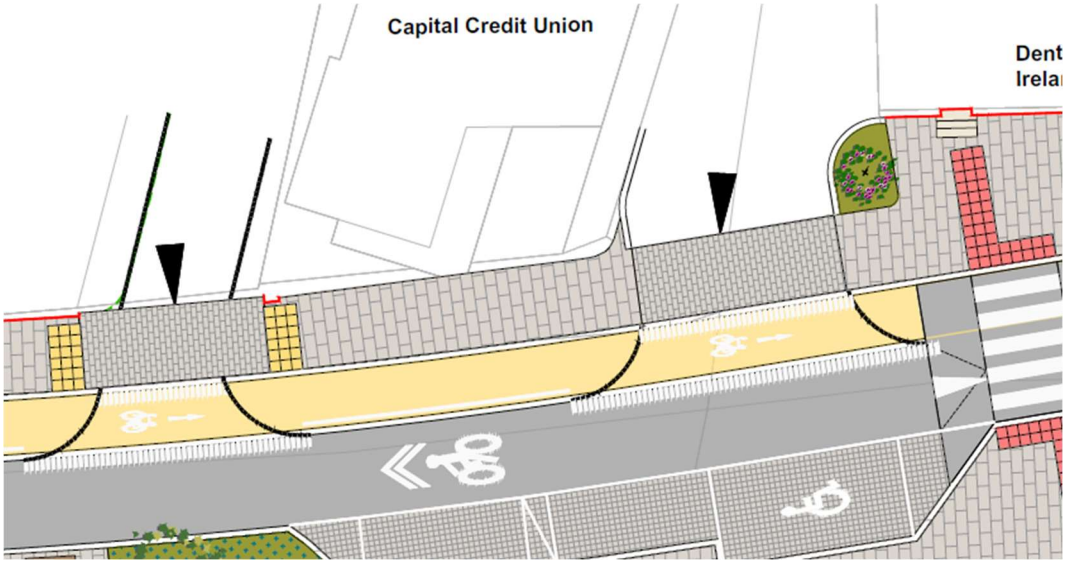

Figure 5 Proposed Layout

Recommendation

The kerb radii at accesses should be reviewed and adjusted, where necessary, to guide drivers into the permitted direction of travel and reinforce that they are entering a one-way street, with left/right turns prohibited.

11.4 Problem: Existing tactile paving removed

Location: Chainage 825

Existing tactile paving has been removed at Chainage 825. This may cause confusion for visually impaired pedestrians regarding the crossing point and the presence of vehicular movements, increasing the risk of conflicts with vehicles.



Figure 6 Existing Layout



Figure 7 Proposed Layout

Recommendation

The provision and arrangement of tactile paving at vehicular accesses should be reviewed to ensure consistency throughout the scheme and to provide appropriate information to visually impaired pedestrians regarding potential vehicle crossing points.

11.5 Problem: Right turns for cyclists

Location: Throughout the scheme

No provision has been made for cyclists to turn right from the cycle track. This may result in cyclists travelling in the wrong direction along the one-way street, manoeuvring into conflict with vehicles or mounting kerbs to access the street, increasing the risk of loss of control, falls and collisions with other road users.

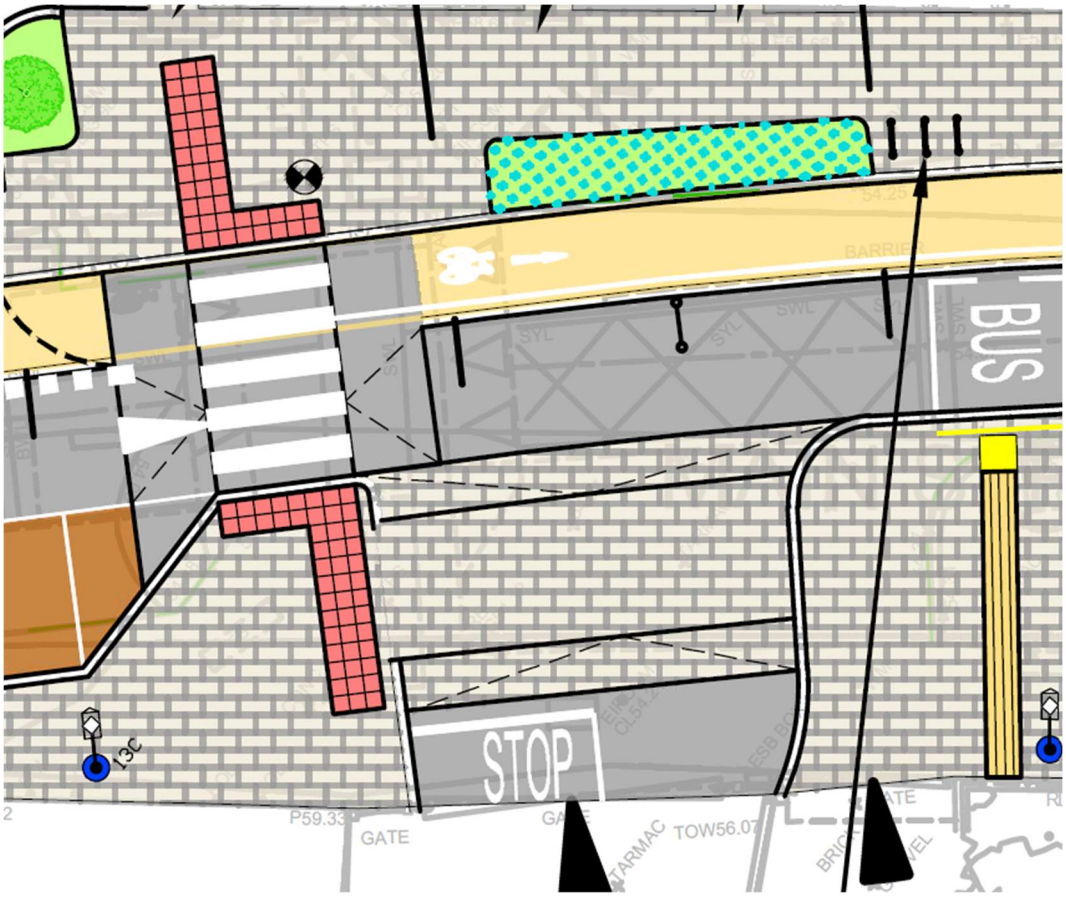

Figure 8 Proposed Layout

Recommendation

Provision should be made for cyclists to turn right from the cycle track at appropriate locations.

11.6 Problem: Existing accesses not provided for

Location: Throughout the scheme

At a number of locations throughout the scheme, existing vehicular accesses have not been accommodated in the proposed design. This may result in vehicles crossing kerb lines and cycle tracks, increasing the risk of loss of control, collisions with cyclists and conflicts with other road users. Refer to the following chainages; LHS 130, 157, 180, 255, 360, 400, RHS 255, 370, 390, 500.

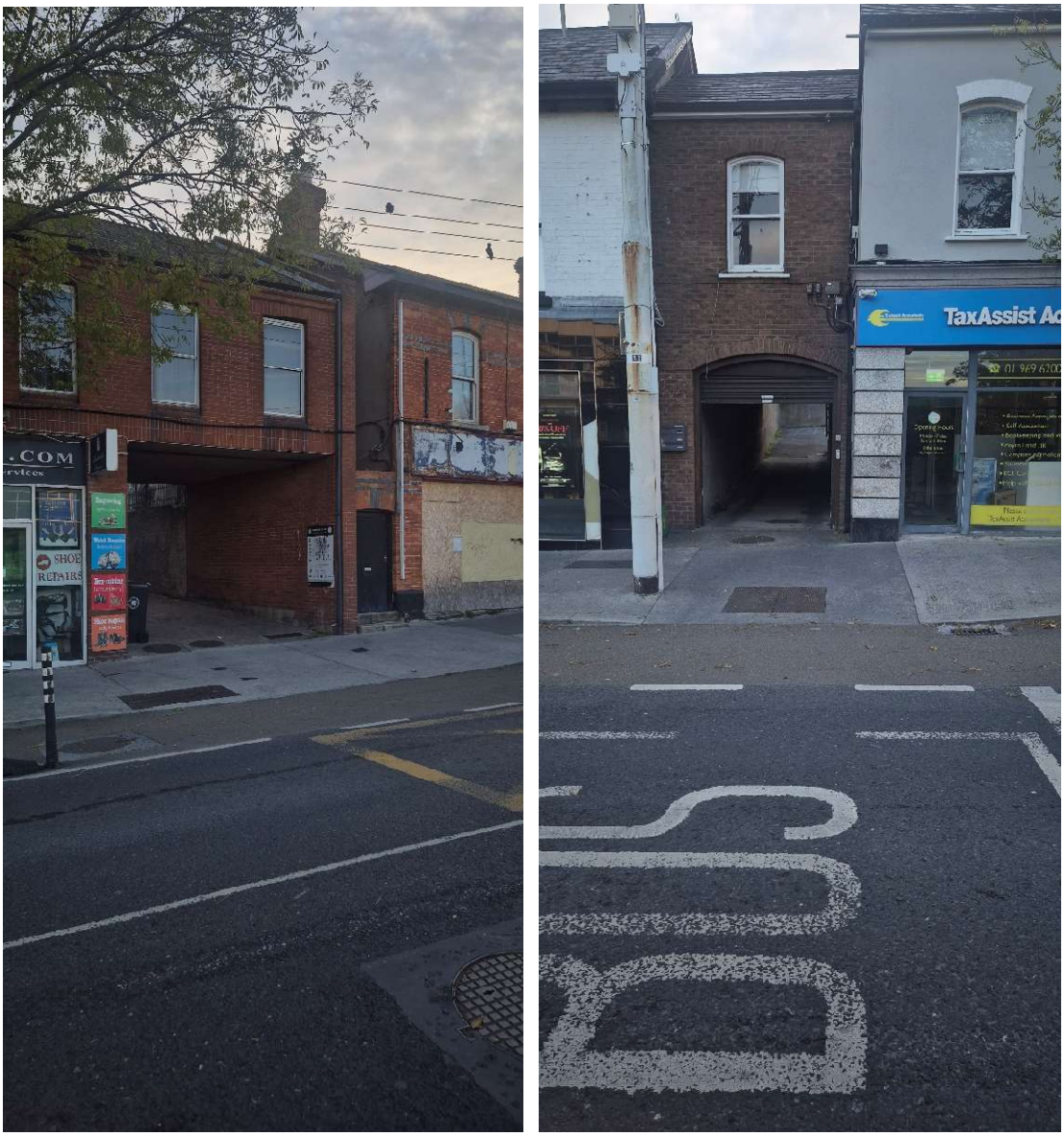

Figure 9 Existing Layout

Recommendation

Existing vehicular accesses should be identified and appropriately accommodated within the scheme design.

11.7 Problem: Inconsistent use of tactile paving

Location: Throughout the scheme

Inconsistent use of tactile paving at vehicular accesses along the route may cause confusion for visually impaired pedestrians regarding the presence and nature of potential vehicle conflicts. This may increase the risk of collisions between pedestrians and vehicles.

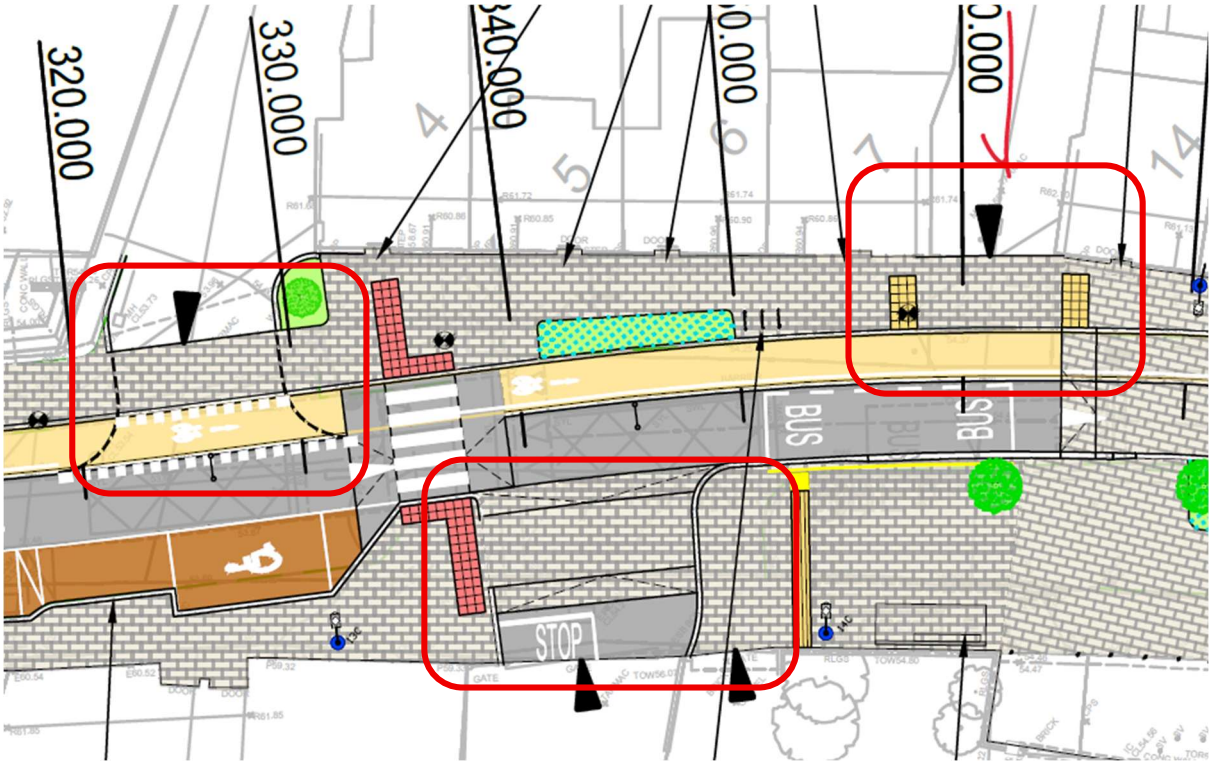

Figure 10 Proposed Layout

Recommendation

A consistent approach should be provided for accesses along the route.

11.8 Problem: Parking arrangements at the church

Location: In the vicinity of the church

High parking demand at the church during service times results in ad hoc parking in the surrounding area. This may obstruct cycle, vehicular and pedestrian routes, increasing the risk of material damage collisions and collisions involving pedestrians.

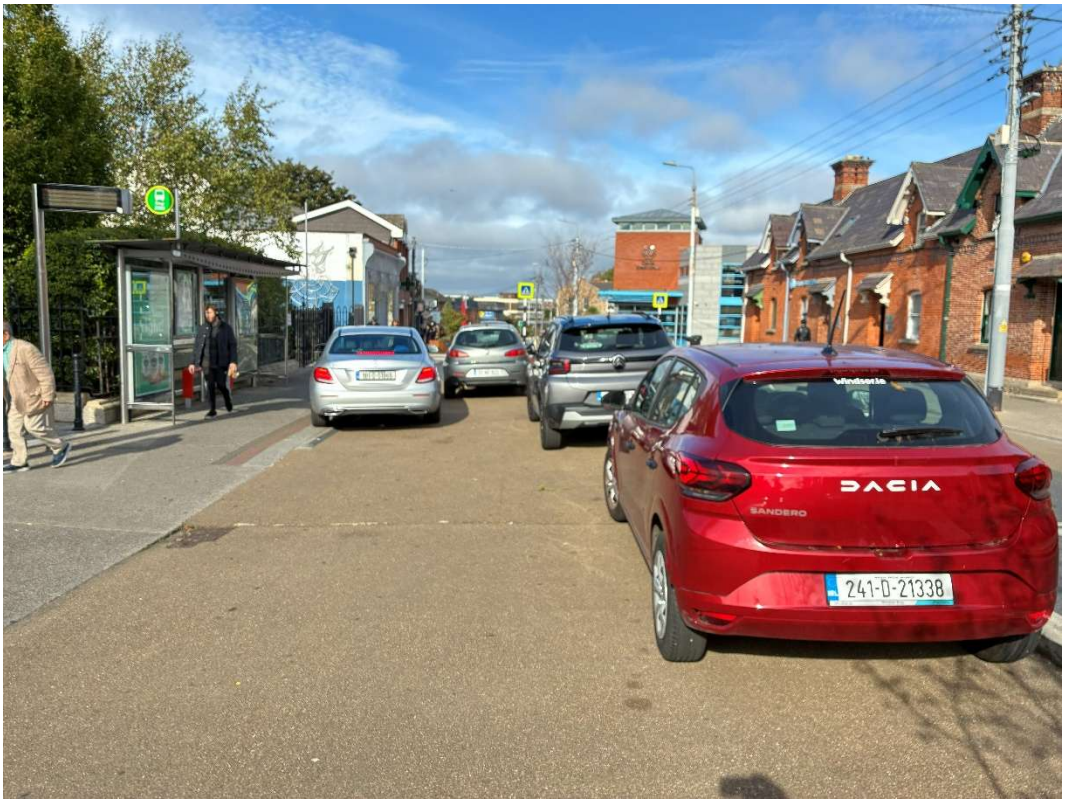

Figure 11 Existing Layout

Recommendation

A formal parking management plan should be developed and implemented for the church during services to prevent ad hoc parking and ensure that parking is appropriately controlled.

Audit Team Statement

We certify that we have examined the drawings and documents listed in section 4.0 and visited the site during the day of 30th October 2026. We further certify that we are independent from the design team for this scheme. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the road safety aspects of the proposed scheme.

Road Safety Audit Team Leader

Name	John Ryan
Signed	
Qualification	MSc BEng CEng FconsEI
Position	Audit Team Leader
Date:	30/10/2026

Road Safety Audit Team Member

Name	Michael Condon
Qualification	Cert of Competence RSA
Position	Audit Team Member
Date:	30/10/2026

Road Safety Audit Feedback Form

Road Safety Audit Feedback Form		
Scheme: **Dundrum Living Streets**		
Audit Stage: 1		Date of Audit 30/10/2026

To be Completed by Designer				To be Completed by Audit Team Leader
Item	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Describe alternative measure(s) Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
11.1	Yes	Yes		
11.2	Yes	Yes		
11.3	Yes	Yes		
11.4	Yes	Yes		
11.5	Yes	Yes		
11.6	Yes	Yes		
11.7	Yes	Yes		
11.8	Yes	Yes		

Signed		Designer	Aimee Dunne	Date	06/11/2026
Signed		Audit Team Leader	John Ryan	Date	13/11/2026
Signed		Employer	Rita Duarte	Date	11/11/2026