

BRUTON CONSULTING ENGINEERS

Title: STAGE 1 ROAD SAFETY AUDIT

For;

Primary Care Centre & Nursing Home, Moygaddy, Co. Meath.

Client: OCSC Consulting Engineers.

Date: February 2022

Report reference: 1388R02

**VERSION: FINAL (April 2022)** 

Prepared By:

### **Bruton Consulting Engineers Ltd**

Glaspistol Tel: 041 9881456

Clogherhead Mob: 086 8067075

Drogheda E: admin@brutonceng.ie

Co. Louth. W: www.brutonceng.ie



### **CONTENTS SHEET**

### Contents

1.0	In	ntroductionntroduction	
2.0	В	Background	3
3.0	Is	ssues Identified in This Road Safety Audit	5
	3.1	Problem	5
	3.2	Problem	6
	3.3	Problem	6
	3.4	Problem	7
	3.5	Problem	8
	3.6	Problem	g
	3.7	Problem	10
4.0	0	Observations	10
4	.1	Observation	10
4	.2	Observation	10
4	.3	Observation	10
5.0	А	Audit Statement	11
Арр	endix	ix A – Problem Location Map	12
Арр	endix	ix B	13
Арр	endix	ix C	14



#### 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 Primary Care Centre and Nursing Home 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 14<sup>th</sup> 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

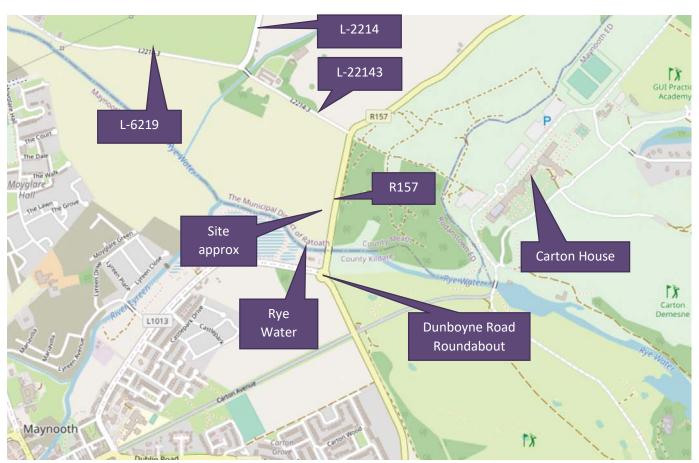
It is proposed to construct a primary care centre and nursing home in Moygaddy north of the Dunboyne Road roundabout and River Rye. This is one of two sites being proposed in close proximity. A separate audit report has been prepared for the second site.

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

This scheme involves the construction of a side road off the realigned R157 to access the site. This side road will cater for future development also.

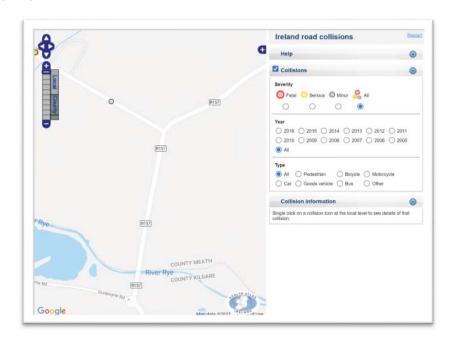
It is proposed to provide a two-way cycle track and footpath on one side of the realigned R157.

The site location is shown below.





The Road Safety Authority's website <u>www.rsa.ie</u> shows that there were no recorded injury collisions on the R157 in the 12-year period 2005 to 2016.





### 3.0 Issues Identified in This Road Safety Audit.

#### 3.1 Problem

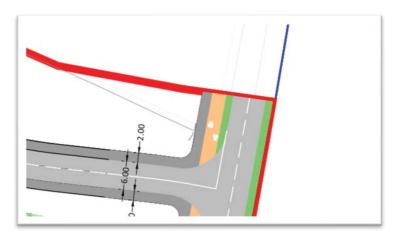
**LOCATION** 

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.





#### RECOMMENDATION

It is recommended that suitable transitions and crossing facilities be provided. Where this scheme ties in with the other planned scheme to the north a transitional arrangement should be provided should construction of that scheme not proceed.



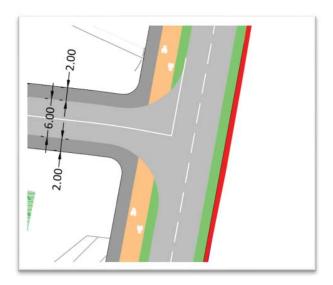
#### 3.2 Problem

#### LOCATION

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

#### PROBLEM

The proposed two way cycle track crosses the mouth of the proposed side road. There is a risk that drivers exiting the side road 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

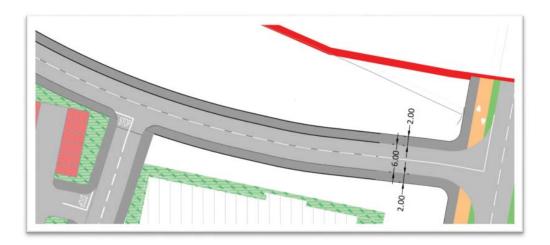
#### LOCATION

Drawing S665- OCSC-1B-MH-DR-C-0111 S2 P01 Sheet 2 of 3, Side road cross section.

#### **PROBLEM**

There are no dedicated cycle facilities along the proposed side road The side road will be a busy area with vehicular traffic when fully developed and this will increase the risk for cyclists.





#### **RECOMMENDATION**

It is recommended cycle tracks be provided on both sides of the side road.

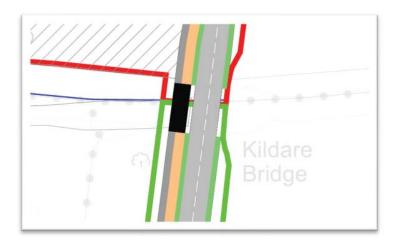
#### 3.4 Problem

#### **LOCATION**

Drawing S665- OCSC-1B-MH-DR-C-0112 S2 P01 Sheet 3 of 3, Kildare Bridge Cross Section.

#### **PROBLEM**

It is unclear if there is sufficient width at Kildare Bridge to accommodate a consistent cross section including the cycle track and footpath and the vehicle restraint systems (with correct setback to the front and working width to the rear). This could lead to a pinch point in the facilities for vulnerable road users which may result in cyclists opting to travel on the R157 carriageway where they would be at grater risk of being struck by passing vehicles.







#### **RECOMMENDATION**

It is recommended that the effective width of the cycle and pedestrian facilities be consistent all along the R157

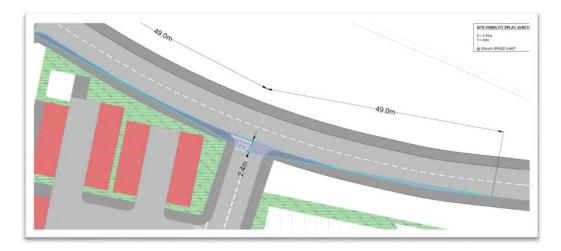
#### 3.5 Problem

#### **LOCATION**

Drawing S665- OCSC-1B-MH-DR-C-0115 S2 P01 Visibility Splay at side road junction with the proposed units.

#### **PROBLEM**

The visibility splay is shown for a 50km/hr urban design speed. It is unknown what the planned speed limit and design speed will be. The speed limit on the R157 is currently 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 design speed of the side road.



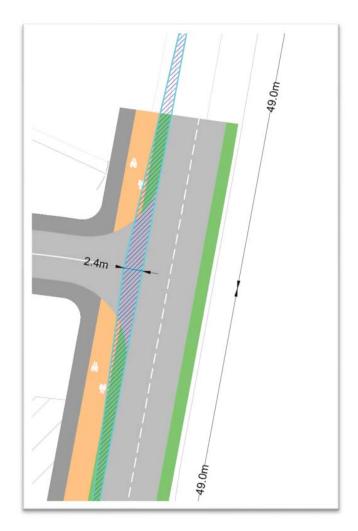
#### 3.6 Problem

#### LOCATION

Drawing S665- OCSC-1B-MH-DR-C-0115 S2 P01 Visibility Splay at side road junction with R157.

#### **PROBLEM**

The visibility splay is shown for a 50km/hr urban design speed. The speed limit on the R157 is currently 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 to the posted speed/design speed be provided.



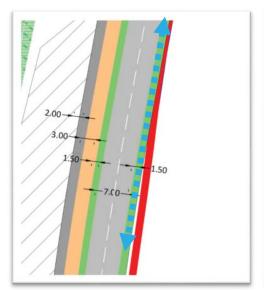
#### 3.7 Problem

#### **LOCATION**

Drawing S665- OCSC-1B-MH-DR-C-0112 S2 P01 Sheet 3 of 3, Carton Estate boundary wall.

#### **PROBLEM**

It is proposed to provide a 1.5m verge between the R157 and the Carton Estate boundary wall. The wall may be hazard if struck by an errant vehicle.





#### RECOMMENDATION

It is recommended that a suitable Clear Zone be provided between the boundary wall and the R157 carriageway.

#### 4.0 Observations

#### 4.1 Observation

It is assumed that dropped kerbs and tactile paving locations will be dealt with during the detailed design phase.

#### 4.2 Observation

Swept path details have not been provided to ensure that ambulances and other emergency vehicles can use the facilities including the set-down area.

#### 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 14<sup>th</sup> 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: Agree Bruton

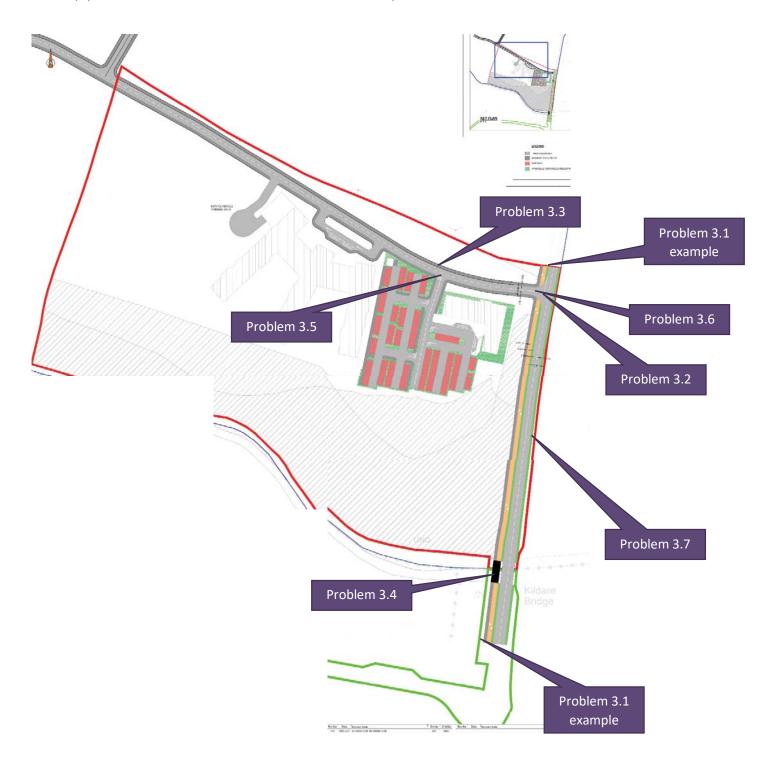
(Audit Team Leader) Dated: 4-4-2022\_\_\_\_\_

Owen O'Reilly Signed: Signed: Signed:

(Audit Team Member) Dated: \_4-4-2022\_\_\_\_



### Appendix A – Problem Location Map





### Appendix B

### Information Supplied to the Audit Team

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



Appendix C

Feedback Form

#### SAFETY AUDIT FORM - FEEDBACK ON AUDIT REPORT

Scheme: Primary Care Centre & Nursing Home, Moygaddy, Co. Meath.

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 across Kildare Bridge will be updated to tie in the existing carriageway R157and at south cyclist will join carriageway	
3.2	Y	N	It is proposed to provide a shared space and tactile for crossing before the cyclist and pedestrian approach the junction. A raised crossing will be provided to indicate priority for pedestrians and cyclists.	Yes
3.3	Y	N	It is not anticipated to have high volume of pedestrian and cyclist traffic. 2m wide shared use will facilitate pedestrian and cyclist movement	Yes
3.4	Y	N	The width of the cycle way and footway will stay consistent. A new pedestrian and cyclist bridge section will be constructed adjacent to the existing bridge to accommodate these modes.	Yes
3.5	N	N	The visibility splay is achieved for 50kmph. The new speed limit will be 50kmph once the new distributor road and development is completed.	Yes
3.6	N	N	The visibility splay is achieved for 50kmph. The new speed limit will be 50kmph once the new distributor road and development is completed.	Yes
3.7	N	N	The proposed 1.5 m verge separation is an improvement to the existing condition, and the section of road is straight and the speed limit on the road will be reduced	Yes



once the new distributor road is	
completed.	

Signed...... Design Team Leader Date 01/04/2022

Signed Marken Brutan

Date ... 4/4/2022

**Audit Team Leader** 

Developer Employer

Date 26/8/22