

24050-05-001

PROPOSED HOUSING DEVELOPMENT AT CHERRY ORCHARD, DUBLIN

Stage 1 Quality Audit

(Incorporating a DMURS Street Design Audit, and Audits
of Accessibility, Cycling, Walking and Road Safety)

for

Malone O'Regan

APRIL 2025

ROADPLAN

CONSULTING

7, Ormonde Road
Kilkenny.
R95 N4FE

Tel: 056 7795800
info@roadplan.ie
www.roadplan.ie

DOCUMENT CONTROL SHEET

Project Title	Proposed Housing Development at Cherry Orchard, Dublin
Project No.	24050-05
Client	Malone O'Regan
Document Title	Stage 1 Quality Audit
Document No.	24050-05-001

Status	Author(s)	Reviewed By	Approved By	Issue Date
Draft 1	GF/GH	GF/GH	GF	15/5/2025
Draft 2	GF/GH	GF/GH	GF	2/4/2025
Final	GF/GH	GF/GH	GF	11/4/2025

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1. INTRODUCTION

- 1.1 Roadplan Consulting has been commissioned by Malone O'Regan to carry out a Quality Audit of a proposed development at Cherry Orchard, Dublin. This scheme is a part of the NDFA social housing schemes.
- 1.2 The proposed development comprises a large-scale residential development including dedicated car parking spaces and an open landscaped area.
- 1.3 Figure 1.1 below is a layout drawing of the development. The surrounding mature residential streets feature speed limits of 30 km/h.



Figure 1.1 – Site Location Map and Site Layout for the development

2. QUALITY AUDIT

- 2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.
- 2.2 Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.
- 2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.
- 2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.
- 2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.
- 2.6 DMURS states that Quality Audits should consist of the following parts:
- DMURS Street Design Audit
 - Individual Design Audits
 - Quality Audit Report

In the case of this report the individual design audits comprise an RSA, an Accessibility audit, a Walking audit and a Cycle audit.

3. METHODOLOGY

3.1 The Audit Team was as follows:

- George Frisby Chartered Engineer, MIEI
- Glenn Hingerty Chartered Engineer, MIEI

3.2 Road safety, non-motorised users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- how the scheme is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

3.3 The site visit for this quality audit was carried out on 18th March 2024.

The documents provided for the audit were:

Drawing Number	Rev	Drawing Title
SHB4-CRD-DR-SMK-ME-P3-6033		Public Lighting Ducting Requirements
SHB5-CRD-DR-MOR-CS-P3-101	Rev 2	Proposed Site Layout
SHB5-CRD-DR-MOR-CS-P3-110	Rev 2	Swept Path Analysis Refuse Truck
SHB5-CRD-DR-MOR-CS-P3-112	Rev 2	Swept Path Analysis Aerial Appliance
SHB5-CRD-DR-MOR-CS-P3-113	Rev 2	Sightline Layout
SHB5-CRD-DR-MOR-CS-P3-114	Rev 2	Swept Path Analysis Fire Tender
SHB5-CRD-DR-MOR-CS-P3-115	Rev 0	Roadmarkings and Signage
SHB5-CRD-DR-MOR-CS-P3-130	Rev 2	Foul Sewer Drainage Layout
SHB5-CRD-DR-MOR-CS-P3-140	Rev 2	Watermain Layout
SHB5-CRD-DR-MOR-CS-P3-150	Rev 2	SUDS Layout
SHB5-CRD-DR-MOR-CS-P3-151	Rev 1	SUDS Details
SHB5-CRD-DR-MOR-CS-P3-152	Rev 2	Headwall Details
SHB5-CRD-DR-SMK-ME-P3-6035		ECar Charging

Copies of these audited drawings are contained in Appendix A.

Details of drainage or road lighting are not provided. It is assumed that adequate layouts will be provided for each.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on <https://www.dmurs.ie/supplementary-material>) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

STREET DESIGN AUDIT

CONNECTIVITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	<p>3.1 – Integrated Street Network</p> <p>3.2.1 – Movement Function</p> <p>3.3.1 – Street layouts</p> <p>3.3.4 – Wayfinding</p>	<p>3.2.1 – Not all pedestrian desire lines are met and in some cases the infrastructure is lacking, substandard or has topographical constraints that are unclear.</p> <p>3.2.1 – It is unclear how cyclists will tie into any future GDA cycle network.</p>	<p>3.2.1 – Layout amended in response to audit suggestion. Internal crossing has been reviewed – some crossings include tactile paving and others show continuous footpath.</p> <p>3.2.1 - On street provision for cyclists is considered appropriate given low design speed (30km/h), the expected traffic volume is low (fewer than 2000 motor vehicles), the road width is sufficient (6m wide) to include share lane.</p>
Multiple points of access are provided to the site/place, in particular for sustainable modes.	<p>3.3.1 – Street Layouts</p> <p>3.3.3 – Retrofitting ¹</p>	No Comment	
Accessibility throughout the site is maximised for	<p>3.3.1 – Street Layouts</p> <p>3.3.2 – Block Sizes</p> <p>3.4.1 – Vehicle Permeability</p>	3.3.1 – Pedestrian and cyclist desire lines are not exhaustive.	3.3.1 – Layout amended in response to audit suggestion. Internal crossing has been

¹ When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).

CONNECTIVITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
pedestrians and cyclists, ensuring route choice.			reviewed – some crossings include tactile paving and others show continuous footpath.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability	No Comment	
SELF-REGULATING STREET ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function 3.2.2 – Place Context 4.1.1 – A Balanced Approach to Speed ²	No Comment	
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures. ³	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces	4.2.1 – No information on building heights is provided within the drawings.	4.2.1 – Architect drawing number: SHB5-CRD-DR-SHA-AR-P1-1005-Proposed Roof Plan shows the roof level for the neighbourhood centre apartment building. The remainder of the

² Refer also to the National Speed Limit Guidelines

³ In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.

SELF-REGULATING STREET ENVIRONMENT

Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
A suitable range of design standards/ measures have been applied that are consistent with the applied design speeds.	4.4.9 – On-Street Parking Advice Note 1 – Transitions and Gateways 4.4.1 – Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	4.4.5 – Visibility Splays at all junctions should be kept clear of all obstructions including parked vehicles, walls, and vegetation/landscaping. This includes future maintenance of tree growth in proximity to junction visibility splays.	building on the site are 2-storey dwellings. 4.4.5 – Noted. Visibility splays at all junctions will be kept clear of all obstructions.

PEDESTRIAN AND CYCLING ENVIRONMENT

Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	No comment	
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 – Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings	4.2.5 – Segregated footways have been provided and appear to be clear of obstructions which may reduce their effective width.	

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.2 – Place Context 4.3.5 - Cycle facilities	4.2.5 – Sheffield stands should be in designated area separated by kerbs and recessed away from footways. 4.2.5 – Benches may be a useful addition to the landscaped area. This will allow pedestrian with a mobility impairment to rest. 3.2.1 – Cyclists will be expected to mix amongst general vehicular traffic at the tie-ins to certain edged of the scheme. There is limited proposed tie-in provision for future cycle schemes in the GDA Cycle network strategy.	4.2.5 – Sheffield stands are in designated areas separated by kerbs and recessed away from footways. 4.2.5 – Benches are provided in the landscaped area. 3.2.1 - On street provision for cyclists is considered appropriate given low design speed (30km/h), the expected traffic volume is low (fewer than 2000 motor vehicles), the road width is sufficient (6m wide) to include share lane.
The particular needs of visually and mobility impaired users been	4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.2.5 - Street Furniture	4.3.5 – There does not appear to be adequate secured cycle facilities, for standard or cargo cycles, provided. These will be particularly important with an increased cycle usage in the area. 4.3.1 – No Tactile Paving has been proposed along certain desire lines in the development.	4.3.5 – Secured bicycle storage is provided within the apartment building. This is shown on Architect drawing number: SHB5-CRD-DR-SHA-AR-P1-0110-Proposed Site Plan 4.3.1 – Layout amended in response to audit suggestion. Internal crossing has been

PEDESTRIAN AND CYCLING ENVIRONMENT

Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
identified and incorporated in the design.	4.3.2 - Pedestrian Crossings 4.3.4 - Pedestrianised and Shared Surfaces	This will compromise navigation abilities of those with vision impairments and should be rectified.	reviewed – some crossings include tactile paving and others shown continuous footpath.

VISUAL QUALITY

Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	4.2.7 – Limited planting is proposed. This may be improved by integrating planting with SuDS measures.	4.2.7 – Detailed Planting layout is shown on Landscape Architect drawing number: SHB5-CRD-DR-MAL-L-P1-0001 – Landscape Plan
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips	4.3.1 – Footways largely appear clear of proposed obstacles that may reduce their effective width; however it is not clear where bins will be stored on collection day. This may pose a hazard for those with visual and mobility impairments.	4.3.1 – Bin storage is provided within the apartment block. This is shown on Architect drawing number: SHB5-CRD-DR-SHA-AR-P1-0110-Proposed Site Plan. On collection day – apartment management will wheel the bins out to the road for collection.
The use of signage and line marking has been minimised.	3.2.1 – Movement Function. 3.2.2 – Place Context. 4.2.4 - Signage and Line Marking.	No comment	

VISUAL QUALITY			
Key Issues	Key DMURS Reference	Audit Suggestion	Design Team Response
<p>Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?</p>	<p>3.2.1 – Movement Function 3.2.2 – Place Context 4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces Advice Note 2 – Materials and Specifications</p>	<p>4.2.6 – It is not clear if there is clarity between footways and roadways for pedestrians with visual impairments at raised tables.</p>	<p>4.2.6 – Layout amended in response to audit suggestion. Internal crossing has been reviewed – some crossings include tactile paving and others shown continuous footpath.</p>

ADDITIONAL COMMENTS

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5. ROAD SAFETY

5.1 Issue

It appears some of the existing Safe Route to School Treatment (Figure 5.1) is to be rationalised in the development proposal (Figure 5.2). Any removal of these speed reduction measures outside a school may increase speeds and increase the likelihood of injuries for pedestrians walking to school.



Figure 5.1 – Existing Safe Routes to School Infrastructure



Figure 5.2 – Proposed Safe Routes to School Infrastructure

Suggestion

Ensure retention and enhancement of all Safe Routes to School infrastructure.

5.2 **Issue**

The existing Westbound bus stop outside St. Ultans Buses does not feature Kassel Kerbing (Figure 5.3) while it is unclear if the proposed relocated eastbound bus stop will feature Kassel Kerbing. This may increase the likelihood of buses mounting kerblines and injuring pedestrians.



Figure 5.3 – Proposed Safe Routes to School Infrastructure

Suggestion

Ensure all bus stopping infrastructure features Kassel Kerbs.

5.3 **Issue**

The proposed trees on the development's streets may compromise lighting casting shadows on the roadway and footways. They may also compromise visibility of road signage. This may increase the likelihood of collisions with vehicles, cyclists or pedestrians crossing the street while compromising navigation for pedestrians with vision impairments.

Suggestion

Ensure trees do not compromise street lighting or road signage. Enhance lighting provision to both sides of the street and carry out shadow analysis.

5.4 Issue

Priority between pedestrians crossing a number of accesses and motorist entering / exiting the access may be unclear in a number of locations. It appears from the road markings on the drawings provided that pedestrians are to have right of way across the proposed access, but the footpath appears to terminate either side of the access. A lack of clear priority at these locations may contribute to a pedestrian collision.



Suggestion

Modify the layout to provide clear priority at all access locations.

6. WALKING

6.1 Issue

Inter-visibility between pedestrians and drivers at crossings in the proposed development may be significantly compromised by the proposed trees and parking locations. This may increase the risk of collisions and pedestrian injuries at these locations because of trees and parking including, but not limited to, that circled in Figure 6.1.

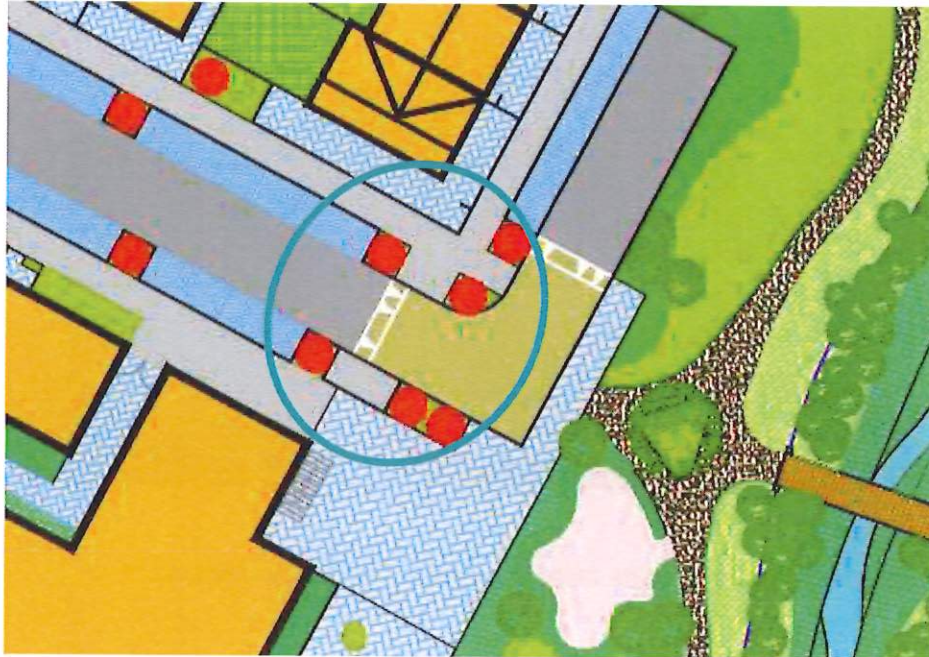


Figure 6.1 – Proposed Trees and parking compromising intervisibility of pedestrians and motorist at crossings

Suggestion

Ensure adequate inter-visibility between pedestrians and drivers at pedestrian crossings. Relocate trees and parking as appropriate.

6.2 Issue

All pedestrian desire lines within the proposed development do not appear to be met by the infrastructure or feature substandard infrastructure for walkability as outlined by the dashed line in Figures 6.2.

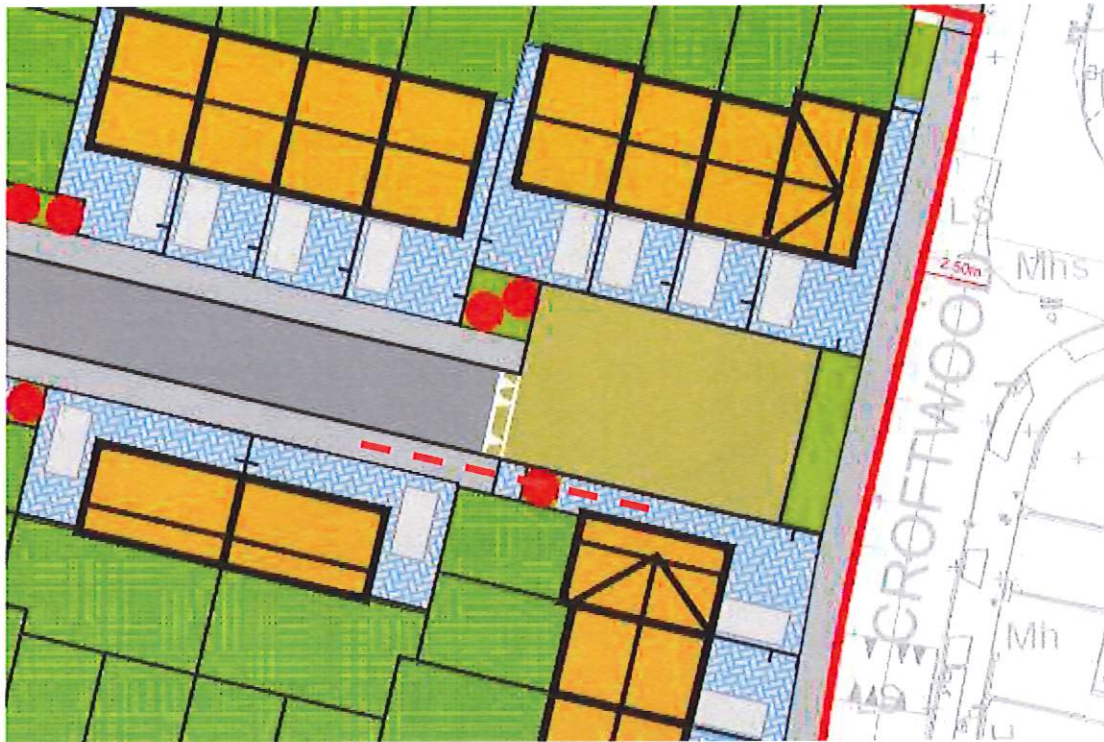


Figure 6.2 – Dominant Pedestrian Desire Lines

Suggestion

Ensure all desire lines across the development and each individual junction are facilitated with adequate walking infrastructure.

6.3 **Issue**

In certain sections of the proposed scheme, it is unclear if the footway width will be adequate for the level of pedestrian usage due to the lack of dimension detail. This may increase the likelihood of pedestrian congestion or need for pedestrians to use roadways to overtake or pass other pedestrians with an increased likelihood of pedestrian and vehicular collisions. Footway effectiveness may be reduced and pose struggles for parents holding children's hands, passing buggies etc resulting in people walking onto cycleways.

Suggestion

Ensure adequate footway widths and level of service at all locations across the scheme.

7. CYCLING

7.1 Issue

As there is no proposed cycle infrastructure in the development, it is not clear how the development will tie into the proposed 'Feeder' Routes (dashed pink line in Figure 7.1) or 'Greenway – Leisure' Routes (dashed pink line in Figure 7.1) adjacent to the development. A lack of coordination may reduce the effectiveness of these schemes, proposed by Dublin City Council and National Transport Authority, and undermine potential to achieve cyclist desire lines.

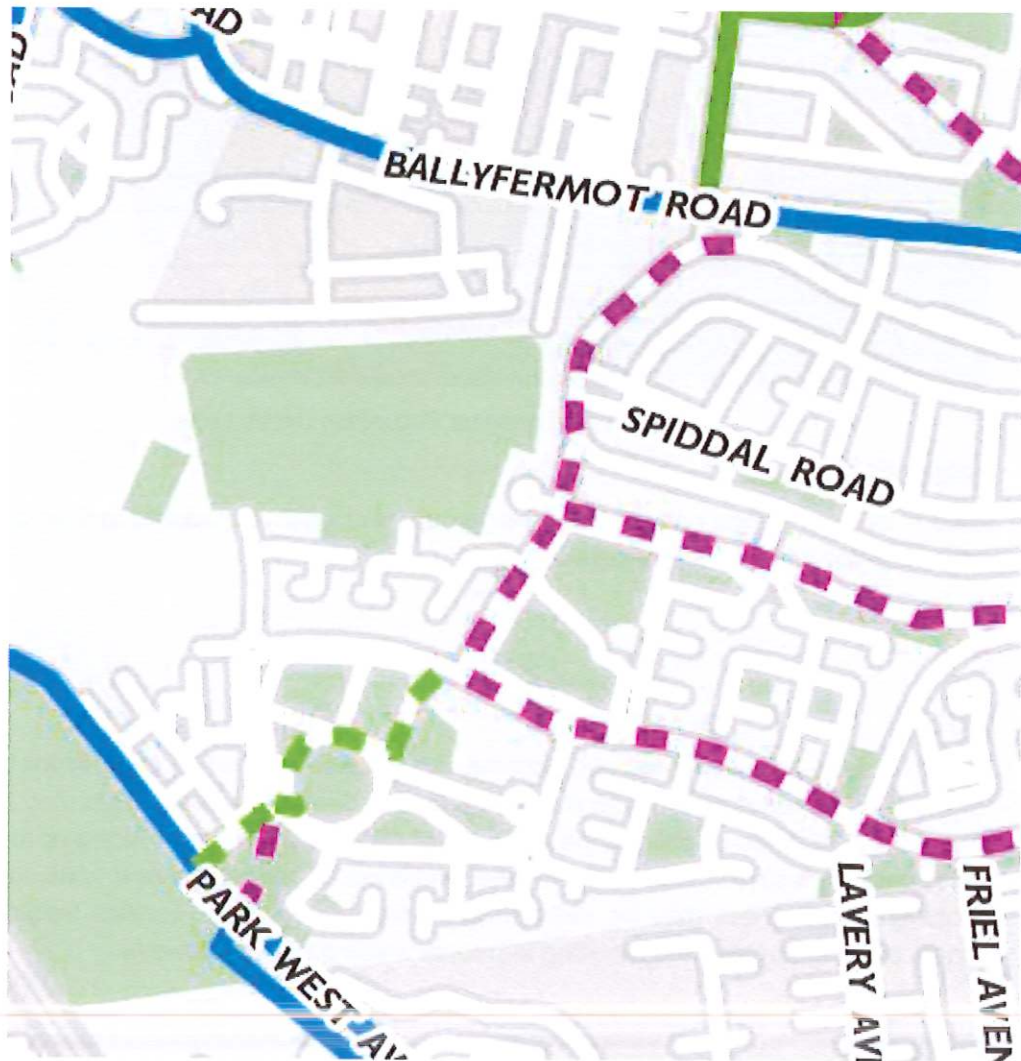


Figure 7.1 – GDA Cycle Network (www.nationaltransport.ie/wp-content/uploads/2023/01/2022-GDA-Cycle-Network.pdf)

Suggestion

Consider wider network impacts of future schemes to support Provide a network of segregated cycleways through the development. Consult with Dublin City Council Active Travel and National Transport Authority to ensure the development is futureproofed.

7.2 **Issue**

It is unclear if proposed secure cycle storage will feature in the development for cycles and cargo cycles. This may cause cyclists to lock cycles to other street furniture, creating a navigation risk and reducing the effective widths of footways, especially for cargo cycle users. Bolted Sheffield Stands may increase risk of cycle theft as they can be easily removed.

Suggestion

Provide adequate volumes secure storage for cycles and cargo cycles. Sheffield Stands should be concreted into the ground to negate theft.

8. ACCESSIBILITY

8.1 Issue

It is unclear what the refuse collection strategy is for this development. Most road edges in the development feature parallel parking in designated bays. This creates a risk that refuse bins will be left on the roadway and block sightlines or left on the segregated footways and thereby reduce the effective width thereof resulting in navigation challenges, particularly for those with vision or mobility impairments.

Suggestion

Revise refuse collection strategies in conjunction with infrastructure provision. Install singular/centralised bin storage areas.

8.2 Issue

Sets of steps in the development (Figure 8.1) do not feature tactile paving or railings. Lack of railings and tactile paving may increase the likelihood of injuries for pedestrians with mobility impairments or vision impairments respectively. In the absence of cross-sections, it is also unclear what the proposed topography is in these areas and what that may mean for mobility impaired pedestrians. Overall wayfinding and navigation for pedestrians with mobility of vision impairments is unclear in these areas.



Figure 8.1 – Steps without railings or Tactile Paving

Suggestion

Ensure railings and tactile paving at steps/ramps. Revise topography to reduce the amount of obstacles for accessibility.

8.3 Issue

Certain crossing points or desire lines including, but not limited to, the locations shown below do not feature tactile paving. This may result in disorientation or confusion of vision impaired users.

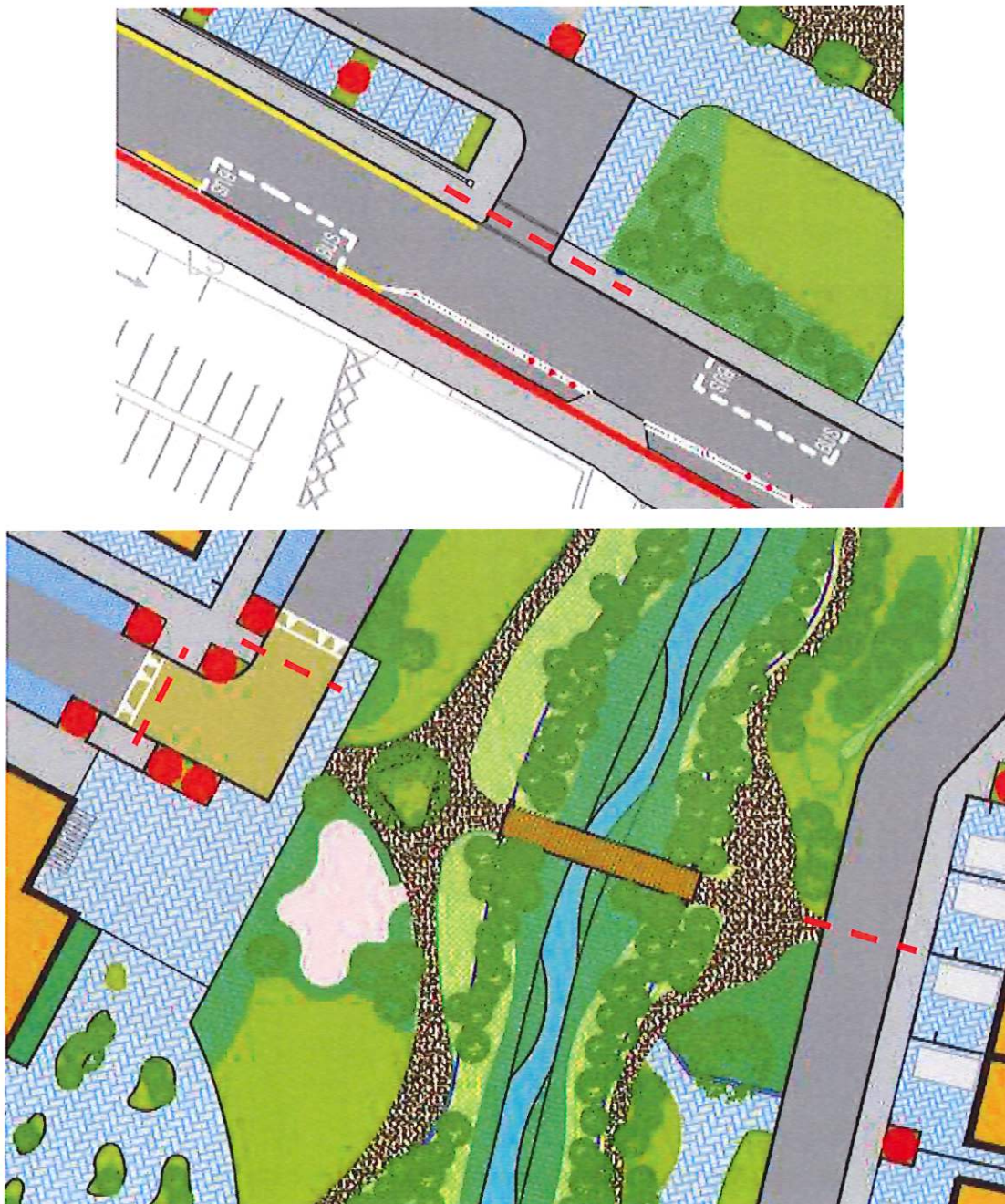


Figure 8.2 – Crossings without Tactile Paving

Suggestion

Ensure adequate tactile paving for all internal crossings.

8.4 Issue

A number of disabled bays are proposed within the development. There is no ramped access to the footways and users may have to enter/exit their vehicles from the vehicular carriage way.

Suggestion

Ramped access should be provided to all disabled parking bays.

8.5 Issue

A wall / railing appears to be proposed between the parking spaces and footpath which may restrict access for to/from the footpath for some pedestrians.



Figure 8.3 – Wall / Railing

Suggestion

Remove the wall / railing between the parking spaces and footpath.

9. QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Housing Development at Cherry Orchard, Dublin

Document Number: 24050-05-001

Date Audit Completed: 2nd April 2025

Paragraph No. In Safety Audit Report	To Be Completed By Designer			To Be Completed by Audit Team Leader
	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)
5.1	Yes	Yes	-----	-----
5.2	Yes	Yes	-----	-----
5.3	Yes	Yes	-----	-----
5.4	Yes	In Part	The crossing at Blackditch Road is a continuous footpath. The crossing towards the new residential estate is tactile paving.	Yes
6.1	Yes	Yes	-----	-----
6.2	Yes	Yes	-----	-----
6.3	Yes	Yes	-----	-----
7.1	Yes	Yes	-----	-----
7.2	Yes	Yes	-----	-----
8.1	Yes	Yes	-----	-----
8.2	Yes	In Part	Railings and tactile paving will be provided at steps/ ramps. We have provided a gently grading slope to the remainder of the woodland look walk as an alternative amenity.	Yes
8.3	Yes	In Part	The crossing at Cherry Orchard Ave is proposed to be a continuous footpath. The other crossings will have tactile paving.	Yes
8.4	Yes	Yes	-----	-----
8.5	Yes	In Part	A 1.5m footpath is provided for the parking spaces within the development. It is proposed to keep the boundary wall to provide separation between residents and the public.	Yes

Safety Audit
Signed off



(On Behalf of) Design Team Leader

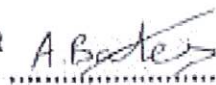
Print Name

DOUGLAS WEIR

Date

7/4/2025

Safety Audit
Signed off



Employer

Print Name ..AONGUS BATES.....

Date ..14/04/2025.....

Safety Audit Signed off  Audit Team Leader

Print Name George Frisby

Date 15/4/2025

Please complete and return to:

Roadplan Consulting,
7, Ormonde Road
Kilkenny
E-mail: info@roadplan.ie

APPENDIX A – DRAWINGS

THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCING WORKING DRAWINGS.



LEGEND	
	EXISTING UNDERGROUND STREET LIGHTING CABLE ROUTE (SUBJECT TO IDENTIFICATION ON SITE)
	NEW UNDERGROUND STREET LIGHTING CABLE ROUTE (SUBJECT TO IDENTIFICATION ON SITE)
	15KV
	11KV
	10KV
	EXISTING 15KV NETWORK MANHOLE OR RECEIVED POLE
	PROPOSED 15KV NETWORK MANHOLE OR RECEIVED POLE
	PROPOSED 11KV/10KV CONCRETE SWAMP PIT / INSPECTION CHAMBER
	10KV/15KV METER COLUMN / METER MOUNTED PUBLIC LIGHTING LUMINAIRE
	10KV/15KV METER COLUMN / METER MOUNTED PUBLIC LIGHTING LUMINAIRE
	EXISTING STREET LIGHTING POLE

NOTES RELATING TO STREET LIGHTING INSTALLATIONS:

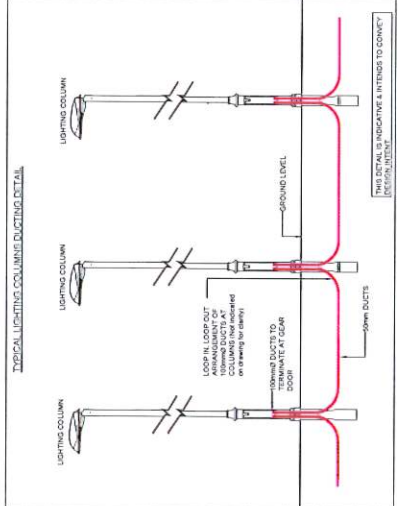
THE PUBLIC LIGHTING DESIGN SHALL FULLY COMPLY WITH BS5489-2(3) LIGHTING CLASS IN.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SERVICES.

CONTRACTOR SHALL ENSURE THAT ALL EXISTING POINTS, PUBLIC LIGHTING POLES, COLUMNS, DUCTS, CABLES ARE NOT ALTERED OUTSIDE THE PROPOSED WORK AREA.

CONTRACTOR SHALL ENSURE THAT ALL EXISTING POINTS, PUBLIC LIGHTING POLES, COLUMNS, DUCTS, CABLES ARE NOT ALTERED OUTSIDE THE PROPOSED WORK AREA.

CONTRACTOR SHALL ENSURE THAT ALL EXISTING POINTS, PUBLIC LIGHTING POLES, COLUMNS, DUCTS, CABLES ARE NOT ALTERED OUTSIDE THE PROPOSED WORK AREA.



PRELIMINARY

simple mckillop

NATURAL INNOVATIVE CONSULTING ENGINEERS

44 GINA ROAD
DUBLIN
COUNTY DUBLIN D02 YK45

PH: 01 453 8000
WWW.SIMPLEMCKILLOP.COM

PROJECT TITLE: SOCIAL HOUSING BUNDLE 4/5

CLIENT: CHERRY ORCHARD DEVELOPMENT AT CHERRY ORCHARD, DUBLIN

DRAWING NO: 9H82-DR-OR-SMK-ME-P3-0033

SCALE: 1:1,000

DATE: 2011.02.04

BY: [Signature]

CHECKED: [Signature]

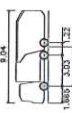
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REV.	DATE	DESCRIPTION
1	10/11/2011	ISSUED FOR PERMIT
2	10/11/2011	ISSUED FOR QUALITY AUDIT

VEHICLE SWEET PATH LEGEND

- SEPARATION SWEEP WITH REDUCED CURB
- SEPARATION SWEEP WITH CURB
- SEPARATION SWEEP WITH CURB AND SIDEWALK
- SEPARATION SWEEP WITH CURB AND SIDEWALK AND BIKEWAY
- SEPARATION SWEEP WITH CURB AND SIDEWALK AND BIKEWAY AND BIKEWAY
- SEPARATION SWEEP WITH CURB AND SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY
- SEPARATION SWEEP WITH CURB AND SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY

"ALL CURVES OF ROADWAYS SHOWN IN THIS PLAN TO MATCH EXISTING CURVES OF THE ADJACENT STREETS UNLESS OTHERWISE NOTED. IF A SWEEP PATH IS A STRAIGHT LINE THEN IT WILL BE SHOWN AS SUCH."



BUILDING 5, HIGH CAPACITY JOHN DANK LA
 ADDRESS: 5, CHERRY AVENUE, DUBLIN 14
 CLIENT: MALONE O'NEGAN CONSULTING ENGINEERS
 DATE: 10/11/2011
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]
 SCALE: 1:500
 PROJECT NO: 23008
 SHEET NO: 101



NO.	DESCRIPTION	DATE	BY	CHK
1	ISSUED FOR PERMIT	10/11/2011	[Name]	[Name]
2	ISSUED FOR QUALITY AUDIT	10/11/2011	[Name]	[Name]

MDR
 MALONE O'NEGAN CONSULTING ENGINEERS
 10000 KILPATRICK ROAD, DUBLIN 14, IRELAND
 T: +353 1 282 2656
 F: +353 1 282 2655
 E: info@mdr.ie
 W: www.maloneog.com

MDFA
 MALONE O'NEGAN CONSULTING ENGINEERS
 10000 KILPATRICK ROAD, DUBLIN 14, IRELAND
 T: +353 1 282 2656
 F: +353 1 282 2655
 E: info@mdfa.ie
 W: www.maloneog.com

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ST. GURRY'S NATIONAL SCHOOL