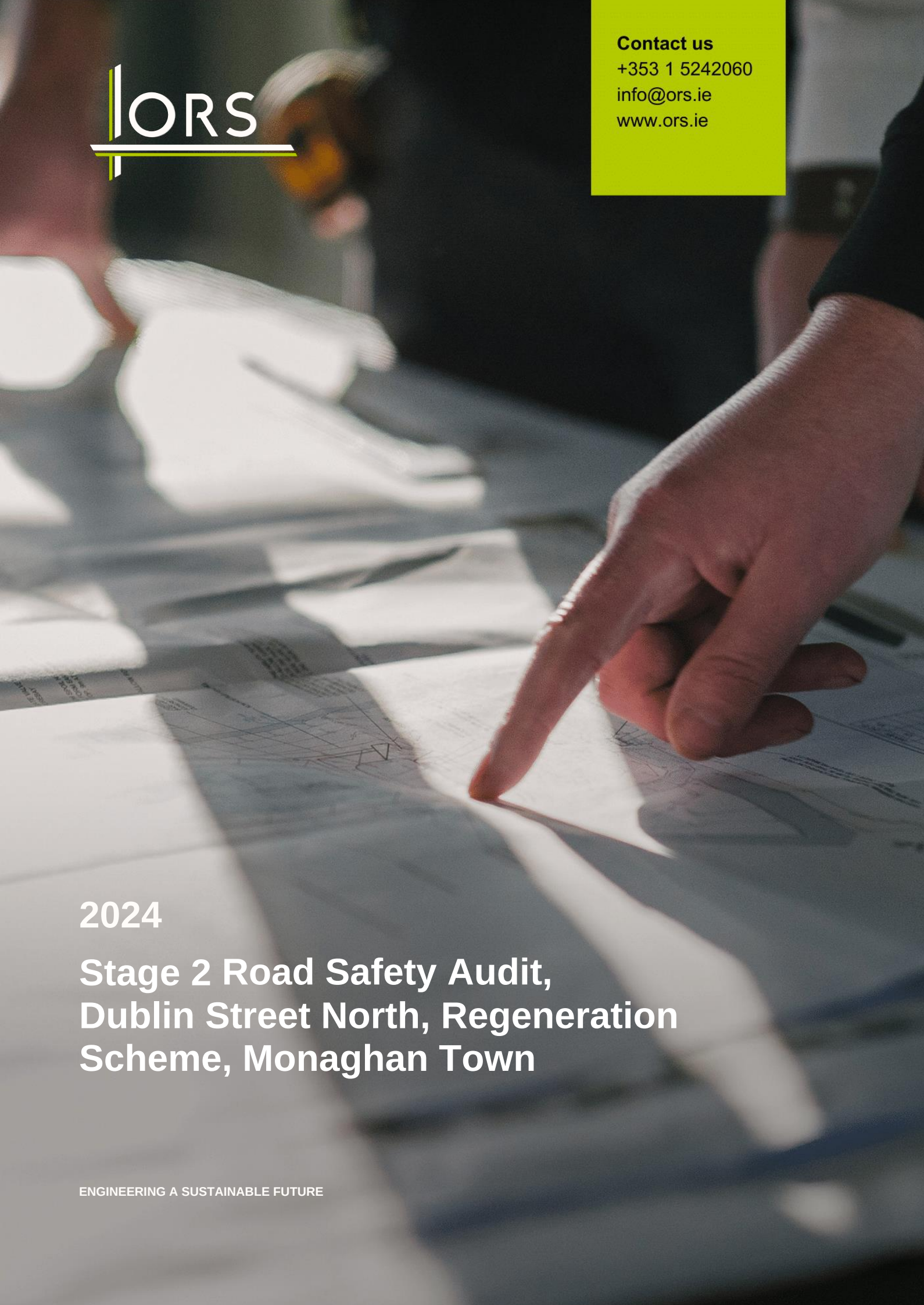

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2024

Stage 2 Road Safety Audit, Dublin Street North, Regeneration Scheme, Monaghan Town

ENGINEERING A SUSTAINABLE FUTURE

Stage 2 Road Safety Audit,
Dublin Street North, Regeneration Scheme, Monaghan Town

Document Control Sheet

Client:	Monaghan County Council
Document No:	241701-ORS-XX-XX-RP-TR-13g-001_S2_RSA

Revision	Status	Author:	Reviewed by:	Approved By:	Issue Date
P01	**S2**	**MG**	**AP**	**DMC**	**20/01/2025**
P02	**S2**	**MG**	**AP**	**DMC**	**28/01/2025**
P03	**S2**	**MG**	**MG**	**DMC**	**14/04/2025**

ORS

Table of Contents

1 Introduction

This report documents the findings of a Stage 2 Road Safety Audit (RSA) conducted with respect to a Dublin Street North Regeneration Scheme, Monaghan Town. The initial Stage 1/2 Road Safety Audit was completed by the CST Group on the 19th of June 2024.

The audit team conducted the site visit for this Road Safety Audit on Wednesday the 18th of December 2024. The audit was conducted in the offices of ORS on the 20th of December 2024.

The audit team comprised of the following people:

Audit Team Leader:
David McCormack BEng (Hons), Dip Eng., CEng, MIEI

Audit Team Member:
Adam Price BEng (Hons), CEng, MIEI

Audit Team Member:
Mark Gallagher AEng, MIEI

During the site visit the weather was damp and overcast. The road surface was wet, and the traffic levels were noted to be low across the audit period.

The audit team reviewed the following documents and drawings provided by the Design Team.

(1) Stage 1/2 Road Safety Audit – CST Group
(2) DBL-OPE-00-XX-DR-L-90160 Rev 02 General Arrangement Key Plan
(3) DBL-OPE-00-XX-DR-L-901301 Rev 04 General Arrangement Sheet 1
(4) DBL-OPE-00-XX-DR-L-901302 Rev 04 General Arrangement Sheet 2
(5) DBL-OPE-00-XX-DR-L-901303 Rev 04 General Arrangement Sheet 3
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(10) DBL-OPE-ZZ-XX-DR-L-902103 Rev 01 Details Surfacing
(11) DBL-OPE-ZZ-XX-DR-L-902104 Rev - Details Surfacing
(12) DBL-OPE-ZZ-XX-DR-L-902105 Rev - Details Surfacing
(13) DBL-OPE-ZZ-XX-DR-L-902201 Rev – Details Soft Landscaping Planting 01
(14) DBL-OPE-ZZ-XX-DR-L-902202 Rev – Details Soft Landscaping Planting 01
(15) DBL-OPE-00-XX-DR-L-901204 Rev 02 Illustrative Sections
(16) DBL-OPE-00-XX-DR-L-901205 Rev 01 Illustrative Sections.

Documents/Information not supplied:

- Collision Data
- Speed & Traffic Surveys
- Departures from Standards

- Visibility Splay Analysis.
- Public Lighting Layout.
- Swept Path Analysis.
- Road Markings and Signage Details
- Drainage Information.
- Kerbing Details.

The terms of reference / procedure for the Audit were as per the relevant sections of the **Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024.** The audit 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 designs to any other criteria.

The Road Safety Audit should not be treated as a design check. The problems identified and described in this report are considered by the Audit Team to require action to improve the safety of the development and minimise accident occurrence. All comments, references and recommendations in this safety audit are in respect of the review of information supplied by the Design Team.

2 Description of Proposed Development

ORS have been commissioned by Open Optimised Environments on behalf of Monaghan County Council to conduct a Stage 2 Road Safety Audit for a proposed development that includes public realm improvements to Dublin Street, Old Cross Square and Diamond Centre Car Park, Monaghan Town.

The proposed development includes:

- Public realm improvements to Dublin Street. These improvements will include footpath widening / narrowed carriageway, introduction of tabletops to facilitate priority pedestrian movement across the street, and use of high-quality materials to set the standard for the new regeneration plan area north and south.
- A new street (Russell Row) is proposed to be implemented to the rear of the existing buildings on Dublin Street. The intention is to create the ambience of a mews lane and pedestrian priority through the implementation of a shared surface.
- Public realm enhancements are proposed to the Old Cross Square. These include the implementation of new street furniture, paving, planting etc and the realignment of roads/ traffic movement etc.
- The proposed development aims to improve the pedestrian environment and public realm of the Diamond Centre Car Park through the realignment / delineation of car parking, pedestrian areas, and introduction of landscaping features to enhance visual amenity and pedestrian movement.

The site is currently a built-up area in the centre of Monaghan town. The site consists of an existing road, park and car park. The site can be accessed by Glaslough Street to the North and the East of the site can be accessed by the Old Cross roundabout to the South.

Please refer to **Figure 2.1** below for the location plan of the proposed scheme.

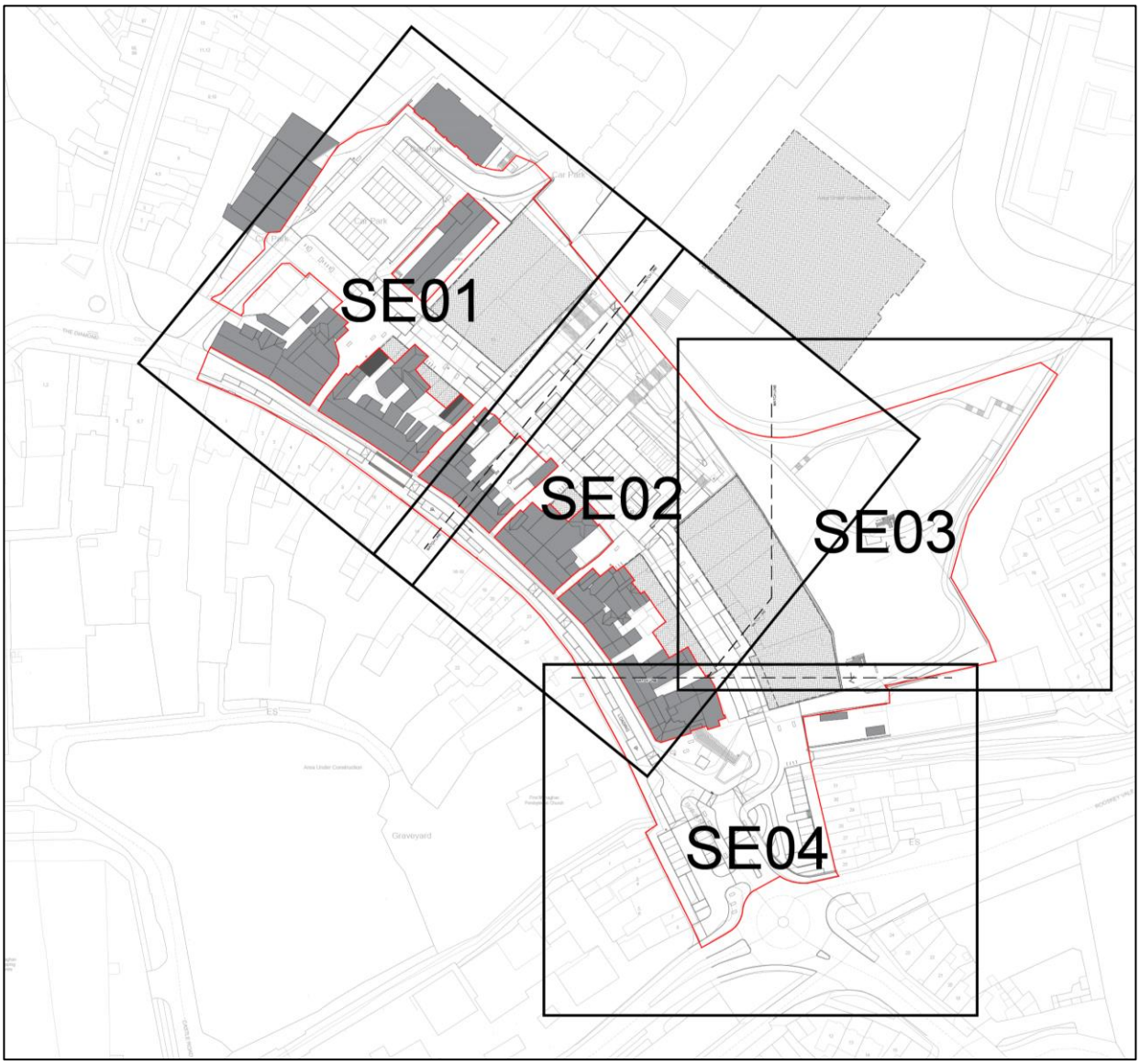


Figure 2.1: Site Location Plan (Source: Open Optimised Environments Ltd)

3 Problems Raised from the Road Safety Audit

The following are problems and recommendations to address the safety issues associated with the proposal. The recommendations are proposed to the designer of the scheme to reduce any safety risks associated with it.

3.1 Collision History

Due to ongoing review of road traffic collision data by the Road Safety Authority website, no traffic collision data could be obtained for the vicinity of the proposed development site.

3.2 Potential Problems Identified

Problem No.01: Cyclist Warning Signage and Road Markings (DBL-OPE-00-XX-DR-L-901301-Rev 04)

Location: Location Identified

The audit team note from the drawings provided that there is no cycle road markings or signage out to the junction with Dublin Street North to demonstrate that this is a shared surface with cyclists. The audit team has concerns that vehicles entering the site from Dublin Street North may not be aware of the change of road environment and may not change their driving habits to cater for the shared usage which could lead to collisions with cyclists.

Recommendation:

The design team should provide appropriate road markings and signage to alert vehicles entering this area that they will be sharing the carriageway with cyclists traveling in both directions.

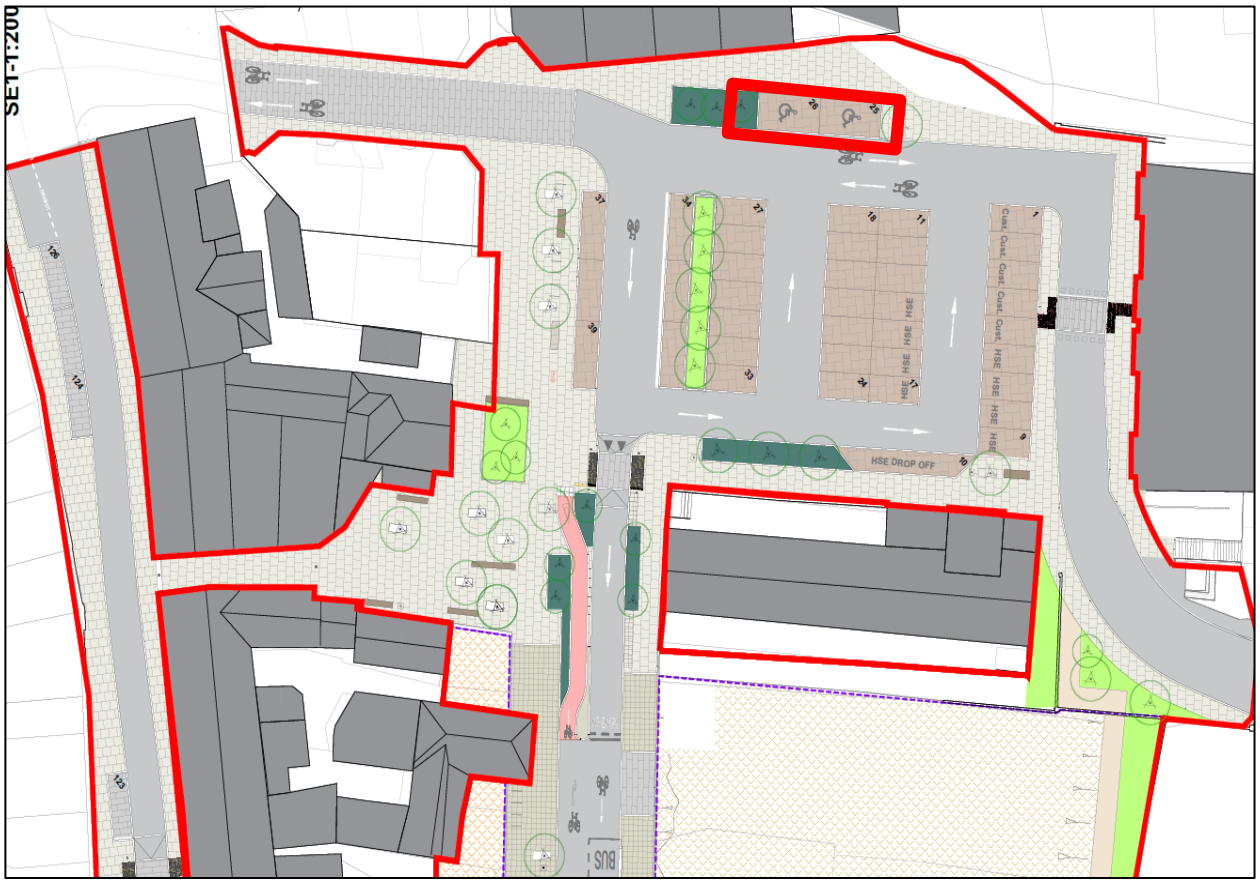
Problem No.02: Road Markings within Car Park (DBL-OPE-00-XX-DR-L-901301-901302-Rev 04)
Location: Location Identified
The audit team note from the drawings provided while there is direction of travel road markings for vehicles, no YIELD, STOP or No Entry Road markings or signage are detailed to give clear instructions to motorists of the priority of junctions and how the car park is to be used. The audit team has concern's that vehicles may enter parking isles against the flow of traffic and that vehicles exiting the spaces may not expect vehicles traveling in this direction which could lead to side swipe type collisions or reversing excessive distances to exit leading to potential collisions with cyclists.

Recommendation:
The design team should ensure that road markings and signage are provided for within the carpark area to control and direct motorists.

Problem No.03: Restricted Car Parking Spaces (DBL-OPE-00-XX-DR-L-901301-901302-901304 Rev 04)
Location: Various Locations
The audit team note from the drawing's provided that the parking spaces identified appear to be limited in space for entry and exiting. The audit team note that this could increase the risk of potential conflicts among vehicles or vehicle conflicts with cyclists or pedestrians as users may have to reverse onto the pedestrian footpath to exit the spaces.

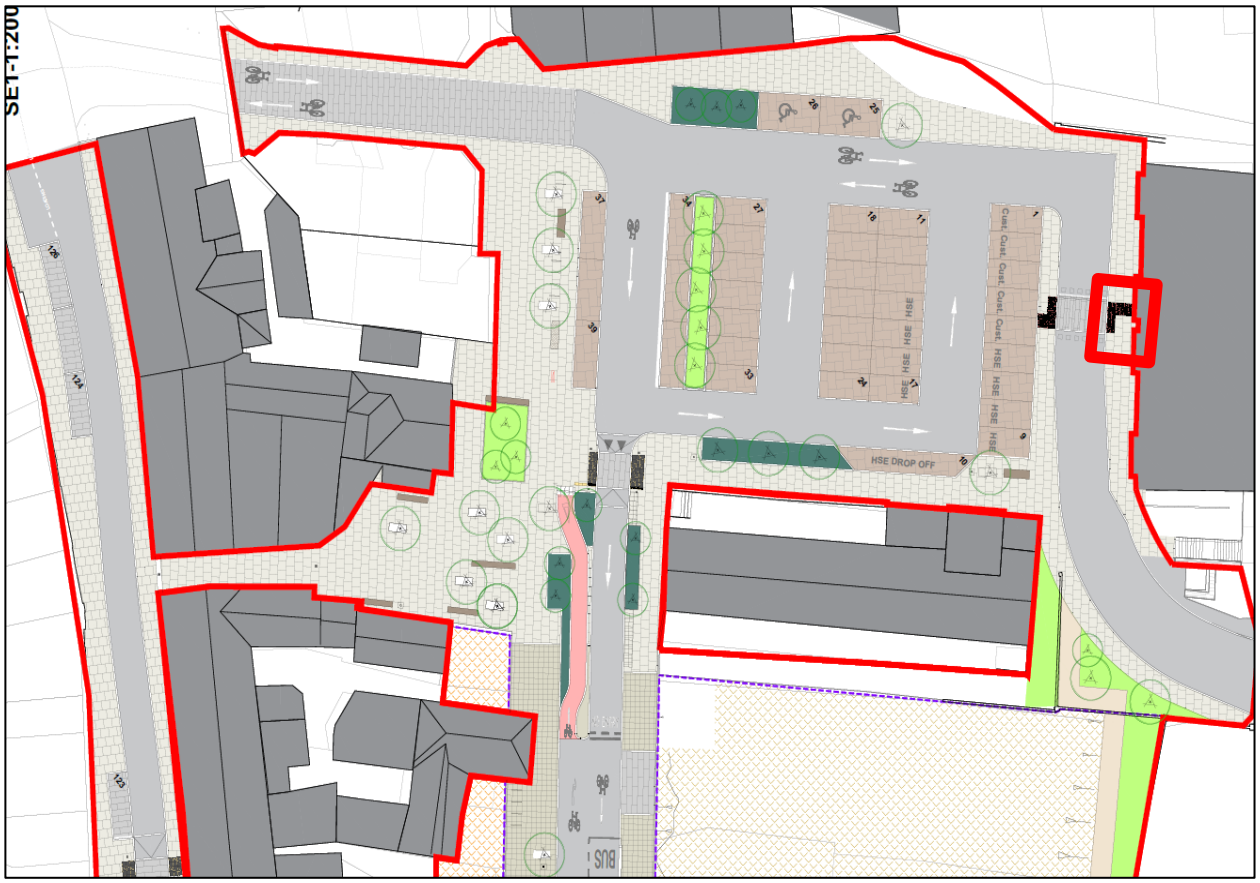
Recommendation:
The designers should ensure that vehicles can safely enter and exit these parking spaces.

Problem No.04: Disabled Parking Spaces Width (DBL-OPE-00-XX-DR-L-901301-Rev 04)
Location: Location Identified
The audit team note from the drawing's provided that there is two disabled parking spaces provided. It is not clear from the drawings provided that the spaces are the appropriate width to facilitate safe entry and exit from vehicles for mobility impaired users and that the appropriate dropped kerbing to access the footpath is provided. The audit team is concerned that if the spaces are not the appropriate width that mobility impaired users of the spaces will not have the required space to safely enter and exit their vehicles. The users of the spaces may also have to travel excessive distances to a dropped kerb which may lead to mobility impaired users trying to access footpath at the closest location at a full height kerb leading to slips trips and falls.



Recommendation:
The design team should provide appropriate space for the parallel accessible parking spaces to facilitate safe entry and exit to vehicles using the spaces and the appropriate dropped kerbing.

Problem No.05: Proposed Controlled Crossing (DBL-OPE-00-XX-DR-L-901301-Rev 04)
Location: Location Identified
The audit team note from the drawings that there is a proposed controlled crossing at the location identified. It appears from the site visit that the crossing location is at the door of one of the retail units. There may be limited space in front of the unit to provide a level access, tactile paving for the controlled crossing and the beacon for the crossing which could lead to the footpath width being reduced below the minimum forcing pedestrians onto the carriageway.



Recommendation:
The design team should locate the proposed crossing at a more suitable location to facilitate a consistent footpath width and maintaining the level access in front of the retail unit.

Problem No.06: Termination of Proposed Footpaths (DBL-OPE-00-XX-DR-L-901301-Rev 04)

Location: Location Identified

The audit team note from the drawings that the proposed footway works do not appear to connect into any existing pedestrian infrastructure within the area. Lack of an appropriate tie-in to an existing footpath or termination could lead to pedestrian confusion, slips, trips or collisions with vehicles on the carriageway.

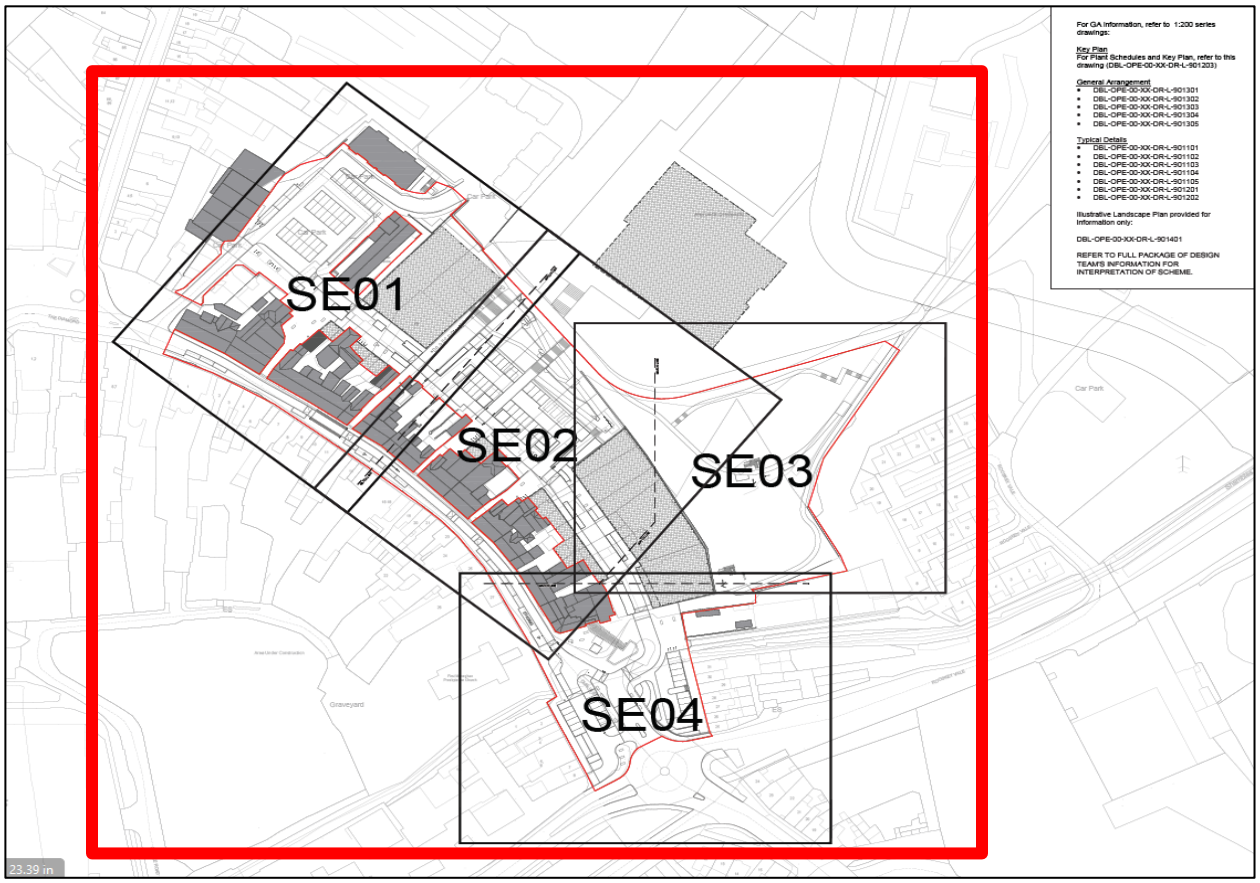
Recommendation:

The design team should provide provision for appropriate termination of the proposed footpath along with any tactile paving and signage.

Problem No.07: Termination of Cycle track (DBL-OPE-00-XX-DR-L-901301-Rev 04)
Location: Location Identified
The audit team note from the drawings that the proposed dedicated cycle track terminates at the location identified. It is unclear if the appropriate tramline tactile paving and signage are being provided to alert cyclists of the termination of the cycle track. Lack of appropriate signage and tactile paving could lead to cyclists entering the dedicated pedestrian area and this could lead to collisions between cyclists and pedestrians.

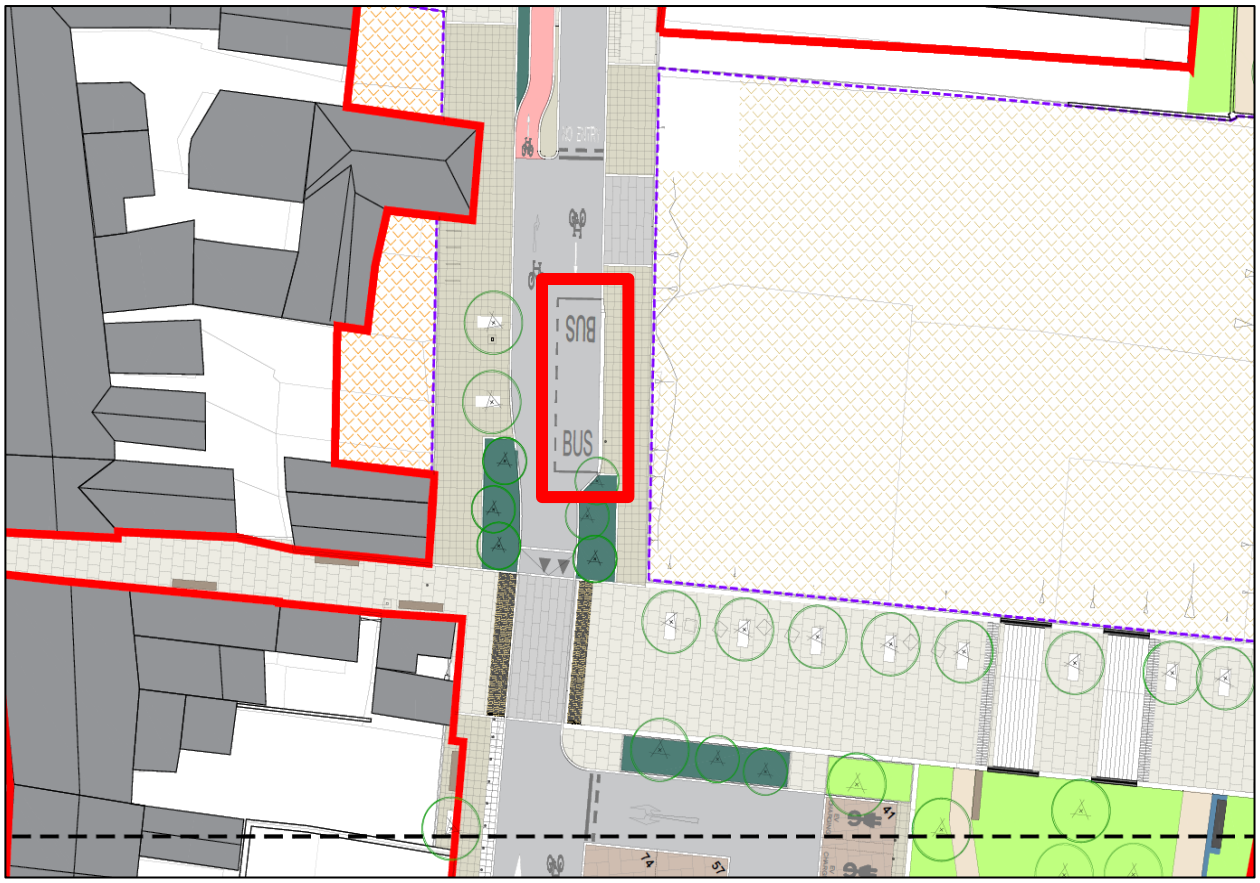
Recommendation:
The design team should provide for appropriate termination tactile paving and signage on the cycle track.

Problem No.08: Swept Path Analysis (DBL-OPE-00-XX-DR-L-901301-04-Rev 04)
Location: Throughout Scheme
The audit team note from the drawings provided that there is no swept path analysis for service vehicles or buses that must enter the scheme. It is unclear if there is sufficient space to facilitate larger vehicles especially those that must access daily. Lack of swept path analysis for the scheme could lead to instances where vehicles mount footpaths and cycle tracks which could lead to collisions with pedestrians and cyclists.



Recommendation:
The design team should provide swept path analysis for the scheme detailing how service vehicles and buses can safely enter and exit the scheme.

Problem No.09: Bus Stop (DBL-OPE-00-XX-DR-L-901301-Rev 04)
Location: Location Identified
The audit team note from the drawings provided at the location identified. It is unclear from the drawings provided if hazard warning tactile paving, kassel kerbs and the bus stop pole are being provided. The audit team has concerns that visually impaired users may not identify the edge of the bus stop if the appropriate hazard warning tactile paving is not provided, and mobility impaired users may have a higher step up or down from a bus if Kassel kerbs are not provided. This could lead to slips, trips and falls.

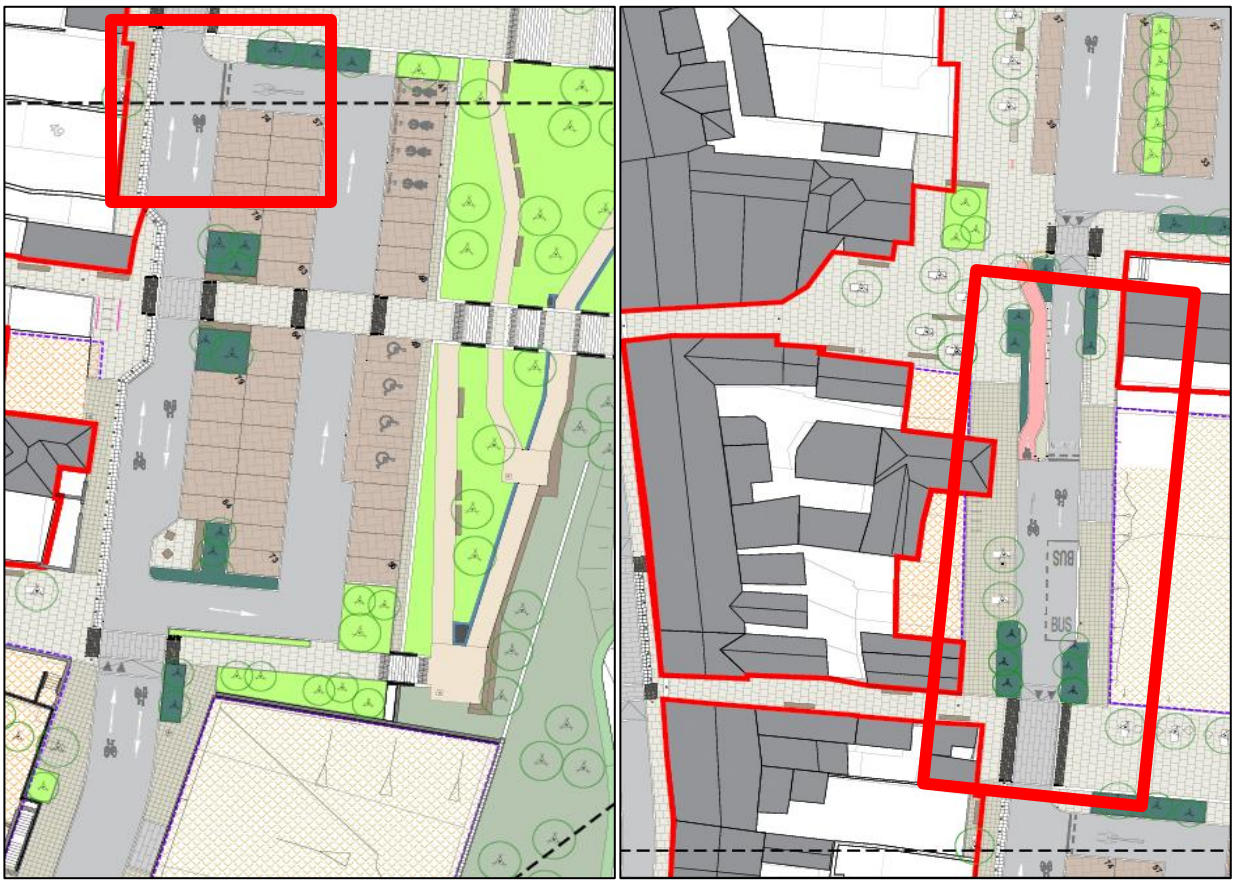


Recommendation:
The design team should ensure that the bus stop is provided with the appropriate hazard warning tactile paving, Kassel kerbs and the location of the bus stop pole is not in the line of the footpath.

Problem No.10: Conflicting Road Markings (DBL-OPE-00-XX-DR-L-901301-901302-Rev 04)

Location: Locations Identified

The audit team note from the drawings provided that there appears to be conflicting road markings. Approaching from the north appears to be a one-way system whereas the road markings in the southern car park indicates that two-way travel is possible. The audit team has concerns that these conflicting road markings could lead to motorists misunderstanding the layout and direction of travel around the car park which could lead to driver confusion which could lead to collisions.



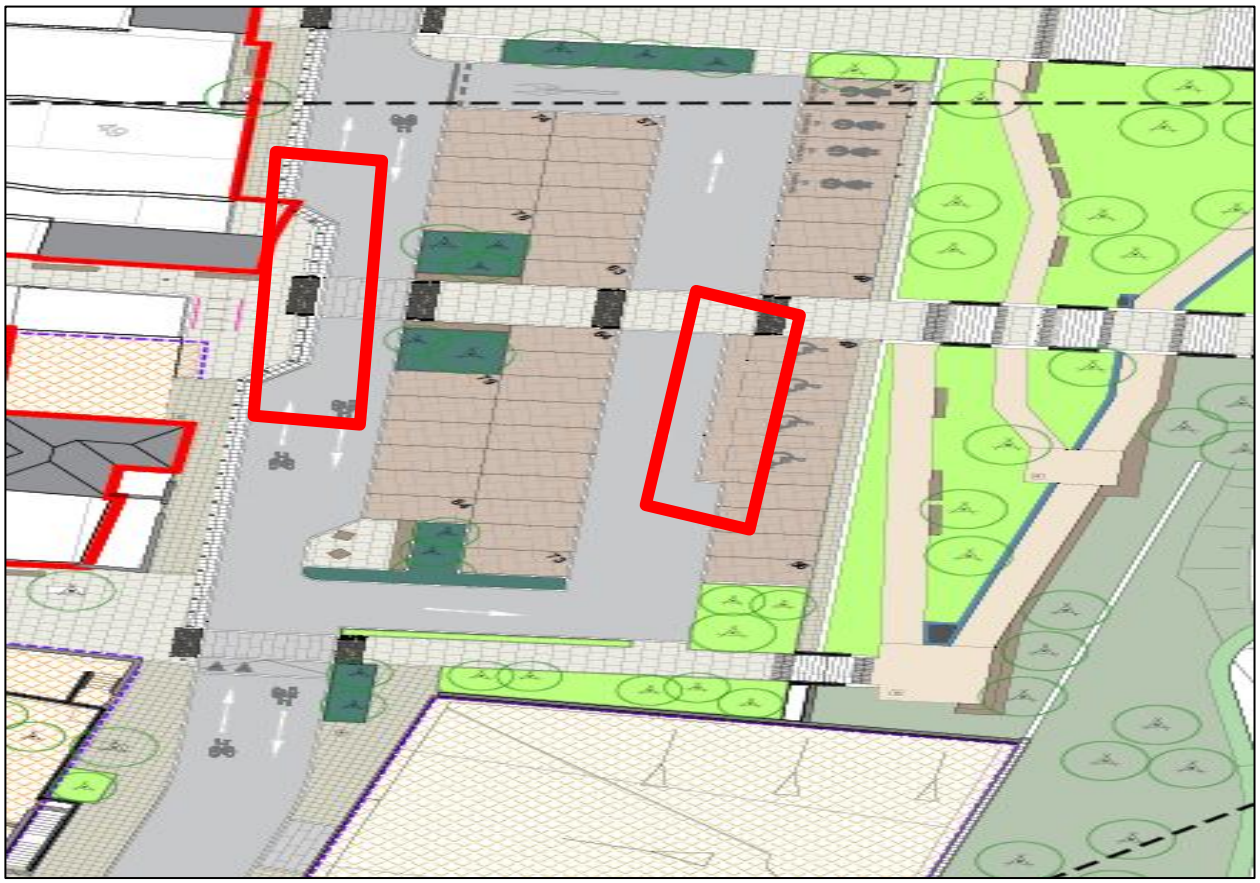
Recommendation:

The design team should provide clear road markings and signage around the car park and provide any No-Entry Road markings and signage where necessary.

Problem No.11: No Turning Area (DBL-OPE-00-XX-DR-L-901302-Rev 04)
Location: Location Identified
The audit team note from the drawings provided that vehicles exiting the spaces identified may find it difficult to exit the space and be orientated the incorrect way for the one-way system. The audit team is concerned that vehicles exiting these spaces may have to reverse an excessive distance to exit the space and be orientated correctly. This could lead to instances whereby a vehicle exiting the space could be reversing into on-coming traffic.

Recommendation:
The design team should ensure that vehicles have the appropriate turning space and can exit the spaces and be orientated in the correct direction to exit in forward gear.

Problem No.12: Sudden Road Narrowing (DBL-OPE-00-XX-DR-L-901302-Rev 04)
Location: Location Identified
The audit team note from the drawings provided that the driving isle suddenly narrows. The audit team is concerned that this sudden narrowing could lead to abrupt manoeuvres from motorists. This could lead to instances whereby a vehicle collides with a narrowing to the west or wheelchair users exiting their vehicles to the east.



Recommendation:
The design team should ensure that the appropriate signage and road markings are provided to alert motorists to the upcoming narrowing.

Problem No.13: Footpath Gradients (DBL-OPE-00-XX-DR-L-901302-901303 Rev 04)
Location: Location Identified
The audit team note from the drawings provided that there are no levels or gradients provided on the proposed footpaths or steps. It is unclear from the drawings provided if the footpaths are considered ramps or gently sloping. The lack of gradients and levels could result in inappropriately positioned intermediate landings, with a lack of rest areas leading to slips, trips or falls.

Recommendation:
The design team should provide details of the gradients and levels for the proposed footpath and ensure that no gradient is too steep or an individual ramp flight too long.

Problem No.14: Hazard Tactile Paving (DBL-OPE-00-XX-DR-L-901302-901303 Rev 04)
Location: Location Identified
The audit team note from the drawings provided that it is unclear if hazard tactile paving is being provided at the top, intermediate and bottom of the flights of steps. Visually impaired users may not comprehend that they are at the top or bottom of the flight of steps. Additionally, a visually impaired user may enter the intermediate landing where the path crosses not being aware of the hazard each side.

Recommendation:
The design team should provide hazard warning tactile paving at the top, bottom and intermediate landings including where the paths cross the flight of stairs.

Problem No.15: Inappropriately Located Landscaping (DBL-OPE-00-XX-DR-L-901301-Rev 04)

Location: Location Identified

The audit team note from the drawings provided there is landscaping provided in the line of travel of the external stairs. Visually Impaired and Mobility Impaired users especially will have to adjust the path at which they navigate the stairs to manoeuvre around the trees. Additionally, this reduces the space to the handrails on splitting the flights and could lead to slips and trips.

Recommendation:

The design team should position landscaping to not impeded the line of travel for the external steps especially where the central handrail extends out past the line of the steps.

Problem No.16: Incomplete Raised Table (DBL-OPE-00-XX-DR-L-901302-901304 Rev 04)
Location: Location Identified
The audit team note from the drawings provided there is an incomplete raised table shown at the location identified. It is unclear if the whole area is to be raised in the car park. The audit team has concerns that if it is intended to be raised that vehicles could mount footpaths/shared surfaces causing collisions with vulnerable road users.

Recommendation:
The design team should detail the extents of the raised area or if it is intended to be a raised table for a crossing. Also, any ramped area should not obstruct the driving isle around the car park.

Problem No.17: Car Parking Spaces at Junction (DBL-OPE-00-XX-DR-L-901304-Rev 04)
Location: Location Identified
The audit team note from the drawing's provided that the parking spaces identified appear to be difficult to exit safely. The audit team has concerns that this may lead to instances where vehicles reverse out of the spaces across the raised table and onto the main road to exit and be orientated in the incorrect direction. The audit team has concerns that this will lead to unsafe driver behaviour and cause vehicle to vehicle collisions or collisions with pedestrians on the crossing.

Recommendation:
The designers should remove the parking spaces identified to prevent unsafe driver behaviour.

Problem No.18: Termination of Shared Surface at Crossings (DBL-OPE-00-XX-DR-L-901304-Rev 04)
Location: Location Identified
The audit team note from the drawing's provided that the appropriate corduroy hazard warning paving is not provided. The audit team has concerns that this may lead to instances where cyclists travel through controlled crossings and cycle on the footpaths leading to collisions with pedestrians on the footpath or vehicles at uncontrolled crossings.

Recommendation:
The designers should provide the appropriate corduroy hazard warning paving at the termination of the shared surface and at the controlled crossing zone.

Problem No.19: Right Turn at Filling Station (DBL-OPE-00-XX-DR-L-901304-Rev 04)
Location: Location Identified
The audit team note from the drawing's provided that vehicles exiting the filling station can only turn right. It is unclear if HGV's and vehicles exiting the filling station can make this right turn without mounting the footpath on the northern side of the road. The audit team has concerns that this could lead to vehicles mounting the footpath causing collisions with pedestrians. It could also lead to vehicles reversing back into the filling station to achieve a better angle to make the turn.

Recommendation:
The designers should provide a swept path analysis detailing HGV's and Cars exiting the filling station and turning right.

Problem No.20: Colour at Locations Other than Crossings (DBL-OPE-00-XX-DR-L-901303-Rev 04)
Location: Location Identified
The audit team note from the drawings provided that the paving in the location identified is called up as Granite Aggregate Precast Paving Units which is unlikely to be a good colour contrast between path and any hazards i.e. the external steps. Some visually impaired users rely on the colour contrast in materials to determine the location of hazards and the edge of the threads in steps. Some visually impaired users may fail to note any warning paving on the ramp and steps.

Recommendation:
The designers should provide materials that achieves a good colour contrast and that the edge of the threads contrast to the rest of the step.

3.3 General Problems Identified

Problem No.21: Signage and Markings
Location: Throughout Scheme
The audit team noted that there is no road and cycle signage, regulatory signage or incomplete road and cycle markings on the drawings provided. Signage and markings aid in, informing road users of the direction of travel and the presence of vulnerable road users and ramps. The lack of adequate signage and markings in this case may result in conflicts of vehicles with vulnerable users and vehicles with other vehicles.

Recommendation:
The design team should ensure that road and cycle signage and markings are provided in line with DMURS and the applicable Traffic Signs Manual.

Problem No.22: Vehicle Swept Path Analysis
Location: Throughout Scheme
The audit team has observed that no vehicle swept path analysis has been conducted based on the provided drawings. To ensure the road layout is optimally designed for emergency and service vehicles, it is crucial to undertake a thorough swept path analysis using appropriate design vehicles. This analysis will confirm that the road configuration allows for safe turning movements without encroaching on pedestrian areas or mounting kerbs, thereby minimising potential conflicts between vehicles and pedestrians. Additionally, the swept path analysis should encompass all relevant vehicle turning movements, ensuring that vehicles can manoeuvre smoothly within the property.

Recommendation:
The design team should analyse vehicle swept paths on the scheme with industry standard software to assess vehicle wheel paths during turning movements to confirm the suitability of the road and internal driveway layout for intended vehicle purposes.

Problem No.23: Public Lighting
Location: Throughout Scheme
The audit team note from the drawings provided that no public lighting was detailed for the development. Areas in low light conditions may result in slips, trips and falls on pedestrian paths. Drivers may not be able to see pedestrians in the internal road network and at pedestrian crossings which has the potential to lead to pedestrian – vehicle collisions resulting in, injuries to pedestrians.

Recommendation:
The design team should ensure that details and locations of all public lighting columns are provided for in the development and that the positioning does not cause any obstruction or hazard to vulnerable road users and that lighting is distributed uniformly throughout the development.

Problem No.24: Drainage
Location: Internal Site Layout
The audit team note from the drawings provided, that there is no provision for drainage channels/ gully positions for the proposed stormwater network at ramps throughout the proposed development. Inadequate gully positioning may lead to issues of ponding in areas of the development which poses a risk of slips, trips or falls to vulnerable road users.

Recommendation:
The design team should ensure that details and locations of all drainage gullies etc are provided for across the site and positioned strategically to avoid the risk of ponding across the site and in particular at any proposed pedestrian crossing points of at any proposed ramps within the scheme.

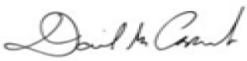
Problem No.25: Materials – Slip Resistance
Location: Throughout the Scheme
The audit team note from the drawings provided that the slip resistance of the proposed surfacing materials is not noted. Some of the natural stone products may become polished and create a slip hazard.

Recommendation:
The design team should ensure that materials have an appropriate slip resistance and Polished Stone Value (PSV) used within the development.

4 Audit Team Statement

We certify that we have examined the drawings listed in Appendix A and examined the site by means of a site visit. This examination has been conducted 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 issues that we have identified have been noted in the report, together with suggestions for improvement, which we recommend should be studied for implementation.

Audit Team Leader: David McCormack: BEng (Hons), Dip Eng., CEng, MIEI
ORS

Signed: 

Date: 13th January 2025

Audit Team Member: Adam Price: BEng (Hons), CEng, MIEI
ORS

Signed: 

Date: 13th January 2025

Audit Team Member: Mark Gallagher, MIEI
ORS

Signed: 

Date: 13th January 2025

Appendix A – Inspected Documents

The audit team reviewed the following documents and drawings provided by the Design Team:

(1) Stage 1/2 Road Safety Audit – CST Group
(2) DBL-OPE-00-XX-DR-L-90160 Rev 02 General Arrangement Key Plan
(3) DBL-OPE-00-XX-DR-L-901301 Rev 04 General Arrangement Sheet 1
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(5) DBL-OPE-00-XX-DR-L-901303 Rev 04 General Arrangement Sheet 3
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(14) DBL-OPE-ZZ-XX-DR-L-902202 Rev – Details Soft Landscaping Planting 01
(15) DBL-OPE-00-XX-DR-L-901204 Rev 02 Illustrative Sections
(16) DBL-OPE-00-XX-DR-L-901205 Rev 01 Illustrative Sections

Appendix B – Designer Response Form

Job: 241701 – Dublin Street North Regeneration Scheme, Monaghan Town
Stage of Audit: Stage 2
Date Audit Completed: 06th January 2025

Problem Reference in Safety Audit Report	To Be Completed by the Designer			To be Completed Audit Team Leader
	Problem Accepted (Yes/No)	Recommendation Accepted (Yes/No)	Alternative Option (Describe) (Only complete if recommendation not accepted)	Alternative Option Accepted by Auditors (Yes/No)
P1	**YES**	**YES**		
P2	**YES**	**YES**		
P3	**YES**	**YES**		
P4	**YES**	**YES**		
P5	**YES**	**YES**		
P6	**YES**	**YES**		
P7	**YES**	**YES**		
P8	**YES**	**YES**		
P9	**YES**	**NO**	Bus stop guidance from the NTA notes Kassel kerbs, and a strip of both a red & grey concrete pavers to denote the bus bay edge of footway. These will all be included in our design.	Yes
P10	**YES**	**YES**		
P11	**YES**	**YES**		
P12	**NO**	**NO**	The Design Team (DT) accepts the issue at the accessible parking bays and will adjust our design accordingly. With regard to the carriageway narrowing, the DT has provided a well defined footway edge treatment including kerbing, guidance tactile paving and bollards to denote the footway	Yes

			edge. Providing road markings to denote traffic priority would go against DMURS principles of self-regulating streets, and has been deliberately omitted in order to help reduce traffic speeds	
P13	**YES**	**YES**		
P14	**YES**	**YES**		
P15	**YES**	**YES**	Tree locations will be reviewed prior to technical design / construction	
P16	**YES**	**YES**		
P17	**YES**	**YES**	Car Parking arrangement at this location will be reviewed prior to technical design / construction	
P18	**YES**	**YES**		
P19	**YES**	**YES**		
P20	**YES**	**YES**		
P21	**YES**	**YES**		
P22	**YES**	**YES**		
P23	**YES**	**YES**		
P24	**YES**	**YES**		
P25	**YES**	**YES**		

Signed:…… ……. Designer Date:…09/04/2025…

D. Anderson, Senior Civil Engineer, McAdam Design

Signed:……Audit Team Leader Date:…14th April 2025

Signed:…….. Employer Date:14th April 2025

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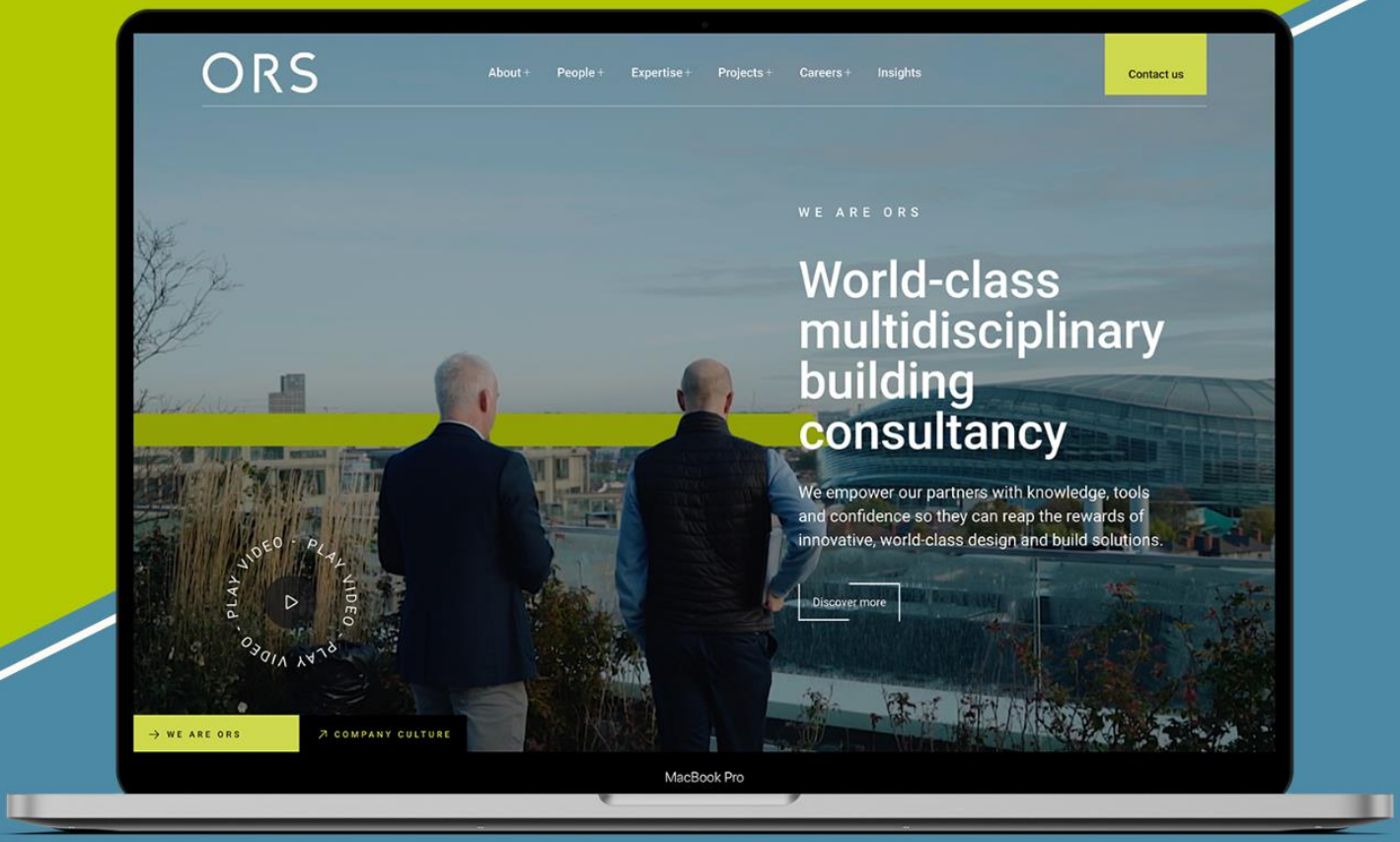

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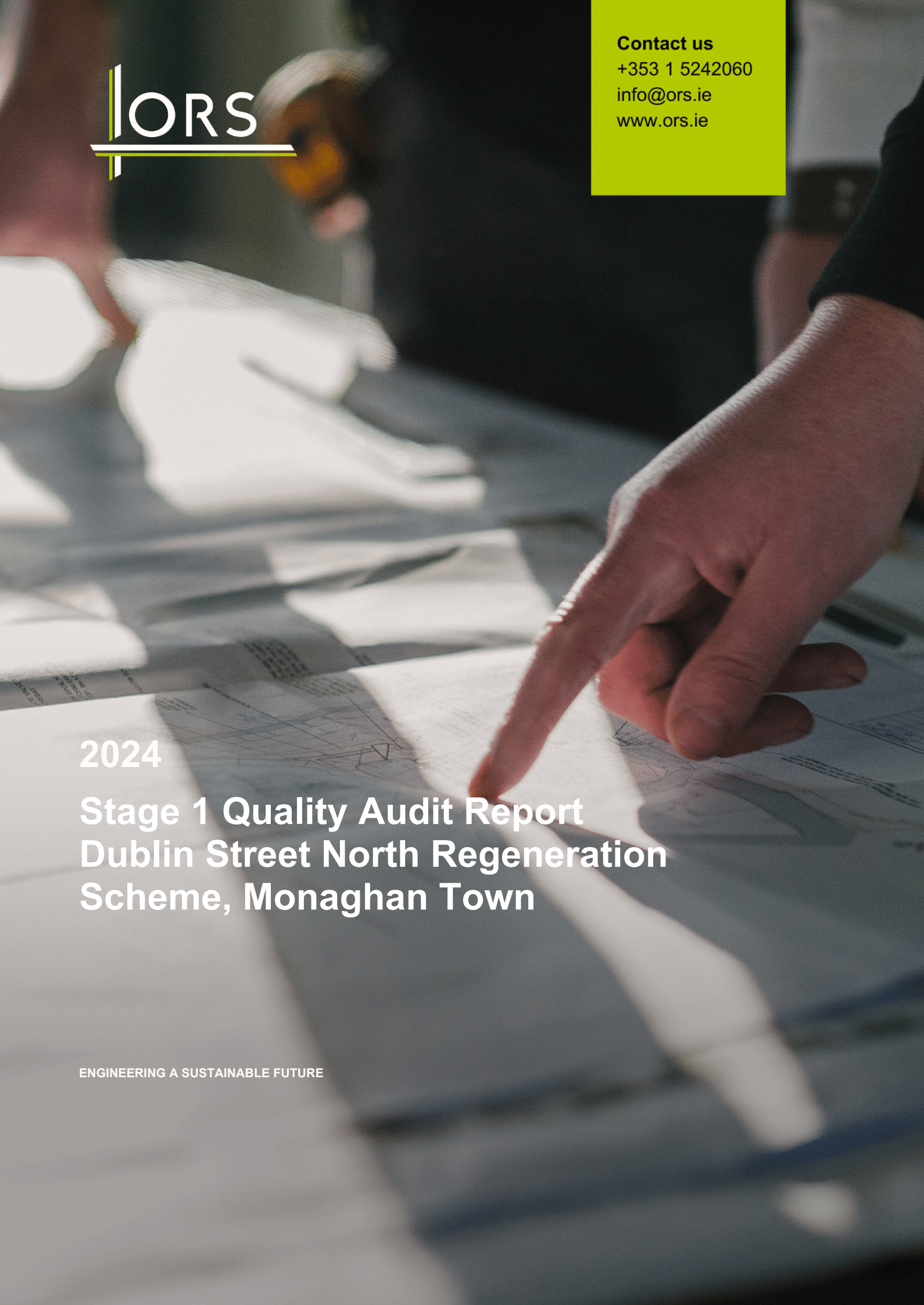

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2024

Stage 1 Quality Audit Report Dublin Street North Regeneration Scheme, Monaghan Town

ENGINEERING A SUSTAINABLE FUTURE

Stage 1 Quality Audit Report
Dublin Street North Regeneration Scheme, Monaghan Town

Document Control Sheet

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P01	S2	EP	AK	MG	03/09/2024

Table of Contents

1 Introduction

This report documents the findings of a Stage 1 Quality Audit (QA) carried out on behalf of Monaghan County Council. The proposed development generally includes public realm improvements to Dublin Street, Old Cross Square and Diamond Centre Car Park, Monaghan Town.

The Quality Audit team comprised of the following people:

Audit Team Leader:
Adam Price BEng (Hons), CEng, MIEI

Audit Team Member:
Mark Gallagher AEng, MIEI

Audit Team Observer:
Angeliki Kalatha MEng, MSc, MIEI

The audit team reviewed the following documents and drawings provided by Open Optimised Environments ltd:

(1) 124154 Stage 1_2 RSA Report Rev R0 for Review
(2) DBL-OPE-00-XX-DR-L-901201
(3) DBL-OPE-00-XX-DR-L-901301
(4) DBL-OPE-00-XX-DR-L-901302
(5) DBL-OPE-00-XX-DR-L-901303
(6) DBL-OPE-00-XX-DR-L-901304
(7) DBL-OPE-00-XX-DR-L-901401

Guidance and information on the completion of the Quality Audit was found in:

- Design Manual for Urban Roads and Streets (DMURS), Department of Transport, Tourism and Sport.
- DMURS Supplementary Material – Advice Note 4 – Quality Audits.
- DMURS Supplementary Material – DMURS Street Design Audit (May 2019).
- Traffic Advisory leaflet 5/11, Department of Transport UK; and
- Building for Everyone - A Universal Design Approach, National Disability Authority.

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

2 Background

2.1 Description of the Proposed Development

ORS have been commissioned by Open Optimised Environments on behalf of Monaghan County Council to conduct a DMURS Quality Audit for a proposed development that includes public realm improvements to Dublin Street, Old Cross Square and Diamond Centre Car Park, Monaghan Town.

The proposed development includes:

- Public realm improvements to Dublin Street. These improvements will include footpath widening / narrowed carriageway, introduction of tabletops to facilitate priority pedestrian movement across the street, and use of high-quality materials to set the standard for the new regeneration plan area north and south.
- A new street (Russell Row) is proposed to be implemented to the rear of the existing buildings on Dublin Street. The intention is to create the ambience of a mews lane and pedestrian priority through the implementation of a shared surface.
- Public realm enhancements are proposed to the Old Cross Square. These include the implementation of new street furniture, paving, planting etc and the realignment of roads/ traffic movement etc.
- The proposed development aims to improve the pedestrian environment and public realm of the Diamond Centre Car Park through the realignment / delineation of car parking, pedestrian areas, and introduction of landscaping features to enhance visual amenity and pedestrian movement.

The site is currently a built-up area in the centre of Monaghan town. The site consists of an existing road, park and car park.

The site can be accessed by Glaslough ~Street to the North and the East of the site can be accessed by the Old Cross roundabout to the South.

Please refer to **Figure 2.1** displayed below, which provides an overview of the site location.

Figure 2.1: Site Location Map (Source: Google Earth)

Figure 2.2 shows the proposed site layout provided by Open Optimised Environments ltd.

Figure 2.2: Site Layout (Source: Open Optimised Environments Ltd)

2.2 Existing Road Network

As previously noted, the vehicular access proposed to the site is via the Old Cross roundabout to the South and Glaslough street to the North of the application site. Dublin street features walking paths on both sides of the one-way road, where there are streetlights and dropped kerbs to allow access in between buildings and through gateways. The current features of the existing road network are as shown in **Figure 2.3** and **Figure 2.4**.

Figure 2.3: Pedestrian facilities along Dublin St. (Source: Google Earth)

Figure 2.4: Existing Dublin Street paved path (Source: Google Maps)

Old Cross is a Roundabout to the South of the application site off which vehicular traffic is proposed to access the application site and its car parking area. Old Cross roundabout has four main exits with the northern most exit being the most relevant to the proposed site. Streetlights are present in the vicinity of the application site, as shown in **Figure 2.5** and **Figure 2.6**.

Figure 2.5: Overview of Old Cross Roundabout (Source: Google Earth)

Figure 2.6: Old Cross Roundabout from the site frontage (Source: Google Maps)

3 Quality Audit Scope

The primary goal of a Quality Audit is to ensure that high-quality places are delivered and maintained by all relevant parties, ultimately benefiting all end users. During that process, the Quality Audit team considers access for disabled people, pedestrians, cyclists, and drivers of motor vehicles to ensure that the scheme is inclusive and caters to the needs of all users.

The scope of this Quality Audit is to review the proposed layouts supplied by the Design Team and make recommendations in line with guidelines as per the Design Manual for Urban Roads and Streets (DMURS) and the Transport Infrastructure Ireland Road Safety Audit Standard GE-STY-01024, to ensure compliance and good practice of regulations defined in these standards documents.

The introduction of DMURS have sought to improve the design of streets in urban areas and to facilitate the implementation of policy on sustainable living by achieving a better balance between all modes of transport and road users. The introduction of DMURS is intended to encourage more people to walk, cycle or use public transport by making the experience safer and more pleasant.

In general, the principles of DMURS are intended to lower traffic speeds, reduce unnecessary car use, and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of the individual communities and places.

DMURS Quality Audits are undertaken to demonstrate that appropriate consideration has been given to the relevant aspects of the design from a DMURS point of view. The benefits of undertaking a DMURS Quality Audit are as follows:

- The needs of all user groups and the design objectives of the project are fully considered.
- An audit enables the project's objectives to be delivered by putting in place a check procedure.
- It can contribute to cost efficiency in design and implementation.
- A DMURS Quality Audit encourages engagement with stakeholders.

This Quality Audit will be divided into the following assessments:

- A DMURS Street Design Audit
- Additional Audits (Access, Walking and Cycling Audits)
- A Road Safety Audit.

A DMURS audit template, consisting of a series of short tables, is available online by the Department for Transport, Tourism and Sport (DTTAS) and has been adopted into this report.

This Quality Audit was carried out to identify any potential difficulties road users, particularly mobility impaired users, older people and families with children may encounter when accessing the proposed housing development and to address any safety issues associated with the proposal. The elements found in this Audit that require further consideration with the guidelines set out in DMURS are outlined at the following pages.

4 DMURS Street Design Audit

4.1 Overview

The DMURS Street Design Audit is an essential tool for evaluating the compliance of street designs with the principles outlined in the Design Manual for Urban Roads and Streets (DMURS). This audit serves to ensure that key considerations outlined in DMURS have been appropriately addressed. The audit focuses on four critical aspects of street design, namely:

- Connectivity.
- Self-Regulating Street Environment.
- Pedestrian and Cycling Environment; and
- Visual Quality.

4.2 Connectivity

Connectivity				
Key Issues	**Key DMURS Reference**	**Comments**	**Audit Suggestion**	**Design Team Response**
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 – Wayfinding	3.1 – The internal network connects unit entrances with parking area and open spaces. 3.2.1 – The development creates a permeable network for pedestrians restricting private vehicles. 3.3.1 – The design creates a strong sense of enclosure by using landscaping to enclose the streets and development as a whole. 3.3.4 – Site layout is legible directing users towards site and building entrances.	Designers should ensure that all the proposed street layout should be appropriately designed with according to DMURS standards.	
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting	3.3.1 – The development maximises the number of walkable routes between destinations within the development through the provision of footpaths at open spaces. 3.3.3 –	Design team should clearly demonstrate how vulnerable users e.g. Wheelchair users will be able to the buildings from the disabled car park.	

		The development creates a permeable network for pedestrians with restrictions on the movement of private vehicles and pedestrian links along the southwestern boundary as well as the main access.	6 pedestrian access points are present on the Dublin Street with 2 vehicular access points on both northwest and south of the proposed property.	
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	3.3.1 – Adequate number of footpaths shared with cyclists. 3.4.1 – The development has created a network with restrictions on the movement of private vehicles. 3.4.1 – The site provides through vehicular accessibility to the development by road from the southern boundary via a roundabout.	Separate cyclist tracks have not been provided on the scheme. Cyclists will be required to share the road with vehicles, dismount and reach their destination through the provided footpaths. Additional cyclist access should be explored.	
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability	3.2.1 – The development comprises an internal street that provides access to the internal car parking areas and the buildings. 3.2.2 – The development comprises an appealing living place enriched with valuable green attributes. 3.4.1 – The development has created a network with restrictions on the movement of private vehicles through the use of short driving distance, frequent junctions & raised tables	The design should incorporate a range of additional traffic calming measures aimed at reducing vehicle speeds throughout the development.	

4.3 Self-Regulating Street Environment

Self-Regulating Street Environment				
Key Issues	**Key DMURS Reference**	**Comments**	**Audit Suggestion**	**Design Team Response**
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function 3.2.3 – Place Context 4.1.1 – A Balanced Approach to Speed	3.2.1 –No Speed limit on the internal road is indicated on the drawing. 3.2.3 – Higher levels of cyclist movement are not catered for. 4.1.1 – The design provides traffic calming measures such as regular speed bumps at pedestrian crossing which could result in lower speeds through the development.	Speed limits should be mentioned on the drawings to be 30km/hr. The design should incorporate additional speed control measures to limit speed through the development.	
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 - On-Street Parking Advice Note 1 – Transitions and Gateways	4.2.2 – Tree plantings are proposed in the layout plan. 4.2.3 – Active Street edges are provided through the provision of landscaping besides pedestrian/cyclist connection and car parking and building access along the vehicular carriageway. 4.2.4 – Signage kept to minimum. 4.2.7 – Planting is used to create a softer landscape and encourage slower speeds. 4.4.2 – To reinforce narrower carriageways each parking bay is finished so that it is clearly distinguishable from the main carriageway.	Signage and road markings should clearly be indicated on the drawings. The type and location of tree planting proposed should be such that they do not obscure visibility splays from junctions, pedestrian crossings and parking bays.	
A suitable range of design standards / measures have been	4.4.1 - Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays	4.4.1 – The proposed internal carriageway will be approximately 5 to 6m wide. 4.4.4 – Forward visibility has been	Designers should ensure that all the proposed vehicular access/egress points should be appropriately	

applied that are consistent with the applied design speeds.	4.4.6 – Alignment and curvature 4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	reduced through the provision of on-street parking and changes in horizontal alignments along the access road. 4.4.6 – The development features changes in horizontal curvature which promotes lower speeds. 4.4.7 Vertical deflections are not proposed in the design.	designed with according to DMURS standards. Visibility splays should be illustrated at the site access junction as well as at all the internal junctions of the site in accordance with DMURS.	

4.4 Pedestrian and Cycling Environment

Pedestrian and Cycling Environment				
Key Issues	**Key DMURS Reference**	**Comments**	**Audit Suggestion**	**Design Team Response**
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	4.2.1 – Limitations in cross-sectional width and the emphasis on delivering segregated footpath and, and the provision of separated pedestrian access increases pedestrian safety. 4.2.3 – Active Street edges provide passive surveillance of the street environment and promote pedestrian activity. 4.2.5 –Street furniture such as seatings, picnic tables are provided in certain sections of the development.	Designers should prioritise sufficient lighting in all the pedestrianised areas throughout the development. This measure is essential to enhance safety and create a sense of security for users. Designers should ensure that tree canopies over time should not obstruct any lighting.	
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised.	4.3.2 – Pedestrian Crossings 4.3.3 – Corner Radii 4.4.3 – Junction Design 4.4.7 – Horizontal and Vertical Deflections	4.3.2 – 4 No. Pedestrian crossing is provided in the development within the car park towards the building. 4.3.3 – Corner radii of 3 to 4.5m seems to be achievable. 4.4.3 – Junction design at the site vehicular access and internal junctions appears appropriate, however there are no visibility splay drawings provided for at the junctions . 4.4.7 – Vertical deflections are provided but are minimal.	Designers should ensure that all the proposed vehicular access/egress points should be appropriately designed with according to DMURS standards. Corner Radii should be appropriately mentioned in the drawings.	
Footpaths are continuous and wide enough to cater for the anticipated	3.2.1 – Movement Function. 3.2.3 – Place Context. 4.2.5 – Street Furniture	3.2.1 – The development maximises the number of walkable routes to the south and east of the development.	Footpath width should be illustrated on the drawings.	

number of pedestrian movements.	4.3.1 – Footways, Verges and Strips 4.3.2 – Pedestrian Crossings	3.2.3 – The development comprises an appealing living place with green attributes. 4.3.2 – The development comprises crossing point for vulnerable users at the northern end of the scheme. 4.3.2 – Dropped kerb pedestrian crossings are provided throughout the site, at strategic locations. 4.3.1 – Footways appear to be appropriate throughout the development which is compliant with DMURS. Mostly segregated from vehicle carriageways and through the provision of on-street parking.		
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 – Street Furniture 4.3.1 – Footways, Verges and Strips 4.2.5 – Street Furniture 4.3.2 – Pedestrian Crossings 4.3.4 – Pedestrianised and Shared Surfaces	4.3.4 – Accessible parking spaces are proposed throughout the site. Mobility impaired users will navigate into the building as accessible parking is at the same level on as shared surface. However, as Mobility impaired users might also share the surface with other vehicular traffic, measures to allow mobility impaired users to navigate safely into the building is unclear.	Segregated or marked pedestrian surface should be considered near every accessible parking space in the car park area. This will enable mobility-impaired users to safely access the building without conflicting with vehicular traffic.	
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.3 – Place Context 4.3.5 – Cycle facilities	4.3.5 – Dedicated cycling lanes are not provided. Cyclists will share the carriageway with vehicles. 4.3.5 Appropriate Cycle parking is provided outside the building	Appropriate dismount signage for cyclists to be installed throughout pedestrianised areas to reduce possibility of conflicts.	

4.5 Visual Quality

Visual Quality				
Key Issues	**Key DMURS Reference**	**Comments**	**Audit Suggestion**	**Design Team Response**
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	3.2.1 – Adequate number of attractive walkable routes are provided to connect users from the car park to the main infrastructure. 3.2.3 – The development embodies an appealing living environment with an emphasis on green features, enhancing the sense of place and discouraging excessive speeds. 4.2.2 – The inclusion of street trees across the site enhances the sense of enclosure achieving a sense of place. 4.2.7 – Planting is proposed to create a softer landscape.		
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.5 – Street Furniture 4.3.1 Footways, Verges and Strips	3.2.1 – Street furniture provided does not restrict pedestrian movements. 3.2.3 – The selection of street furniture is suitable for the context. 4.3.1 – Streetlight columns are not proposed along footpaths.	Streetlight columns should be proposed at the rear of footpaths.	
The use of signage and line marking has been minimised.	3.2.1 – Movement Function 3.2.3 – Place Context 4.2.4 –	4.2.4 – Details of signage are provided, and signage is kept to the minimum required.	Design team should ensure that the signage is provided	

	Signage and Line Marking		according to DMURS standards.	
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	3.2.1 – Movement Function 3.2.3 – Place Context. 4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces Advice Note 2 – Materials and Specifications	3.2.1 – Adequate number of walkable routes are provided to the south of the development as well to the north connecting to main entry and exit point with the rest of location. 3.2.1 – Materials and finishes have been carefully chosen to facilitate movement by providing visual distinctions between surfaces. 3.2.3, 4.2.6 – Materials and finishes have been used to define crossing points and parking spaces. 4.3.2 – Different surface textures and materials at pedestrian crossings act as traffic calming and indicate the crossing location to drivers. 4.4.2 – Carriageway surfaces have been defined by colour differences to make drivers aware of changes in priority.	Design team should ensure that the walking route towards the north and car park is designed according to DMURS standards.	

5 Additional Audits

5.1 Accessibility and Walkability Audit

The proposed site will be accessed off Dublin Street to the south of the site which connects to a roundabout and another access north of the site which leads to the car park. This will be the 2 vehicular entrances to the site.

There are multiple access points for pedestrians to access the site from the west of the proposed location which connects to Dublin Street. These entry points can also be used by cyclists as a shared pedestrian and cyclist access.

The site is well accessible via footpaths that connects the site to several local amenities like shopping centre, restaurants and pubs.

5.1.1 Public Transport Network

The proposed development is well served by the bus M3 which connects Mullan Village and Latlorcan. The bus stop is present at the entrance and the frequency of the buses every 2 hours on a weekday from 9am to 5pm.

Figure 5.1: Bus stops in the vicinity of the development (Source: TFI)

Table 5.1 – Bus Services Available near the Development (Source: TFI)

Route No.	Bus Operator	Origin	Destination	Weekday Services
M3	TFI Local Link	Mullan Village	Latlorcan	Every 2 hours

5.2 Cycle Audit

Currently there is no cycle infrastructure in place in the surrounding area. Cyclists are expected to share the public road network with motorists. The proposed development does not include a segregated vehicle and cycle track.

External designated bicycle parking is provided in two locations outlined below.

Figure 5.2: Location of bicycle stands (Source: Open Optimized Environments)

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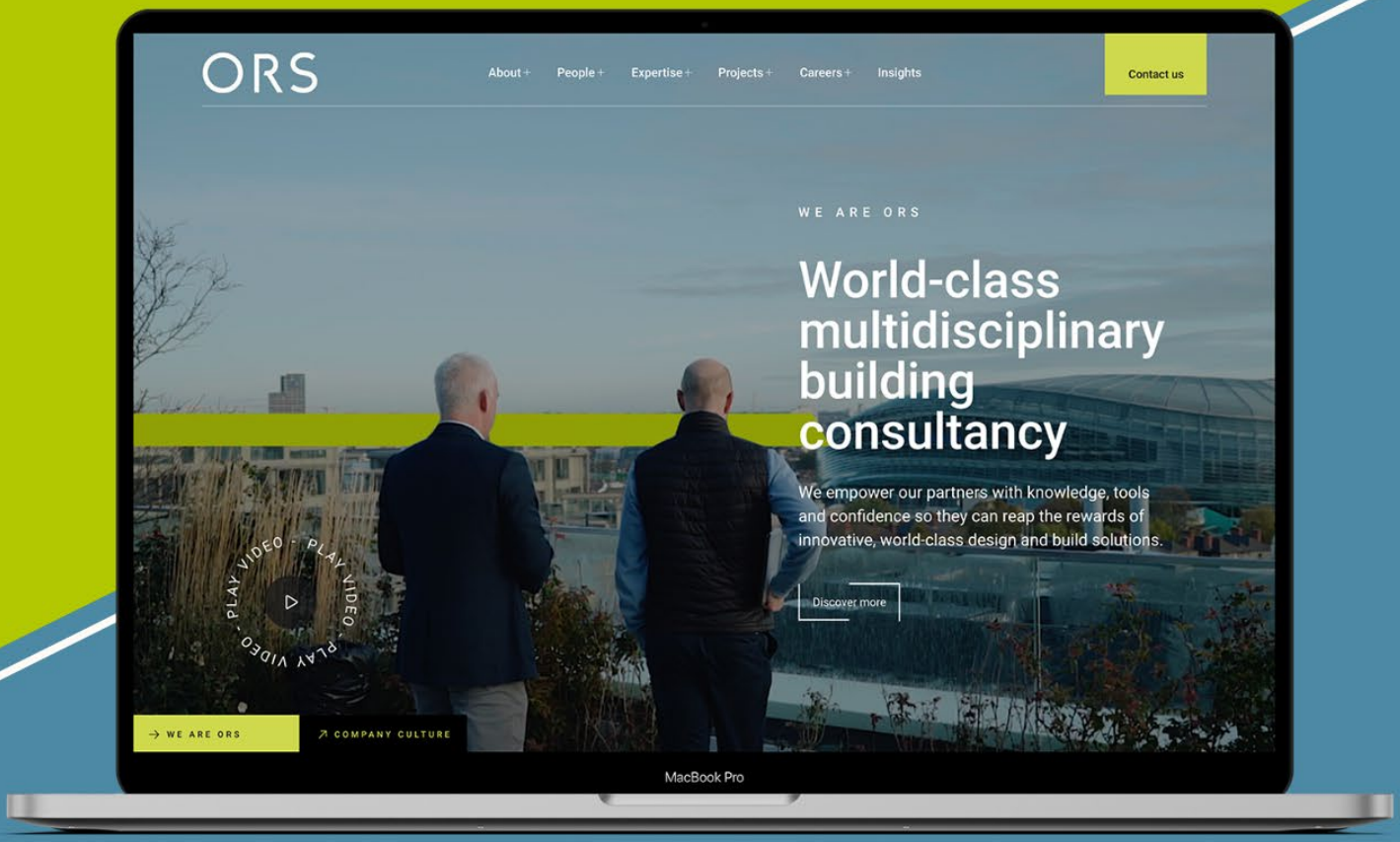

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ENHANCING LOCAL COMMUNITIES

NORTH DUBLIN ROAD & BACKLANDS REGENERATION PROJECT

QUALITY AUDIT – DESIGNER'S RESPONSE FORM

E2442

ISSUE P01

APRIL 2025

PREPARED BY	CHECKED BY	APPROVED BY	ISSUE	DATE
DSA	KOS	KOS	P01	10/04/25

Table 1 – Quality Audit - Connectivity

Key Issues	Audit Suggestion	Design Team Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	Designers should ensure that all the proposed street layout should be appropriately designed with according to DMURS standards.	The design is in compliance with the latest version of DMURS (2019), including the latest supplementary Advice Notes.
Multiple points of access are provided to the site/place, in particular for sustainable modes.	Design team should clearly demonstrate how vulnerable users e.g. Wheelchair users will be able to the buildings from the disabled car park. 6 pedestrian access points are present on the Dublin Street with 2 vehicular access points on both northwest and south of the proposed property.	The development is designed to maximise accessibility throughout. In some locations, such as existing alleyways, gradients are limited to due to existing site constraints. A small number of access points on Russell Row are step access only due to the interface with the existing topography. However these are secondary access points, and primary access is via Dublin Street.
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	Separate cyclist tracks have not been provided on the scheme. Cyclists will be required to share the road with vehicles, dismount and reach their destination through the provided footpaths. Additional cyclist access should be explored.	Russell Row has been designed in line with DMURS & the Cycle Design Manual (CDM) to be a Mixed Traffic route. Due to the expected low traffic levels this allows vehicles & cyclists to share the same road space. To improve the road environment for cyclists build-outs designed to slow traffic have been amended to be tapered in accordance with the CDM. A short north-bound dedicated cycle lane is provided due a short stretch of south-bound one-way carriageway. The development has been designed to link with existing cycle routes at Old Cross Square, linking to the Ulster Canal Greenway, and to the proposed cycle routes in the Roosky Lands project.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	The design should incorporate a range of additional traffic calming measures aimed at reducing vehicle speeds throughout the development.	Multiple traffic calming measures have been included in line with DMURS, such as; - implementation of the principle of self regulating streets by the provision of

		- Multiple build-outs requiring traffic to give way; - elimination of give way road markings to reduce driver's sense of traffic priority - through traffic only permitted south-bound to reduce the potential of the route being used as a rat run - reduced kerb height, including multiple raised tables See drawings DSN-MCA-ZZ-XX-DR-CE-1101 to -1104

Table 2 - Quality Audit - Self-Regulating Street Environment

Key Issues	Audit Suggestion	Design Team Response
A suitable range of design speeds have been applied with regard to context and function.	Speed limits should be mentioned on the drawings to be 30km/hr. The design should incorporate additional speed control measures to limit speed through the development.	Design speed added to the project drawings Speed limiting measures provided in line with DMURS' principle of self-regulating streets See drawings DSN-MCA-ZZ-XX-DR-CE-1101 to -1104
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.	Signage and road markings should clearly be indicated on the drawings. The type and location of tree planting proposed should be such that they do not obscure visibility splays from junctions, pedestrian crossings and parking bays.	Design drawings clearly show the proposed road markings and road signage in line with the Traffic Signs Manual, and visibility splays in line with DMURS. See drawings DSN-MCA-ZZ-XX-DR-CE-1501 to -1504 & DSN-MCA-ZZ-XX-DR-CE-1511
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	Designers should ensure that all the proposed vehicular access/egress points should be appropriately designed with according to DMURS standards. Visibility splays should be illustrated at the site access junction as well as at all the internal junctions of the site in accordance with DMURS.	All vehicular access & egress points have been designed in accordance with DMURS, including the latest supplementary Advice Notes. All visibility splays have been shown on drawing DSN-MCA-ZZ-XX-DR-CE-1511

Table 3 - Quality Audit - Pedestrian and Cycling Environment

Key Issues	Audit Suggestion	Design Team Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	Designers should prioritise sufficient lighting in all the pedestrianised areas throughout the development. This measure is essential to enhance safety and create a sense of security for users. Designers should ensure that tree canopies over time should not obstruct any lighting.	The lighting in the development has generally been designed in line with BS 5489-1 & EN 13201. Lighting on roads, and specifically at controlled & uncontrolled road crossings, has been designed in line with TII design standard DN-LHT-03038 Design of Road Lighting for the National Road Network. See drawing 22268-DLW-XX-XX-DR-E-00100
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised.	Designers should ensure that all the proposed vehicular access/egress points should be appropriately designed with according to DMURS standards. Corner Radii should be appropriately mentioned in the drawings.	All vehicular access & egress points have been designed in accordance with DMURS, including the latest supplementary Advice Notes. All kerb radii have been dimensioned on drawings DSN-MCA-ZZ-XX-DR-CE-1101 to -1104
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	Footpath width should be illustrated on the drawings.	All footpath and footway widths have been dimensioned on drawings DSN-MCA-ZZ-XX-DR-CE-1101 to -1104
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	Segregated or marked pedestrian surface should be considered near every accessible parking space in the car park area. This will enable mobility-impaired users to safely access the building without conflicting with vehicular traffic.	All disabled parking bays have immediate level access to a dedicated pedestrian footway.
Cycling facilities will cater for cyclists of all ages and abilities.	Appropriate dismount signage for cyclists to be installed throughout pedestrianised areas to reduce possibility of conflicts.	The Cycle Design Manual 2023 notes that requirements for cyclists to dismount are not inclusive. It also notes that where a persistent problem is found that cannot be solved through other design features or enforcement then it can be considered. As such the Design Team will keep this recommendation under review through Detailed Design.

Table 4 - Quality Audit - Visual Quality

Key Issues	Audit Suggestion	Design Team Response
The landscape plan responds to the street hierarchy and the value of the place.	*no suggestion provided	*no response required
Street furniture is orderly placed.	Streetlight columns should be proposed at the rear of footpaths.	Streetlight columns are located at the rear of footways, and the edge of off-line footpaths. See drawing 22268-DLW-XX-XX-DR-E-00100
The use of signage and line marking has been minimised.	Design team should ensure that the signage is provided according to DMURS standards.	Signage and road markings have been provided in accordance with DMURS, and the Traffic Signs Manual, and minimised where feasible in line with the DMURS principle of self-regulating streets. See drawings DSN-MCA-ZZ-XX-DR-CE-1501 to -1504
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place	Design team should ensure that the walking route towards the north and car park is designed according to DMURS standards.	All new footways are design in accordance with DMURS, including the latest supplementary Advice Notes.

Cycle Audit

Audit Issue	Design Team Response
Currently there is no cycle infrastructure in place in the surrounding area. Cyclists are expected to share the public road network with motorists. The proposed development does not include a segregated vehicle and cycle track. External designated bicycle parking is provided in two locations outlined below.	Russell Row has been designed in line with DMURS & the Cycle Design Manual (CDM) 2023 to be a Mixed Traffic route. Due to the expected low traffic levels this allows vehicles & cyclists to share the same road space. To improve the road environment for cyclists build-outs designed to slow traffic have been amended to be tapered in accordance with the CDM. A short north-bound dedicated cycle lane is provided due a short stretch of south-bound one-way carriageway. The development has been designed to link with existing cycle routes at Old Cross Square, linking to the Ulster Canal Greenway, and to the proposed cycle routes in the Roosky Lands project.

E2442 DUBLIN STREET NORTH REGENERATION

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