

ATKINS

Member of the SNC-Lavalin Group

Residential Development, Aderrig Phase 2, Adamstown, Co. Dublin

Stage 2 Road Safety Audit

Quintain Developments Ireland Ltd

October 2022



Notice

This document and its contents have been prepared and are intended solely for Quintain Developments Ireland Ltd. information and use in relation to the Aderrig Phase 2 Stage 2 Road Safety Audit.

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Document history

Revision	Purpose description	Origin-ated	Checked	Reviewed	Author-ised	Date
Rev 0	Draft	DB	DC	DM	AFM	May 2022
Rev 1	Feedback Form completed	DB	DC	DM	AFM	Oct 2022

Client signoff

Client	Quintain Developments Ireland Ltd
Project	Proposed residential development, Aderrig Phase 2, Adamstown, Co. Dublin
Job number	5150924
Client signature / date	

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1. Introduction

1.1. Background

This report describes the findings of a Stage 2 Road Safety Audit associated with the Aderrig Phase 2 development, Adamstown, Co. Dublin.

The Audit has been completed by Atkins on behalf of Quintain Developments Ireland Ltd.

1.2. Site Inspection

The site inspection was carried out by the audit team on the 31st March 2022.

Weather conditions during the site inspection were sunny and dry; road surfaces were dry.

1.3. The Team

The Road Safety Audit Team members were as follows:

- Team Leader: **Darragh Malone** BEng (Hons) MSc CEng MICE
- Team Member: **Dara Crosbie** BSc ME CEng MIEI

1.4. The Design

The following drawings were examined as part of the Stage 2 Road Safety Audit process:

Table 1-1 – Design Team Documents & Drawings List

Drawing Number	Drawing Title	Revision
20-108-T110	Road Layout & Levels	C
20-108-T111	Road Kerbing Layout	C
20-108-T112	Proposed Road Markings & Signage	C
20-108-T120	Typical Road Construction Details – Sheet 1 of 2	A
20-108-T121	Typical Road Construction Details – Sheet 2 of 2	A
20-108-T211	Drainage Layout	C
20-108-T217	Proposed SuDS Details	-
SES 07521	Public Lighting Layout	B

1.5. Road Safety Audit Compliance

Procedure and Scope

This Road Safety Audit has been carried out in accordance with the procedures and scope set out in TII publication number **GE-STY-01024 - Road Safety Audit**.

As part of the road safety audit process, the Audit Team have examined only those issues within the design which relate directly to road safety.

Compliance with Design Standards

The road safety audit process is not a design check, therefore verification or compliance with design standards has not formed part of the audit process.

Minimizing Risk of Collision Occurrence

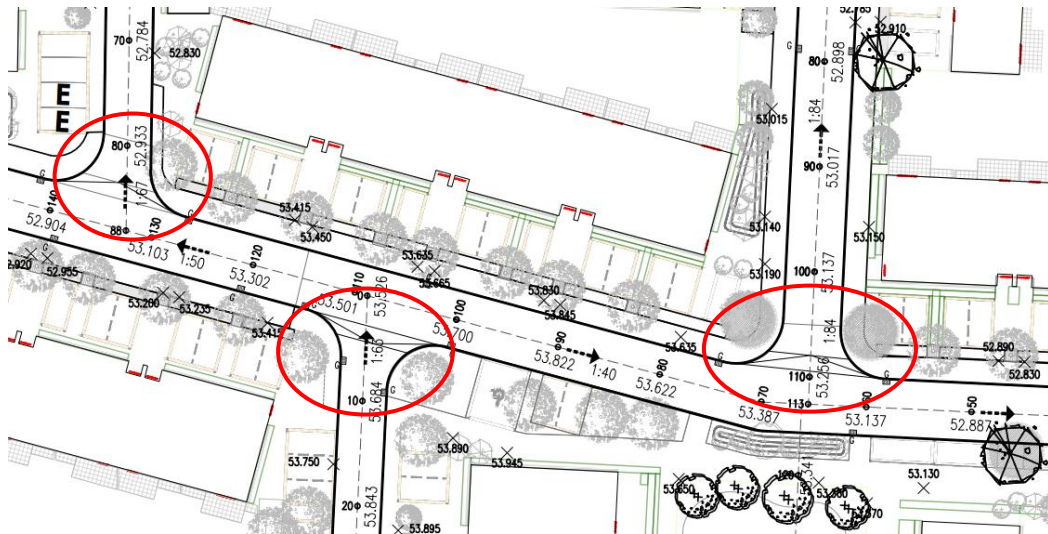
All problems described in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and minimise the risk of collision occurrence.

2. Road Safety Issues Identified

2.1. Problem: Tactile paving for visually impaired

Location: Homezone Streets and Side Streets

The provision of tactile / blister paving at crossing locations is either missing or insufficiently provided across some homezone streets and side streets. Where such surface features are found to be deficient, there is potential for visually impaired pedestrians to inadvertently step out into the adjacent live carriageway resulting in an increased risk of pedestrian-vehicle collisions.



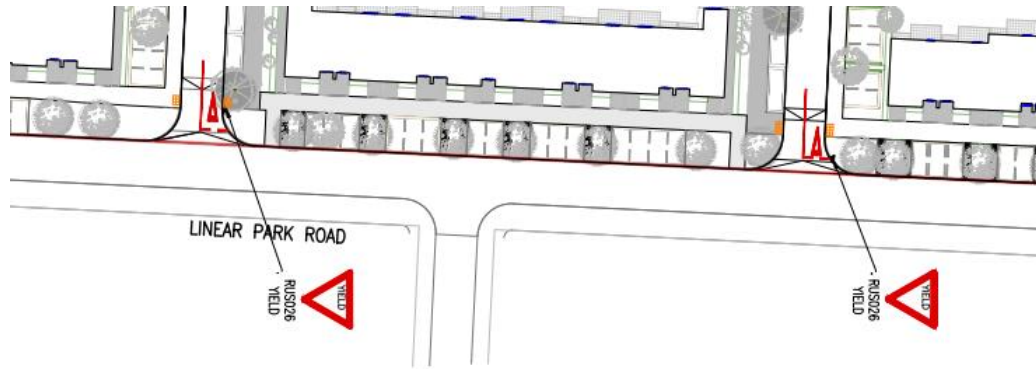
Recommendation

The Design Team should review the design provision / application of tactile paving at all crossing locations across the scheme, taking cognisance of required paving arrangement, colour and extent.

2.2. Problem: Formal Crossing Facilities vs Pedestrian Desire Line

Location: Linear Park Road

Given there is an apparent pedestrian desire line between the proposed development to the west of Linear Park Road and the linear park to the east, the proposed design does not make any provision for formalised crossing facilities to accommodate safe access to the parkland area. Where no formal crossing facilities are provided, pedestrians may attempt to cross the road in an area where it is unsafe to do so leading to an increased risk of pedestrian-vehicle conflicts.



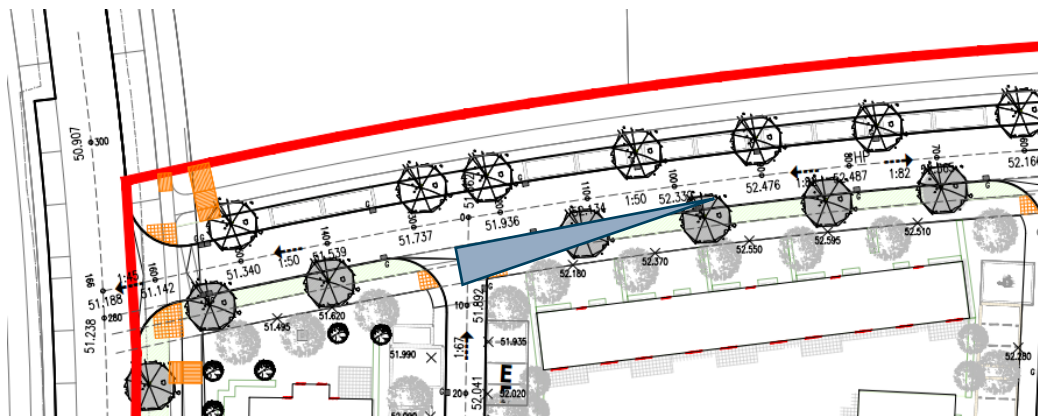
Recommendation

The Design Team should include provision of formalised crossing points along Linear Park Road. Such provision should be consistent with others provided in the area for similar road type and posted speed limits.

2.3. Problem: Visibility at Junctions

Location: General / All junctions

Where proposed landscaping measures are located in the vicinity of proposed junctions, there is potential for landscape elements (e.g. shrubs, trees, etc) to encroach into visibility envelopes over time. Where visibility at junctions is compromised / reduced, there is increased risk of side swipe type vehicle-vehicle collisions or cycle-vehicle collisions where vehicles emerging from the minor road have inadequate visibility to approaching traffic.



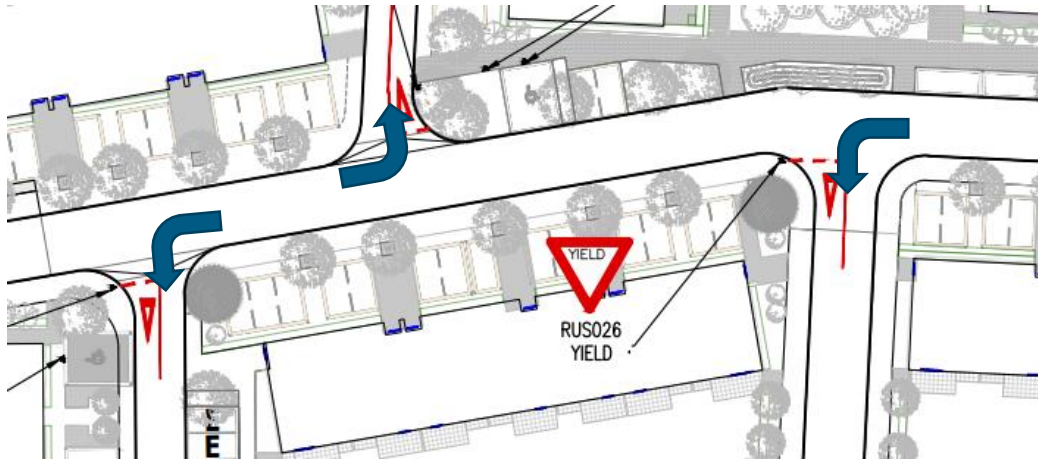
Recommendation

The Design Team should ensure that all landscaping elements are located away from junctions / visibility splays.

2.4. Problem: Access for Larger Vehicles

Location: Homezone Streets and Side Streets

Where access is required by larger vehicles (e.g. service vehicles [refuse truck] or emergency vehicles) the junction radii provided indicate that some turning movements may require the vehicle to mount footpaths when turning into homezone or side streets. This may lead to an increased risk of head-on type vehicle-vehicle collisions or larger vehicles being required to traverse pedestrian areas increasing the risk of vehicle-pedestrian collisions.



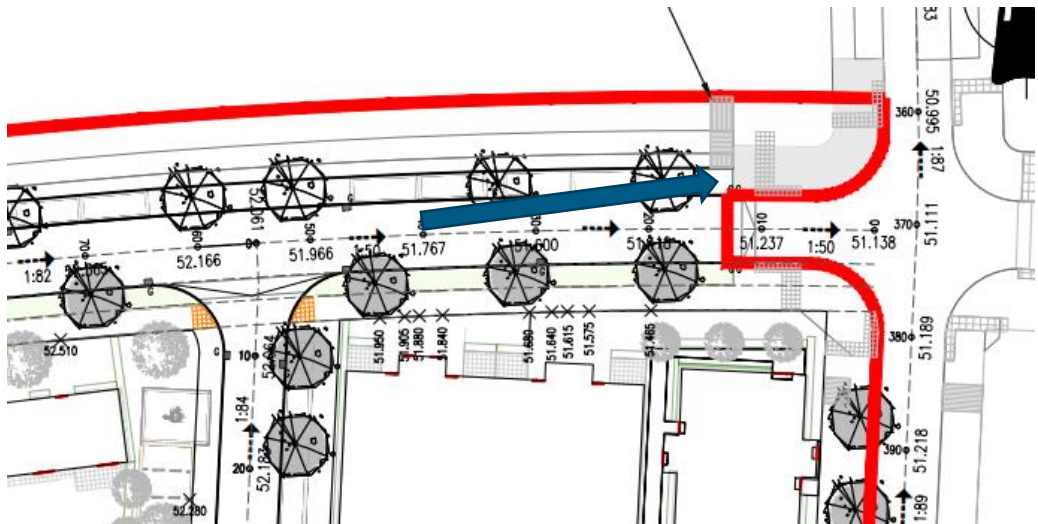
Recommendation

The Design Team should consider design measures or other alternative measures as appropriate to ensure such vehicles can safely pass through these junctions. It is recommended that swept path analysis be carried out.

2.5. Problem: Visibility to Traffic Signals

Location: Junction at NE Corner of Site

Where proposed landscaping measures are located in the vicinity of proposed junctions, there is potential for landscape elements (e.g. shrubs, trees, etc) to block visibility to traffic signals. Where visibility to traffic signals is compromised / reduced, there is increased risk of rear end, side swipe or head on type vehicle-vehicle collisions or cycle-vehicle collisions.



Recommendation

The Design Team should ensure that all landscaping elements do not block visibility to traffic signals.

3. Audit Team Statement

3.1. Certification

We certify that we have examined the drawings and documents listed in Chapter 1 of this Report.

3.2. Sole Purpose

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design which could be removed or modified in order to improve the road safety aspects of the scheme.

3.3. Implementation of RSA Recommendations

The problems identified herein have been noted in the Report together with their associated recommendations for road safety improvements. We (the Audit Team) propose that these recommendations should be studied with a view to implementation.

3.4. Audit Team's Independence to the Design Process

No member of the Audit Team has been otherwise involved with the design of the measures audited.

3.5. Road Safety Audit Team Sign-Off

Darragh Malone

Audit Team Leader
Road Safety Engineering Team
ATKINS

Signed:



Date: 31/05/2022

Dara Crosbie

Audit Team Member
Road Safety Engineering Team
ATKINS

Signed:



Date: 31/05/2022

4. Designer's Response

4.1. Preparing a Response to the Road Safety Audit

The Designer should prepare an Audit Response for each of the recommendations using the Road Safety Audit Feedback Form attached in Appendix A.

When completed, this form should be signed by the Designer and returned to the Audit Team.

4.2. Returning the Feedback Form

Please return the completed Road Safety Audit Feedback Form attached in Appendix A of this report to the following email or postal address:

Road Safety Engineering Team,
Atkins,
Atkins House,
150 Airside Business Park,
Swords,
Co Dublin,
Ireland.

Tel: 00 353 (0)1 810 8000

Email: darragh.malone@atkinglobal.com

The Audit Team will consider the Designers response and reply indicating acceptance or otherwise of the Designers response to each recommendation.

4.3. Triggering the Need for an Exception Report

Where the Designer and the Audit Team cannot agree on an appropriate means of addressing an underlying safety issue identified as part of the audit process, an Exception Report must be prepared by the Designer on each disputed item listed in the audit report.

Appendices

Appendix A. Road Safety Audit Feedback Form

Scheme: Error! Use the Home tab to apply Title to the text that you want to appear here.

Audit Stage: Stage 2 Road Safety Audit

Date Audit Completed: 31st May 2022

	To be completed by the Designer			To be completed by the Audit Team
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative Measures accepted by Auditors (yes/no)
2.1	Yes	Yes	Please see attached Waterman Moylan Layout No. 20-108-C112-proposed Road Markings & Signage. This layout has been updated to include tactile paving at all crossing locations.	
2.2	Yes	Yes	Please see attached Waterman Moylan Layout No. 20-108-C112-proposed Road Markings & Signage. This layout has been updated to include tactile paving along the Linear Park Road.	
2.3	Yes	No	Please see attached Landscape Architects Layout No. 17-064_LD-05-CS and 17-064_HW-01-CS. These layouts show that the tree detail has a narrow stem with a 2-metre clearance to ensure visibility is unobstructed.	Yes
2.4	Yes	Yes	Please see attached Atkins Layouts No. 5150924-HTR-10-DR-0125 to 5150924-HTR-10-DR-0129. These layouts have been prepared to show swept path movements for heavy vehicles through the development.	
2.5	Yes	No	Please see attached Landscape Architects Layout No. 17-064_LD-05-CS and 17-064_HW-01-CS. These layouts show that the tree detail has a narrow stem with a 2-metre	No - minimum mounting height of a standard signal head is 2.1m, the designer should clearly demonstrate that the proposed landscaping elements do not block visibility to the signals.

clearance to ensure visibility is unobstructed.

Signed by the Designer: Kevin Owen

Date: 04/07/2022

Signed by the Audit Team Leader:

A handwritten signature in blue ink, appearing to read "Doreen Mott", is displayed on a light gray rectangular background.

Date: 07/10/2022

Signed by the Employer:

Date:

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