Road Safety Matters

Road Safety Audit

Stage 1/2

for

ACCESS TO PROPOSED MIXED USE DEVELOPMENT

AT

CARRIGALINE, CO CORK

Date: October 2021

Report produced for: HLCE Limited

Report produced by: Road Safety Matters Ltd

Reference: RSM/MOB/121021/CARRIGALINE RSA1-2

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BACKGROUND INFORMATION

The report which follows is the Combined Stage 1/2 detailed design Road Safety Audit for the proposed access junction and internal road access to a mixed-use development site to be accessed off the eastern side of the new Carrigaline Western Relief Road (CWRR) which is currently under construction in Carrigaline, Co Cork, based on the information supplied to the RSA Team as detailed below. The development will involve construction of 224 residential apartment dwellings, as well as a large retail outlet and 2 No small retail units and a creche with associated parking both underground and at surface level. This Audit has been prepared for the design of the access point, internal roads, car parking and all associated ancillary works.

Table 1: Information Supplied

Item		Supplied	Comment
A	Plans / Drawings	Y	950829-HJL-A-0002-SITE LAYOUT PLAN
			950829-HJL-A-1010-GROUND FLOOR PLAN
			AUTOTRACK SKETCH (NO DRG NUMBER)
			CM-RL-P01: Roads Layout
			CM-RL-P02: Roads Layout
			LY05-V1-XXX-DR-HLCE-CE-0001-DRAFT
			LY05-V1-XXX-DR-HLCE-CE-0006-DRAFT-27.09.21
B	Traffic Volume Information	Y	Final Traffic & Transport Assessment Report Carrigaline
C	Speed Count Data	N	
D	Collision Data	N	
E	Departures from Standards	N	
F	Audit Brief	Y	RSA 1/2 – Combined Detailed Design Stage Audit. Scope confined to red line boundary only.
G	Other Data / Documents	Y	950829_SCHEDULE OF ACCOMMODATION_PRE-PLANNING DRAFT

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1. INTRODUCTION

1.1 This report results from a Combined Stage 1/2 Road Safety Audit (RSA) of the proposed access and internal road layout for a proposed mixed-use development site comprising 224 residential apartment dwellings, a large retail outlet and 2 No small retail units and a creche with associated parking both underground and at surface level. The site, at the location shown in figure 1, will be accessed via a priority-controlled T-junction off the eastern side of the new Carrigaline Western Relief Road (CWRR) which is currently under construction in Carrigaline, Co Cork, and shown indicatively in figure 1. This Stage 1/2 RSA has been carried out at the request of HLCE Limited, and comprises an examination of the design proposals within the red

line boundary of the site only, which is shown in figure 2. This Audit examines the road safety implications associated with the proposed access to the development site and the internal road layout, and all associated ancillary works.

Figure 1: Site Location Plan

Figure 2: Proposed Internal Site Layout

1.2 The RSA was carried out during October 2021 and included a site visit by the Audit Team on Tuesday 12th October 2021 during daylight hours. The weather at the time of the site visit was fine and dry, and the surface of the road was dry. Traffic conditions were light to moderate, and Vulnerable Road User (VRU – including pedestrians and cyclists) was low. The posted speed limit on the roads adjacent to the site was the urban speed limit of 50 km/hr.

1.3 The Audit Team Membership was as follows;

Team Leader:	Miriam O'Brien – BE (Civil) FIHE MIEI MCIHT SoRSA CoC
Team Member:	Anthony Sumner – HNC Civil Eng, AEng, MIEI, MCIHT

1.4 The Audit took place at the offices of Road Safety Matters Ltd following the site visit by the Audit Team. The Audit was undertaken in accordance with the Design Team's Audit Brief, and comprised an examination of the plans provided by the Design Team, as listed in Background Information, Table 1.

1.5 The terms of reference of the Audit are as described in TII GE-STY-01024 Dec 2017. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.6 Section 2 of this report contains issues raised by the Stage 1/2 RSA together with recommendations to be considered. Section 3 contains the Auditor Team Statement. Most issues raised in Section 2 can be cross-referenced with the scheme drawing (**Appendix C)** and photographs taken on the site visit which are included in **Appendix B** & within the body of the Report where necessary.

2. ISSUES RAISED BY THE STAGE 1/2 ROAD SAFETY AUDIT

2.1 GENERAL

2.1.1 The designers have not advised of any departures from standard.

2.1.2 There was no information provided relating to long sections or cross sections for the proposed roads to determine crossfall and gradients. The levels of the CWRR under construction are higher than the adjacent land with significant embankments noted to each side, at the southwestern corner of the site.

2.1.3 No information was provided on any existing collision statistics in the vicinity of the site. A review of the Road Safety Authority (RSA) online collision database indicates that there were a significant number of collisions recorded on the R611 Kilmoney Road Lower to the south of the site between 2005 and 2016 inclusive, as shown in figure 3, a high proportion of which involved Vulnerable Road Users (VRUs, including pedestrians, cyclists and motorcyclists). A collision involving a pedestrian was recorded at the location of the new intersection with the proposed CWRR, which is located at the southwestern corner of the site, and will be used by a high proportion of vehicles to access the site. An Audit of this junction was outside the scope of this Stage 1/2 RSA, however the safety of all road users should be considered in accessing the site from all directions, particularly in the context of the site location within an urban environment, where a high proportion of VRUs should be anticipated.

It should be noted that the RSA database is not a comprehensive record of collisions, and does not include damage only collisions or any collisions recorded since 2016 (or before 2005), hence should be reviewed in conjunction with the Local Authority / Gardaí records for the network surrounding the site.

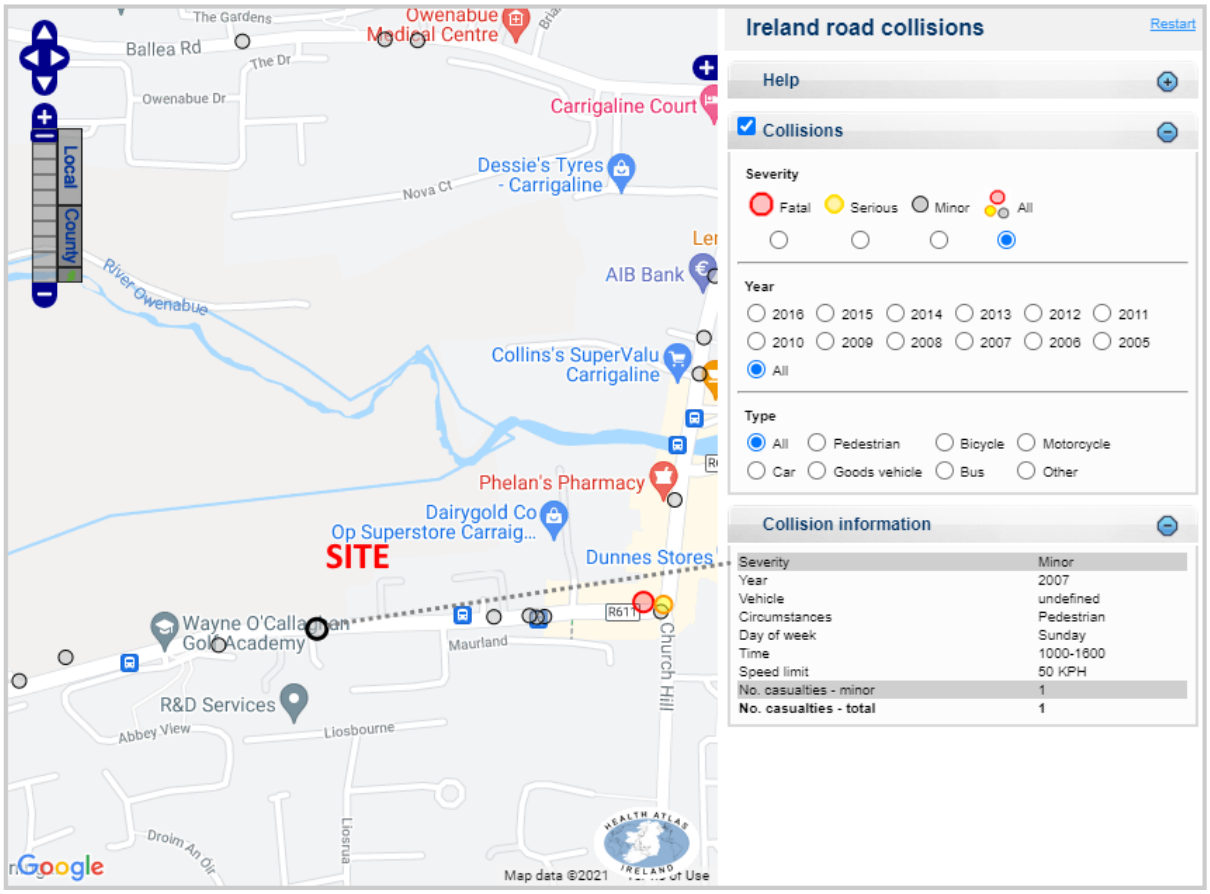

Figure 3: Collision Plot for Road network adjacent to site

2.1.4 Problem – Speeds Generally

The speed limit on the R611 to the south of the site is the 50 km/hr urban speed limit. The proposed speed limit on the CWRR is unknown. There is no provision for 30 km/hr reduced speed limit and slow zone signage within the site, which was noted at entry to other residential areas in the locality, and no provision for traffic calming within the site or for lower speed limits and associated signage on the access to the basement car parking area. There was no 85th percentile speed data provided for the external road network north and south of the site, however observations at the time of the site visit demonstrated that some vehicles were travelling at speeds in excess of the posted speed limit of 50 km/hr on the R611, as recorded by an existing VMS located just south of the proposed junction with the CWRR. Vehicle speeds on the R613 Ballea Road to the north of the site were lower, and traffic calming measures, including vertical deflection, were noted along this link.

Figure 4: VMS south of CWRR Junction

Figure 5: VMS recording higher speeds

Recommendations

1. A reduced speed limit and slow zone signage should be provided at a safe suitable location on entry to the site which does not obstruct footways, and at a suitable mounting height to prevent an overhead hazard. Suitable lower speed limits and associated signage should be applied to the car parking circulation areas within the site.

2. Provision should be made for suitable traffic calming and/or speed control measures as necessary within and on all approaches to the site.

2.1.5 Problem – Drainage and crossfalls generally

There were no long or cross sections provided, particularly for the tie in to the proposed CWRR where a significant embankment was noted to the south. Inappropriate gradients at the tie-in may present difficulties for some vehicles and may lead to excess surface water runoff into the site from the public road adjacent. Insufficient drainage and inappropriate gradients and crossfalls on surfaces throughout the site can create hazards for all road users.

Recommendations

1. The new access junction and access roads will need to be adequately drained to minimise the risk of ponding and excess surface water, with the location of all proposed gullies and drainage channels to be shown, including on all hard surfaces to be used by VRUs.

2. The detailed design should include details of gradients and crossfalls on the proposed roads and footway/VRU circulation areas to determine likely drainage paths.

3. Provision should be made to ensure excess surface water does not runoff from the adjacent public road into the site, or site proposals result in excess surface water runoff onto the CWRR.

4. All gullies or drainage channels should be flush with the surrounding pavement, and placed in a location which is outside the desire line for pedestrians and two-wheeled vehicles.

2.1.6 Problem – Kerb and Pavement Design generally

There were no long or cross sections provided for the proposed roads. A large portion of the northern section of the site will be used for public amenity, adjacent to the River Owenabue, however there were no details provided for proposed surfaces and gradients on footways and VRU routes to determine suitability for all road users, including those who are mobility or visually impaired.

Figure 6: Embankments at site

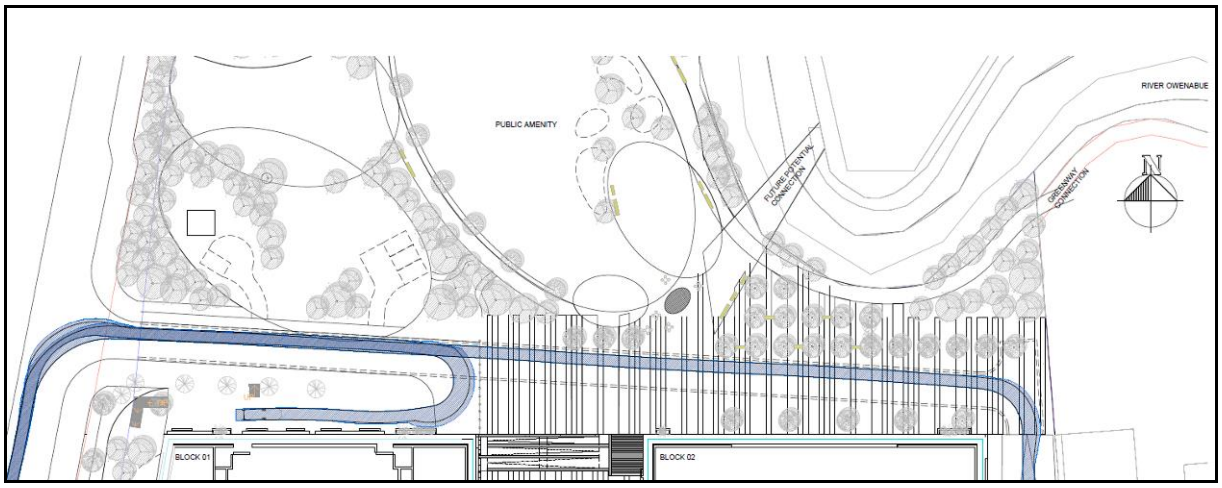

Figure 7: Levels and details unknown in Public Amenity Area

Recommendations

1. Detailed design should include vertical design and long and cross sections, and provision should be made for a relatively level dwell area at the proposed site access for a distance of 15m back from the channel line.

2. Detailed design should include details of any proposed embankments along the western site perimeter, and details of all gradients and crossfalls on roads and surfaces to be used by traffic and VRUs, including within the public amenity area at the north of the site.

3. A minimum crossfall of 2.5% should be provided on the access link, or the longitudinal profile should be a minimum 2% to minimise the risk of standing water. A minimum crossfall of 2.5% should also be provided on footways.

4. Detailed design should include kerb design to include detailed of all dropped kerbs and full height kerbs within and surrounding the site. All kerbs on pedestrian desire lines to be flush with the surrounding surface or have a maximum upstand of 6mm.

2.1.7 Problem – Parking

The majority of the site car parking will be provided at basement level on two tiers, however the TTA indicated provision for a number of parking spaces at surface level also. The location of these parking bays is not clear from the layout plans supplied, and demands for drop off and parking at the proposed crèche and retail facilities on the site is not known. The location of parking bays may restrict intervisibility or obstruct pedestrian or vehicular movement. The location of columns within the basement car parking area have not been shown, and there was no swept path analysis provided for the internal layout within this parking area.

Recommendations

1. The design should include provision for parking restrictions where necessary on approaches to the access junction to the site and at locations where vehicles parking on-street may restrict turning movements and safe two-way movements for other vehicles.

2. On street parking spaces should be located away from pedestrian desire lines and crossings points where intervisibility may be restricted, and spaces should be configured as parallel rather than perpendicular where possible.

3. Provision should be made for suitable clearance to all columns and solid continuous hazards/walls throughout the site and basement parking area, and the layout should be finalised to take into account the turning movements of all anticipated vehicle sizes, with suitable height restrictions to be provided where necessary at the ramps. Suitable ramp gradients should also be provided.

2.1.8 Problem – Site Clearance, Utilities, Landscaping and Boundary Treatment

The provision for site clearance, boundary treatment and landscaping is unclear from the plans, although a note has been provided to indicate that an existing stone wall at the access will be removed to achieve unobstructed visibility splays in accordance with the Design Manual for Urban Roads and Streets (DMURS). Utilities have not been shown. The location of services and associated chamber covers can present a slip hazard to VRUs, and inappropriately located landscaping and boundary treatment can compromise visibility and intervisibility.

Recommendations

1. Visibility throughout and on approaches to the site should be clear and unobstructed at all times in accordance with traffic speeds.

2. Any potential intervisibility obstructions arising from boundary treatment, landscaping or street furniture proposals internally within the site should be removed or relocated outside visibility splays or provided at a height less than 1.05m.

3. All trees, hedges and landscaping should be located away from positions which could increase the risk of conflict for road users, and pedestrians should be clearly visible from a point 2m back from the kerb line on both sides of all internal crossing points.

4. Trees, boundaries and landscaping should be offset a safe distance from the carriageway edges and ideally away from footways or areas where shedding leaves and tree roots may cause slip/trip hazards, or where street lighting luminescence may be compromised.

5. Chamber covers should also be located away from VRU desire lines where possible, with finished levels to be flush with the surrounding pavement.

2.2 JUNCTION LAYOUT AND LINK ALIGNMENT/CROSS SECTION

2.2.1 Problem – Access Junction Geometry and Layout

The TTA for the site indicates turning movement proportions and anticipated Queues during AM and PM peak hours for the development site, and the layout plan indicates provision for a ghost island junction on the CWRR, however there is no provision for suitable reservoir length for queueing vehicles including deceleration length, to minimise obstruction to through traffic and potential for increased rear shunt collision risk. The junction has also been configured with two egress lanes at the proposed stop line on the minor road, which will increase the number of simultaneously turning traffic streams at the junction, and presents an increased risk of right-angled collisions and pulling out type incidents due to waiting vehicles in the adjacent lane on the minor road obstructing clear visibility to and from oncoming vehicles.

The swept path analysis provided for the proposed access junction showed right turning vehicles only entering. Left turning manoeuvres to and from the site have not been shown, which are typically the most constrained movement, particularly on a layout where there will be two lanes of egressing traffic waiting to turn out, which increases the likelihood of obstruction for entering vehicles.

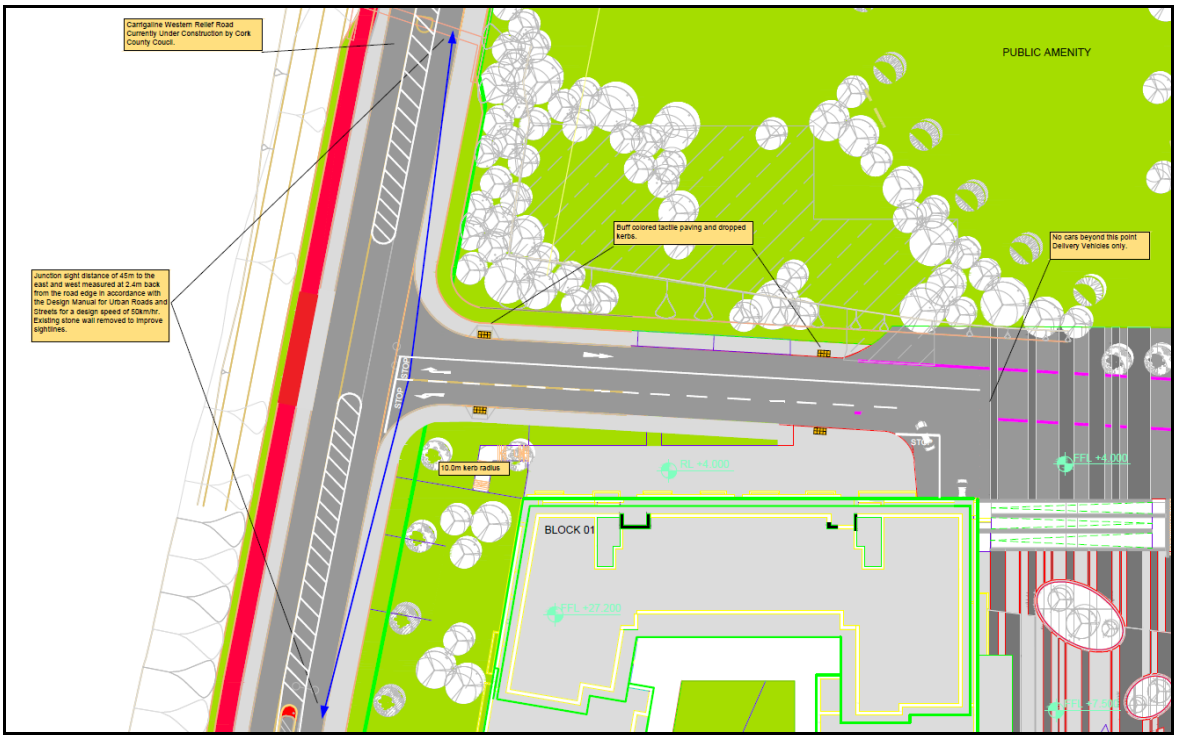

Figure 8: Proposed Layout at Site Access

Recommendations

1. The layout should ensure that the total demand for right turners into the site is satisfied by the proposed layout, with suitable right turn reservoir length, and that traffic queuing to enter the development site will not obstruct the movement of through traffic on the CWRR.

2. The minimum length of right turn reservoir should be provided in accordance with the relevant standards for ghost island junction design, to include queuing length, deceleration length, taper and turning length, taking into account approach speeds and forward visibility from each direction, with visibility to be clear and unobstructed at all times in accordance with traffic speeds.

3. The number of exit lanes should be reduced to one to minimise the number of conflicting movements and to minimise the crossing distance for pedestrians. Vehicles waiting to turn out of the minor road must not obstruct entry for other vehicles, including emergency access.

2.2.2 Problem – Proposed Ramp Layout

There were no details provided for the proposed ramp gradients to the basement car parking areas, or details of any proposed barrier operating systems or vertical and horizontal clearance to structures adjacent. Steep ramps gradients will present difficulties for some vehicles and road users, and insufficient clearance to walls will result in an increased risk of vehicle strike or encroachment into the path of oncoming vehicles on a confined space. VRUs are particularly vulnerable at these locations.

Recommendations

1. Detailed design should include for suitable gradient design on the access ramps to the basement car parking at each level, ideally with a maximum 1 in 7 slope for vehicular traffic and shallower for VRUs, where access by such road users is envisaged.

2. Where steep and/or narrow ramps are provided, clear signage must be provided to ensure pedestrians, and cyclists do not attempt to access the basement car park at the ramp locations.

3. Suitable safe clearance should be provided to the adjacent walls. Wall construction or solid continuous hazards should be setback a minimum 600mm from the carriageway edges and edge of running lane throughout the site.

4. Suitable signage must also be provided regarding height restrictions at the ramped access to ensure vehicles with heights exceeding the headroom provision do not attempt to use the ramp(s).

2.3 NON-MOTORISED USER PROVISION

2.3.1 Problem – Pedestrian Provision

There was no information provided on anticipated pedestrian demands and desire lines to and from the site, however a relatively high proportion of trips to and from the site on foot should be anticipated. A number of issues were noted in respect of proposed pedestrian accessibility to and from and within the site, which can be summarised as follows:

2.3.1.1 The access junction has been configured with three lanes, with no provision for refuge, which presents a wide crossing distance for pedestrians which increases the risk of pedestrian/vehicular conflict, particularly for older or more vulnerable pedestrians. Provision has been made for an uncontrolled crossing at an offset from the junction mouth, however pedestrians will still need to cross 3 lanes of traffic at this location.

Recommendations

1. Crossing distances should be minimised to less than 10m, with provision for suitable refuge as necessary on wider crossing distances, including any demand to cross the carriageway on the CWRR in the vicinity of the proposed site access.

2. Final layout to be provided in accordance with the requirements for ghost island junctions and associated road markings on single carriageway urban roads.

2.3.1.2 Ramps and steps have been shown at a number of locations within the site, however details have not been provided for ramps to ensure widths and gradients are suitable for all anticipated road users. Tactile paving has not been shown to the top and bottom of steps to alert visually impaired pedestrians to the presence of the hazard.

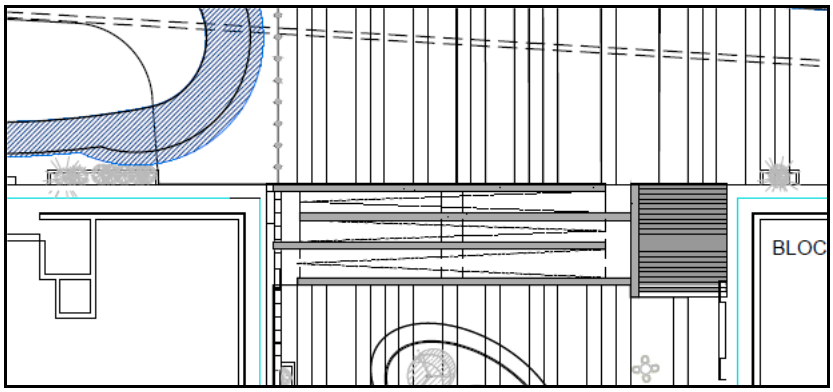

Figure 10: Proposed Ramps and steps within Site

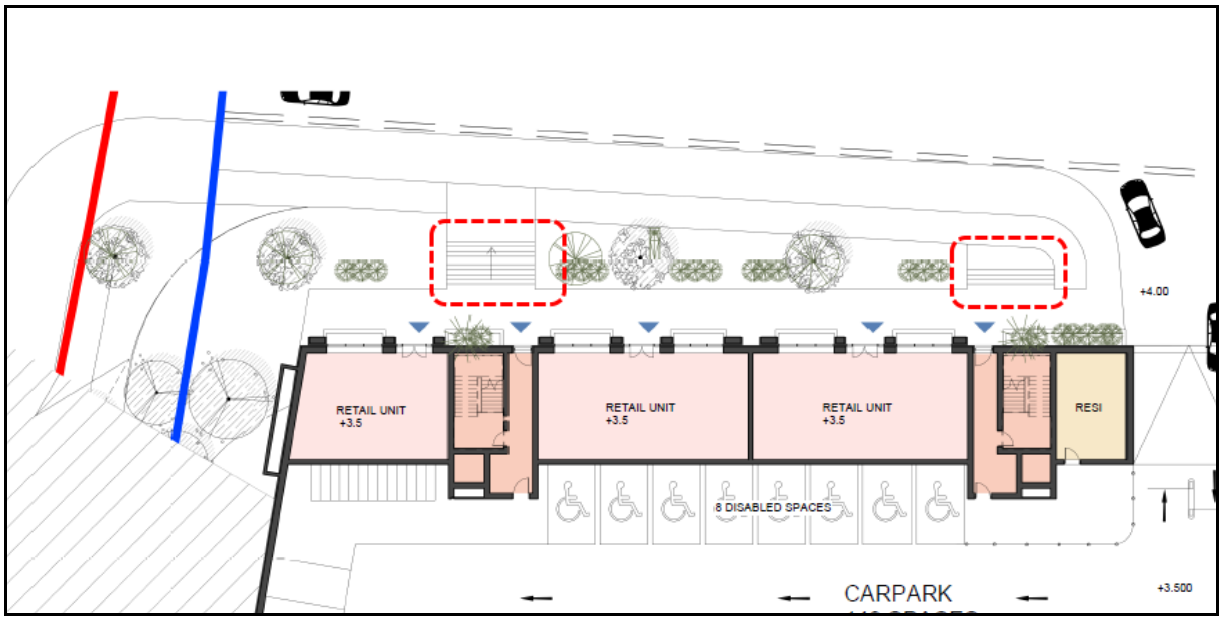

Figure 11: Proposed Ramps and steps within Site

Recommendations

1. All ramps throughout the scheme should have a maximum gradient of 1:20 (preferable) or 1:12 (absolute maximum over short distances only) at all locations. An alternative means of access for wheelchair users must be provided in all locations where steps have

been provided and where there is no ramp, or where ramp gradients of 1:20 or greater are provided, with a total ramp rise greater than 2m.

2. Ramp widths and layout should comply with the requirement of Technical Guidance Document M, Access and Use (2010) with the minimum unobstructed width between handrails to be not less than 1200 mm, and 1500mm between the walls, with wider ramps to be provided for shared use with cyclists, or where a high demand for access by buggy/double buggy users may arise.

3. Corduroy tactile paving should be provided at the top and bottom of all steps throughout the site and configured in accordance with 'Guidance on the use of Tactile Paving Surfaces'.

2.3.1.3 A pedestrian access has been shown at the southern section of the site which includes ramps and steps, however swept path analysis has been provided to demonstrate vehicular access at this location also, where conflict may arise. Pedestrians are also likely to be circulating within the access route to and from the delivery area to the east of the site, where conflicts may also arise, particularly as HGVs have limited visibility and blind spots.

Figure 12: Pedestrian Access to south of site

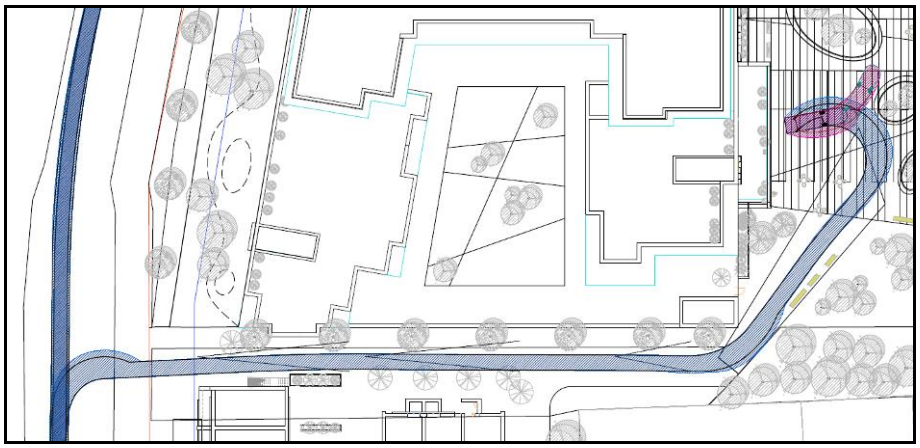

Figure 13: Vehicular Movements on Pedestrian Access

Recommendations

1. Pedestrian movements should be segregated from HGV and vehicular movements where possible throughout the site.

2. All routes to be used by vehicles should have suitable gradients, and provision should be made for suitable dropped kerbs where necessary at all locations where vehicular access is required, including for emergency vehicle access, with clear signage for the latter to ensure routes are not obstructed by other vehicles.

2.3.1.4 The internal site profile and gradients may present difficulties for some pedestrians, particularly those who are older or mobility impaired, and particularly in wet and icy conditions when the risk of slipping is increased, and on routes within the public amenity area to the north of the site.

Recommendations

1. The surfaces of all areas to be used for pedestrian circulation throughout the site should have suitable crossfall and should not become slippery when wet.

2. Pedestrian activity, desire lines and demands should be considered at all tie-in points to the scheme and throughout the site, taking into account issues raised in this Stage 1/2 RSA

report, and the movement of VRUs should be prioritised at all times throughout and on approaches to the site.

3. Provision should be made for continuous footways on all pedestrian desire lines, ideally with a minimum 2m width, and an absolute minimum 1.2m at isolated sections only. All shared VRU routes should be a minimum 3m width.

4. Footways should not terminate abruptly, particularly where pedestrians may be brought into unfinished surfaces or out into the carriageway into the path of passing or turning vehicles, or where intervisibility may be restricted by parked vehicles, boundary treatment or landscaping.

5. Intervisibility at all crossing points should be clear and unobstructed at all times in accordance with traffic speeds. Pedestrians should be clearly visible from a point 2m back from the kerb line on all crossing points and desire lines throughout and on approaches to the site, including across the mouth of the access junction.

6. All internal gradients on VRU routes should be suitable for accessibility for all road users, including those who are mobility impaired. The surfaces of VRU routes should be sufficiently wide for shared use between pedestrians and cyclists where feasible, and where this cannot be achieved, provision should be made for suitable transition kerbs to facilitate safe transfer between on and off-road facilities/parking areas for cyclists.

7. Finished levels of all dropped kerbs at proposed pedestrian crossing points should be flush with the adjacent road surface or have a maximum upstand of 6mm, and all trip hazards should be removed from pedestrian desire lines.

2.3.2 Problem – Cyclist Provision Generally

No information has been provided on likely cyclist demand and activity to and from the site, and there was no cycling activity observed adjacent to the site at the time of the site visit. The design includes provision for a significant number of cycling parking spaces, however the proposed routes to and from the bicycle parking areas are unclear. There are no dedicated cycling routes or facilities shown, and cyclists would be expected to share road space with motorised vehicles where the risk of conflict is higher. The widths of the proposed footways throughout the site and surrounding the site are insufficiently wide for

shared use between cyclists and pedestrians. The layout plans show provision for a Greenway connection to the northeast side of the site along the southern bank of the river, however there is no provision for connectivity to the hard surface areas. Cyclists will also be brought out into an area where vehicles will be reversing and turning, as a turning head has been shown, as indicted on figure 14. Future potential connection over the river has also been shown, however it is unclear how cyclists will access the southern section of the site as the ramp width shown in figure 4 immediately west of the steps appears too narrow.

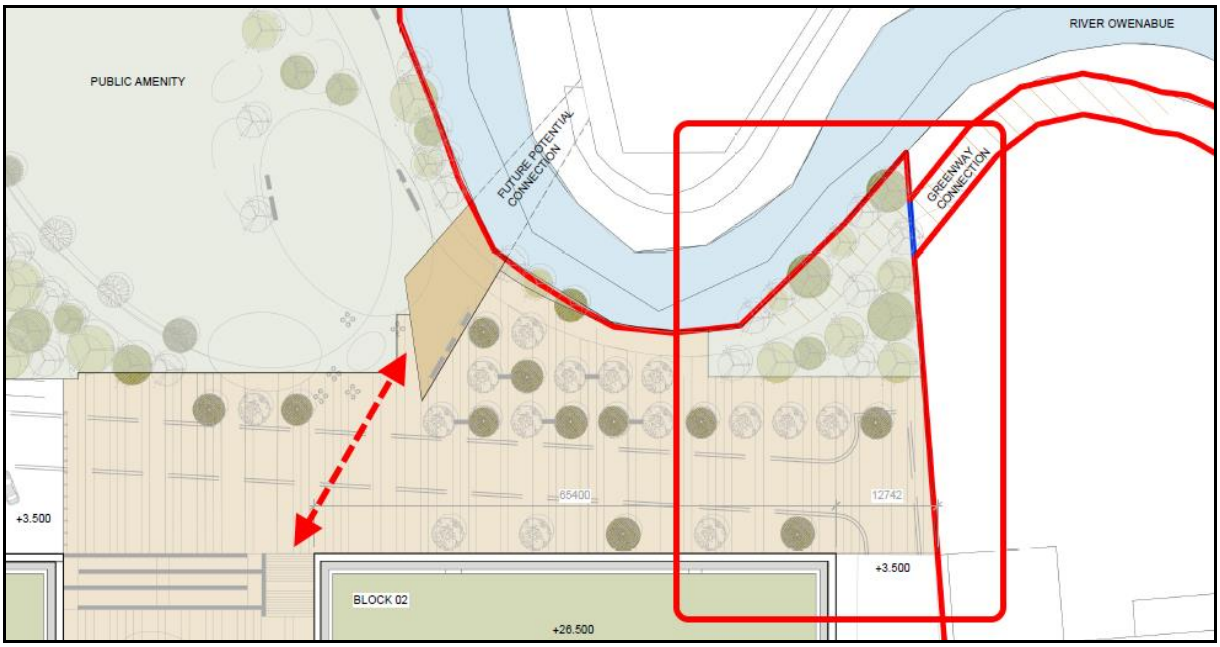

Figure 14: Details for Greenway Connection & Cyclist Connectivity Not known

Recommendations

1. Likely cyclist demands, desire lines and volumes should be examined within and on all approaches to the site to take into account issues raised in this Stage 1/2 RSA report, with safe continuous and unobstructed facilities provided to cater for anticipated cycling demands, inclusive of shared off road facilities wherever possible, with a minimum 3m width, to minimise the risk of pedestrian and cyclist conflict.

2. Provision should be made for suitable transition kerbs to facilitate safe access between on and off-road facilities and proposed bicycle parking spaces within the site, and gradients on all routes to be used by cyclists should be a maximum 3%.

3. Detailed design should include provision for suitable connectivity to the Greenway and proposed cycling network long the CWRR. Cyclists should not be brought out into areas where vehicles will be turning and reversing.

2.4 ROAD SIGNS, MARKINGS AND LIGHTING

2.4.1 Problem – Lighting

There were no details provided for proposed lighting at the access junction or on the internal roads. The new scheme will need to be adequately lit to minimise the risk of collisions occurring during the hours of darkness.

Recommendation

1. Lighting proposals should be clarified, to include for new lighting where required at the site access junction and on roads throughout the site, as well as off road sections where VRUs will be circulating.
2. All lighting columns should be passively safe, and placed to the rear of footways where possible at a sufficient offset from the carriageway edge, and should not obstruct VRU or vehicular movement.
3. Internal site lighting should not interfere with or cause dazzle on the external road network.

2.4.2 Problem – Road Signs and Road Markings

There was no signing and lining schedule provided for the proposed signs and road markings, however the design layout includes for stop lines and markings at the proposed site access and at the access to the basement car parking area. No provision has been made for associated signage in accordance with the requirements of the Traffic Signs Manual. There is no provision for reduced speed limit and slow zone signage, parking restrictions and no signs or guidance regarding the restriction of access for delivery vehicles only to the eastern area of the site, where a high pedestrian desire line should be anticipated.

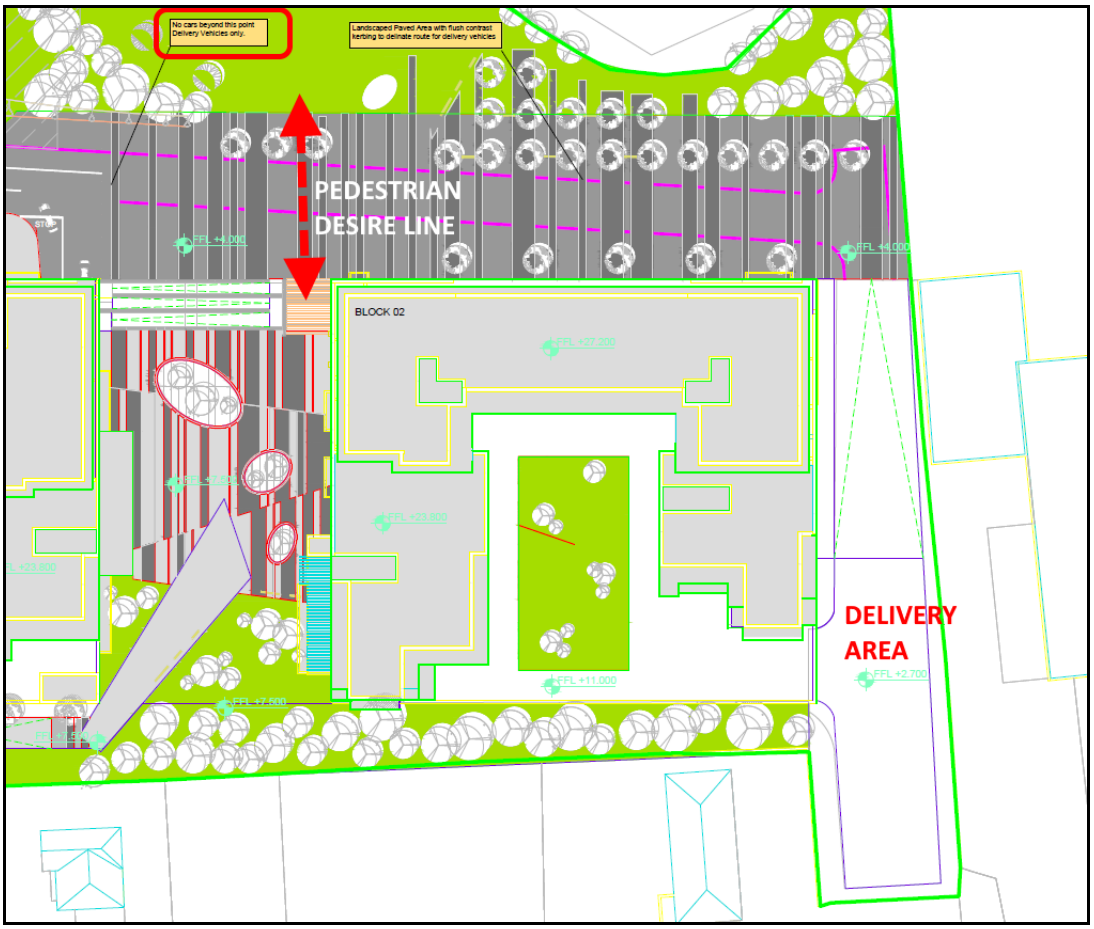

Figure 15: No provision for signs to distinguish Service Vehicle Access

Recommendations

1. A signing and lining schedule should be produced at detailed design stage, to take into account all issues raised in this Stage 1/2 RSA report, to include provision for standardised road markings and signage in accordance with the Traffic Signs Manual.

2. All signs should be posted in full view of motorists in a safe location with a minimum offset of 450mm from the sign face to the carriageway edges. The lowest edge of all signs should be set at a height of 2.1m or higher over footway and at 2.4m or higher over a surface which may be used by cyclists.

3. All road markings and signage to be highly reflective material to ensure visibility during the hours of darkness.

3. AUDIT TEAM STATEMENT

We certify that we have visited the site and examined the drawings and information supplied. 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 identified have been noted within the report, together with suggestions for improvements which are recommended to be studied for implementation. No one on the Audit Team has been otherwise involved with the design of the measures audited. This audit has been carried out in accordance with TII GE-STY-01024 December 2017.

Signed: Date: 21/10/21

MIRIAM O'BRIEN

Signed: Date: 21/10/21

ANTHONY SUMNER

APPENDIX A – ROAD SAFETY AUDIT BRIEF CHECKLIST

Have the following been included in the audit brief?: (*if 'No', reasons should be given below)*

	Yes	No
1. The Design Brief	☑	☐
2. Departures from Standard	☐	☑
3. Scheme Drawings	☑	☐
4. Scheme Details (e.g. signs schedules, traffic signal staging)	☐	☑
5. Collision data for existing roads affected by scheme	☐	☑
6. Traffic surveys	☐	☑
7. Previous Road Safety Audit Reports and Designer Responses/Feedback Form	☐	☑
8. Previous Exception Reports	☐	☑
9. Start date for construction and expected opening date	☐	☑
10. Any elements to be excluded from audit	☐	☑
Any other information?	☐	☑

APPENDIX B – SITE PHOTOGRAPHS


KEEP
OUT


KEEP
OUT
Authorised
Persons Only
Kingdom Hall
of
Jehovah's Witnesses


45


50
47
KEEP
Carrigaline
CLEAN
50


SITE
ACCESS
NO.3
NO
UNAUTHORISED
ENTRY
ROAD
CLOSED
NO PARKING
KEEP
OUT


YIELD


SITE SAFETY
DANGER
CONSTRUCTION SITE
SAFETY FOOTWEAR
MUST BE WORN
SITE
ACCESS
NO 1


15
km/h

APPENDIX C – SCHEME DRAWINGS

Road Safety Matters Ltd
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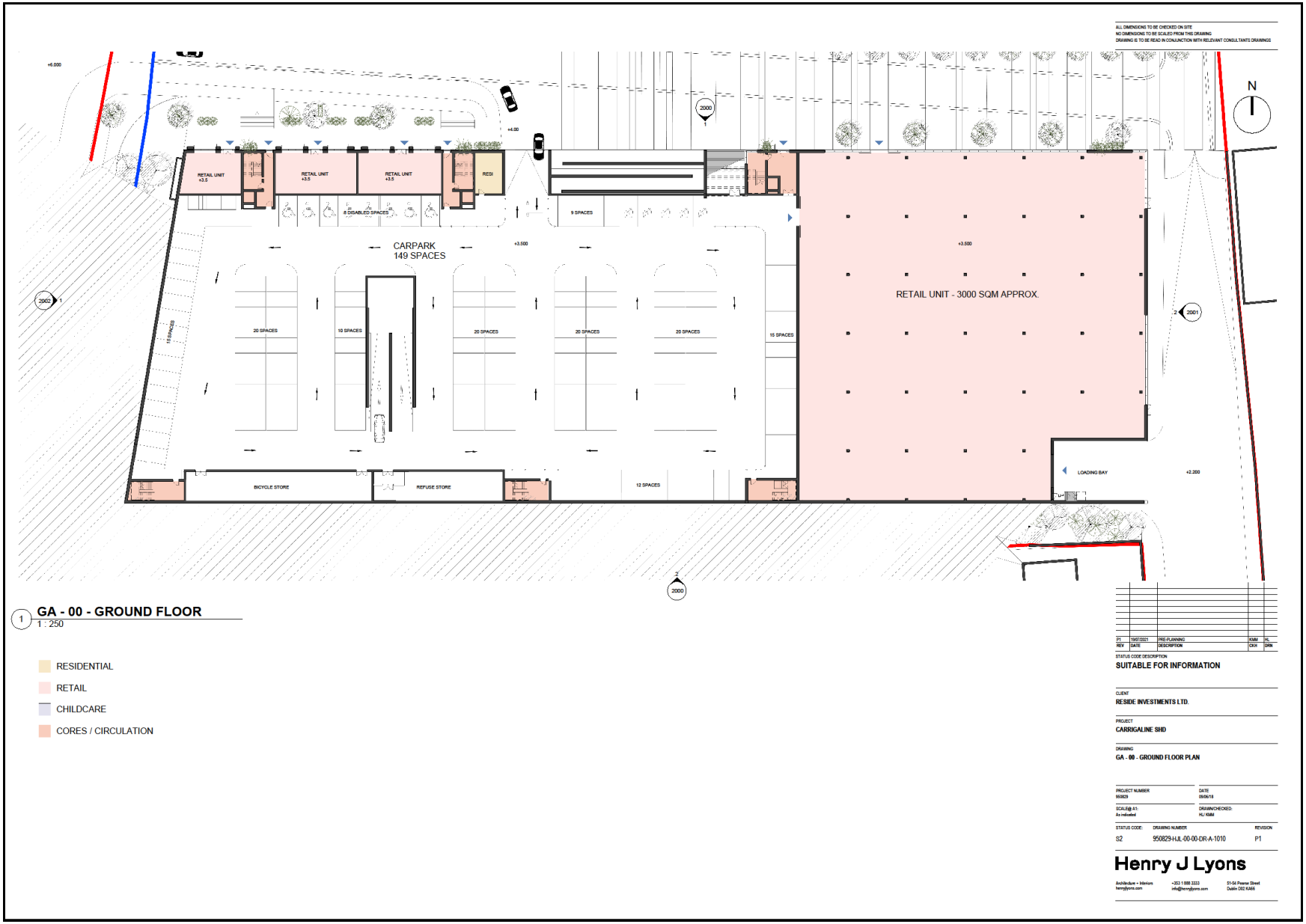
Co Kilkenny, Ireland E41 W721
Tel +353 (0)56 883 8428
mobrien@roadsafetymatters.net
www.roadsafetymatters.net

Company Registration No 657952 VAT No IE 3649269UH


ALL DIMENSIONS TO BE CHECKED ON SITE
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING
DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT CONSULTANTS DRAWINGS
N
SUPERVALUE
RIVER OWENABUE
PUBLIC AMENITY
FLUVIAL NATURAL CONNECTION
GREENWAY CONNECTION
BLOCK 01
BLOCK 02
+26.500
+10.500
+23.300
+7.000
+3.500
+2.200
+6.000
+9.000
CO-OP
OWN DOOR UNITS
+21.024
+21.624
+22.224
+22.824
+19.824
P1 19/07/2021 PRE-PLANNING KMM HL
REV DATE DESCRIPTION CKD DRN
STATUS CODE DESCRIPTION
SUITABLE FOR INFORMATION
CLIENT
RESIDE INVESTMENTS LTD.
PROJECT
CARRIGALINE SHD
DRAWING
SITE LAYOUT PLAN
PROJECT NUMBER 950829
DATE 07/01/14
SCALE@ A1: 1 : 500
DRAWN/CHECKED: HL/ KMM
STATUS CODE: S2
DRAWING NUMBER 950829-HJL-00-00-DR-A-0002
REVISION P1
Henry J Lyons
Architecture + Interiors henryjlyons.com
+353 1 888 3333 info@henryjlyons.com
51-54 Pearse Street Dublin D02 KA66
2 GA - SITE LAYOUT PLAN
1 : 500


ALL DIMENSIONS TO BE CHECKED ON SITE
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING
DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT CONSULTANTS DRAWINGS
N
RETAIL UNIT +3.5
RETAIL UNIT +3.5
RETAIL UNIT +3.5
RESI
8 DISABLED SPACES
9 SPACES
CARPARK
149 SPACES
+3.500
RETAIL UNIT - 3000 SQM APPROX.
20 SPACES
10 SPACES
20 SPACES
20 SPACES
20 SPACES
15 SPACES
15 SPACES
BICYCLE STORE
REFUSE STORE
12 SPACES
LOADING BAY
+2.200
2000
2001
2002
GA - 00 - GROUND FLOOR
1 : 250
RESIDENTIAL
RETAIL
CHILDCARE
CORES / CIRCULATION
P1 19/07/2021 PRE-PLANNING KMM HL
REV DATE DESCRIPTION CKD DRN
STATUS CODE DESCRIPTION
SUITABLE FOR INFORMATION
CLIENT
RESIDE INVESTMENTS LTD.
PROJECT
CARRIGALINE SHD
DRAWING
GA - 00 - GROUND FLOOR PLAN
PROJECT NUMBER 950829
DATE 09/06/18
SCALE@ A1: As indicated
DRAWN/CHECKED: HL/ KMM
STATUS CODE: S2
DRAWING NUMBER 950829-HJL-00-00-DR-A-1010
REVISION P1
Henry J Lyons
Architecture + Interiors
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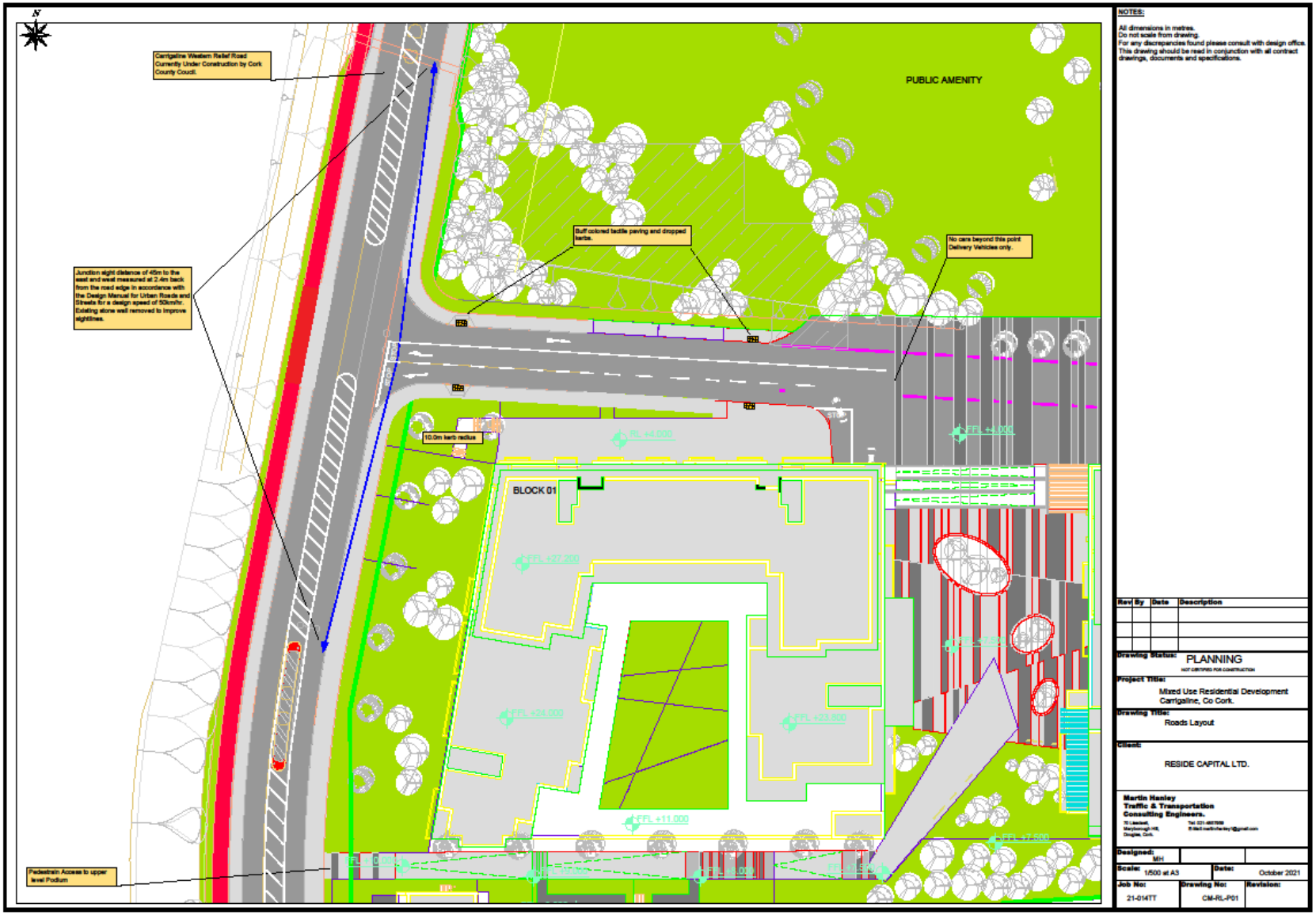
+353 1 888 3333
info@henryjlyons.com
51-54 Pearse Street
Dublin D02 KA66


N
Carrigaline Western Relief Road Currently Under Construction by Cork County Council.
Junction sight distance of 45m to the east and west measured at 2.4m back from the road edge in accordance with the Design Manual for Urban Roads and Streets for a design speed of 50km/hr. Existing stone wall removed to improve sightlines.
Buff colored tactile paving and dropped kerbs.
No cars beyond this point Delivery Vehicles only.
PUBLIC AMENITY
10.0m kerb radius
BLOCK 01
RL +4.000
FFL +4.000
FFL +27.200
FFL +24.000
FFL +23.800
FFL +11.000
Pedestrain Access to upper level Podium
NOTES:
All dimensions in metres.
Do not scale from drawing.
For any discrepancies found please consult with design office.
This drawing should be read in conjunction with all contract drawings, documents and specifications.
Rev By Date Description
Drawing Status: PLANNING
NOT CERTIFIED FOR CONSTRUCTION
Project Title: Mixed Use Residential Development Carrigaline, Co Cork.
Drawing Title: Roads Layout
Client: RESIDE CAPITAL LTD.
Martin Hanley Traffic & Transportation Consulting Engineers.
Designed: MH
Scale: 1/500 at A3
Date: October 2021
Job No: 21-014TT
Drawing No: CM-RL-P01
Revision:


N
No cars beyond this point
Delivery Vehicles only.
Landscaped Paved Area with flush contrast
kerbing to delinate route for delivery vehicles
Car Park
BLOCK 02
FFL +27.200
FFL +23.800
FFL +11.000
FFL +2.700
CO-OP
Car Park
NOTES:
All dimensions in metres.
Do not scale from drawing.
For any discrepancies found please consult with design office.
This drawing should be read in conjunction with all contract
drawings, documents and specifications.
Rev By Date Description
Drawing Status: APPROVAL
NOT CERTIFIED FOR CONSTRUCTION
Project Title:
Mixed Use Residential Development
Carrigaline, Co Cork.
Drawing Title:
Roads Layout.
Client:
RESIDE CAPITAL LTD.
Martin Hanley
Traffic & Transportation
Consulting Engineers.
Designed: MH
Scale: 1/500 at A3
Date: October 2021
Job No: 21-014TT
Drawing No: CM-RL-P02
Revision:

Road Safety Audit Feedback Form

Scheme: Access to Mixed Use Development, Carrigaline, Co Cork

Route No. N/A

Audit Stage: 1/2

Date Audit Completed: October 2021

To Be Completed By Designer				To Be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	**Problem accepted (yes/no)**	**Recommended measure accepted (yes/no)**	**Describe Alternative Measure(s). Give Reasons for not accepting Recommended Measure. Only Complete if recommended measure is not accepted**	**Alternative measures or reasons accepted by auditors (yes/no)**
2.1.4	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.1.5	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.1.6	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.1.7	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.1.8	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.2.1	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.2.2	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.3.1.1	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	

2.3.1.2	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.3.1.3	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.3.1.4	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.3.2	Yes	Yes	These issues will be address at detail design stage prior to tender issue.	
2.4.1	Yes	Yes	A public lighting design has been prepared as part of the planning application..	
2.4.2	Yes	Yes	A detail schedule of signage and road marking will be produced at detail design stage prior to tender.	

Signed: _____ **Designer** **Date** 25/04/2022

Signed: _____ **Audit Team Leader** **Date** **21/10/21**