



APPENDIX 13-2

ROAD SAFETY AUDIT

Title: STAGE 1 ROAD SAFETY AUDIT

For;

Office Innovation Campus, Moygaddy, Co. Meath.

Client: OCSC Consulting Engineers.

Date: February 2022

Report reference: 1388R01

VERSION: FINAL (April 2022)

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1.0 Introduction

This report was prepared in response to a request from Mr. Shane Mc Givney, OCSC Consulting Engineers, for a Stage 1 Road Safety Audit of the proposed office Innovation Campus at Moygaddy Co. Meath.

The Road Safety Audit Team comprised of;

Team Leader: **Norman Bruton**, BE CEng FIEI, Cert Comp RSA.

TII Auditor Approval no. NB 168446

Team Member: **Owen O'Reilly**, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng MIEI

TII Auditor Approval no. OO1291756

The Road Safety Audit comprised an examination of the drawings provided and a site visit by the Audit Team, together, on the 14th of February 2022.

The weather at the time of the daytime site visit was dry and the road surface was damp.

This Stage 1 Road Safety Audit has been carried out in accordance with the requirements of TII, Publication Number GE-STY-01024, dated December 2017.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within this safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

A location map showing where each problem occurs is provided in **Appendix A**.

A list of the documents provided to the Audit Team is provided in **Appendix B**.

The feedback form to be completed by the Design Team Leader is provided in **Appendix C**.

2.0 Background

It is proposed to construct an innovation campus off the R147 in Moygaddy north of the Dunboyne Road roundabout and Rye Water. This is one of two sites being proposed in close proximity. A separate audit report has been prepared for the second site.

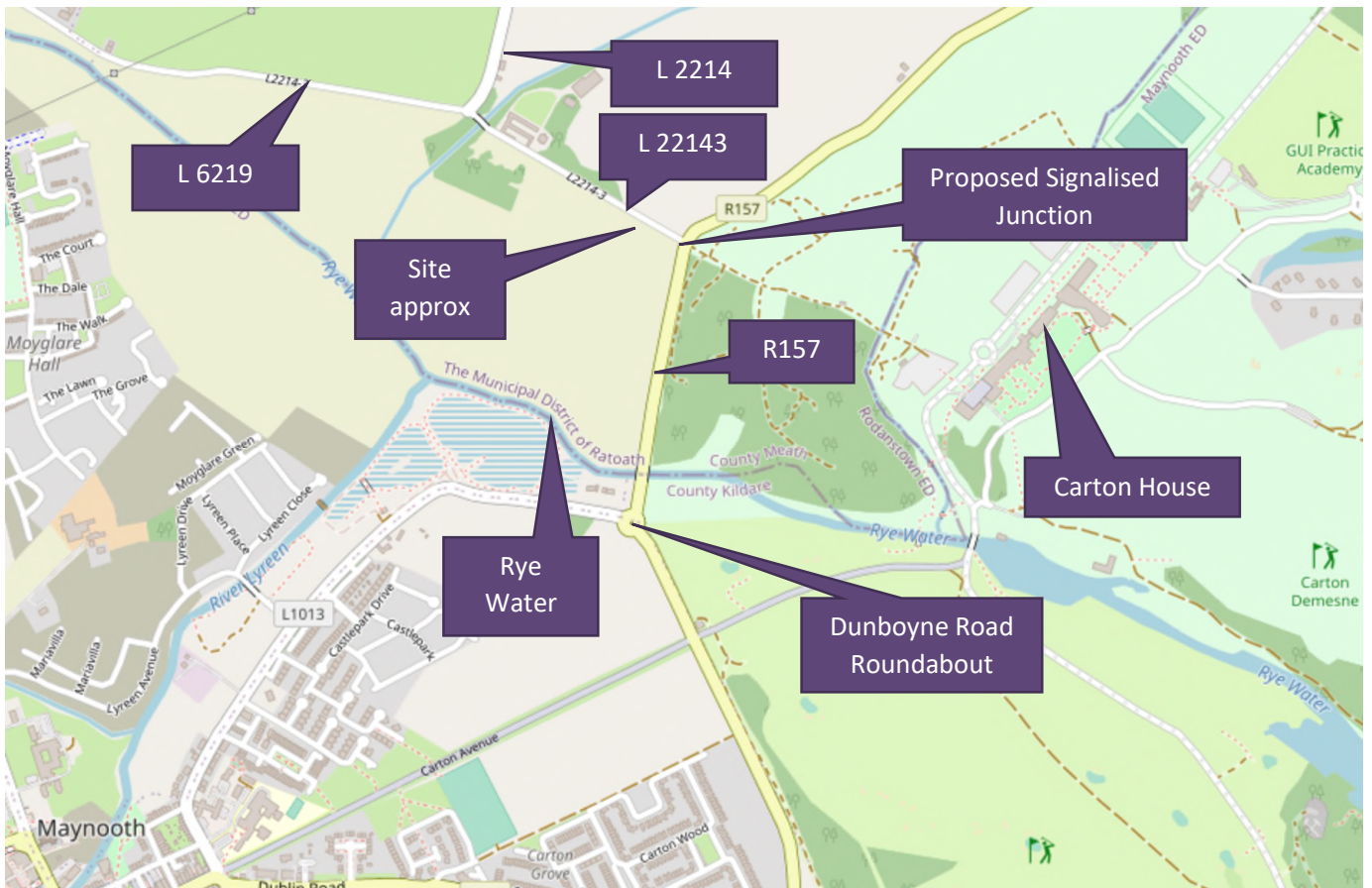
The speed limit on the R157 is 80km/hr.

This scheme involves the construction of 9 no. office buildings and associated road works and car parking.

It is proposed to provide a signalised junction on the R157 at the existing sharp bend that bounds with Carton Estate. It is also proposed to realign the L-22143 on approach to the junction including the provision of a right turning lane.

It is proposed to provide a two-way cycle track and footpath on one side of both sections of the realigned R157.

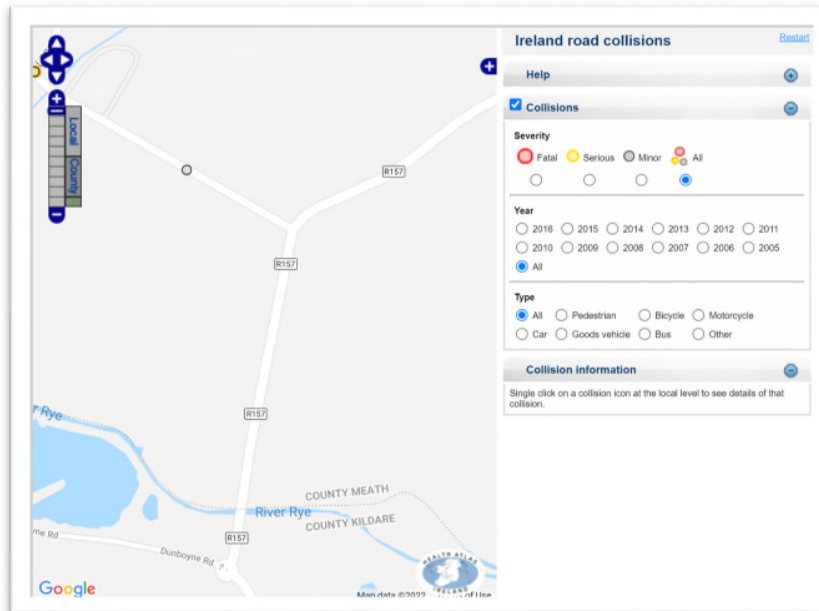
The site location is shown below.



STAGE 1 RSA – MOYGADDY SITE A
OCSC



The Road Safety Authority’s website www.rsa.ie shows that there was one minor injury recorded on the Kilcloon Road in the 12-year period 2005 to 2016.



3.0 Issues Identified in This Road Safety Audit.

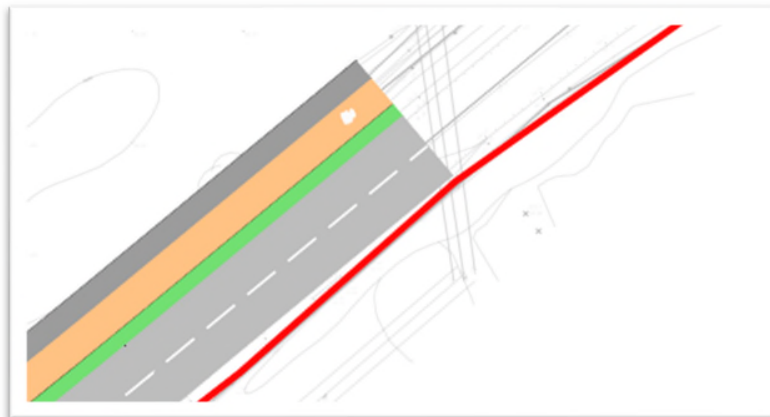
3.1 Problem

LOCATION

General Comment tie-in points

PROBLEM

Details have not been provided of how the cycle track and footpaths will tie in at the scheme extents. Cyclists and pedestrians will have to cross the carriageway to access the facilities. Without suitable transitions from off road to on road and suitable crossing facilities there is a risk that pedestrians and cyclists will be struck by passing traffic.



Examples only

RECOMMENDATION

It is recommended that suitable transitions and crossing facilities be provided.

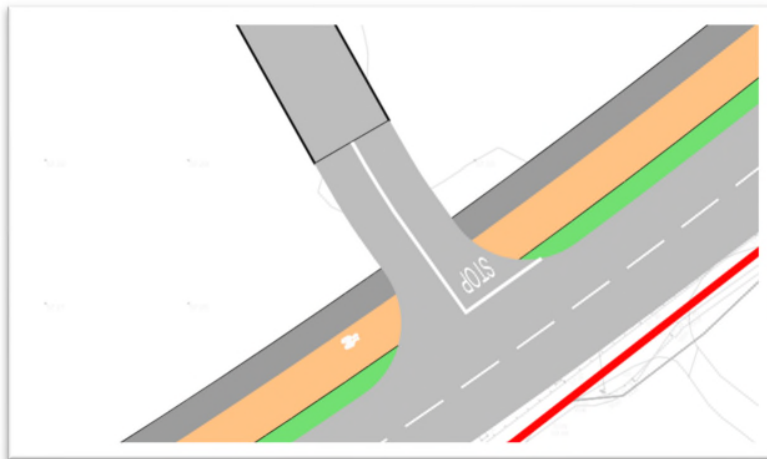
3.2 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3, cycle track across campus access road.

PROBLEM

The proposed two way cycle track crosses the mouth of the campus access road. There is a risk that drivers exiting the campus may not expect two way cyclists as they approach the stop line.



RECOMMENDATION

It is recommended that a 'bend out crossing' be provided.

3.3 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3, campus access road.

PROBLEM

There are no dedicated cycle or pedestrian facilities along the main campus access. The campus will be a busy area with vehicular traffic when fully occupied and this will increase the risk for cyclists and pedestrians.

RECOMMENDATION

It is recommended that footpaths and cycle tracks be provided within the campus.

STAGE 1 RSA – MOYGADDY SITE A OCSC

3.4 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3, campus access road.

PROBLEM

There is a signalised pedestrian crossing of the R157 eastern section, however there is no footpath on that side. This could lead to slips and falls if pedestrians cross into the grassed verge.



RECOMMENDATION

It is recommended that a section of footpath be provided linking the north-south and east west pedestrian crossing areas. The crossing should be retained to be able to cater for potential future development.

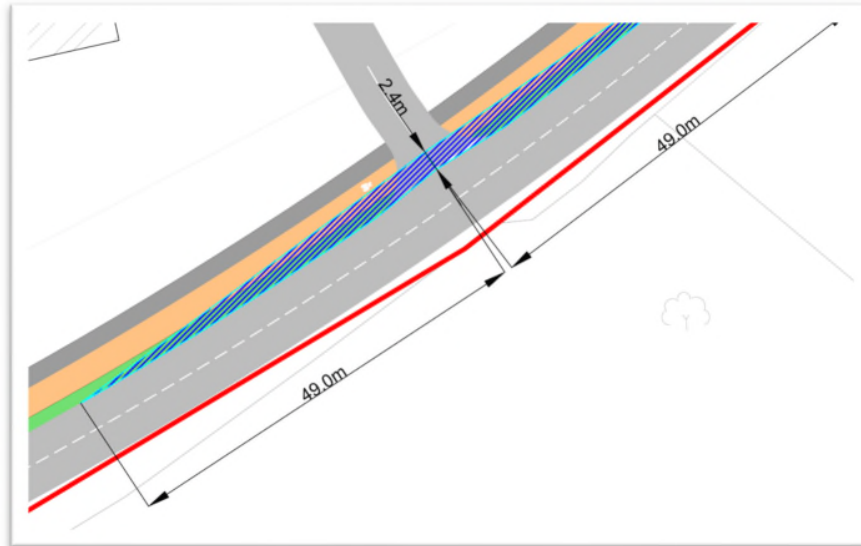
3.5 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0115 S2 P01, Visibility Splay at Campus junction.

PROBLEM

The visibility splay is shown for a 50km/hr urban design speed. The posted speed is 80km/hr. There may be insufficient visibility to oncoming vehicles leading to side-impact or rear-end collisions.



RECOMMENDATION

It is recommended that visibility splays be provided to match the anticipated 85th percentile speed post opening.

3.6 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3, Carton Estate gate.

PROBLEM

There is an existing gate into the Carton estate close to the proposed signalised junction. It is unclear if this gate will be used in the future. If it is to be used movements into and out of it may lead to collisions at the junction.

STAGE 1 RSA – MOYGADDY SITE A
OCSC



RECOMMENDATION

It is recommended that the accommodation works relating to this gate be included in the design process.

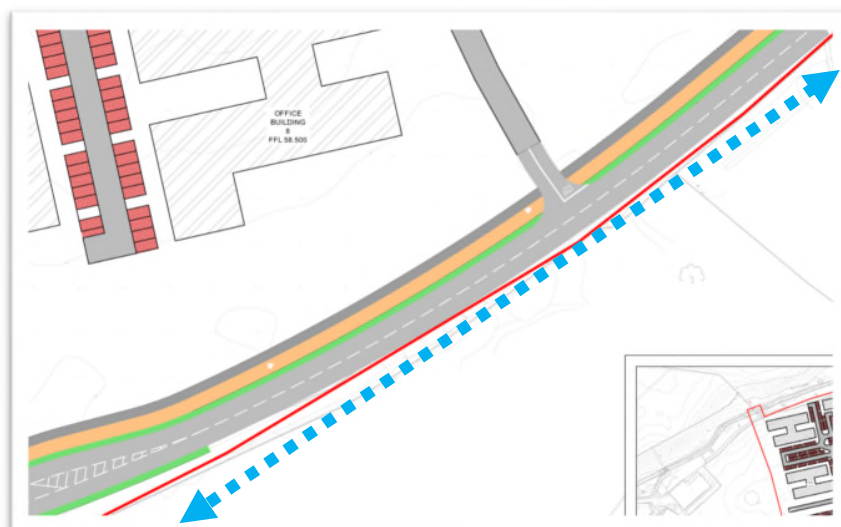
3.7 Problem

LOCATION

Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3, Carton Estate boundary wall.

PROBLEM

The realigned R157 eastern arm is very close to the stone wall of the Carton Estate. This is a hazard for an errant vehicle.



RECOMMENDATION

It is recommended that a suitable Clear Zone be provided between the boundary wall and the realigned carriageway.

4.0 Observations

4.1 Observation

It is assumed that shared use areas at crossing points of the signalised junction will be designed at a later stage.

4.2 Observation

Swept path details have not been provided to ensure the stop lines are set back sufficiently at the signalised junction to cater for HGV manoeuvres.

4.3 Observation

Vertical alignment, drainage, lighting and landscaping details have not been provided to the Audit Team.

5.0 Audit Statement

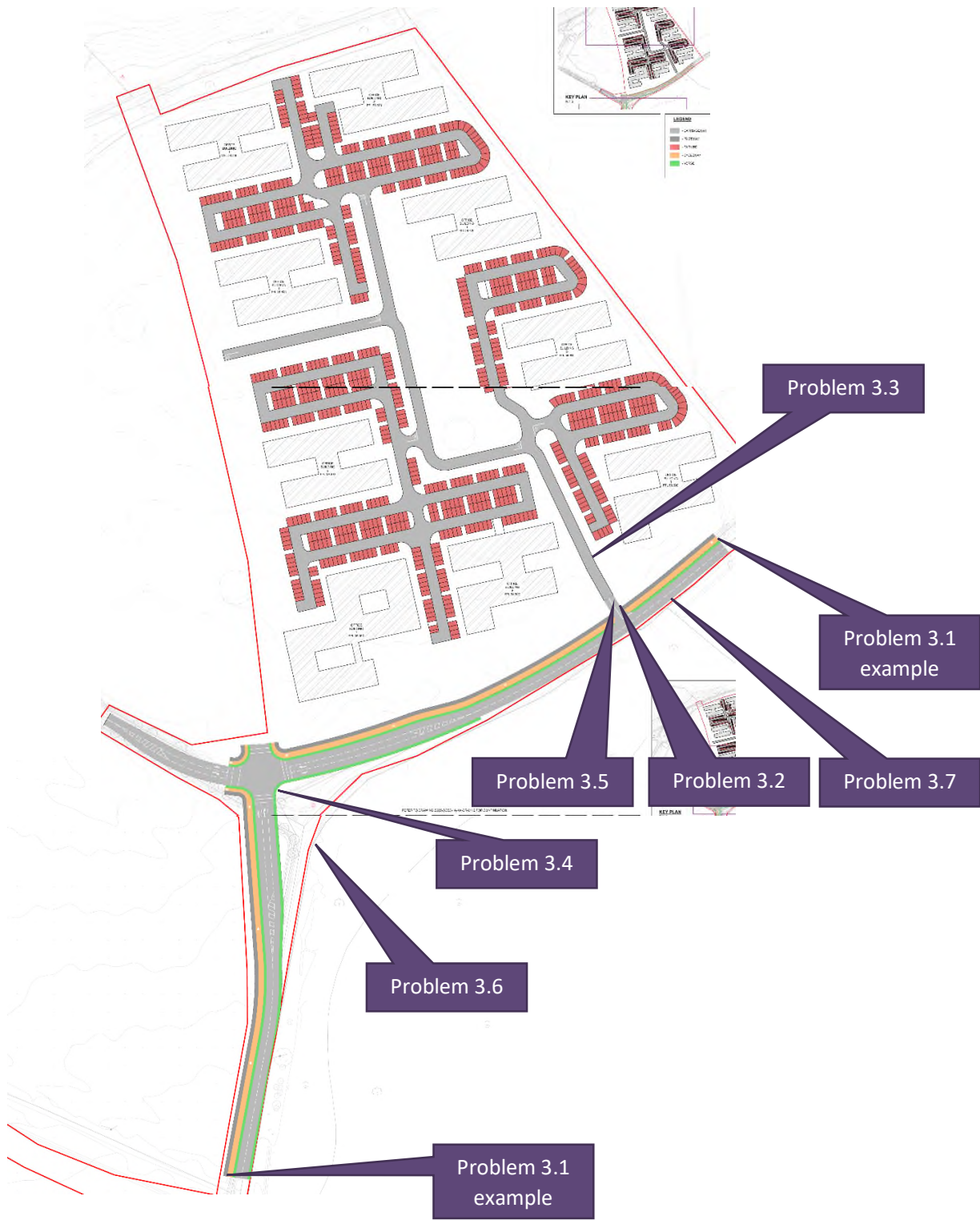
We certify that we have examined the site on the 14th of February 2022. The examination has been carried out with the sole purpose of identifying any aspects of the design which could be added, removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions which we would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton Signed: *Norman Bruton*
(Audit Team Leader) Dated: 8/4/ 2022_____

Owen O'Reilly Signed: *Owen O'Reilly*
(Audit Team Member) Dated: _8/4/2022_____

Appendix A – Problem Location Map



Appendix B

Information Supplied to the Audit Team

- Drawing S665- OCSC-1A-MH-DR-C-0110 S2 P01 Sheet 1 of 3
- Drawing S665- OCSC-1A-MH-DR-C-0111 S2 P01 Sheet 2 of 3
- Drawing S665- OCSC-1A-MH-DR-C-0112 S2 P01 Sheet 1 of 3
- Drawing S665- OCSC-1A-MH-DR-C-0115 S2 P01

Appendix C

Feedback Form

SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORT

Scheme: Office Innovation Campus, Moygaddy.

Stage: 1 Road Safety Audit

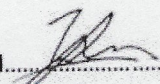
Date Audit (Site Visit) Completed: 14th February 2022

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)
3.1	Y	Y	The proposed cycle lane along the R157 eastern arm will be updated to tie into the carriageway. A suitable Jug turn will be provided on the opposite side of the road to accommodate the cyclists' right turning movement towards the development	Yes
3.2	Y	N	It is proposed to provide a shared space and tactile for crossing before the cyclist and pedestrians approach the junction. A raised crossing will be provided to indicate priority for pedestrians and cyclists.	Yes
3.3	Y	Y	A shared facility has been provided within the campus at required widths which ties into the external pedestrian and cyclist network.	Yes
3.4	Y	N	There are insufficient spaces to provide walkways and cycle lanes along the south-eastern parts of the design (boundary wall). As such, two way movements will take place on the opposite sides. Pedestrian crossing lines have been removed from the junction on the eastern and southern legs.	Yes
3.5	N	N	The visibility splay is achieved for 50kph. The speed limited will be lowered to 50kph once the new	Yes

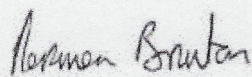
STAGE 1 RSA – MOYGADDY SITE A
OCSC



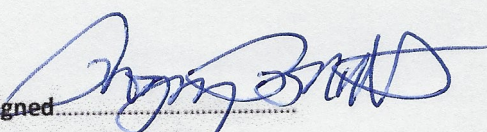
			distributor road and development is completed	
3.6	Y	Y	It is proposed to utilize the existing R157 road alignment as an off-road trail truck. The gate can be accessed via this trail in future once the development is completed.	Yes
3.7	Y	N	The proposed 1.5m verge separation is an improvement to the existing condition. As the section of road is fairly straight and the speed is being reduced, it is not anticipated that this would be a problem.	Yes

Signed 
Design Team Leader

Date 08/04/2022

Signed 
Audit Team Leader

Date 8/4/2022

Signed 
Developer/ Employer

Date 26/8/22