

Title: **STAGE 1 QUALITY AUDIT**

For;

Redevelopment of Former Tedcastles Site, Monkstown.

Client: **DBFL Consulting Engineers.**

Date: **August 2021**

Report reference: **0739R02**

VERSION: **FINAL**

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1.0 Introduction

This report was prepared in response to a request from Mr. Nick Fenner of DBFL Consulting Engineers for a Stage 1 Quality Audit of the proposed external streetworks associated with the redevelopment of the former Tedcastles site in Monkstown.

This portion (independent appendices) of the Quality Audit has been carried out in accordance with the guidance in the Design Manual for Urban Roads and Streets (DMURS), produced by Department of Transport Tourism and Sport in March 2013 and as revised in May 2019.

This portion of the Quality Audit includes a road safety audit, an access audit, a walking audit and a cycle audit.

The Quality Audit Team comprised of;

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

TII approval number: NB 168446

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

TII approval number: OO 1291756

The Quality Audit comprised an examination of the information provided and a site visit by the Audit Team, together on the 6th March 2020 and again on the 23rd July 2021.

The weather at the time of the first site visit was dry and the road surface was damp. The weather at the time of most recent site visit was dry and the road surface was also dry.

The Stage 1 Road Safety Audit within the Quality Audit has been carried out in accordance with the requirements of TII Publication Number GE-STY-01024, dated December 2017.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

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

If any of the recommendations within this quality audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

The information supplied is listed in **Appendix A**.

A problem location map is contained in **Appendix B**.

The feedback form to be completed by the Design Team Leader is contained in **Appendix C**.

2.0 Background

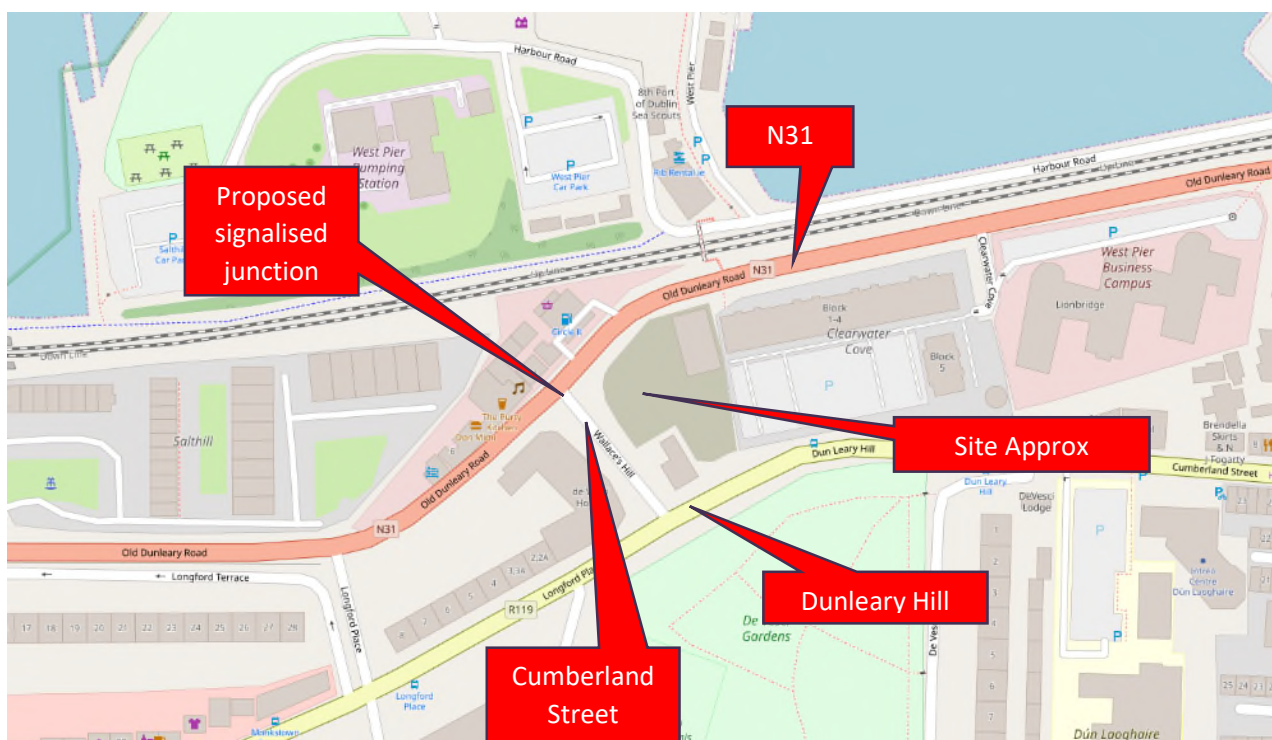
It is intended to redevelop the former Tedcastles site at the junction of Old Dunleary Road (N31) and Cumberland Street. To facilitate the development, it is proposed to improve the road and footpath network in the vicinity. The proposals include the conversion of the priority junction to a signalised junction with crossing facilities for pedestrians on each arm. A car park access to the development will be provided off Old Dunleary Road. There will be a number of pedestrian entrances into the development. The scope of this audit includes all external roads and facilities for vulnerable road users.

The junction between Cumberland Street and Dunleary Hill will also be improved. The large radius left turn into Cumberland Street will be removed and a raised table and uncontrolled pedestrian crossing will be provided at the narrowed junction mouth.

Recent improvement on the Old Dunleary Road have seen the provision of a two-way cycle lane and the conversion of the road to a one-way system west of Cumberland Street. There is also a one-way system east of the West Pier Business Campus.

The speed limit is 50km/hr.

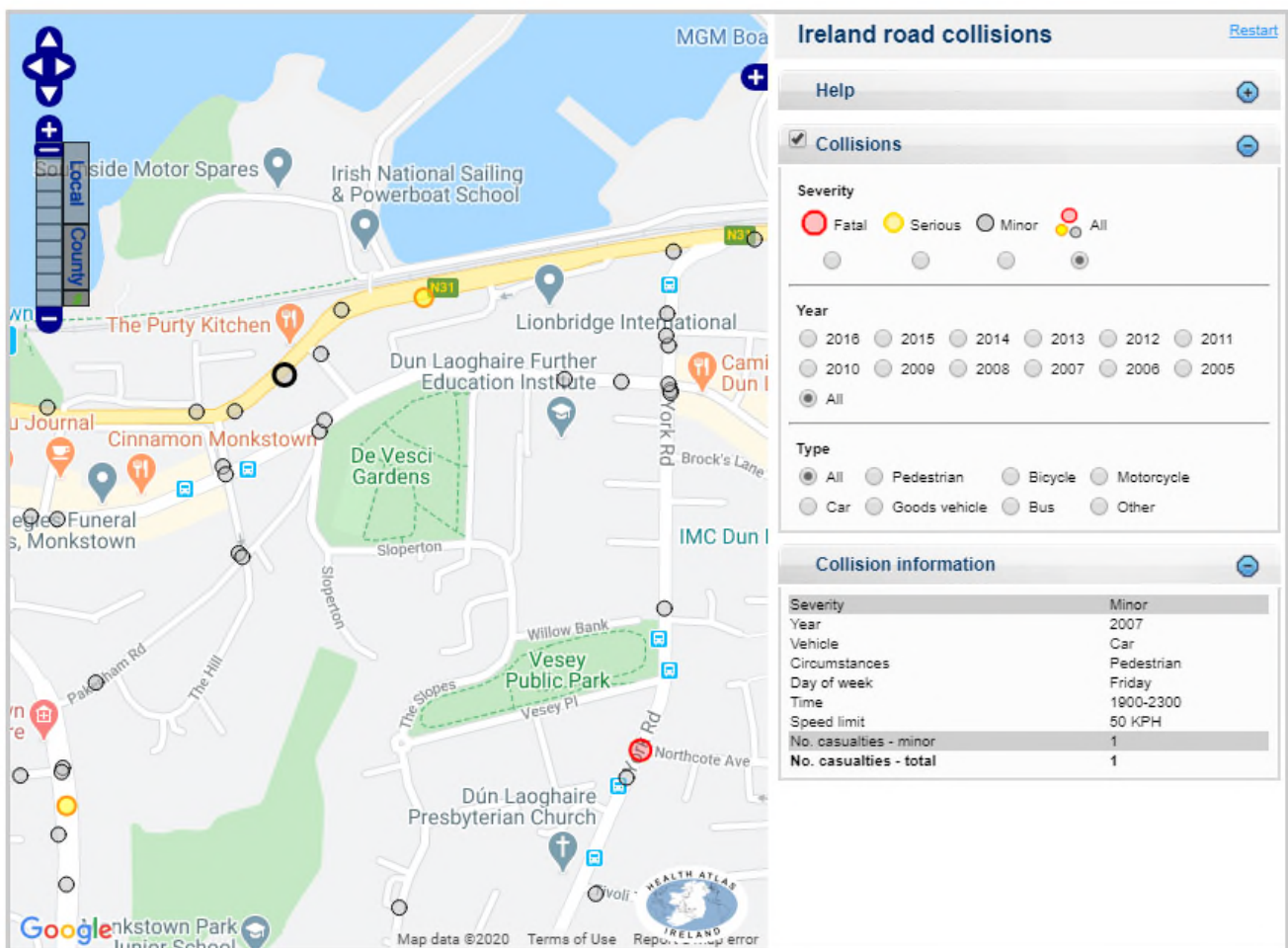
A site location map is provided below



Scheme Location Plan (Image courtesy of Openstreetmap.org)

The Road Safety Authority's website www.rsa.ie shows the recorded injury collisions between 2005 and 2016. There were three minor injury collisions and one serious injury collision recorded in that period adjacent to the proposed works.

The serious injury collision occurred in 2007 and involved a car and a pedestrian. Two of the minor injury collisions occurred either side of the N31/Cumberland Street junction and also involved cars and pedestrians. The third minor injury collision had a primary collision type of 'angle, right turn' and appeared to happen as a car exited Cumberland Street onto Old Dunleary Road. Although the number and severity of the collisions is relatively low for the 11-year period there is evidence to suggest that the proportion of collisions involving pedestrians is significant.



3.0 Issues Raised in This Quality Audit.

Summary Table of Problem Categories

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

3.1 Problem

LOCATION

Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.

PROBLEM

It is proposed to provide signalised pedestrian crossings on Old Dunleary Road that cross both the carriageway and the cycle track. It is important that cyclists stop in advance of the crossings to allow pedestrians safe passage across.



RECOMMENDATION

It is recommended that stop lines be provided on the cycle track in advance of the signals and that cyclists be aware that the red traffic signals are not just for vehicular traffic.

3.2 Problem

LOCATION

Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.

PROBLEM

There is a substantial ESB pole /PL lighting column on the southern footpath of the N31 which could obscure inter-visibility between pedestrian and drivers at the signalised crossing, resulting in collisions with vulnerable road users.



RECOMMENDATION

It is recommended that the pole and services be removed.

3.3 Problem

LOCATION

Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.

PROBLEM

The drawing shows the swept path for a two axel refuse truck which encroaches slightly on the cycle track on the N31 for the left turn movement from Cumberland Street. There is a risk that larger vehicles, even three axel refuse trucks will undertake this manoeuvre and may encroach significantly on the cycle track including the rubber kerb which segregates it from the general traffic lane.



RECOMMENDATION

It is recommended that an assessment be carried out of the largest vehicles that will undertake this manoeuvre and if necessary the stop line on Cumberland Street should be set back to allow the movement to take place.

3.4 Problem

LOCATION

Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.

PROBLEM

It is anticipated that many cyclists will use the signalised pedestrian crossing to access the cycle parking spaces at the surface level and in the basement of the proposed development. There is a risk that the proposed pedestrian crossing will be too narrow to cater for cyclists and pedestrians and this could lead to collisions between the two user groups.



RECOMMENDATION

It is recommended that the crossing be wide enough to cater for all future users.

4.0 Observations

4.1 Observation

The dropped kerbs at vehicular accesses should be at least 25mm in height so that they can be detected by blind or partially sighted pedestrians.

4.2 Observation

No surface water drainage details have been provided to the Audit Team. There is a risk of surface water ponding at the pedestrian crossing points without adequate drainage.

5.0 Audit Statement

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

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

Norman Bruton

Signed: Norman Bruton

(Quality Audit Team Leader) Dated: 24/8/2021

Owen O'Reilly

Signed: Owen O'Reilly

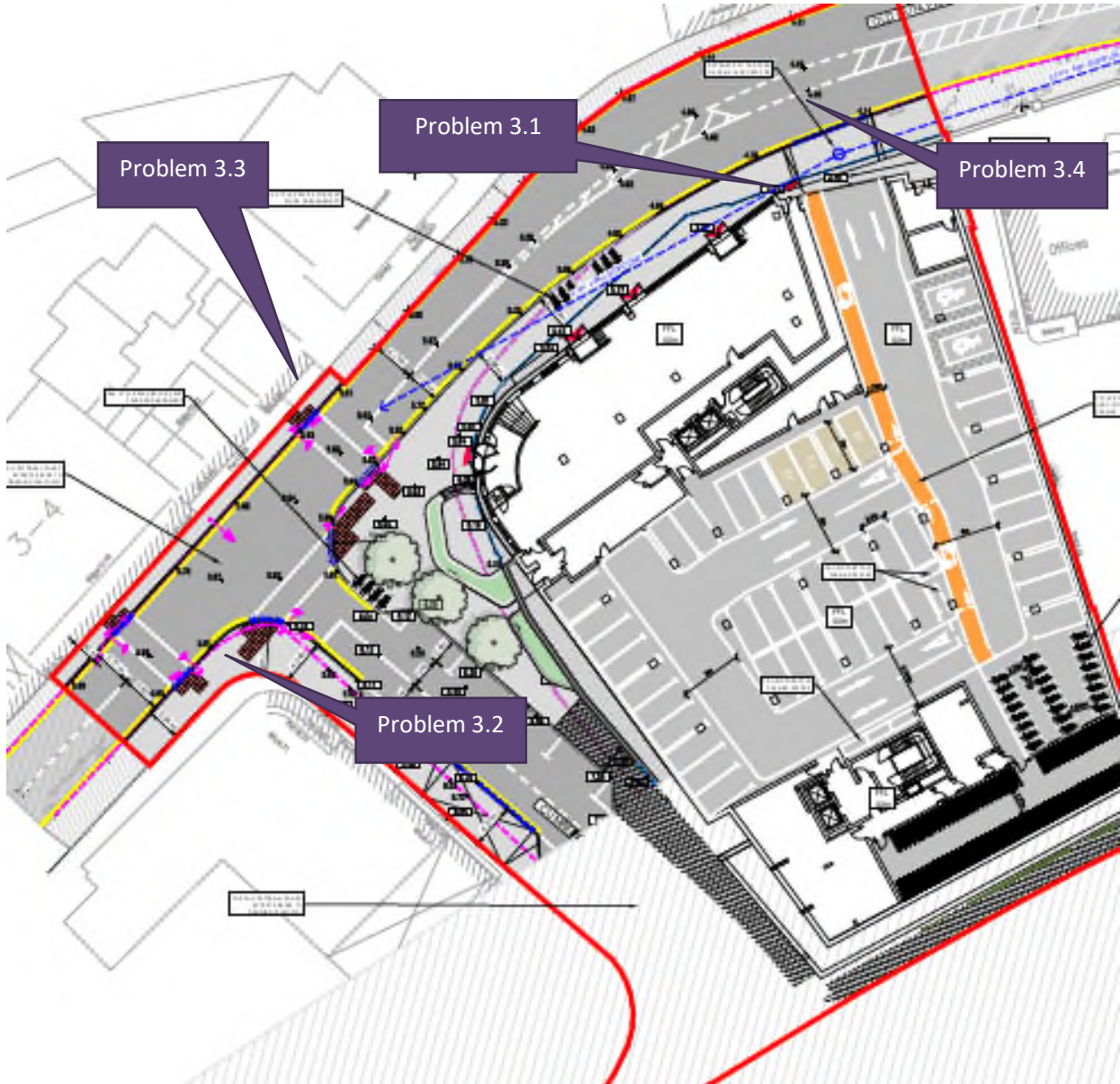
(Quality Audit Team Member) Dated: 24/8/2021

Appendix A

List of Material Supplied for this Stage 1 Quality Audit;

- Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.
- Drawing TED-DBFL-RD-SP-DR-C-1101 Rev P01.

Appendix B – Problem Location Map.



Appendix C

Feedback Form

QUALITY AUDIT FORM – FEEDBACK ON AUDIT REPORT


Scheme: Tedcastles, Monkstown.

Stage: 1 Quality Audit


Date Audit (Site visit) Completed: 23rd July 2021

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1	Yes	Yes	Stop lines have been proposed on the cycle track in advance of the signals as show on DBFL drawing no. TED-DBFL-RD-SP-DR-C-1101 Rev P02. It should be noted that all works in the public realm are subject to agreement with Dun Laoghaire-Rathdown County Council.	Yes
3.2	Yes	Yes	The light pole on the southern footpath along the N31 will be relocated, such that it does not obscure intervisibility between pedestrians and drivers, subject to agreement with the relevant utility service providers and Dun Laoghaire-Rathdown County Council.	Yes
3.3	Yes	Yes	The swept path assessment has been carried out to track the turning movement for a 3-axle refuse vehicle as shown on DBFL drawing no. TED-DBFL-RD-SP-DR-C-1101 Rev P02. This shows a slight protrusion of the vehicle onto the cycle lane during the movement. However, since the intersection is signal controlled, the movement from Cumberland Street will occur when the cycle lanes on the N31 are on a red light and no cyclists will be on the affected portion of the cycle lane thus allowing for a safe movement. It should be noted that	Yes

			all works in the public realm are subject to agreement with Dun Laoghaire-Rathdown County Council.	
3.4	Yes	Yes	The proposed crossing on the N31 has been set as 4.0m, as show on DBFL drawing no. TED-DBFL-RD-SP-DR-C-1101 Rev P02, to accommodate all future users which include pedestrians and cyclists. It should be noted that all works in the public realm are subject to agreement with Dun Laoghaire-Rathdown County Council.	Yes

Signed.....
Design Team Leader

Date23/8/2021.....

Signed.....
Audit Team Leader

Date:23/8/2021.....

Signed.....
Employer

Date: ...23/8/2021