

Title: **QUALITY AUDIT**

**INCLUDING**

**Road Safety Audit, Access Audit, Cycle Audit and Walking Audit.**

**For;**

**Carlisle Residential Development, Kimmage Road West,  
Kimmage, Dublin 12.**

Client: **Barrett Mahony**

Date: **February 2022**

Report reference: **1383R01**

VERSION: **FINAL**

Prepared By:

**Bruton Consulting Engineers Ltd**

Glaspistol

Clogherhead

Drogheda

Co. Louth.

Tel: 041 9881456

Mob: 086 8067075

E: [admin@brutonceng.ie](mailto:admin@brutonceng.ie)

W: [www.brutonceng.ie](http://www.brutonceng.ie)

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## 1.0 Introduction

This report was prepared in response to a request from Mr. Michael Hughes, Barrett Mahony Consulting Engineers, for a Quality Audit for a proposed residential development at the Carlisle site in Kimmage, Co. Dublin.

The Quality Audit has been carried out in accordance with the guidance in the Design Manual for Urban Roads and Streets (DMURS), produced by Department of Transport Tourism and Sport in March 2013 and as updated in June 2019.

This portion of the Quality Audit is a design stage audit and includes a Stage 1 Road Safety Audit (in accordance with TII Publication GE-DTY-01024, dated December 2017), an access audit, a walking audit and a cycling audit. (i.e. aspects of a Quality Audit carried out independent of the Design Team and generally included as appendices to the overall Audit)

The Road Safety and Quality Audit Team comprised of;

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

**TII Road safety Auditor approval number:** NB 168446

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

**TII Auditor Approval no.** OO 1291756

This portion of the Quality Audit involved the examination of drawings and other material and a site visit by the Audit Team, on the 11<sup>th</sup> of February 2022. The weather at the time of the site visit was dry and the road surface was also dry.

The problems raised in this Quality Audit may belong to more than one of the categories of Audit named above. A table has been provided at the start of Section 3 of this report detailing which category of audit each problem is associated with.

Recommendations have been provided to help improve the quality of the design with regard to the areas described above. A feedback form has also been provided for the designer to complete indicating whether or not he/she will accept those recommendations or provide alternative recommendations for implementation.

The information supplied to the Audit Team is listed in **Appendix A**.

A feedback form for the Designer to complete is contained in **Appendix B**.

A plan drawing showing the problem locations is contained in **Appendix C**.

## 2.0 Background

It is proposed to construct a strategic housing development (SHD) of 208 residential apartment units in 5 no. blocks at the Carlisle site in Kimmage. It is proposed to provide 100 car parking spaces and 480 bicycle parking spaces.

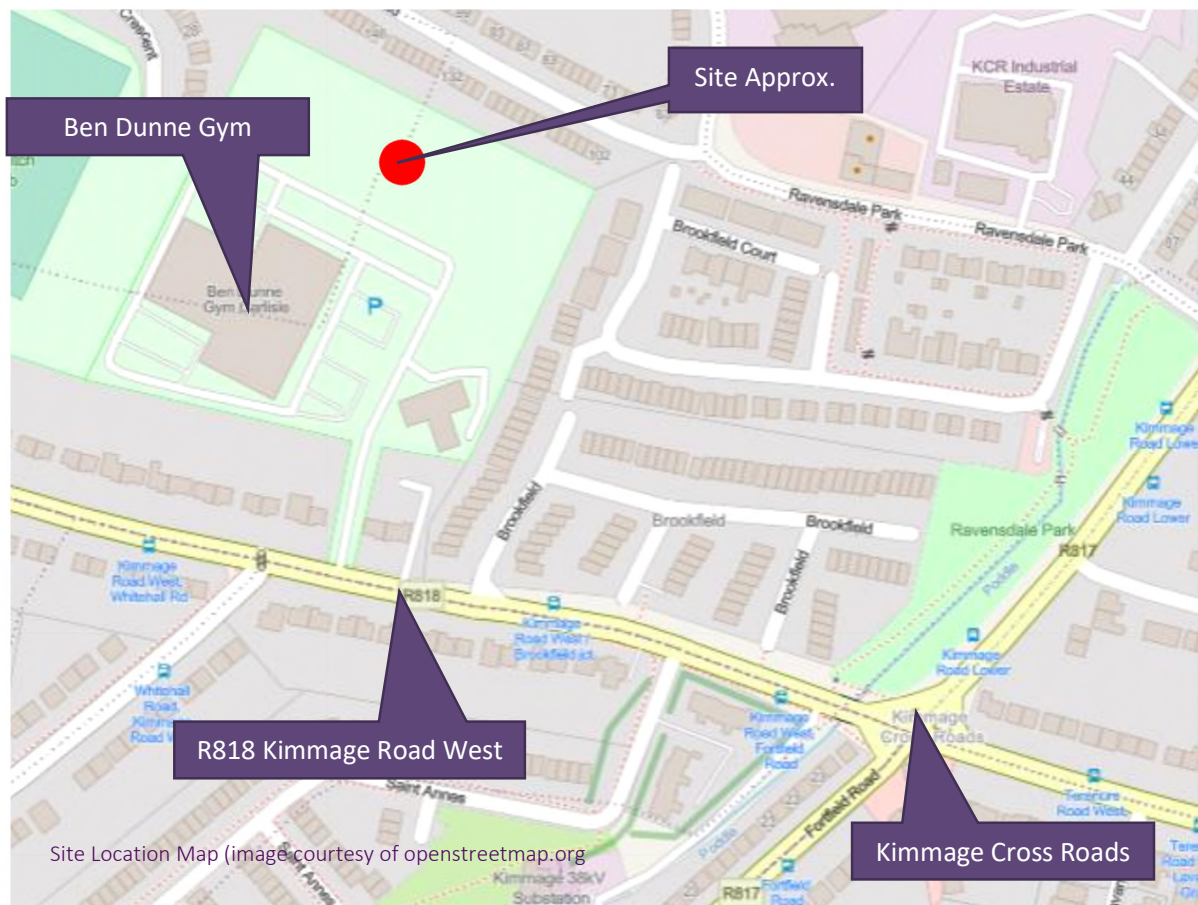
The site will access Kimmage Road West via the existing priority controlled access to the Ben Dunne Gym at Carlisle.

Kimmage Road West is a bus route as is Kimmage Road Lower and Fortfield Road which meet at Kimmage Cross Roads in close proximity to the site.

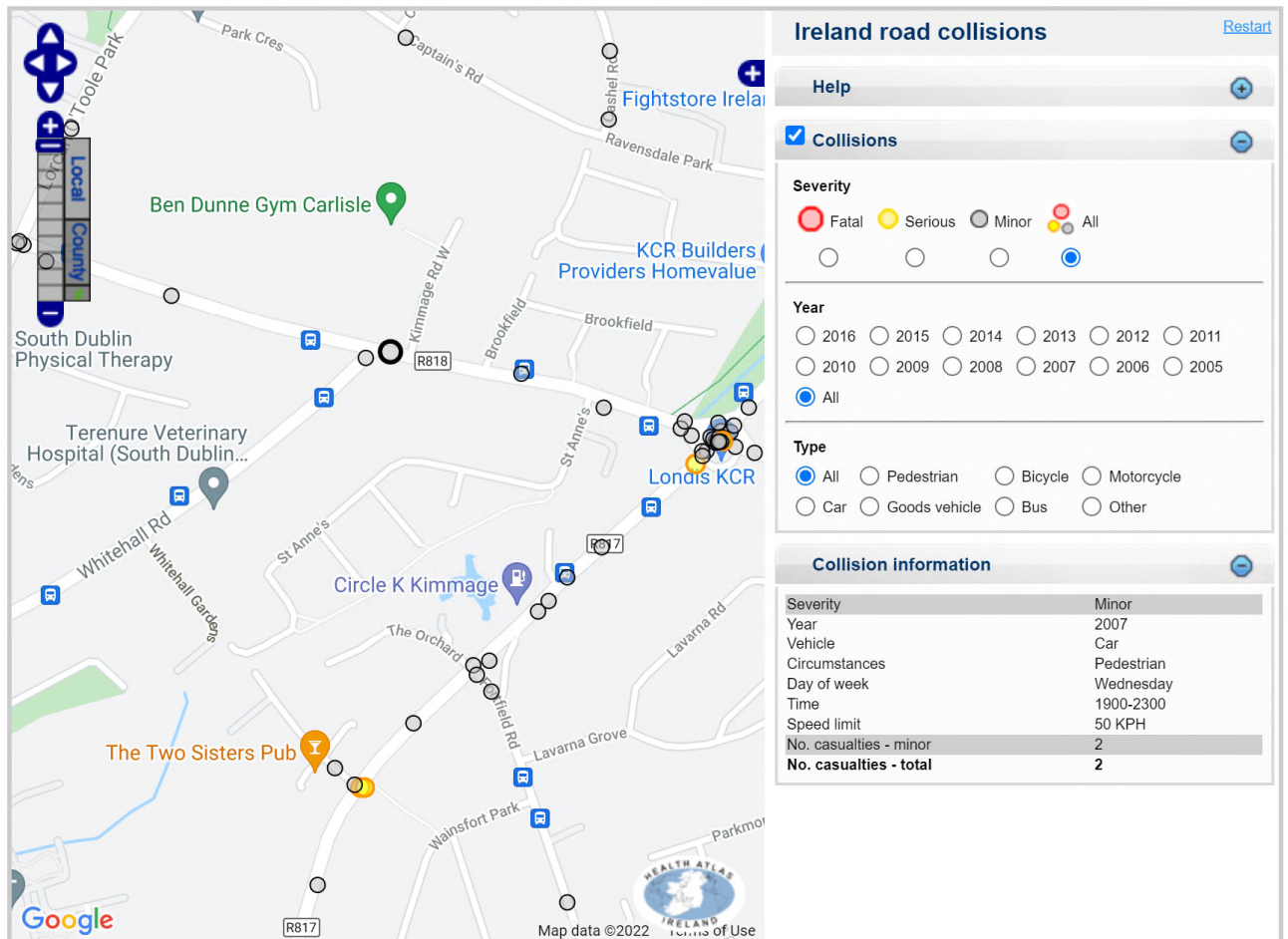
Kimmage Road West is a single carriageway road with footpaths on both sides and with a speed limit of 50km/hr. It is assumed that the speed limit within the development and along the access road will be 30km/hr.

The scheme has been designed to achieve the objectives set out in DMURS.

The site location map is shown below.



The Road Safety Authority's website ([www.rsa.ie](http://www.rsa.ie)) shows that there was one minor injury collision involving a pedestrian, adjacent to the access off Kimmage Road West in the 12-year period, 2005 to 2016.



## 3.0 Issues Identified in the Stage 1 Quality Audit

Summary Table of Problem Categories

Problem Reference	Access Audit	Walking Audit	Cycling Audit	Road Safety Audit	Quality Audit
3.1		✓	✓	✓	✓
3.2		✓			✓
3.3		✓		✓	✓
3.4		✓		✓	✓

### 3.1 Problem

#### LOCATION

Drawing CST-BMD-00-ZZ-DR-C-1017 PL Rev 2, Main access road.

#### ISSUE

The main access road to the site is relatively straight and relatively long. This will lead to high vehicle speed and as a result high injury severity if a pedestrian or cyclist is struck by an errant vehicle. It was observed during the site visit that traffic calming measures are currently in place. It is unclear if these or similar are to be retained.



#### RECOMMENDATION

It is recommended that traffic calming measures be provided to ensure slow speeds.



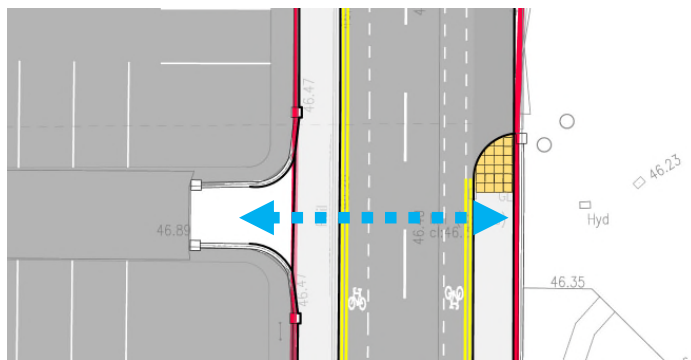
### 3.2 Problem

#### LOCATION

Drawing CST-BMD-00-ZZ-DR-C-1017 PL Rev 2, Main access road, Pedestrian desire line to Ben Dunne Gym.

#### ISSUE

There will be a pedestrian desire line across the main access road to the pedestrian only access to the Ben Dunne Gym. Without dropped kerbs this could lead to trips and falls. It was noted during the site visit that there is a pedestrian guardrail on the footpath. It is unclear if it is proposed to retain the railing.



#### RECOMMENDATION

It is recommended that dropped kerbs and suitable tactile paving be provided to cater for the pedestrian desire line.

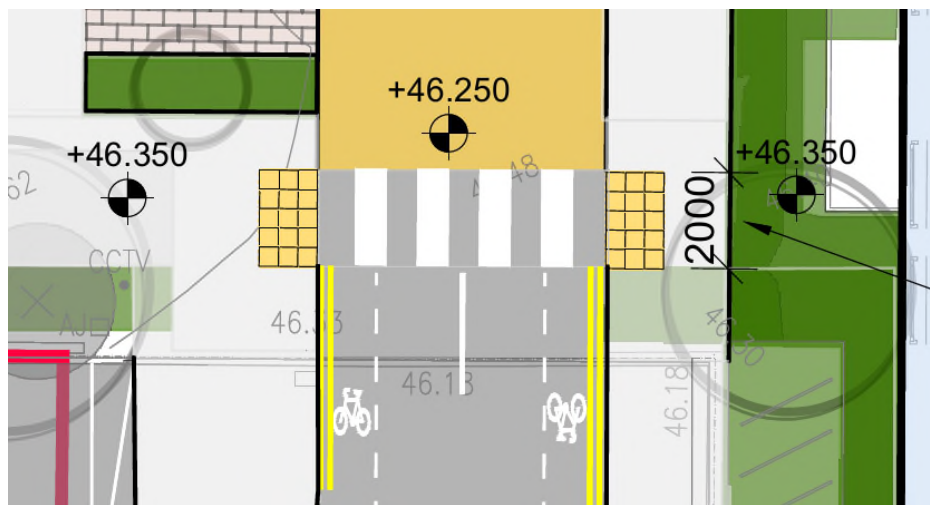
### 3.3 Problem

#### LOCATION

Drawing CST-BMD-00-ZZ-DR-C-1017 PL Rev 2, Main access road, Start of shared use road.

#### PROBLEM

There is a proposed pedestrian crossing at the start of the shared use road. It has proposed zebra type black and white stripes which may lead to confusion over priority. Pedestrians may think that they have priority given the presence of the stripes but drivers may not think so due to the lack of flashing beacons. The confusion may lead to collisions between vehicles and pedestrians.



#### RECOMMENDATION

It is recommended that the stripes be removed and that an uncontrolled crossing be provided.

### 3.4 Problem

#### LOCATION

Drawing CST-BMD-00-ZZ-DR-C-1002PL Rev 3, Surface water drainage design at dropped kerbs.

#### ISSUE

There is a risk of surface water ponding at the dropped kerb locations for uncontrolled pedestrians crossings if there is not adequate drainage provision upstream of each crossing. This could lead to slips and falls in wet or icy conditions.

#### RECOMMENDATION

It is recommended that gullies be provided immediately upstream of all dropped kerbs.



## 4 Observations

### 4.1 Observation

The hatched marking at the splitter island for the development of the right turning lane are orientated in the incorrect direction and the bifurcation arrow start after the lane has developed.

## 5 Quality Audit Statement

This portion of the Quality Audit has been carried out in accordance with the guidance given in DMURS and takes into consideration the principles approaches and standards of that Manual.

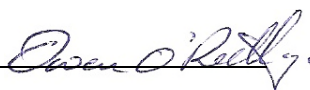
The quality audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton

Signed: 

(Quality Audit Team Leader) Dated: 14-2-2022

Owen O'Reilly

Signed: 

(Quality Audit Team Member) Dated: 14-2-2022

## Appendix A

### List of Material Supplied for this Quality Audit;

- Drawing CST-BMD-00-ZZ-DR-C-1040
- Drawing CST-BMD-00-ZZ-DR-C-1041
- Drawing CST-BMD-00-ZZ-DR-C-1050
- Drawing CST-BMD-00-ZZ-DR-C-1070
- Drawing CST-BMD-00-ZZ-DR-C-1080
- Drawing CST-BMD-00-ZZ-DR-C-1081
- Drawing CST-BMD-00-ZZ-DR-C-1082
- Drawing CST-BMD-00-ZZ-DR-C-1205
- Drawing CST-BMD-00-ZZ-DR-C-1206
- Drawing CST-BMD-00-ZZ-DR-C-1000
- Drawing CST-BMD-00-ZZ-DR-C-1001
- Drawing CST-BMD-00-ZZ-DR-C-1002
- Drawing CST-BMD-00-ZZ-DR-C-1003
- Drawing CST-BMD-00-ZZ-DR-C-1015
- Drawing CST-BMD-00-ZZ-DR-C-1016
- Drawing CST-BMD-00-ZZ-DR-C-1017
- Drawing CST-BMD-00-ZZ-DR-C-1020

### Report Provided as Background Material;

Report 21.221-RP-04 DMURS (Issue 3)  
Report 21.221-RP-05 - Outline CSWMP (Issue 2)  
Report 21.221-RP-06 Outline Car Park Management Strategy (Issue 3)  
Report 21.221-RP-07 - Parking Report & Residential Travel Plan (Issue 3)  
Report 21.221-RP-08 - Traffic Impact Assessment (Issue 3)  
Report 21.221-RP-09 Construction Traffic Management (Issue 2)  
Report 21.221-IR-01 Infrastructure Report (Issue 3)  
Report 21.221-IR-02 - Site Specific Flood Risk Assessment (Issue 3)  
Report 21.221-RP-02 (Outline CDWMP (Issue 3)  
Report 21.221-RP-03 Outline Construction Management Plan (Issue 3)

## Appendix B

### Feedback Form

**QUALITY AUDIT FORM – FEEDBACK ON QUALITY AUDIT REPORT**

Scheme: SHD Carlisle Site, Kimmage

Quality Audit- Stage 1

Date Audit (site visit) Completed 211-2-2022

Paragraph No. in Quality Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1	Yes	Yes		
3.2	Yes	Yes		
3.3	Yes	Yes		
3.4	Yes	Yes		

Signed.....*Michael Hughes*.....  
Design Team Leader  
(Barrett Mahony Consulting Engineers)

Date: 14.02.2022

Signed.....*Norman Banton*.....  
Audit Team Leader

Date: ...14/2/2022.....

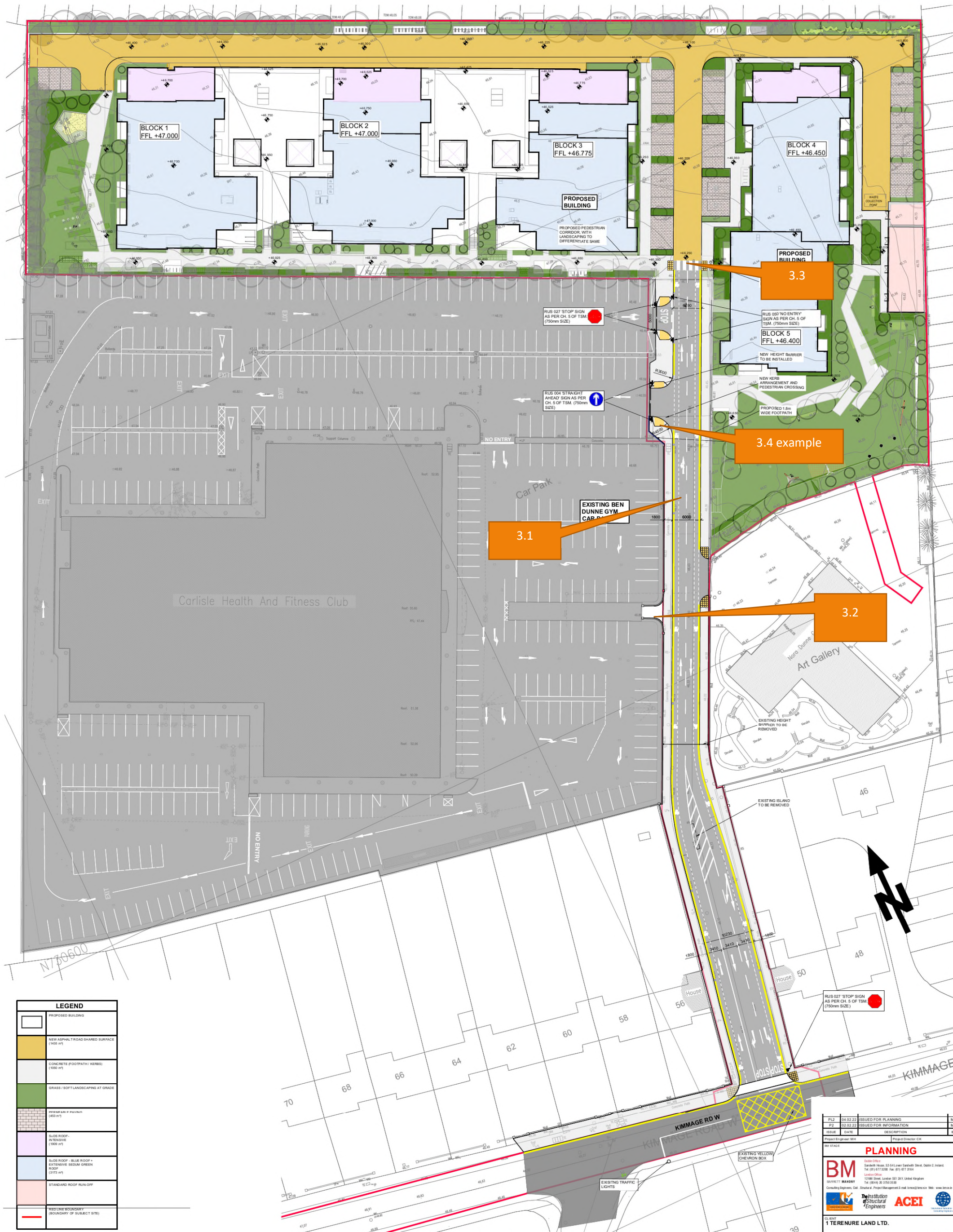
## Appendix C

### Problem Location Plan.



## NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS DRAWINGS. DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS ONLY IN ANY DOUBT - AS NOTED.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



PL2	04.02.22	ISSUED FOR PLANNING	MR
P2	02.02.22	ISSUED FOR INFORMATION	MR
ISSUE	DATE	DESCRIPTION	BY

Project Engineer: MVR  
Project Director: CK

## PLANNING

**BM**  
Barrington & Munn  
Consulting Engineers, Ltd.  
12th Floor, 12th Avenue, London SE1 3AX, United Kingdom  
Tel: 020 7616 2000 Fax: 020 7616 2001  
Email: info@barrington-munn.co.uk Website: www.barrington-munn.co.uk

CL-ENT  
1 TERENCE LAND LTD.

PROJECT TITLE  
CARLSLE SITE KIMMAGE, RESIDENTIAL DEVELOPMENT

REFERENCE  
ROADS LAYOUT

DRAWING REFERENCE  
CST-BMD-00-ZZ-DR-C-1017

STATUS  
PL

REVISION  
2