

**Site Development at Brownsbarn Drive,  
Citywest Business Campus, Dublin 24  
Stage 1 Road Safety Audit**

**Stephen Reid Consulting Traffic and Transportation**

**March 2021**



# Site Development at Brownsbarn Drive, Citywest Business Campus, Dublin 24

## Stage 1 Road Safety Audit

**March 2021**

### Notice

This document and its contents have been prepared and are intended solely for Stephen Reid Consulting Traffic and Transportation's information and use in relation to the proposed Site Development at Brownsbarn Drive, Citywest Business Campus, Dublin 24.

Traffico assumes no responsibility to any other party in respect of or arising out of or in connection with this document and / or its contents.

### Document History

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# Contents

<b>Section</b>	<b>Page</b>
<b>1. Introduction</b>	<b>2</b>
1.1 Report Context	2
1.2 Details of Site Inspection	2
1.3 The Road Safety Audit Team	2
1.4 Design Drawings Examined as Part of the Audit Process	2
1.5 Road Safety Audit Compliance	3
<b>2. Road Safety Issues Identified</b>	<b>4</b>
2.1 Problem: HGV Strikes on Existing Compact Roundabout	4
2.2 Problem: HGV Conflicts at Entrances in Close Proximity	4
2.3 Problem: Carpark Access Impacting on Roundabout	5
2.4 Problem: ESB Sub-Station Located in Direct Access	5
2.5 Problem: Roundabout Pedestrian Crossings	6
<b>3. Audit Team Statement</b>	<b>7</b>
3.1 Certification & Purpose	7
3.2 Implementation of RSA Recommendations	7
3.3 Road Safety Audit Team Sign-Off	7
<b>4. Designers Response</b>	<b>8</b>
4.1 How the Designer Should Respond to the Road Safety Audit	8
4.2 Returning the Completed Feedback Form	8

## List of Tables

Table 1.1 – Site Inspection Details	2
Table 1.2 – Audit Team Details	2
Table 1.2 – Designers Drawing List	2

## List of Figures

Figure 2.1 – Gradient on Compact Roundabout Circulating Area	4
Figure 2.2 – HGV Conflicts at Access to Unit 1 and Unit 2	4
Figure 2.3 – Car Park Access onto Roundabout	5
Figure 2.4 – Unit 2 ESB Sub-Station	5
Figure 2.5 – Roundabout Pedestrian Crossings	6
Figure 4.1 – Road Safety Audit Sign-Off and Completion Process	8

## Appendices

<b>Appendix A</b>	<b>9</b>
A.1 Road Safety Audit Feedback Form	9



# 1. Introduction

## 1.1 Report Context

This report describes the findings of a Stage 1 Road Safety Audit associated with the Site Development at Brownsbarn Drive, Citywest Business Campus, Dublin 24.

The Audit has been completed by Traffico Ltd. on behalf of Stephen Reid Consulting Traffic and Transportation.

## 1.2 Details of Site Inspection

Date	Daylight / Darkness	Weather & Road Conditions
Friday 5 <sup>th</sup> March 2021	Daylight	Overcast & dry, dry roads.

Table 1.1 – Site Inspection Details

## 1.3 The Road Safety Audit Team

The members of the Road Safety Audit Team have been listed following:

Status	Name / Qualifications	TII Auditor Reference No:
Audit Team Leader (ATL)	<b>Jason Walsh</b> BEng (Hons) PCert (RSA) CEng MIEI	JW3362499
Audit Team Member (ATM)	<b>Martin Deegan</b> BEng(Hons) MSc CEng MIEI	MD101312
Audit Trainee (AT)	-	-

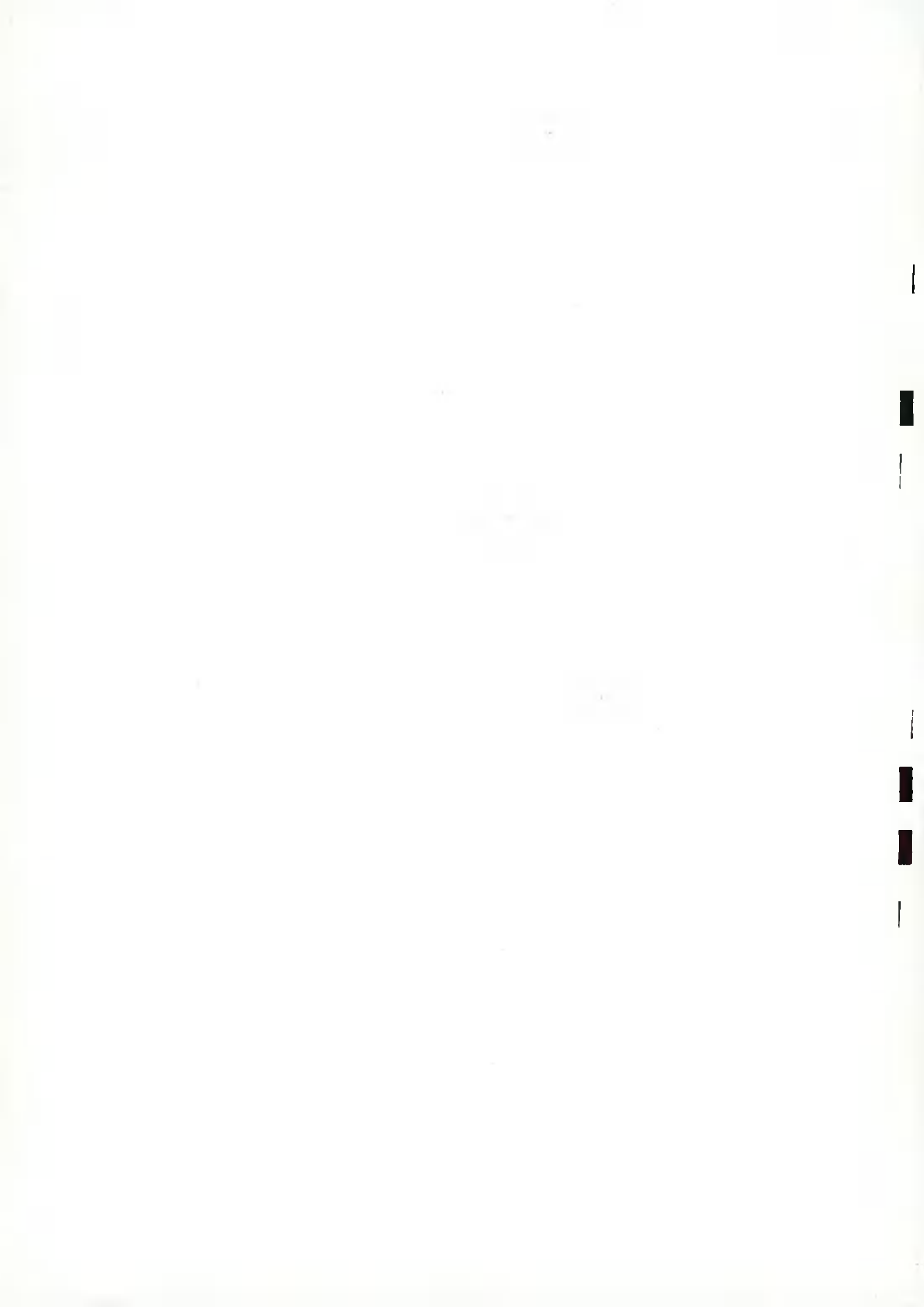
Table 1.2 – Audit Team Details

## 1.4 Design Drawings Examined as Part of the Audit Process

The following drawing(s) were examined as part of the Road Safety Audit (RSA) process:

Drawing No.	Drawing Title	Revision
D1678-D2	SITE PLAN WITH SWEPT PATHS	PL1

Table 1.3 – Designers Drawing List





## 1.5 Road Safety Audit Compliance

### **Procedure and Scope**

This Road Safety Audit has been carried out in accordance with the procedures and scope set out in TII publication number GE-STY-01024 - Road Safety Audit.

As part of the road safety audit process, the Audit Team have examined only those issues within the design which relate directly to road safety.

### **Compliance with Design Standards**

The road safety audit process is not a design check, therefore verification or compliance with design standards has not formed part of the audit process.

### **Minimizing Risk of Collision Occurrence**

All problems described in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and minimise the risk of collision occurrence.



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## 2. Road Safety Issues Identified

### 2.1 Problem: HGV Strikes on Existing Compact Roundabout

**Location:** Existing Compact Roundabout Serving Development

The relatively small inscribed circle diameter of the compact roundabout combined with the observed vertical gradients on the roundabout circulatory area could result in HGV strikes on the central island. This could lead to shed loads and delays on the adjacent network.

Figure 2.1 – Gradient on Compact Roundabout Circulating Area



#### Recommendation

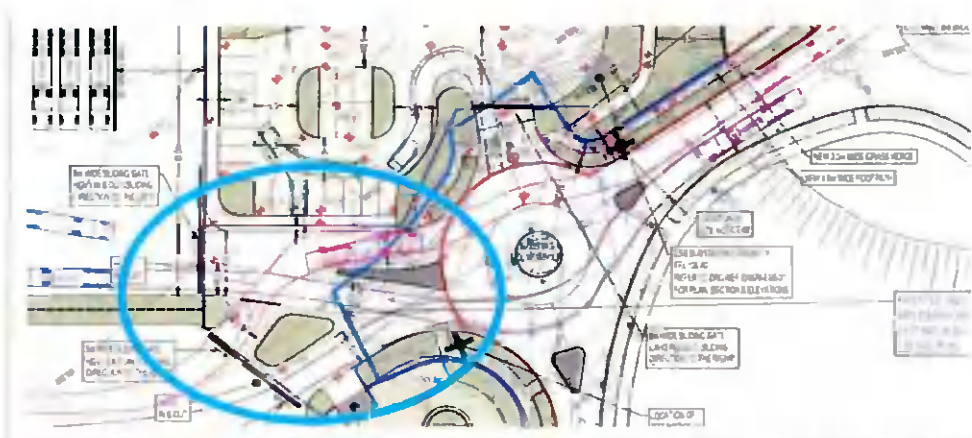
The central island should be protected from HGV strikes and a vehicle over-run apron should be constructed around the island to slow circulating vehicle speeds.

### 2.2 Problem: HGV Conflicts at Entrances in Close Proximity

**Location:** Proposed New Arm off Existing Compact Roundabout

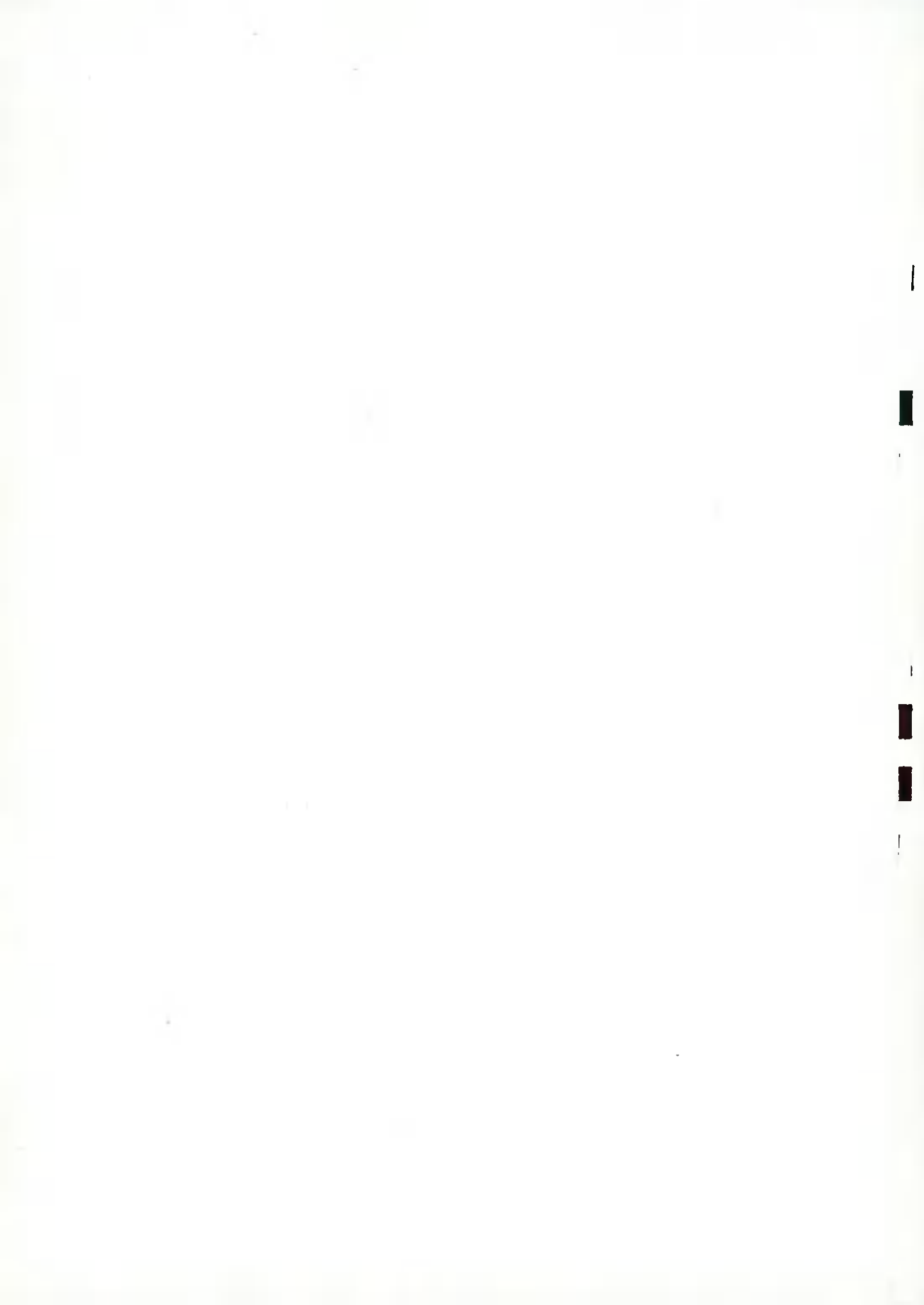
The HGV access arrangement for Unit 1 & Units 2 are in close proximity and could lead to conflicts between HGV's accessing the units which may result in collisions between HGV's and delays on the adjacent roundabout.

Figure 2.2 – HGV Conflicts at Access to Unit 1 and Unit 2



#### Recommendation

The access points should be separated and moved further away from the roundabout.

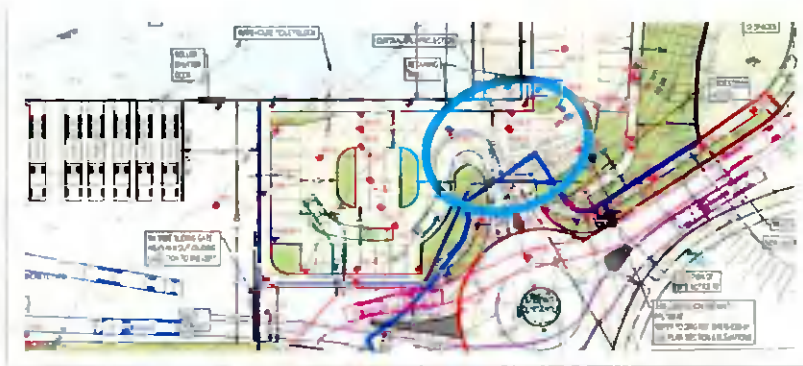


## 2.3 Problem: Carpark Access Impacting on Roundabout

**Location:** Car Park Access onto Compact Roundabout

The constrained nature of this car park may result in collisions between vehicles navigating the entrance to the car park and lead to delays or secondary collisions on the roundabout.

Figure 2.3 – Car Park Access onto Roundabout



### Recommendation

The car park access should be closed and relocated away from the roundabout circulatory area.

## 2.4 Problem: ESB Sub-Station Located in Direct Access

**Location:** ESB Sub-Station in Unit 2 HGV Access

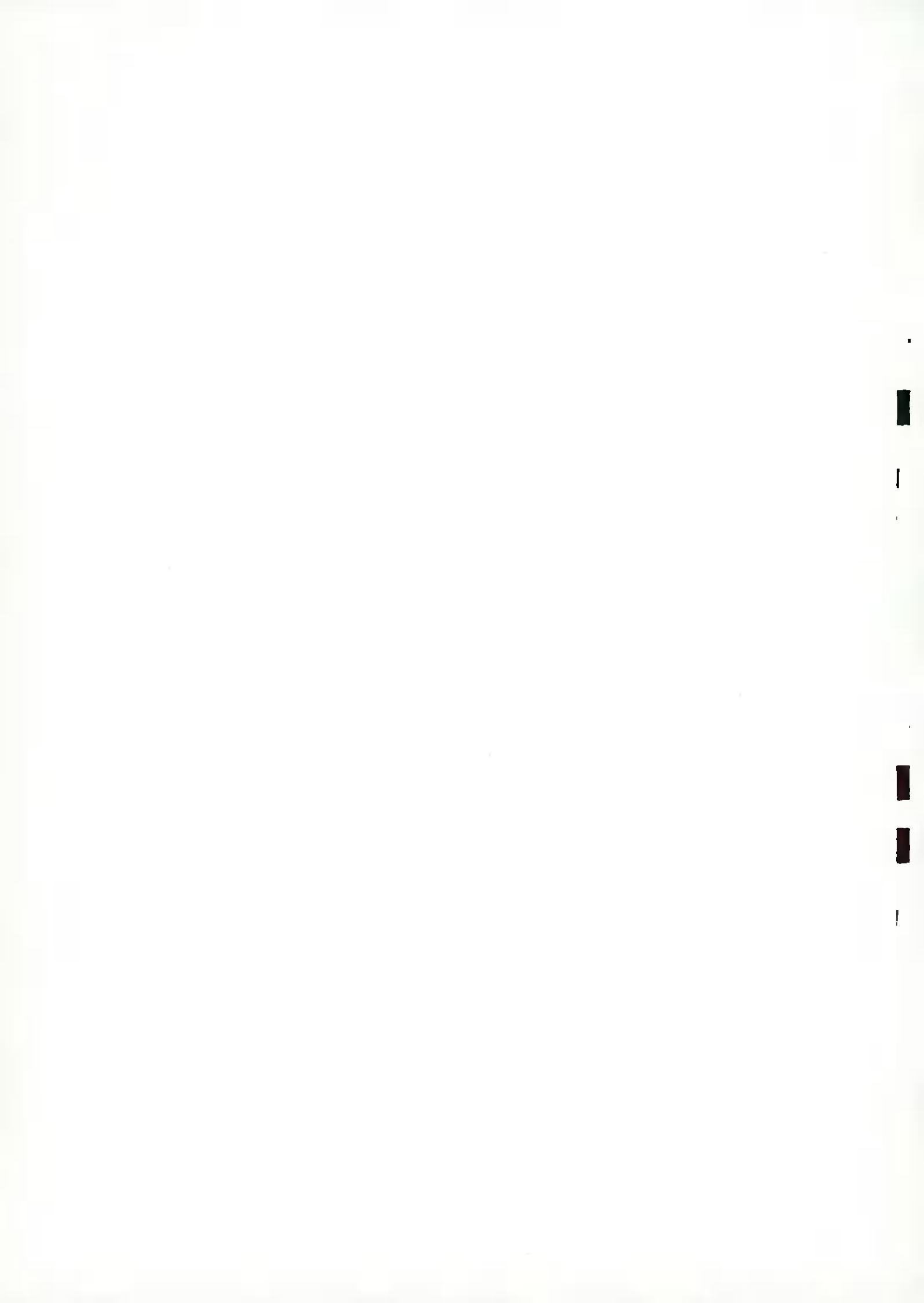
ESB service vehicles and staff working in this location are at risk of accidental strike by HGV's. A stationary ESB service vehicle may also impede HGV access to unit 2, resulting in delays and conflict on the roundabout.

Figure 2.4 – Unit 2 ESB Sub-Station



### Recommendation

Service vehicle access to the sub-station should be relocated to a safer area, away from the access to Unit 2.



## 2.5 Problem: Roundabout Pedestrian Crossings

**Location:** Existing Compact Roundabout Serving Development

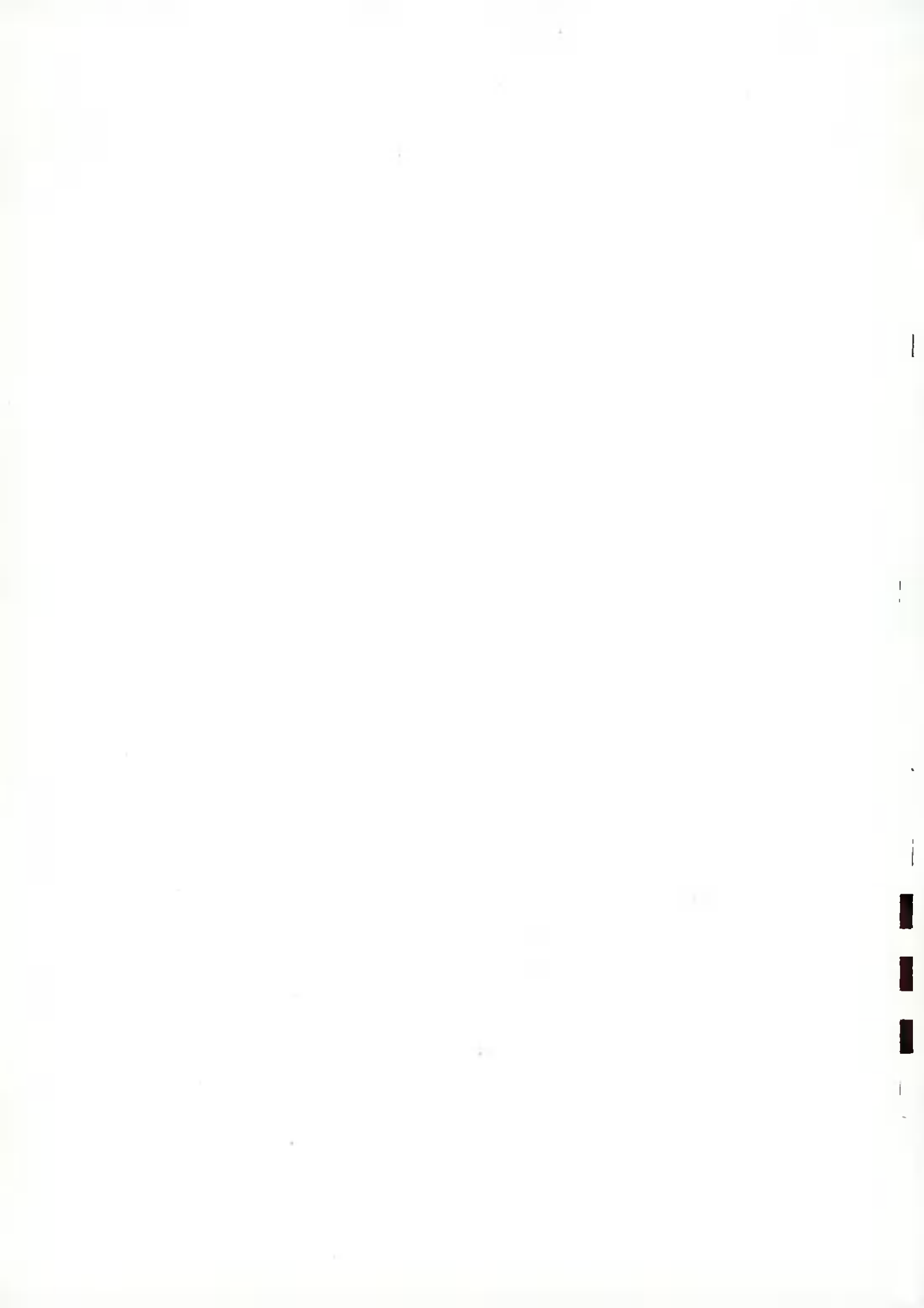
The existing pedestrian crossings serving each arm of the roundabout have high kerbs which may result in trips for vulnerable or mobility impaired road users.

**Figure 2.5 – Roundabout Pedestrian Crossings**



### **Recommendation**

The crossing points should be improved to facilitate safe crossing for vulnerable and mobility impaired road users.





### 3. Audit Team Statement

#### 3.1 Certification & Purpose

We certify that we have examined the drawing(s) listed in Chapter 1 of this Report.

**Sole Purpose of the Road Safety Audit**

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design which could be removed or modified to improve the road safety aspects of the scheme.

#### 3.2 Implementation of RSA Recommendations

The problems identified herein have been noted in the Report together with their associated recommendations for road safety improvements.

We (the Audit Team) propose that these recommendations should be studied with a view to implementation.

**Audit Team's Independence to the Design Process**

No member of the Audit Team has been otherwise involved with the design of the measures audited.

#### 3.3 Road Safety Audit Team Sign-Off

**Jason Walsh**

Audit Team Leader  
Road Safety Engineering Team

traffico

Signed:



Date: 10<sup>th</sup> March 2021

**Martin Deegan**

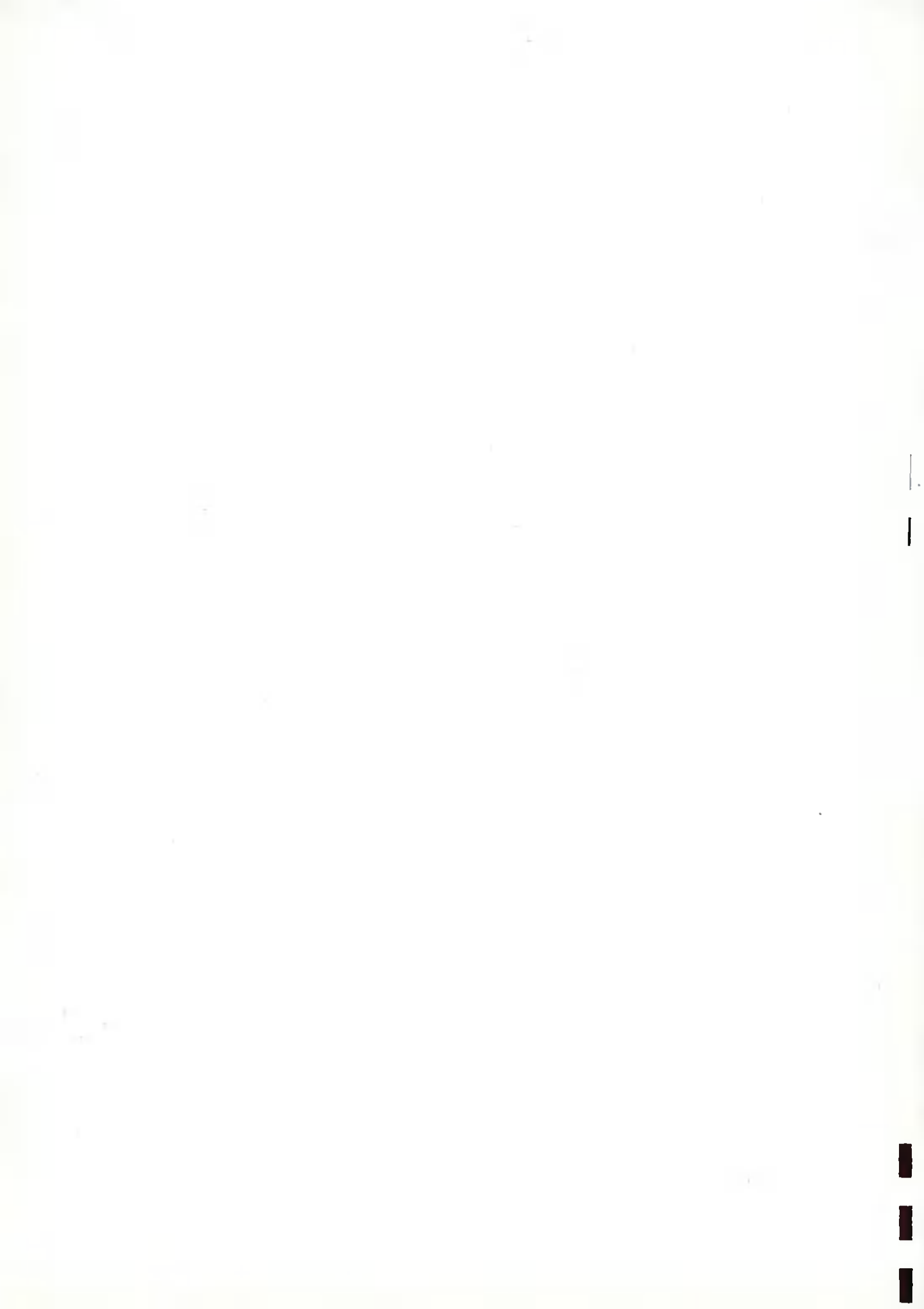
Audit Team Member  
Road Safety Engineering Team

traffico

Signed:



Date: 10<sup>th</sup> March 2021



## 4. Designers Response

### 4.1 How the Designer Should Respond to the Road Safety Audit

The Designer should prepare an Audit Response for each of the recommendations using the Road Safety Audit Feedback Form attached in Appendix A.

When completed, this form should be signed by the Designer and returned to the Audit Team for consideration. See flow-chart following for further description.



Figure 4.1 – Road Safety Audit Sign-Off and Completion Process

### 4.2 Returning the Completed Feedback Form

The Designer should return the completed Road Safety Audit Feedback Form attached in Appendix A of this report to the following email address:

- Email address: [martin@traffico.ie](mailto:martin@traffico.ie)
- Telephone: 087 948 3535

The Audit Team will consider the Designer's response and reply indicating acceptance or otherwise of the Designers response to each recommendation.

#### Triggering the Need for an Exception Report

Where the Designer and the Audit Team cannot agree on an appropriate means of addressing an underlying safety issue identified as part of the audit process, an Exception Report must be prepared by the Designer on each disputed item listed in the audit report.



## Appendix A

### A.1 Road Safety Audit Feedback Form



<h1>Road Safety Audit Feedback Form</h1>	
Scheme: Site Development at Brownsbarn Drive, Citywest Business Campus, Dublin 24	
Audit Stage: Stage 1 Road Safety Audit	Audit Date: 8 <sup>th</sup> March 2021

Problem Reference (Section 2)	Designer Response Section			Audit Team Response Section
	Problem Accepted (yes / no)	Recommended Measure Accepted (yes / no)	Alternative Measures or Comments	Alternative Measures Accepted (yes / no)
2.1	Yes	No	Further to review the roundabout was identified as unsuitable for the type and volume of traffic movements which would be generated by the proposed development and the potential impact on the N7 interchange due to proximity of the compact roundabout to 'Roundabout 2' (the northern roundabout at the N7 J3). Therefore, the compact roundabout is to be removed and replaced by a longer section of roadway from 'Roundabout 2', with right turning lane provision and the exit arms from the development provided as priority stop controlled junctions.	Yes
2.2	Yes	Yes	See also comments in response to item 2.1 with proposed removal of the compact roundabout.	Noted with thanks.
2.3	Yes	Yes	See also comments in response to item 2.1 with proposed removal of the compact roundabout, and note we have revised priorities within the access to Unit 1 car parking areas.	Noted with thanks.
2.4	Yes	Yes	Proposed Sub-station relocated. See also comments in response to item 2.1 with proposed removal of the compact roundabout.	Noted with thanks.
2.5	Yes	Yes	See also comments in response to item 2.1 with proposed removal of the compact roundabout.	Noted with thanks.

*\*The Designer should complete the Designer Response Section above, then fill out the designer details below and return the completed form to the Road Safety Audit Team for consideration and signing.*

Designer's Name: Pat Kavanagh  
Kavanagh Burke  
Consulting Engineers

Designer's Signature: 

Date: 22/3/21

Audit Team's Name: Martin Deegan

Audit Team's Signature: 

Date: 23 March 2021









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