

**Title:       QUALITY AUDIT (LRD Stage 3)**  
**INCLUDING**  
**Road Safety Audit Stage 1, Access Audit, Cycle Audit and**  
**Walking Audit.**  
**For;**  
**Proposed Residential Development, Fortfield Road,**  
**Terenure, Dublin 6W.**

**Client:       PUNCH Consulting Engineers.**

**Date:         August 2024**

**Report reference: 1469R03**

**VERSION: FINAL**

**Prepared By:**

**Bruton Consulting Engineers Ltd**

Glaspistol  
Clogherhead  
Drogheda  
Co. Louth.

Tel: 041 9881456  
Mob: 086 8067075  
E: admin@brutonceng.ie  
W: www.bruntonceng.ie

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## 1.0 Introduction

This report was prepared in response to a request from Mr. Paul Casey, PUNCH Consulting Engineers, for a Quality Audit for the proposed residential development at Fortfield Road, Terenure, Dublin 6W. This audit is for the LRD Stage 3 process.

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 updated in June 2019.

This portion of the Quality Audit is a design stage audit and includes a Stage 1&2 Road Safety Audit (in accordance with TII Publication GE-DTY-01024, dated December 2017), an access audit, a walking audit and a cycling audit. (i.e. aspects of a Quality Audit carried out independent of the Design Team and generally included as appendices to the overall Audit)

The Road Safety and Quality Audit Team comprised of;

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

**TII Road safety Auditor approval number:** NB 168446

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

**TII Auditor Approval no.** OO 1291756

This portion of the Quality Audit involved the examination of drawings and other material and a site visit by the Audit Team, on the 28<sup>th</sup> of April 2022. The weather at the time of the site visit was dry and the road surface was also dry.

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.

Recommendations have been provided to help improve the quality of the design with regard to the areas described above. A feedback form has also been provided for the designer to complete indicating whether or not he/she will accept those recommendations or provide alternative recommendations for implementation.

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

A feedback form for the Designer to complete is contained in **Appendix B**.

A plan drawing showing the problem locations is contained in **Appendix C**.

**A Quality audit was carried out in May 2022 on a previous version of this scheme and in February 2024 on the LRD Stage 2 Layout.**

## 2.0 Background

It is proposed to construct a residential development at Fortfield Road, Dublin 6W.

*“The development will comprise a Large-Scale Residential Development (LRD) on a site at Fortfield Road, Terenure of 295 no. units delivering 19 no. houses and 276 no. apartments made up of studios; 1 beds; 2 beds; 3 beds; and 4 beds. Provision of car, cycle and motorbike parking will be provided throughout the development, including at basement and surface level. Vehicular/pedestrian/cyclist access from Fortfield Road. Proposed upgrade works to the surrounding road network is also included. All associated site development works, open space, services provision, ESB substations, plant areas, waste management areas, landscaping and boundary treatments.”*

Fortfield Road is a wide single carriageway road with footpaths on both sides. It is a bus route.

It is proposed to signalise the Fortfield Road/College Drive Junction and to have controlled pedestrian crossings on all four arms. The existing controlled crossing north of the junction on Fortfield Road will be removed.

**There are some minor changes to the LRD Stage 2 scheme that was audited previously. Issues raised in that audit that have been addressed in the design development have not been repeated in this audit.**

The speed limit on Fortfield Road is 50km/hr.

The site location map is shown below.



Figure 1: Site Location (© Google Maps)

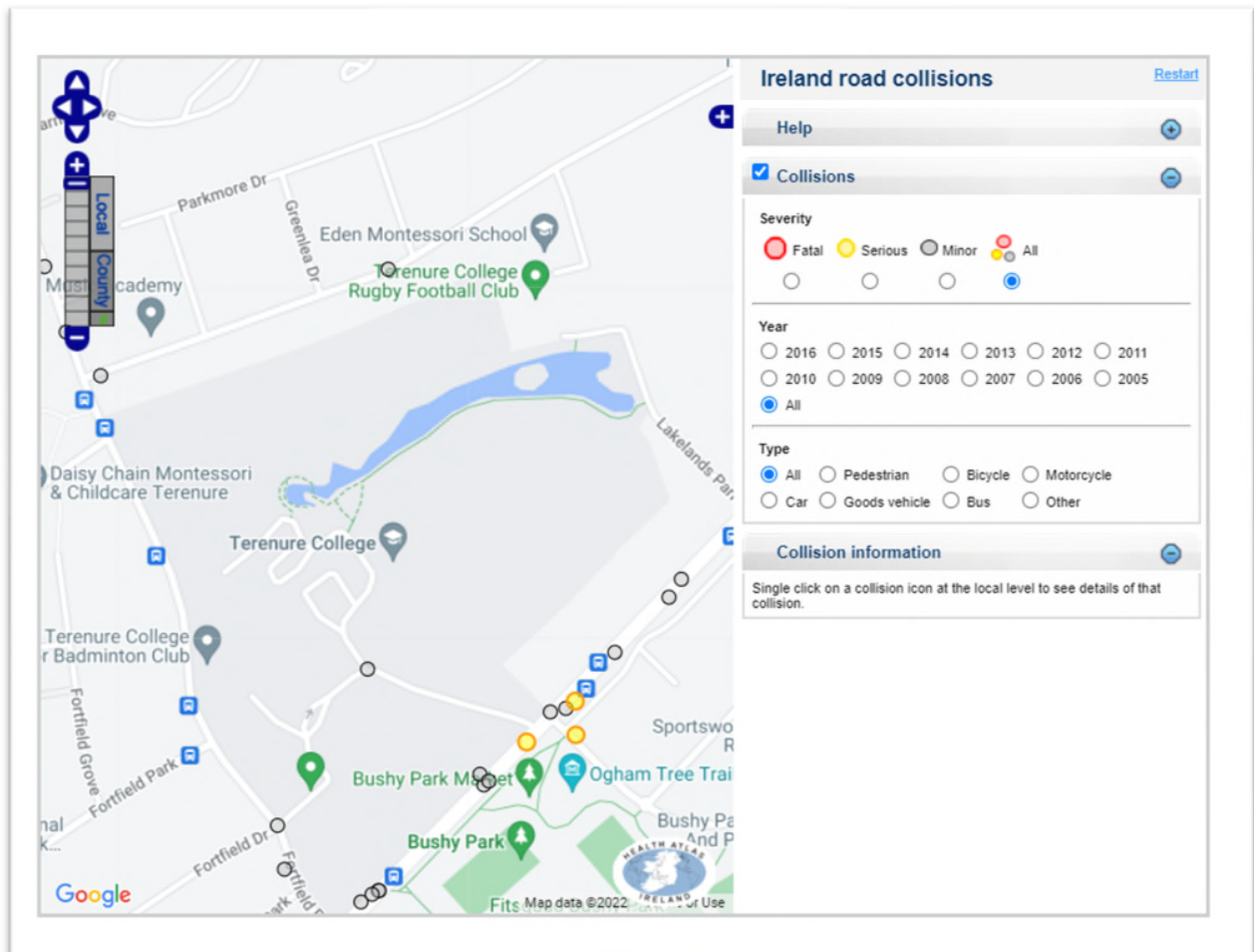
The general layout of the residential development is shown in the drawing extract below.





## 2.1 Collision History.

The Road Safety Authority's website shows that there were no recorded injury collisions on the section of Fortfield Road adjacent to the scheme or on Lakelands park in the 12-year period 2005 to 2016.



3.0 Issues Identified in This Quality Audit.

Summary Table of Problem Categories

Problem Reference	Access Audit	Walking Audit	Cycling Audit	Road Safety Audit	Quality Audit
3.1	✓	✓		✓	✓

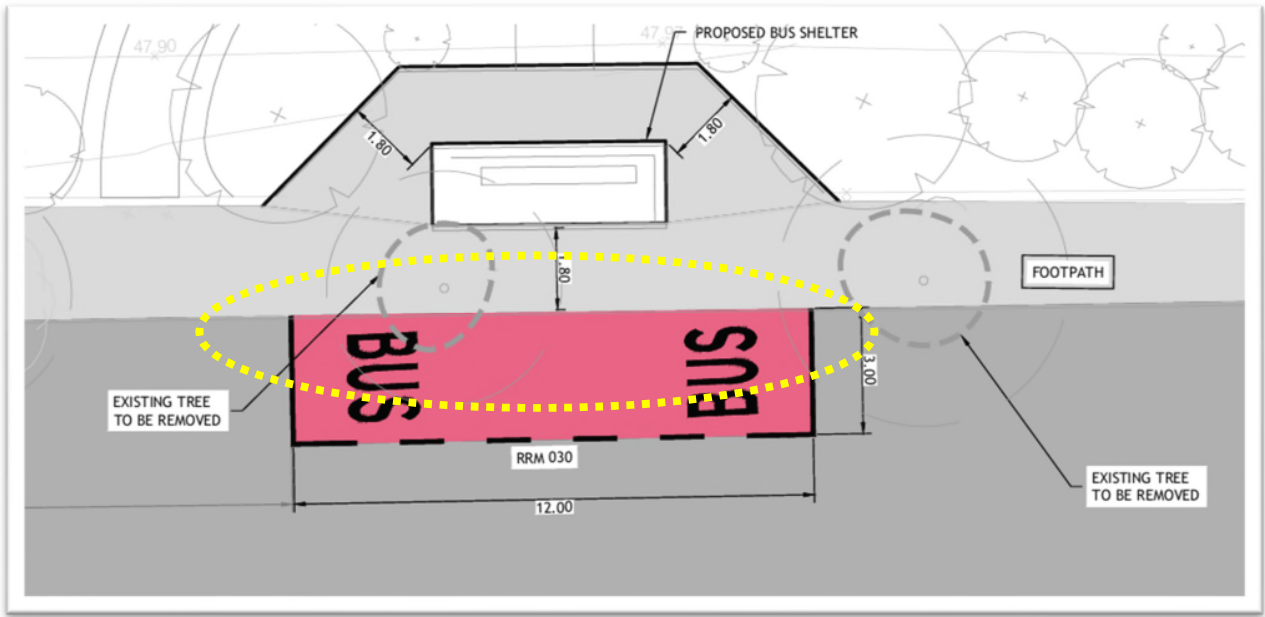
3.1 Problem

LOCATION

Drawing 222102-PUNCH-XX-XX-DR-C-0461 C02, Proposed Bus Stop.

PROBLEM

It is unclear what height kerbs are proposed at the bus stop. Low kerbs may prevent accessibility to buses for some mobility impaired pedestrians or wheelchair users. A kassel kerb detail is provided in Drawing 0550 C02 however it is unclear if this type of kerbing is intended at this location.



RECOMMENDATION

It is recommended that suitable height kerbs be provided to allow accessibility for all.



## 4.0 Observations

### 4.1 Observation

There are no existing cycle facilities on Fortfield Road. There is however a wide carriageway and future proposals may include cycle lanes and an upgrade to toucan crossings at the proposed signalised junction.

## 5.0 Quality Audit Statement

This portion of the 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.

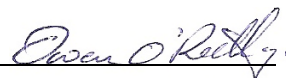
The quality audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton

Signed: 

(Quality Audit Team Leader) Dated: 2-9-2024

Owen O'Reilly

Signed: 

(Quality Audit Team Member) Dated: 2-9-2024

## Appendix A

### List of Material Supplied for this Quality Audit;

Drawing 222102-PUNCH-XX-XX-DR-C-0460\_PROPOSED LINEMARKINGS - NORTHERN ACCESS

Drawing 222102-PUNCH-XX-XX-DR-C-0461\_PROPOSED LINEMARKINGS - BUS STOP

Drawing 222102-PUNCH-XX-XX-DR-C-0470\_PLUVIAL FLOODING DETENTION BASIN

Drawing 222102-PUNCH-XX-XX-DR-C-0500\_TYPICAL DRAINAGE DETAILS - SHEET 1

Drawing 222102-PUNCH-XX-XX-DR-C-0501\_TYPICAL DRAINAGE DETAILS - SHEET 2

Drawing 222102-PUNCH-XX-XX-DR-C-0502\_TYPICAL DRAINAGE DETAILS - SHEET 3

Drawing 222102-PUNCH-XX-XX-DR-C-0503\_TYPICAL DRAINAGE DETAILS - SHEET 4

Drawing 222102-PUNCH-XX-XX-DR-C-0525\_PROPOSED WATERMAIN DETAILS

Drawing 222102-PUNCH-XX-XX-DR-C-0550\_TYPICAL ROADS DETAILS

Drawing 222102-PUNCH-XX-XX-DR-C-0600\_VEHICLE SWEPT PATH - FIRE TENDER - SHEET 1

Drawing 222102-PUNCH-XX-XX-DR-C-0601\_VEHICLE SWEPT PATH - REFUSE VEHICLE

Drawing 222102-PUNCH-XX-XX-DR-C-0602\_VEHICLE SWEPT PATH - RIGID VEHICLE FOR DELIVERIES

Drawing 222102-PUNCH-XX-XX-DR-C-0603\_VEHICLE SWEPT PATH - FIRE TENDER - SHEET 2

Drawing 222102-PUNCH-XX-XX-DR-C-0604\_VEHICLE SWEPT PATH - FIRE TENDER - SHEET 3

Drawing 222102-PUNCH-XX-XX-DR-C-0625\_SIGNALISED JUNCTION INTERVISIBILITY ZONE - NORTHERN ACCESS

Drawing 222102-PUNCH-XX-XX-DR-C-0100\_PROPOSED GROUND FLOOR DRAINAGE LAYOUT

Drawing 222102-PUNCH-XX-XX-DR-C-0110\_PUBLIC DRAINAGE RECORD

Drawing 222102-PUNCH-XX-XX-DR-C-0125\_PROPOSED BASEMENT DRAINAGE LAYOUT

Drawing 222102-PUNCH-XX-XX-DR-C-0150\_PROPOSED SUDS LAYOUT

Drawing 222102-PUNCH-XX-XX-DR-C-0151\_SUDS LAYOUT - PROPOSED ROOF LAYOUTS BLOCK A & B

Drawing 222102-PUNCH-XX-XX-DR-C-0152\_SUDS LAYOUT - PROPOSED ROOF LAYOUTS BLOCK C & D

Drawing 222102-PUNCH-XX-XX-DR-C-0175\_GROUND LEVEL FOUL WATER LONG SECTIONS - SHEET 1

Drawing 222102-PUNCH-XX-XX-DR-C-0176\_GROUND LEVEL FOUL WATER LONG SECTIONS - SHEET 2

Drawing 222102-PUNCH-XX-XX-DR-C-0177\_GROUND LEVEL FOUL WATER LONG SECTIONS - SHEET 3

Drawing 222102-PUNCH-XX-XX-DR-C-0178\_BASEMENT FOUL WATER LONG SECTIONS - SHEET 1

Drawing 222102-PUNCH-XX-XX-DR-C-0179\_BASEMENT FOUL WATER LONG SECTIONS - SHEET 2

Drawing 222102-PUNCH-XX-XX-DR-C-0200\_SURFACE WATER LONG SECTIONS - SHEET 1

Drawing 222102-PUNCH-XX-XX-DR-C-0201\_SURFACE WATER LONG SECTIONS - SHEET 2

Drawing 222102-PUNCH-XX-XX-DR-C-0202\_SURFACE WATER LONG SECTIONS - SHEET 3

Drawing 222102-PUNCH-XX-XX-DR-C-0203\_SURFACE WATER LONG SECTIONS - SHEET 4

Drawing 222102-PUNCH-XX-XX-DR-C-0204\_SURFACE WATER LONG SECTIONS - SHEET 5

Drawing 222102-PUNCH-XX-XX-DR-C-0300\_PROPOSED WATERMAIN LAYOUT

Public Lighting Drawing and report

Drawing L1\_804\_SECTIONS AND ELEVATIONS\_SECTION 4 OF 11

Drawing L1\_805\_SECTIONS AND ELEVATIONS\_SECTION 5 OF 11

Drawing L1\_806\_SECTIONS AND ELEVATIONS\_SECTION 6 OF 11

Drawing L1\_807\_SECTIONS AND ELEVATIONS\_SECTION 7 OF 11

Drawing L1\_808\_SECTIONS AND ELEVATIONS\_SECTION 8 OF 11

Drawing L1\_809\_SECTIONS AND ELEVATIONS\_SECTION 9 OF 11

Drawing L1\_810\_SECTIONS AND ELEVATIONS\_SECTION 10 OF 11

Drawing L1\_811\_SECTIONS AND ELEVATIONS\_SECTION 11 OF 11

Drawing L1\_900\_HARD LANDSCAPE DETAILS\_PAVING

Drawing L1\_901\_HARD LANDSCAPE DETAILS\_LANDSCAPE ELEMENTS 1 OF 2

Drawing L1\_902\_HARD LANDSCAPE DETAILS\_LANDSCAPE ELEMENTS 2 OF 2

Drawing L1\_903\_HARD LANDSCAPE DETAILS\_BOUNDARIES

Drawing L1\_904\_HARD LANDSCAPE DETAILS\_METAL PLANTER

Drawing L1\_905\_SOFT LANDSCAPE DETAILS\_PLANTING

Drawing L1\_906\_SOFT LANDSCAPE DETAILS - TREE PLANTING

Drawing L1\_907\_BIO\_RETENTION TREE PIT

Drawing L1\_908\_SOFT LANDSCAPE DETAILS\_NO DIG PAVING

Drawing L1\_000\_COVER SHEET

Drawing L1\_001\_DRAWING INDEX

Drawing L1\_002\_PLANTING SCHEDULE

Drawing L1\_100\_GENERAL ARRANGEMENT\_ACCESS AND CIRCULATION

Drawing L1\_101\_GENERAL ARRANGEMENT\_TOTAL OPEN SPACE

Drawing L1\_102\_GENERAL ARRANGEMENT\_SITE BOUNDARIES

Drawing L1\_103\_GENERAL ARRANGEMENT\_TILE LAYOUT

Drawing L1\_104\_GENERAL ARRANGEMENT\_LAYOUT 1 OF 6

Drawing L1\_105\_GENERAL ARRANGEMENT\_LAYOUT 2 OF 6

Drawing L1\_106\_GENERAL ARRANGEMENT\_LAYOUT 3 OF 6

Drawing L1\_107\_GENERAL ARRANGEMENT\_LAYOUT 4 OF 6

Drawing L1\_108\_GENERAL ARRANGEMENT\_LAYOUT 5 OF 6

Drawing L1\_109\_GENERAL ARRANGEMENT\_LAYOUT 6 OF 6

Drawing L1\_110\_GENERAL ARRANGEMENT\_ROOF LAYOUT

Drawing L1\_800\_SECTIONS AND ELEVATIONS\_LOCATION PLAN

Drawing L1\_801\_SECTIONS AND ELEVATIONS\_SECTION 1 OF 11

Drawing L1\_802\_SECTIONS AND ELEVATIONS\_SECTION 2 OF 11

Drawing L1\_803\_SECTIONS AND ELEVATIONS\_SECTION 3 OF 11

Drawing PP-305 - PROPOSED FLOOR PLANS (BLOCK C)

Drawing PP-306 - PROPOSED FLOOR PLANS (BLOCK D)

Drawing PP-307 - PROPOSED FLOOR PLANS (BLOCK D)

Drawing PP-400 - PROPOSED SECTIONS & ELEVATIONS (BLOCK A)

Drawing PP-401 - PROPOSED SECTIONS & ELEVATIONS (BLOCK B)

Drawing PP-402 - PROPOSED SECTIONS & ELEVATIONS (BLOCK C)

Drawing PP-403 - PROPOSED SECTIONS & ELEVATIONS (BLOCK D)

Drawing PP-500 - APARTMENT TYPOLOGIES

Drawing PP-501 - APARTMENT TYPOLOGIES

Drawing PP-502 - HOUSES PLANS, SECTIONS & ELEVATIONS

Drawing PP-503 - HOUSES PLANS, SECTIONS & ELEVATIONS

Drawing PP-600 - CYCLE STORES - FLOOR PLANS & ELEVATIONS

Drawing PP-000 - OS MAP

Drawing PP-001 - SITE LOCATION MAP

Drawing PP-100 - EXISTING SITE PLAN

Drawing PP-101 - PROPOSED SITE PLAN - GROUND FLOOR

Drawing PP-102 - PROPOSED SITE PLAN - TYPICAL FLOOR

Drawing PP-103 - PROPOSED SITE PLAN - ROOF

Drawing PP-104 - PROPOSED BASEMENT PLAN

Drawing PP-105 - EXISTING CONTIGUOUS ELEVATIONS

Drawing PP-106 - PROPOSED CONTIGUOUS SECTIONS & ELEVATIONS

Drawing PP-107 - PROPOSED CONTIGUOUS SECTIONS & ELEVATIONS

Drawing PP-200 - PROPOSED BASEMENT PLAN

Drawing PP-300 - PROPOSED FLOOR PLANS (BLOCK A)

Drawing PP-301 - PROPOSED FLOOR PLANS (BLOCK A)

Drawing PP-302 - PROPOSED FLOOR PLANS (BLOCK B)

Drawing PP-303 - PROPOSED FLOOR PLANS (BLOCK B)

Drawing PP-304 - PROPOSED FLOOR PLANS (BLOCK C)



## Appendix B

### Feedback Form

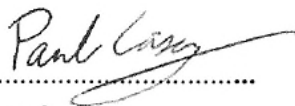
# **QUALITY AUDIT FORM – FEEDBACK ON QUALITY AUDIT REPORT**

Scheme: Fortfield Road, Residential Development.

Quality Audit- Stage 1 (LRD Stage 3)

Date Audit (site visit) Completed 28-4-2022


Paragraph No. in Quality 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		

Signed.....  
Design Team Leader

Date ..... 16/08/2024

Signed.....  
Audit Team Leader

Date: ..... 16-8-2024

Signed.....  
Employer

Date: ..... 16/8/24

## Appendix C

### Problem Location Plan.



