

Stage 1 Road Safety Audit

Phase 1 of Residential Development, Rosshill, Galway

On behalf of Alber Developments Ltd

Prepared By:

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July 2021

Civil Structural Traffic



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Document History

| Revision | | RO | RO | R1 | R2 | R3 | | |
|-------------------|---|----|----|----|----|----|--|--|
| Purpose of Issue: | P=Preliminary PG=Progress C=Comment I=Information PL=Planning T=Tender CN=Construction | С | PL | С | PL | PL | | |
| Date: | | 02 | 06 | 09 | 19 | 05 | | |
| | | 12 | 12 | 02 | 05 | 07 | | |
| | | 19 | 19 | 21 | 21 | 21 | | |
| Originator: | | SS | SS | SS | SS | SS | | |
| Checked By: | | MR | MR | FF | FF | FF | | |
| Approved By: | | SS | SS | SS | SS | FF | | |
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1. Introduction

1.1. This report describes a Stage 1 Road Safety Audit carried out on behalf of Alber Developments Ltd on Phase 1 of a proposed residential development at Rosshill, Galway. The development involves the construction of an upgraded road junction with the Old Dublin Road and realignment of the Rosshill Road. The audit was carried out between 8th February and 4th July 2021.



Figure 1.1 Site Location

1.2. The audit team were as follows:

Team Leader:

Stuart Summerfield, HNC (Civil) MCIHT FSoRSA, Partner Certificate of Competency in Road Safety Audits (SoRSA, Jul 2015) TII Auditor Ref. SS73290

Team Member:

Francis Fidgeon, Chartered Engineer, BE CEng MEI Certificate of Competency in Road Safety Audits (UCD, 2013) TII Auditor Ref. FF74289

- 1.3. The audit comprised an examination of the drawings relating to the scheme supplied by the design office.
- Stuart Summerfield visited the site as part of a previous Road Safety Audit team on 19th November 2019 between the hours of 14:20 15:15. Weather conditions during the inspection were overcast and the road surface was dry. Photographs were taken during the inspection. Francis Fidgeon visited



the site on 4^{th} July 2021 between the hours of 20:20 - 21:30. Weather conditions during that inspection were wet and the road surface was wet. Photographs were taken during the inspection.

- 1.5. This Stage 1 audit has been carried out generally in accordance with the relevant sections of the Transport Infrastructure Ireland (TII) Publication (Standard) GE-STY-01024 (Dec 2017) 'Road Safety Audit'. The audit team has examined only those issues within the design relating to the road safety implications of the scheme and has therefore not examined or verified the compliance of the design to any other criteria.
- 1.6. Appendix A describes the documents examined by the audit team.
- 1.7. All of the 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 accident occurrence.

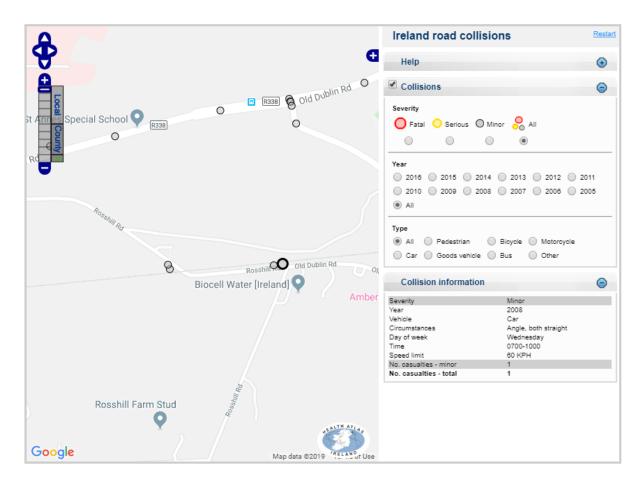


2. Items Resulting from This Stage 1 Audit

2.1 Collision Data

Collision data has not been supplied with this scheme.

Road Collision Data available on the Road Safety Authority Database, within the period 2005 to 2016, recorded four collisions in the immediate vicinity of the proposed site. Three of these collisions occurred in 2008 and one in 2010. Zero collisions have been recorded since 2010.





2.2 General Problems / Problems at Multiple Locations

2.2.1 Rosshill Road : Pedestrian Access to the Development

Problem: Rosshill Road does not have suitable pedestrian or cycle facilities. The proposed development is likely to generate substantial pedestrian and cyclist numbers.

Rosshill Road gets very busy during the AM and PM peak hours with commuting traffic.



Hazard: Pedestrians may decide to walk in the carriageway due to the poor-quality footpaths. Additionally, motorists may not give sufficient space for cyclists on the road. Impact between users may result.

Recommendation: Provide upgraded facilities for non-motorised users.

2.2.2 Pedestrian Connectivity

Problem: There are no safe crossing points to the existing footway.

Hazard: Impact with crossing pedestrians and vehicles may result.

Recommendation: Provision of suitable safe crossing facility to existing footway or provision of continuous footways.



2.2.3 Equestrians

Problem: There are numerous signs on Rosshill Road warning of equestrian use of the road.



Hazard: The increased traffic numbers due to the development increase the risk of vehicle / horse impacts.

Recommendation: The design team should undertake investigations to the use of the Rosshill Road and provide segregated equestrian facilities if deemed necessary.

2.2.4 Development Roads: Visibility

Problem: Visibility at some of the sharp bends on the internal roads may be restricted due to the parking to the inside of the bend. This parking could limit driver visibility around the bend.

Hazard: Motorists may collide with pedestrians who are crossing the road or opposing traffic whose swept path crosses theirs.

Recommendation: Ensure suitable forward visibility is achieved. DMURS chapter 4.4.4 can be used as a reference document for the design of the internal roads.

2.2.5 Development Roads: Turning Heads

Problem: The internal turning heads seem short. Refuse collection vehicles may reverse back to make use of the road junctions for turning.

Hazard: Impact with crossing pedestrians, cyclists or other road users may result.

Recommendation: Ensure the turning heads are of sufficient size for turning of large vehicles.



2.2.6 Development Roads: Pedestrian Crossing

Problem: Tactile paving is not shown at all footpath crossings of internal carriageways.

Hazard: Sight impaired may errantly enter the carriageway and become confused / not find the receiving footpath / continue to walk in the carriageway. Impact with crossing pedestrians and vehicles may result.

Recommendation: Ensure adequate crossing facilities are provided to facilitate safe crossing points for vulnerable road users.



2.3 **Problems at Specific Locations**

2.3.1 Cattle on Rosshill Road

Problem: Milking cows were observed being driven on Rosshill Studfarm Road, along Rosshill Road and to a pen near opposite Rosshill Studfarm Road. The proposed new junction for Rosshill Road will mean the cattle require to be driven a longer distance on Rosshill Road.



Hazard: Rosshill Road can be busy with faster moving traffic and there is an increased risk of vehicle/animal impact. Also, the development will mean an increase in traffic on Rosshill Studfarm Road.

Recommendation: Maintain an element of the existing road for use by the cattle. Ensure adequate signage is provided to inform drivers of the presence of cattle.



2.3.2 Existing Rosshill Road / Rosshill Studfarm Road Junction.

Problem: The proposed new junction is in close proximity to the existing junction.

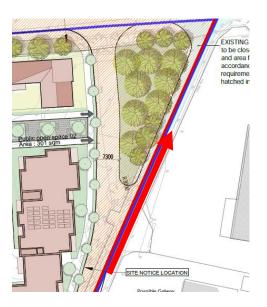
Hazard: Rosshill Road traffic arriving from the east may errantly turn into the redundant road junction. These users may be required to reverse back onto the public road. Rear-end impacts may result.

Recommendation: Ensure the existing road and junction is removed and suitably landscaped to avoid any confusion that a road exists at this location. However, refer to 2.3.1 above. Ensure adequate signage is provided to inform drivers of new junction layout.



2.3.3 Redundant Section of Rosshill Studfarm Road

Problem: Northbound Rosshill Studfarm Road traffic may have see-through to the former section of road (to be closed). Users may errantly drive onto the closed section of road and be required to reverse back onto the revised road alignment.



Hazard: Rear-end shunts may result.

Recommendation: Ensure see-through to the former road is omitted.



2.3.4 Rosshill Road / Rosshill Studfarm Road: Junction Visibility

Problem: Visibility to the right when exiting the development may be restricted due to roadside vegetation. Vehicles approaching the proposed junction from the east do so at high speed.

Hazard: Users may proceed from the new junction into the Rosshill Road into the path of oncoming vehicles. Impact may result.

Recommendation: Ensure the available junction visibility is suitable for the speed of traffic on the road.



2.3.5 Railway Bridge: Height

Problem: The railway bridge over the Rosshill Road is signed as 4.0m clearance. Although unlikely to be a problem for the occupants of the development some construction traffic may be higher than this limit.



Hazard: Construction vehicles may strike the bridge and damage the structural integrity of the bridge.

Recommendation: Ensure the Construction Management Plan identifies a suitable access route for high vehicles.

2.3.6 Rosshill Road: Drainage

Problem: The existing Rosshill Road drainage is not working adequately. The development will generate increased traffic movements on this road.



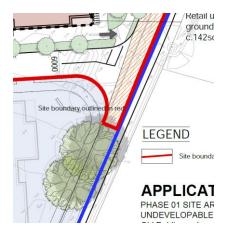


Hazard: During times of extreme rainfall standing water may encroach into the carriageway. Risk of vehicular loss of control will be heightened by the increased use of this road.

Recommendation: Ensure adequate surface water drainage is provided.

2.3.7 Development Junction with Rosshill Studfarm Road: Visibility

Problem: Large trees are proposed to the right of the new junction, within the visibility envelope.



Hazard: Users may pull out of the junction into the path of oncoming traffic.

Recommendation: Ensure all high landscaping is kept to the rear of the junction visibility splay.

2.3.8 Re-aligned Rosshill Studfarm Road: Width

Problem: The realigned Rosshill Studfarm Road seems to reduce in width to the north of the new development junction. Southbound traffic may not expect this road narrowing and keep a uniform distance from the road edge.

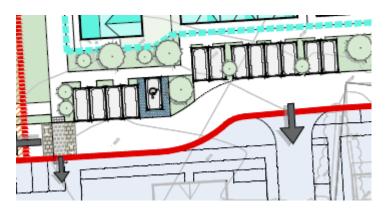
Hazard: Impact with users turning out of the development may result.



Recommendation: Ensure a uniform road width is provided between the development access and the junction with Rosshill Road.

2.3.9 Chicane to Southwest of Phase 1

Problem: Perpendicular parking off a short sharp chicane to the southwest of Phase 1 has restricted visibility due to the further parking to the west.



Hazard: Motorists pulling out of the parking, particularly those reversing, may pull into the path of oncoming traffic and be struck.

Recommendation: Realign the road or remove some parking so that adequate visibility is achieved.

2.3.10 No path for disabled parking spaces

Problem: Safe access/egress from the disabled parking spaces shown below is not proposed.



Hazard: Users may travel in the carriageway and be struck.

Recommendation: Provide a footpath to the front of the parking spaces.



3. Audit Team Statement

We certify that we have examined the drawings and other information listed in Appendix A. 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 safety of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement which we recommend should be studied for implementation. No one in the audit team has been involved with the scheme design as shown in Appendix A.

Signed Stuart Summerfield Audit Team Leader

Signed Francis Fidgeon Audit Team Member



Appendix A List of Documents Examined

| DRAWING NO: | DRAWING NAME: | RECEIVED FROM: | DATE: |
|-------------|--|----------------------------|----------|
| 20175 3003 | Site Layout Plan - Part 01 [O'Neill O'Malley Ltd] | Tobin Consulting Engineers | 28/06/21 |
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Appendix B RSA Feedback Form

ROAD SAFETY AUDIT FEEDBACK FORM

CST Group Chartered Consulting Engineers 1, O'Connell Street, Sligo, F91 W7YV, Ireland

Scheme: Phase 1 of Residential Development, Rosshill, Galway on behalf of Alber Developments Ltd

 Audit Stage:
 1
 Date Audit Completed:
 04/07/21
 Route No.
 Our Ref:
 119209 | R3

| TO BE COMP | TO BE COMPLETED BY AUDIT TEAM LEADER | | | |
|--|---|-----|--|--|
| Paragraph No. in Safety Audit Report | Audit accepted measure Give reasons for not accepting recommended | | Alternative measures or reasons accepted by Auditors (Yes/No) | |
| 2.2.1 | Yes | Yes | | |
| 2.2.2 | Yes | Yes | | |
| 2.2.3 | Yes | Yes | | |
| 2.2.4 | Yes | Yes | | |
| 2.2.5 | Yes | Yes | | |
| 2.2.6 | Yes | Yes | | |
| 2.3.1 | Yes | Yes | | |
| 2.3.2 | Yes | Yes | | |
| 2.3.3 | Yes | Yes | | |
| 2.3.4 | Yes | Yes | | |
| 2.3.5 | Yes | Yes | | |
| 2.3.6 | Yes | Yes | | |
| 2.3.7 | Yes | Yes | | |
| 2.3.8 | Yes | Yes | | |
| 2.3.9 | Yes | Yes | | |
| 2.3.10 | Yes | Yes | | |

| Signed: | Digitally signed by Richard Daly DN: cn=Richard Daly, o, ou, email=richard.daly@tobin.ie, c=US Date: 2021.07.05 13:11:32 +0100 | Designer | Date: | 05.07.21 |
|---------|--|-------------------|-------|------------|
| | Richard Daly | | | |
| | TOBIN Consulting Engineers | | | |
| Signed: | S Amit | Audit Team Leader | Date: | 05/07/2021 |
| | Stuart Summerfield | | | |
| | CST Group Chartered Consulting Engineers | | | |
| Signed: | Bully | Employer | Date: | 05.07.21 |
| | Barry Duffy | | | |
| | Alber Developments Ltd | | | |