

Lismore Homes Limited

Residential Development Baldoyle GA2

Stage 1 Road Safety Audit



# Document Control Sheet

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<b>Project Title:</b>	Residential Development Baldoyle GA2
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## **APPENDIX 1: ROAD SAFETY AUDIT FEEDBACK FORM**

## SECTION 1: INTRODUCTION

Barry Transportation was commissioned by Lismore Homes Limited to undertake a Stage 1 Road Safety Audit to support a Planning Application for Baldoyle GA2, a residential development at lands at Stapolin, Baldoyle North, Dublin 13. The Baldoyle GA2 development corresponds to Growth Area 2 in the Baldoyle Stapolin Local Area Plan 2013-2019 as extended. Growth Area 1 is currently under construction and Growth Area 3 has recently received planning permission from An Bord Pleanála.

The proposed development consists of a Strategic Housing Development for the construction of 1,007 residential apartments (consisting of 58 no. studio units, 247 no. 1 bedroom units, 94 no. 2 bedroom 3 person units, 563 no. 2 bedroom 4 person units, and 45 no. 3 bedroom units), communal residential community rooms, and a ground floor creche in 16 no. buildings with heights varying from 4 to 12 storeys, basement and surface level car parking, secure covered bicycle parking, landscaping, water supply connection at Red Arches Road, and all ancillary site development works on a site located in the townland of Stapolin, Baldoyle, Dublin 13.



**Figure 1: Location of Proposed Development**

The audit has been prepared in accordance with TII Publications (Standards) GE-STY-01024 - Road Safety Audit (2017). The Audit Team has examined and reported on only the road safety implications of the scheme and has not examined or verified the compliance of the design to any other criteria. This audit is confined to the details as shown on the scheme drawings provided. The Audit Team was as follows:

Tristan Dunne  
Team Leader

BE MEngSc CEng MIEI  
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Classon House,  
Dundrum Business Park,  
Dundrum Road,  
Dublin 14.

Filip Ondrusz  
Team Member

MScEng CEng MIEI  
Barry Transportation  
Classon House,  
Dundrum Business Park,  
Dundrum Road,  
Dublin 14.

Noel Navya of Barry Transportation attended the site visit as audit team observer.

The audit site visit was carried out during daylight hours on Tuesday 2 November 2021. Weather conditions during the site visit were dry.

Drawings and documents supplied for the audit consisted of:

- BALN5-CCH-00-ZZ-DR-A-005 Proposed Site Plan

## SECTION 2: AUDIT ITEMS

### 2.1 Problem: No Traffic Calming Proposed

The proposed road layout may encourage excessive traffic speed by virtue of long straights, use of one-way roads, open views and unimpeded access. This may result in an unsafe environment for vulnerable road users resulting in collisions involving pedestrians and cyclists.

#### Recommendation

Traffic calming design integral with the road layout should be incorporated throughout the scheme.

### 2.2 Problem: Use of Crossroad Junctions

The scheme proposes to use crossroads junctions at several locations. In order for this junction type to operate safely, vehicle speeds need to be kept low. As stated in Problem 2.1, the road layout may encourage inappropriate speed. There is hence a risk of collision between crossing vehicles.

#### Recommendation

Traffic calming design integral with the road layout should be incorporated at proposed crossroad junctions.

### 2.3 Problem: Perpendicular Parking Against Footpaths

Perpendicular on-street parking is proposed in front of Sector 7 Block 3 that will butt against a footpath. In the absence of a barrier, drivers might park in these bays, overhanging the footpath. This could partially or fully block the footpath and present an issue for more vulnerable road users, resulting in trips and falls or being forced to walk on the carriageway leading to vehicle/pedestrian collisions.

#### Recommendation

Wheel-stops should be provided.

### 2.4 Problem: Pedestrian Crossings Offset From Desire Lines

Some pedestrian crossings are offset from the pedestrian desire-line. Pedestrians are more likely therefore to cross at a location where they may trip on kerbs. This may also lead to confusion as drivers might not expect pedestrians away from designated crossings, resulting in vehicle/pedestrian collisions.

#### Recommendation

Crossings should be provided on pedestrian desire-lines.

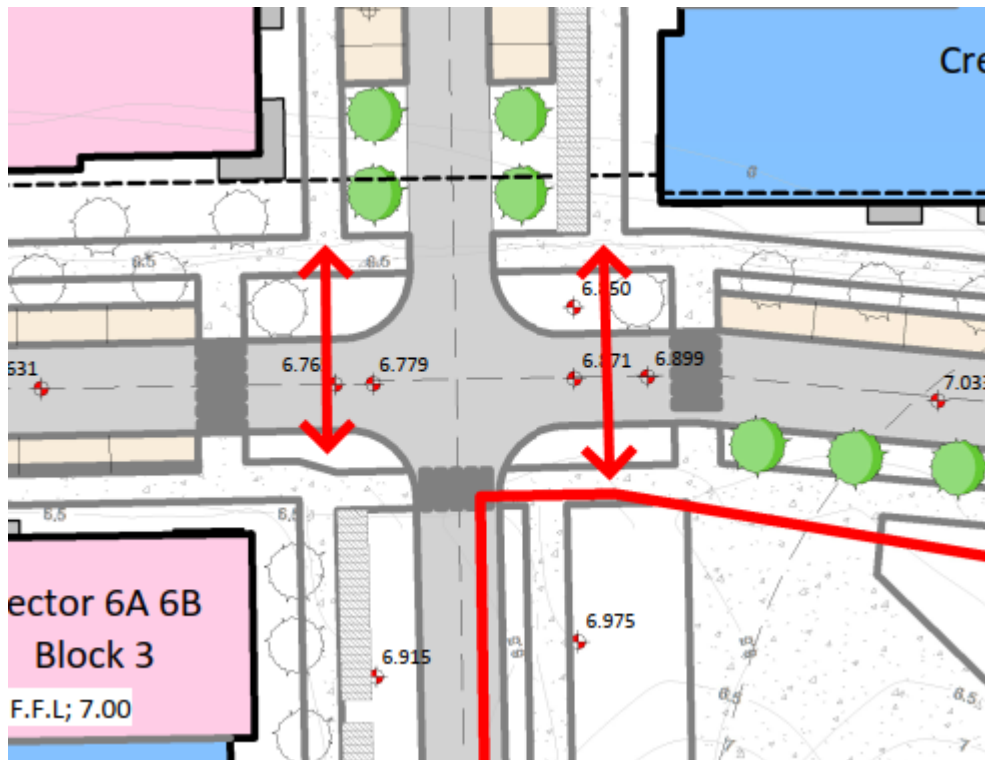


Figure 2: Example of pedestrian crossings not lined up with desire lines

## 2.5 Problem: No Access Provided to the Portmarnock to Baldoyle Greenway

The proposed scheme does not indicate any direct connections to the Portmarnock to Baldoyle Greenway on the northern perimeter of the site. This is considered a missed opportunity and would draw cyclists, walkers, playing children, dog-walkers, etc. away from the proposed development road infrastructure and avoid unnecessary interaction between vulnerable road users and traffic that may otherwise lead to various collisions involving vulnerable road users.

### Recommendation

Direct connection points to the Portmarnock to Baldoyle Greenway should be provided along the northern perimeter of the site.

## 2.6 Problem: Potential Mis-Use of Creche Parking Bays

The parking bays outside the proposed creche have the potential to be mis-used for all day parking and this could result in unsafe and inappropriate parking by users of the creche, resulting in unsafe manoeuvres when passing of parked vehicles which may lead to head on or side swipe collisions, and/or vulnerable road users being forced to walk on the carriageway leading to pedestrian collisions.

### Recommendation

Parking in the bays should be prohibited during hours of operation of the creche so that they can be used for dropping off or picking up.

## 2.7 Problem: Tree Planting

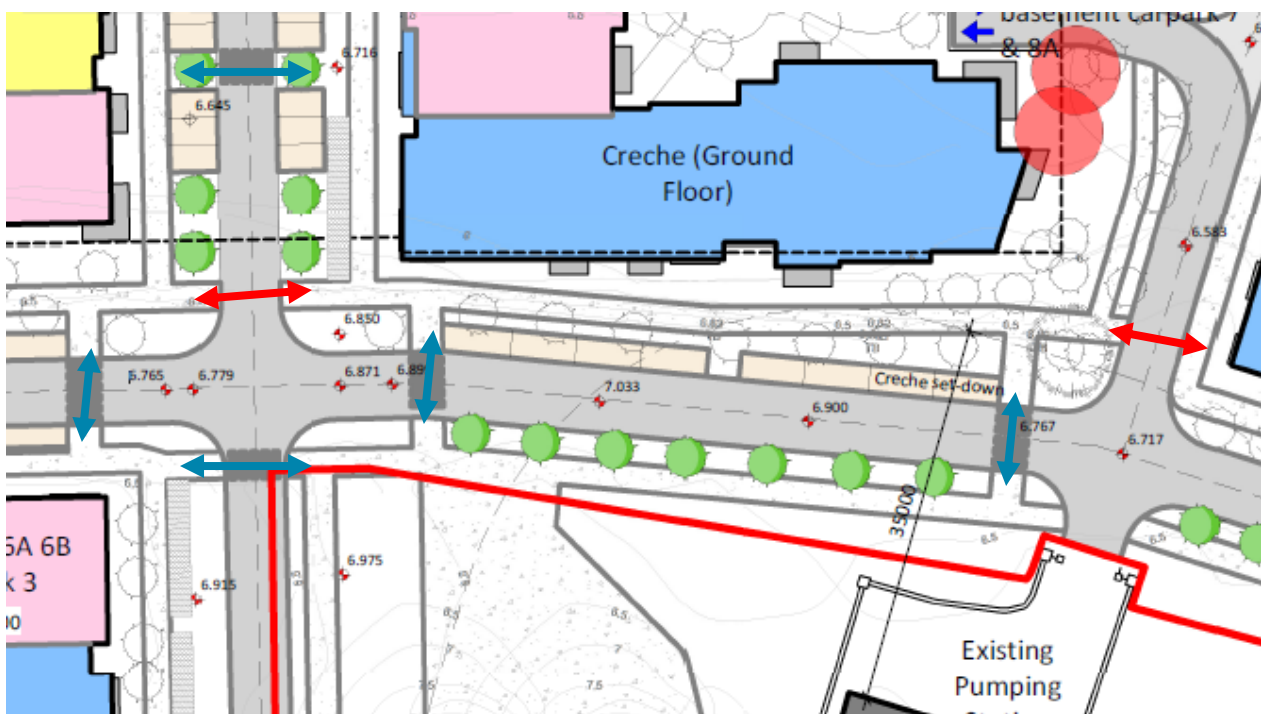
The proposed scheme includes a high density of tree planting. It is important that this be retained as part of the scheme as the provision of trees adjacent to the carriageway provides a vertical aspect that increases the sense of speed and encourages a more traffic-calmed environment. However some links have limited tree planting indicated, which reduces the capacity to influence speeds and could as a result lead to various collisions.

### Recommendation

All links should have tree planting at the edge of the road.

## 2.8 Problem: Mixed Use of Zebra and Uncontrolled Pedestrian Crossings

There appears to be a mix of zebra and uncontrolled, courtesy pedestrian crossing points proposed throughout the development. This inconsistency could confuse road users as to priority on crossings and lead to pedestrian/vehicle collisions.



**Figure 3: Mixed types of pedestrian crossings throughout the scheme (blue-zebra, red-uncontrolled).**

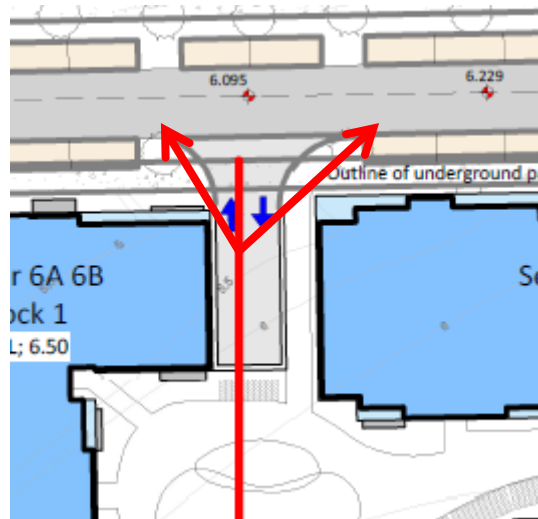
### Recommendation

Ideally only one type of crossings should be provided through the scheme. However, if there are reasons to differentiate, a more coherent approach should be applied to ensure the road environment is self-explanatory and consistent.

## 2.9 Problem: Underground Parking Exits

Some underground car park exits have restricted visibility to the footpath due to retaining walls and/or building corners. This could lead to vehicle/pedestrian collisions as exiting drivers might not see the crossing pedestrians in time to react.





**Figure 4: Example of a restricted visibility from one of the underground car park exits.**

**Recommendation**

Adequate intervisibility between drivers exiting underground car parks and crossing pedestrians should be provided.

**2.10 Comment: Use of Excessive Radii on Junction Corners**

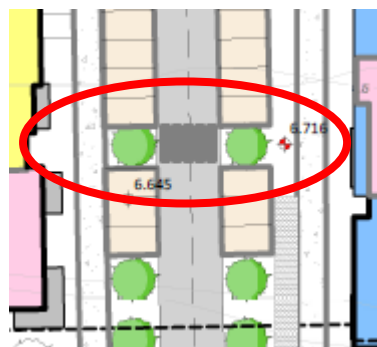
Corner radii used at junctions appear to be large. Reduced junction corner radii promotes a more traffic-calmed environment.

**2.11 Comment: Traffic Signs and Road Markings**

No details of traffic signs or road markings were available for this audit however it is recommended that with good design detail, the language of the street should allow for a light use of traffic signs and road markings for this scheme. Excessive use of and reliance on traffic signs and road markings will make the infrastructure appear more car-centric, less residential, send wrong messages to drivers and ultimately encourage speeding.

**2.12 Comment: Trees Indicated at Pedestrian Crossing**

The detail of the pedestrian crossing between Sectors 7 and 8 seems to be confused, as there are no footpaths leading to it and there are trees proposed in the footpath at either side of the crossing.



**Figure 5: The pedestrian crossing detail that seems to be confused**

## SECTION 3: AUDIT TEAM STATEMENT

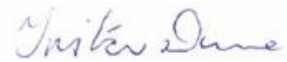
We certify that we have examined the supplied drawings and documents and the scheme on-site during daylight hours.

The examination and subsequent report was made with the sole purpose of identifying any features of the scheme that could be removed or modified in order to improve the safety of the proposals.


The problems identified have been noted in this report together with associated safety improvement suggestions, which we recommend should be studied for implementation.

No one on the Audit Team has been involved with the scheme design.

### Audit Team Leader

Name:	Tristan Dunne BE MEngSc CEng MIEI	Signed:  Date: 09/11/21
Organisation:	J.B. Barry & Partners	
Address:	Classon House, Dundrum Business Park, Dundrum Road, Dublin 14.	

### Audit Team Member

Name:	Filip Ondrusz MScEng CEng MIEI	Signed:  Date: 09/11/21
Organisation	J.B. Barry & Partners	
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# Appendix 1: Road Safety Audit Feedback Form

Scheme: GA2 Residential Development

Audit Stage: Stage 1 Road Safety Audit

Date Audit Completed: 9th November 2021

Paragraph No. in Report	To Be Completed by the Design Team			To Be Completed by the Audit Team
	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Designer's Response / Alternative measures (describe)	Designer's Response / Alternative Measures accepted by Auditors (yes/no)
2.1	Yes	Yes	Raised tables introduced.	
2.2	Yes	Yes	Raised tables introduced.	
2.3	Yes	Yes		
2.4	Yes	Yes		
2.5	No	No	Direct connection points to the Portmarnock to Baldoyle Greenway are not possible as the client is not in control of the lands necessary to provide the link. Links are provided to the public open space directly to the north of the proposed development. This public open space links directly to the Portmarnock to Baldoyle Greenway.	Yes
2.6	Yes	Yes		
2.7	Yes	Yes	Tree planting will be maximised as much as practicable along link roads.	
2.8	Yes	Yes	Design revised to show only one type of crossing.	
2.9	Yes	Yes		

Signed: Sean O'Brien Designer

Date 25/11/2021

Signed: Justin Dune Audit Team Leader

Date 25/11/21

Signed: Jan Kennedy Client  
Lisnare Homes LTD

Date 26/11/21