

Whitehall Road Active Travel Scheme

Stage 2 Road Safety Audit

180201-X-X-X-XXX-RP-DBFL-CE-0001

March 2025

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	S - Issued		

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P7	1	26/03/25	Final	Sayed Ahmad Saeed	Mark McKenna	Mark McKenna

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1.1 BACKGROUND

The map displays the Dublin region with a focus on the proposed Scheme Route, highlighted in orange. The route starts at Whitehall, passes through Crumlin, and ends at Kimmage. Key roads shown include the N1, N11, R110, R112, R114, R117, R134, R138, and R150. Landmarks such as Greenhills, Whitehall, Crumlin, Kimmage, and Rathfarnham are labeled. A legend in the bottom left corner identifies the orange line as the 'Scheme Route'. The map also shows various parks and green spaces, including Tynon Park, Bushy Park, and Spawell Golf And Leisure Centre.

1.2 SCOPE OF ROAD SAFETY AUDIT

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March 2025

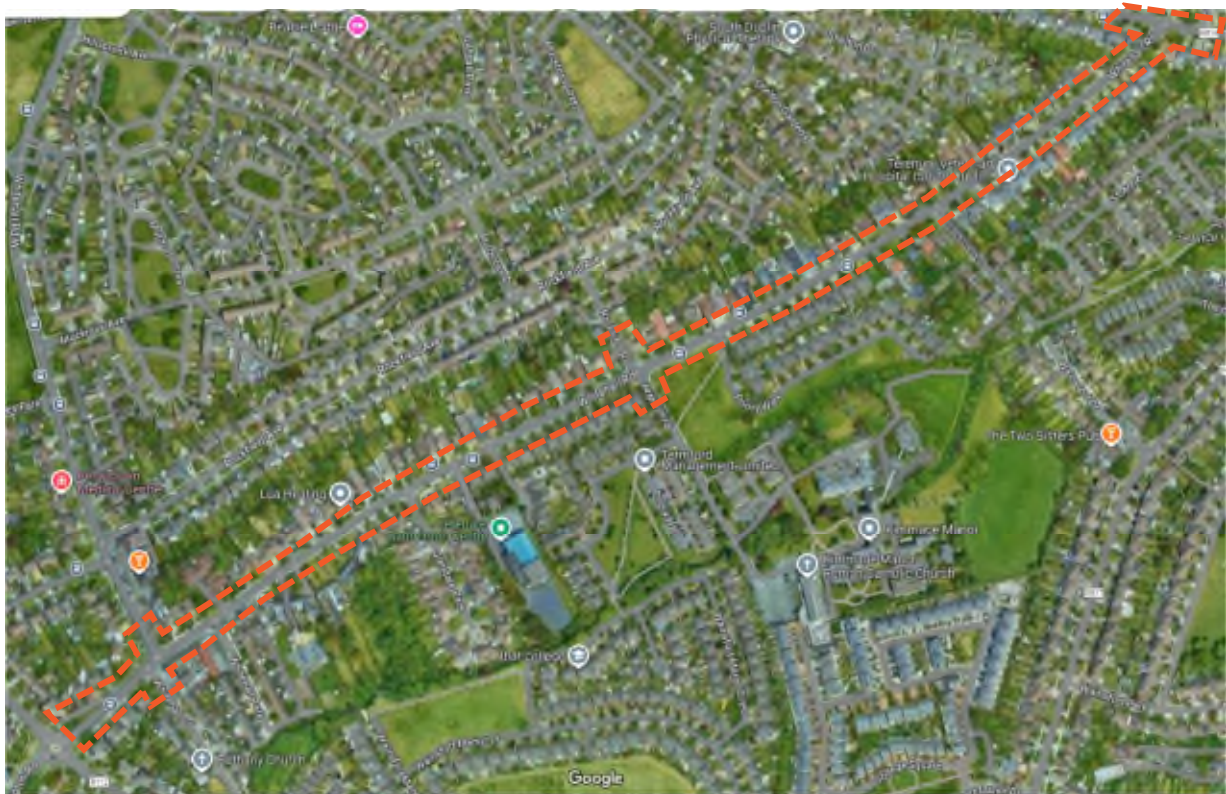


Figure 1-2: Geographical Scope of Road Safety Audit

2 STAGE 2 ROAD SAFETY AUDIT

2.1 INTRODUCTION

This report was prepared in response to a request from Mr. Kevin Brennan, DBFL Consulting Engineers, for a Stage 2 Road Safety Audit of an active travel scheme in Dublin 12.

The Road Safety Audit team was as follows:

- Team Leader: Mark McKenna
BEng (Hons) MSc CEng MIEI Cert Comp RSA
DBFL Consulting Engineers
TII approval number: MM 3363499
- Team Member: Sayed Ahmad Saeed
BEng Tech BEng (Hons) MEng MIEI
DBFL Consulting Engineers
TII approval number: SS 3419515
- Trainee Observer: Riyaaz Ebrahim
BEng (Hons) MEng MIEI
DBFL Consulting Engineers
TII approval number: RE 249047
- Trainee Observer: Ruairi Browne
BEng (Hons), MIEI
DBFL Consulting Engineers
TII approval number: TII Reference number: RB283140

The Audit comprised a review of the drawings/documents provided, in addition to an examination of the existing conditions on site. The site was visited by the audit team on Thursday 8th of August 2024 between 14:00pm and 15:00pm. The weather on the day of the site visit was dry and sunny.

This Road Safety Audit has been undertaken in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

The problems identified and described in this report are considered by the Audit Team to require action in order to improve safety levels within the scheme and minimise accident occurrence.

Should any of the recommendations identified within this audit report not be accepted, a written response is required within the feedback form. Comments made in relation to the scheme in the

Observations section of this report are for information only and do not require a response within the feedback form.

2.2 COLLISION HISTORY

The Road Safety Authority (RSA) website is usually reviewed in order to ascertain the safety record in the vicinity of the subject scheme. The RSA database is currently under review and therefore, for this audit, details on previous collisions within the area were not available.

3 ISSUES IDENTIFIED FOR THIS AUDIT

3.1 PROBLEMS AT GENERAL LOCATIONS

Location G1 – Lighting

Problem:

A street lighting assessment has not been provided for the purposes of the Road Safety Audit. It is unclear to the auditors if lighting columns will be relocated or upgraded due to the design or if there is sufficient lighting for the proposed active travel scheme and no localised dark spots. As a result, the audit team cannot comment upon the appropriateness of the proposed schemes street lighting strategy.

Recommendation:

It is recommended that appropriate street lighting is provided across all pedestrians, cycle, and vehicle routes.

Location G2 – Pedestrian Desire Lines (Update of Stage 1 RSA)

Problem:

There are a number of pedestrian desire lines identified along the route which lack crossing facilities, most notably near the bus stops along the route. A lack of crossing facilities at these locations may result in unsafe crossing manoeuvres increasing the risk of vehicular / pedestrian collisions particularly during peak traffic times or difficulty for mobility impaired pedestrians to access bus stops where full height kerbs are present.



Recommendation:

It is recommended that appropriate and safe pedestrian crossing measures are included at pedestrian crossing desire lines in the vicinity of bus stops.

Location G3 – Vehicle Tracking

Problem:

The auditors are concerned that at where junction tightening has been introduced at signal controlled junctions that larger vehicles may have difficulty undertaking their required manoeuvre within the various junctions' footprint which could potentially result in side-swipe collisions with vehicles in adjacent vehicular lanes.



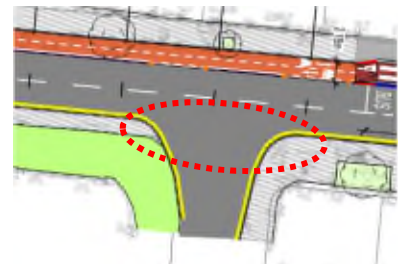
Recommendation:

It is recommended that a swept path analysis is undertaken to ensure the appropriate design vehicle movements can be safely accommodated at the altered signal controlled junctions.

Location G4 – Tactile Paving at Side Roads

Problem:

No tactile paving is proposed at a number of crossing points at side road junctions along the southern side of the corridor. A lack of tactile paving may lead to those with limited vision to unknowingly enter the roadway, which can lead to collisions between pedestrians and vehicles.



Recommendation:

It is unclear if these junctions fall within the scope of the subject RSA. Should they be part of the subject scope, it is recommended that tactile paving is included at pedestrian crossing points.

Location G5 – Residential dwelling entry widths

Problem:

A number of the bollards positioned at dwelling accesses appear narrow. Should these be too narrow to conveniently accommodate a car, this could result in damage to vehicles or



bollards or cause vehicles to undertake a number of manoeuvres to navigate the bollards which could result in rear end shunts.

Recommendation:

Bollards should be positioned such that drivers can gain convenient access their driveways without the need for multiple movements.

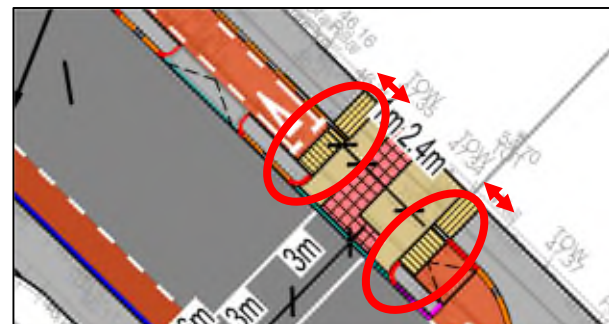
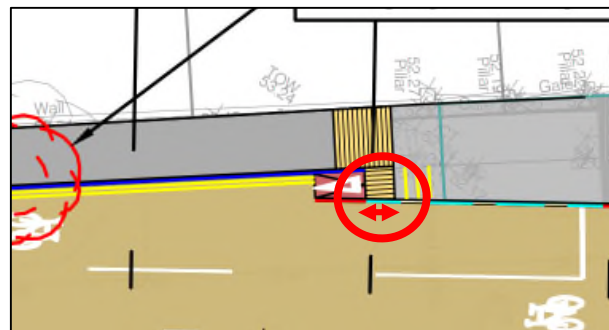
Location G6 – Ladder and Tramline tactile paving

Problem:

The proposed ladder and tramline tactile paving appears to be short in a number of locations throughout the scheme. Should this paving be too short, a visually impaired pedestrian may step across the paving thereby not registering its presence which could lead them into the road carriageway or into the path of cyclists.

Recommendation:

It is recommended that the tactile paving is installed to the appropriate dimensions.



Location G7 – Existing Residential Accesses within signal controlled junctions

Problem:

There is currently a number of private dwellings accessed within the signal controlled junctions (Rockfield Drive / Whitehall Road / Priory Way junction and Whitehall Road / Kimmage Road junction) which do not receive a signal to safely enter the junction in the path of other road users who benefit from a signal phase / stage. At the time of the site visit a collision almost occurred between a vehicle exiting one of the houses within the Rockfield Drive / Whitehall Road / Priory Way junction and a vehicle exiting the Rockfield Drive arm of the junction. It is acknowledged that this is an existing arrangement which the design team has inherited. Nevertheless, the audit team are concerned that the introduction of cycle infrastructure and stages could add additional risk of

a collision occurring as vehicles exit these private dwellings particularly as there are more junction movements to consider.

Recommendation:

The proposals at the signal controlled junctions should include for an on-demand signal for private accesses or a management approach that ensures safe navigation through the junction for those movements that do not benefit from a signal stage.

3.2 PROBLEMS AT SPECIFIC LOCATIONS

Location S1 – Continuation of Cycle Facilities

Problem:

Cyclists are proposed to be mixed with vehicular traffic at the eastern extents of the scheme. During the site visit it was observed that the road currently sees high volumes of vehicular



traffic. A lack of dedicated cycle facilities along this section of the route where high traffic volumes exist may lead to cyclists, in particular less experienced cyclists, continuing to use the footpath while cycling or increase the risk of cyclist / vehicle collisions.

Recommendation:

It is recommended that the cycle facilities are reviewed, and that, if achievable, dedicated cycle facilities be implemented. Should dedicated cycle facilities not be achievable, additional speed reduction measures should be implemented to ensure a design speeds compatible with a mixed traffic environment are obtained.

Location S2 – Proposed Parking Areas -Western Section

Problem:

It can be seen on the drawings that a section of parking is being retained for a row of shops by way of a short parallel parking area segregated from the footpath by bollards. Due to the presence of the proposed full height kerb, it is unclear if business owners are permitted to continue to park at the location to the east of the aforementioned parallel parking facility. Should vehicles continue to park informally at this location, this could result in vehicles being parked haphazardly which could result in pedestrian routes becoming blocked / narrowed which could result in pedestrians entering the road to travel



through this area potentially leading to pedestrian / vehicle collisions or could lead to the vehicles parked in the dedicated parallel parking arrangement having difficulty exiting these spaces should their route be blocked by other parked vehicles which could lead to material damage to vehicles.

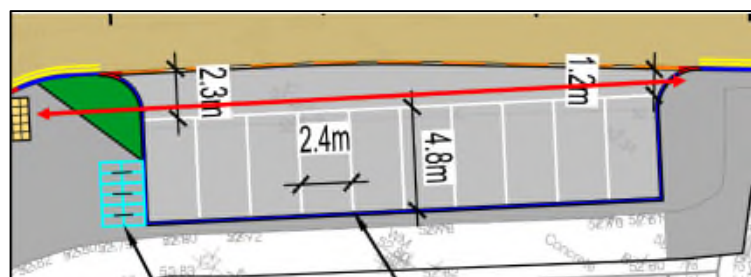
Recommendation:

It is recommended that, should parking be permitted at this location, the parking spaces are formalised and clarified with respect to the routing of pedestrians.

Location S3 – Pedestrian Desire Line along Car Parking

Problem:

There is a wide buffer between the northern side of this car parking that is along a pedestrian desire line. Some pedestrians may view this as a convenient more direct walking route which has the potential to create conflicts between parking vehicles and pedestrians.



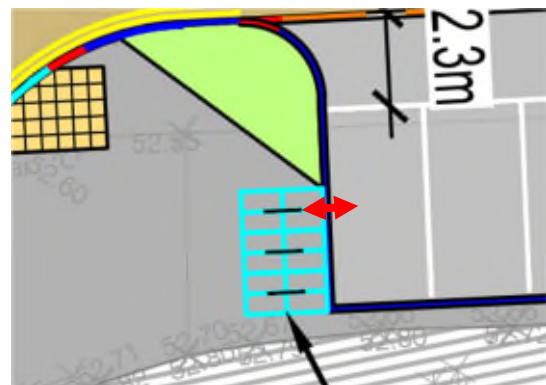
Recommendation:

It is recommended that the layout discourages pedestrians from crossing between the parked vehicles and carriageway potentially through the reduction in the width of the buffer.

Location S4 – Cycle Parking Spaces

Problem:

The proposed cycle parking spaces are located immediately adjoining the perpendicular car parking spaces. Failure to provide sufficient space between the cycle parking and vehicle parking could result in material damage to bicycles should they be located within the parking vehicles swept path or door opening areas.



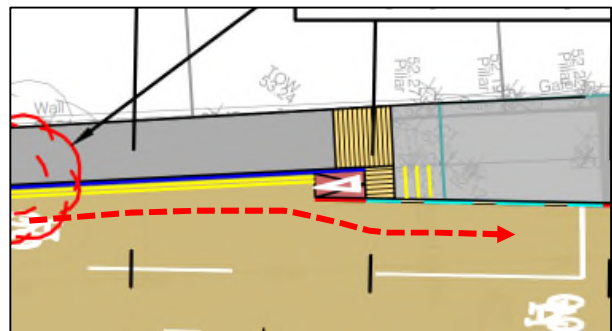
Recommendation:

Cycle parking stands should be positioned an appropriate distance from car parking spaces.

Location S5 – Cycle transition into Shared Area

Problem:

The road kerb line suddenly ends with a cycle facility into the shared area. Drivers may not expect this sudden change particularly in poor visibility, which could lead to vehicles mounting the kerb and entering the shared area. This may cause collisions between vehicles and pedestrians or cyclists.



Recommendation:

It is recommended that measures incorporated to guide drivers away from the cycle transition into the shared pedestrian / cycle facility.

Location S6 – Cycle Stage

Problem:

It is unclear if the westbound cyclists on Kimmage Road will receive an individual phase or will travel with vehicular traffic as no dedicated cycle signal head is identified on the drawing provided. Should cyclists travel within the same signal phase as vehicular traffic, this could lead to vehicle / cycle conflicts between turning vehicles and through moving cyclists.



Recommendation:

It is recommended that cyclists are given priority at the junction either by way of an advanced start if operating with traffic or have its own dedicated phase / stage.

4 Comments

Location C1 – Road Crown

The creation of the proposed two-way cycle track will lead to the centre line being off-centre to the crown of the road. Due to the reduced road width, it is expected that vehicle speeds will be reduced and therefore this arrangement should not result in a road safety concern. Nevertheless, the operation of this facility should be monitored by the local authority and should vehicle speeds be observed as excessive, the off-centre road crown should be aligned with the centre-line of the road.

5 AUDIT TEAM STATEMENT

I certify that I have examined the drawings and other information listed in Chapter 6. This Audit 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 that I have identified have been noted in the report, together with suggestions for improvement which we recommend should be studied for implementation.

Audit Team Leader: Mr. Mark McKenna *BEng (Hons) MSc CEng Cert Comp RSA*

DBFL Consulting Engineers

Signed:



Date: 26/03/2025

Audit Team Member: Mr Sayed Ahmad Saeed *BEng Tech, BEng, CEng MIEI*

DBFL Consulting Engineers

Signed:



Date: 26/03/2025

6 LIST OF INFORMATION RECEIVED

Information received that assisted this Audit is summarised in **Table 6-1**.

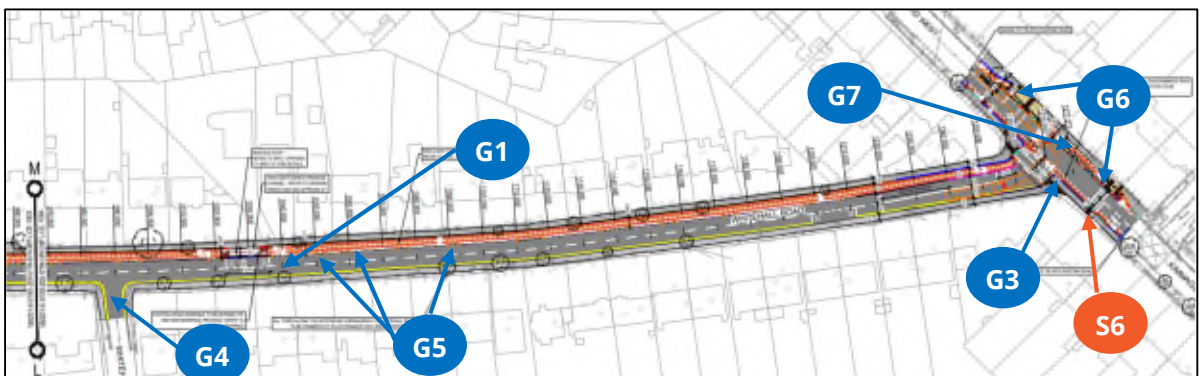
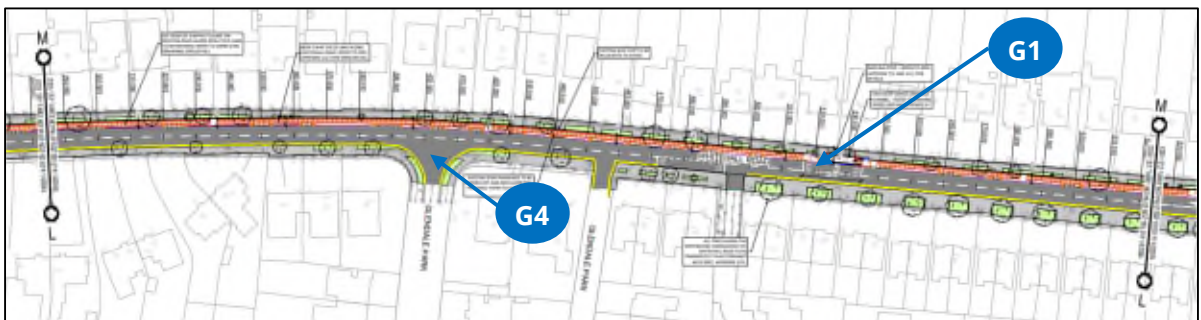
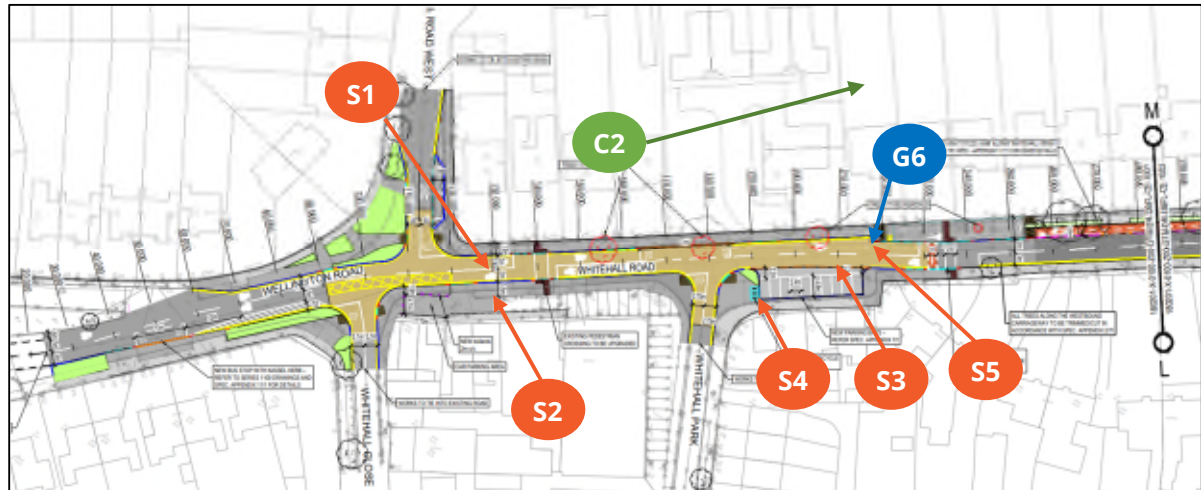
Items Received		Yes/No	Details
1	Scheme Description	Yes	
2	Project Brief	Yes	
3	Scheme / Project Drawings	Yes	180201-X-0100-Z00-DTM-DR-DBFL-CE-1001_General Arrangement Sheet 1 Rev 0 180201-X-0100-Z00-DTM-DR-DBFL-CE-1002_General Arrangement Sheet 2 Rev 0 180201-X-0100-Z00-DTM-DR-DBFL-CE-1003_General Arrangement Sheet 3 Rev 0 180201-X-0100-Z00-DTM-DR-DBFL-CE-1004_General Arrangement Sheet 4 Rev 0 180201-X-0500-Z00-DTM-DR-DBFL-CE-1301_Drainage Layout Sheet 1 Rev 0 180201-X-0500-Z00-DTM-DR-DBFL-CE-1302_Drainage Layout Sheet 2 Rev 0 180201-X-0500-Z00-DTM-DR-DBFL-CE-1303_Drainage Layout Sheet 3 Rev 0 180201-X-0500-Z00-DTM-DR-DBFL-CE-1304_Drainage Layout Sheet 4 Rev 0 180201-X-0500-Z00-DTM-DR-DBFL-CE-5001_Typical Drainage Details Sheet 1 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-1401_Pavement Construction Area Layout Sheet 1 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-1402_Pavement Construction Area Layout Sheet 2 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-1403_Pavement Construction Area Layout Sheet 3 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-1404_Pavement Construction Area Layout Sheet 4 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3001_Road Cross Sections Sheet 1 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3002_Road Cross Sections Sheet 2 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3003_Road Cross Sections Sheet 3 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3004_Road Cross Sections Sheet 4 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3005_Road Cross Sections Sheet 5 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3006_Road Cross Sections Sheet 6 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3007_Road Cross Sections Sheet 7 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3008_Road Cross Sections Sheet 8 Rev 0

			180201-X-0700-Z00-DTM-DR-DBFL-CE-3009_Road Cross Sections Sheet 9 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3010_Road Cross Sections Sheet 10 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3011_Road Cross Sections Sheet 11 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3012_Road Cross Sections Sheet 12 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3013_Road Cross Sections Sheet 13 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3014_Road Cross Sections Sheet 14 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3015_Road Cross Sections Sheet 15 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-3016_Road Cross Sections Sheet 16 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-5001_Road Construction Details Sheet 1 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-5002_Road Construction Details Sheet 2 Rev 0 180201-X-0700-Z00-DTM-DR-DBFL-CE-5003_Road Construction Details Sheet 3 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1801_Road Marking and Signage Layout Sheet 1 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1802_Road Marking and Signage Layout Sheet 2 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1803_Road Marking and Signage Layout Sheet 3 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1804_Road Marking and Signage Layout Sheet 4 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1901_Traffic Signal Layout Sheet 1 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1902_Traffic Signal Layout Sheet 2 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1903_Traffic Signal Layout Sheet 3 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1904_Traffic Signal Layout Sheet 4 Rev 0
4	Departures from Standard	No	
5	Traffic Signal Information	Yes	180201-X-1200-Z00-DTM-DR-DBFL-CE-1901_Traffic Signal Layout Sheet 1 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1902_Traffic Signal Layout Sheet 2 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1903_Traffic Signal Layout Sheet 3 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1904_Traffic Signal Layout Sheet 4 Rev 0
6	Road Signs & Road Marking Details	Yes	180201-X-1200-Z00-DTM-DR-DBFL-CE-1801_Road Marking and Signage Layout Sheet 1 Rev 0

			180201-X-1200-Z00-DTM-DR-DBFL-CE-1802_Road Marking and Signage Layout Sheet 2 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1803_Road Marking and Signage Layout Sheet 3 Rev 0 180201-X-1200-Z00-DTM-DR-DBFL-CE-1804_Road Marking and Signage Layout Sheet 4 Rev 0
7	Traffic Count Information	No	
8	Speed Survey Data	No	
9	Collision Data	No	
10	Previous Road Safety Audit Reports	Yes	
11	Relevant Design Standards	No	
12	Public Transport Information	No	
13	Other Information	No	

Table 6-1: Information Received as basis for Road Safety Audit

Appendix A : Stage 2 RSA Problem Map



- G General problem at multiple locations (sample of problems shown only)
- S Problems at specific locations

Appendix B : Feedback Form

STAGE 2 ROAD SAFETY AUDIT FEEDBACK FORM


Scheme: Whitehall Road Active Travel Scheme

Audit Stage: Stage 2

Date Audit Completed: November 2024

To be Completed By Designer				To be Completed by Audit Team Leader
Problem No. in Quality 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)
G1	YES	YES		
G2	YES	NO	There is no available space to provide safe uncontrolled crossings at the desire lines (identified on the scheme by the Auditor) due to the presence of existing houses entrances and trees. The bus stops will be retained in the same locations except the bus stop on the eastbound carriageway at ch.430m which has been relocated at ch.530m.	YES
G3	YES	YES		
G4	YES	YES		
G5	YES	YES		
G6	YES	YES		
G7	YES	YES		
S1	YES	YES		
S2	YES	YES		
S3	YES	YES		
S4	YES	YES		
S5	YES	YES		
S6	YES	YES		

180201

Signed: 

Designer: Kevin Brennan

Date: 25/03/2025

Signed: 

Audit Team Leader: Mark McKenna

Date: 26/03/2025

Signed: 

Employer: Mbakure Johbson

Date: 26/03/2025

Please complete and return to safety auditor.



**Engineering
Sustainable
Futures**

Dublin Office

Ormond House
Upper Ormond Quay
Dublin 7, Ireland
D07 W704

+ 353 1 400 4000
info@dbfl.ie
www.dbfl.ie

Cork Office

14 South Mall
Cork, Ireland
T12 CT91

+ 353 21 202 4538
info@dbfl.ie
www.dbfl.ie

Galway Office

Odeon House
7 Eyre Square
Galway, Ireland
H91 YNC8

+ 353 91 33 55 99
info@dbfl.ie
www.dbfl.ie

Waterford Office

Suite 8b The Atrium
Maritana Gate, Canada St
Waterford, Ireland
X91 W028

+ 353 51 309 500
info@dbfl.ie
www.dbfl.ie