

Strategic Housing Development at Glenamuck Road North

Quality Audit

Moran Park Homebuilders Ltd

February 2022

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Notice

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1. Introduction

1.1 Report Context

This report describes the findings of a Quality Audit associated with the proposed Strategic Housing Development at Glenamuck Road North.

The Audit has been completed by Traffico Ltd. on behalf of Moran Park Homebuilders Ltd.

1.2 Details of Site Inspection

Date	Daylight / Darkness	Weather & Road Conditions
Friday 18 th February 2022	Daylight	Blustery and raining with wet 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:

- Team Leader: **Martin Deegan** BEng(Hons) MSc CEng MIEI
- Team Member: **Colin Prendeville** BEng(Hons) CEng MIEI CIHT

1.4 Drawings & Documents Examined as Part of the Audit Process

The following drawings and documents were examined as part of the Audit process:

Drawing No.	Drawing / Document Title	Revision
P200	Site Location Plan	-
P201	Proposed Road Levels & Building Levels	-
P210	Typical Road Construction Details	-
P220	Proposed Drainage Layout Sheet 1 of 2	-
P221	Proposed Drainage Layout Sheet 2 of 2	-
P224	Proposed Basement Drainage Layout	-
P270	Autotrack Swept Path Analysis	-
P280	Proposed Junction Layouts	-
1	Landscape Masterplan	E
4	Landscape Sections	E
5	Combined Landscape & Arborist Plan	E
7	Combined Lighting & Landscape Plan	E

Table 1.2 – Designers Drawing & Document List

1.5 Quality Audit Content and Compliance

Procedure and Scope for Quality Audit

This Quality Audit is undertaken in accordance with Section 5.4.2 of the Design Manual for Urban Roads and Streets. The UK Department for Transport Traffic Advisory Leaflet (TAL) 5/11 has also been referred to for guidance.

This Quality Audit consists of the following audit sections:

- Walking, Cycling and Access Audit – focusing on accessibility requirements of vulnerable road users (and in particular, those with visual or mobility impairments), and on the movement and place function requirements of pedestrians and cyclists
- Road Safety Audit – focusing on issues relating directly to road safety

Procedure and Scope Specific to the Road Safety Audit

The 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.

2. Walking, Cycling and Access Audit

2.1 Best Practice Guidance

This Quality Audit has been carried out in accordance with general best practice guidance set out within the following documents:

- The Disability Act 2005
- British Standards Institute BS8300:2001
- Building Regulations 2000, Technical Guidance Document M – Access for People with Disabilities (Department of the Environment, Heritage and Local Government)
- Buildings for Everyone Access and use for all citizens (National Disability Authority)
- Access Auditing of the Built Environment Guidelines (National Disability Authority)
- Traffic Management Guidelines (Irish Government Publications 2003)
- Guidance on the use of Tactile Paving Surfaces: UK Department for Transport.

2.2 Objectives of the Walking, Cycling and Access Audit

The objectives of this Walking, Cycling and Access Audit are as follows:

- To ensure a high level of accessibility to the proposed development site for all vulnerable road users and in particular visually and mobility impaired users
- To ensure that the current and future access needs within the scheme are recognised and developed
- To ensure that advantage is afforded to walkers and cyclists at every opportunity.

2.3 General Accessibility Recommendations

Following delivery of the Walking, Cycling and Access Audit, the design team should consider all issues raised herein for inclusion into the final design. It is less costly to make the changes now, pre-construction, than later after the scheme has been commissioned.

The client should consider setting up a dedicated access team for the project, responsible for the long-term management of universal access throughout the development.

This process should be facilitated by an Access Plan, which is a strategy for improving accessibility developed from the Audit and can ensure that access is an on-going concern and help identify opportunities for change.

The access plan should incorporate planned maintenance programmes, a schedule of works that has been devised to take into account the priority information in the Audit, processes to allow regular updating of the Audit information and links to maintenance and management procedures.

It should also set out procedures to ensure that when opportunities for access improvement arise, they are recognised.

2.4 Specific Walking, Cycling and Accessibility Recommendations

A summary of the design features, together with recommended actions to be taken during the relevant stage of the design or operation of the scheme have been detailed in the following table.

Table 2.1 - Walking, Cycling and Access Audit Summary Table

I.D.	Location	Feature	Action	When
01	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure pedestrian environments are logical, clear to understand and consistent throughout the development. In particular, a seamless link in footpath connections should be provided between the proposed development and the adjacent development approved under Planning Ref: 18A/1187 and PL06D.304995.	Design Stage
02	Shared Surfaces	Pedestrian & Cyclist Provision	Ensure consistency in the types of Shared Surface utilised and provided sufficient information to the end users to inform them that they are entering a shared surface.	Design Stage
03	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure continuity for pedestrians is provided at crossing points, and that crossing points are located with good forward stopping sight distance for approaching vehicles.	Design Stage
04	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure contrasting colours/materials are used to define areas which are meant for sole use by vulnerable road users.	Design Stage
05	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure footpath edges are clearly defined.	Design Stage
06	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure street furniture is carefully positioned to avoid obstruction in footways and to maximise the effective width.	Design & Operational Stages
07	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure steps are legible and easy to define by providing step nosings which contrast in colour with the step going (or tread).	Design Stage
08	Development Footpaths and Shared Surfaces	Pedestrian Provision	Ensure footpaths and crossing points are located on all significant desire lines, where they are safe and convenient for all road users.	Design Stage
09	Development Footpaths	Pedestrian Provision	Ensure appropriate dropped kerbs and tactile paving provided at crossing points.	Design Stage
10	Buildings	Building Entrances	Ensure the main building entrances are well defined and by employing colours and material finishes which contrast with the rest of the building façade.	Design Stage

I.D.	Location	Feature	Action	When
11	Public Footpaths	Pedestrian Provision	At access points through the site boundaries which connect with public thoroughfares, all internal footpaths should link seamlessly with external footpaths or walkways to accommodate universal access and pedestrian progression.	Design Stage
12	Buildings	Building Entrances	Ensure clear sight lines to the main pedestrian entrances are provided from all approaches to the buildings. Trees and street furniture should not block these.	Design Stage
13	Development Footpaths and Shared Surfaces	Street Lighting	Ensure street lighting is located where pedestrian movement decisions are required (i.e. at crossing points, entrances and in shared street areas).	Design Stage
14	General	Drainage	Ensure any break in surface or gap (such as a drainage gulley) are no greater than 10mm and are perpendicular to line of travel. Locate drainage features away from crossing points, preferable upstream, to minimise the passage of run-off through the crossing point.	Design Stage
15	General	Drainage	Ensure access routes (for example, the building access ramps) are constructed with even and gentle falls to allow proper drainage and prevent the formation of puddles. The cross-fall gradient to any access route should not exceed 1 in 50, except when associated with a dropped-kerb.	Design Stage
16	Development Footpaths and Shared Surfaces	Provision of Street Furniture	Ensure street furniture does not encroach on the clear width of pathways.	Design Stage
17	Development Footpaths and Shared Surfaces	Provision of Street Furniture	Ensure street furniture contrasts in colour with the surrounding pavement surfaces.	Design Stage
18	Development Footpaths and Shared Surfaces	Provision of Street Furniture	Ensure that any pedestal mounted items or emergency doors which open onto footpaths or trafficked areas are fitted with a tapping rail 250mm above the ground, contrasting in colour with the pavement. This may be applicable to the underground car parks, where doors open outwards into trafficked areas.	Design Stage
19	Car Parks	Car park provision	Ensure car parking is accessible, easy to use, and that sufficient parking spaces are provided within a well-designed environment to meet the needs of all end users who might reasonably be expected to use them.	Design Stage

I.D.	Location	Feature	Action	When
20	Car Parks	Car park provision	Ensure location of designated spaces for car users with disabilities are located as close as possible to the building access points and are provided with appropriate dropped kerbs to facilitate direct wheelchair access.	Design Stage
21	Car Parks	Car park provision	Turning heads should be provided in Cul-de-Sacs to limit the need for reversing activity.	Design Stage
22	Car Parks	Car park provision	Ensure that access to/from parked vehicles are not inhibited by boundary treatments, street furniture or structural features.	Design Stage
24	External Landscaped areas	Cycle stands	To encourage use and safeguard security, position cycle stands away from isolated areas and close to building entrances which have natural passive surveillance. Consider providing cover over the cycle stands to protect cyclists from the elements where possible.	Design Stage
25	Development footpaths	Bin storage	Bin storage and collection can lead to obstruction of the footpaths and cycle facilities. The Designer should ensure the refuse truck access and turning, bin storage and bin collection are considered and comprehensively catered for within the development proposals.	Design Stage
26	Approach to buildings	Building Access Ramps	Gradients appropriate for universal access should be applied to the ramped accesses to the main buildings and the recreational area. To assist access for the mobility impaired, the ramps should incorporate level landings at the bottom, at appropriate intervals along the ramp and also at the top of the ramp.	Design Stage

3. Stage 1 Road Safety Audit Problems

3.1 Problem: Pedestrian Exposure to Vehicle Conflict

Location: Direct Access onto Glenamuck Road North

Pedestrians on Glenamuck Road North will be encouraged to cross the access road at its widest point. At the same location, vehicles will be directed to roll into crossing area in advance of stopping. This could lead to conflicts between pedestrians and vehicles.

Figure 3.1 – Conflict Point at Crossing Between Pedestrians and Vehicles



Recommendation

The pedestrian crossing facilities should be moved back from the public road to reduce the crossing distance. The Stop Line should be repositioned in advance of the crossing to afford advantage to pedestrians.

3.2 Problem: Pedestrian Linkage to Block C

Location: Footpaths on Internal Street Between Main Access and Block C

Progression for pedestrians (particularly the blind or the mobility impaired) travelling northbound on Glenamuck Road North, bound either for Block C or the development approved under Planning Ref: 18A/1187 (and PL06D.304995) may be challenging due to the single sided footpath and the need to cross the internal streets in order to reach their destination. This may lead to conflicts in the carriageway between vehicles and pedestrians.

Figure 3.2 – Pedestrian Route from Glenamuck Road North



Recommendation

Pedestrian progression along the route described should be improved by either providing a footpath on both sides of the access road or by affording advantage to pedestrians (over vehicles) at each location that they will be expected to cross the internal street (see 1-3 above).

3.3 Problem: Trees Obscuring Pedestrian Crossing Points

Location: Internal Streets and Planting Areas

Trees may obscure intervisibility between motorists and pedestrians at a number of key crossing points within the development streets.

Figure 3.3 –Trees Obscuring Intervisibility Between Motorists and Pedestrians



Recommendation

The trees should be repositioned to mitigate the risk described.

4. Audit Team Statement

4.1 Certification & Purpose

We certify that we have examined the drawing 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.

4.2 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.

4.3 Road Safety Audit Team Sign-Off

Martin Deegan

Audit Team Leader
Road Safety Engineering Team

traffico

Signed: 

Date: 22nd February 2022

Colin Prendeville

Audit Team Member
Road Safety Engineering Team

traffico

Signed: 

Date: 22nd February 2022

5. Responding to the Road Safety Audit

5.1 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 5.1 – Road Safety Audit Sign-Off and Completion Process

5.2 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

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

Road Safety Audit Feedback Form

Scheme: Strategic Housing Development at Glenamuck Road North

Audit Stage: Stage 1 Road Safety Audit

Audit Date: 22nd February 2022

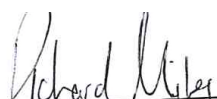
Problem Reference (Section 2)	Designer Response Section			Audit Team Response Section
	Problem Accepted (yes / no)	Recommended Measure Accepted (yes / no)	Alternative Measures or Comments	Alternative Measures Accepted (yes / no)
3.1	Yes	Yes	We propose to adjust the roads layout to reposition crossing point on a shorter path and revise the stop line positioning as recommended. We also propose a raised ramp pedestrian crossing at the entrance to facilitate pedestrian priority.	<i>Noted with thanks.</i>
3.2	Yes	Yes	We are proposing to prioritise pedestrians over vehicles at the three locations identified. The proposed adjustments made at the junction (refer above) will resolve location 1, At location 2, this is at a raised shared surface area so I believe pedestrians are prioritised here, but we will clearly indicate intended routing and crossing points on our layout . For Location 3, a pedestrian priority link through to Carricail shall be afforded.	<i>Noted with thanks.</i>
3.3	Yes	Yes	We are co-ordinating with the landscape architect to ensure trees are suitably positioned and pedestrian priority and sightlines are afforded in each instance.	<i>Noted with thanks.</i>

** 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:

Richard Miles

Designer's
Signature:



Date: 22/02/2022

Employer's
Name:

Employer's
Signature:

Date:

Audit Team's
Name:

Martin Deegan

Audit Team's
Signature:



Date: 28 Feb 2022

Road Safety Audit Feedback Form

Scheme: Strategic Housing Development at Glenamuck Road North

Audit Stage: Stage 1 Road Safety Audit

Audit Date: 22nd February 2022

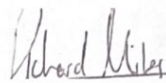
Problem Reference (Section 2)	Designer Response Section			Audit Team Response Section
	Problem Measure Accepted (yes / no)	Recommended Measure Accepted (yes / no)	Alternative Measures or Comments	Alternative Measures Accepted (yes / no)
3.1	Yes	Yes	We propose to adjust the roads layout to reposition crossing point on a shorter path and revise the stop line positioning as recommended. We also propose a raised ramp pedestrian crossing at the entrance to facilitate pedestrian priority.	Noted with thanks.
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3.3	Yes	Yes	We are co-ordinating with the landscape architect to ensure trees are suitably positioned and pedestrian priority and sightlines are afforded in each instance.	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:

Richard Miles

Designer's
Signature:




Date: 22/02/2022

Employer's
Name:

ADRIENNE MORAN

Employer's
Signature:



Date: 1/3/22

Audit Team's
Name:

Martin Deegan

Audit Team's
Signature:



Date: 28 Feb 2022



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