

# CS CONSULTING GROUP

HEAD OFFICE: 19-22 Dame Street, Dublin 2, D02 E267, Ireland

T | +353 | 5480863 | E | info@csconsulting.ie | www.csconsulting.ie

Strategic Housing Unit Sent By: Email

An Bord Pleanála Job Ref: R089

64 Marlborough St A-NB

Rotunda **Date:** 7-May-21

Dublin 1

RE: <u>Alterations to Shoreline GA01 Lands at Stapolin Growth Area 1, Baldoyle, Co. Dublin DMURS Statement of Consistency to An Bord Pleanála.</u>

Cronin & Sutton Consulting Engineers (CS Consulting), as part of a multi-disciplinary design team, have been commissioned by The Shoreline Partnership to develop a DMURS Statement of Consistency to accompany a planning application for a proposed mixed residential development and all associated ancillary accommodation at Baldoyle, Dublin 13.

### **Traffic & Transportation**

The proposed scheme is designed in compliance with the following:

- Design Manual for Urban Roads and Streets (2019)
- Fingal Development Plan 2017–2023
- Baldoyle-Stapolin Local Area Plan 2013–2019
- National Cycle Manual (2011)
- Greater Dublin Area Cycle Network Plan

#### **Internal Street Layout**

The internal road network of the proposed development comprises link roads along the north-south and east-west axes, allowing circulation into and through the development site, as well as a network of connecting local streets that serve the individual blocks within the development. The primary link road through the development is the continuation of Longfield Road, which shall extend northward

KP & Associates Consulting Engineers Ltd. T/A Cronin & Sutton Consulting
Company No. 505303 | Registered Office: 19-22 Dame Street, Dublin 2, Ireland
Directors: N. Barrett, K. Cronin, R. Fitzmaurice, M. McEntee, L. McNamee,
D. Rehill, O. Sullivan, C. Sutton-Smith, E. Sutton, P. Sutton
Associate Directors: C. Barry, C. Twomey | Associates: D. Byrne, G. Lindsay

### LONDON OFFICE:

Centralpoint, 45 Beech St, London, EC2Y 8AD,

T | +44 207 070 3660

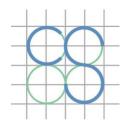
E | info@csconsultinguk.com

### LIMERICK OFFICE:

45 O'Connell Street, Limerick, V94 XE18, Ireland

T | +353 61 594 988 E | info@csconsulting.ie





through the site from its current termination at the site's southern boundary. This shall have a carriageway width of 7.0m, comprising one traffic lane in either direction, and shall be flanked to either side by a 2.6m-wide pedestrian footpath. Along the southern part of this Longfield Road extension, perpendicular on-street car parking spaces shall be arranged to either side of the road, between the carriageway and the footpath (see Figure 1). Limited on-street car parking shall also be provided along the northern section but shall take the form of recessed parallel parking bays.

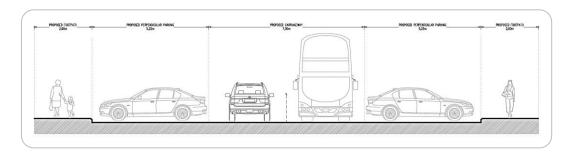


Figure 1 – Typical link road cross section (Longfield Road)

The second link road is the westward continuation of Red Arches Road, which shall be extended to meet Longfield Road. The third link road is that which extends westward from Longfield Road, along the northern side of Stapolin Square (immediately within the northern boundary of the development site) and continues along the western side of Stapolin Square. This provides the connection between Longfield Road and the proposed bus ramp up to the podium level of Clongriffin railway station.

All three link roads have been designed to permit the regular passage of buses, as illustrated in Figure 1. On-line bus stops are provided on both roads, in proximity to Stapolin Square and to the proposed bus ramp by Clongriffin railway station.

All other internal roads within the development are classed as local streets and primarily serve a local access function. These shall generally have a carriageway width of 5.5m, comprising one traffic lane in either direction, and shall also be flanked by 2.6m-wide footpaths. Along those sections of local streets on which dwellings are located, perpendicular on-street car parking spaces shall be arranged to either side of the road, between the carriageway and the footpath (see Figure 2).

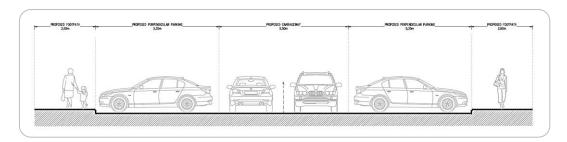
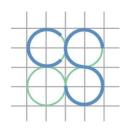


Figure 2 – Typical two-way local street cross section (Racecourse Grove)



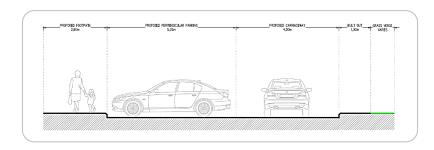


Figure 3 – Typical one-way local street cross section (Stapolin Avenue)

Two sections of local street along the eastern boundary of the development site shall be restricted to one-way vehicular traffic. As shown in Figure 3, these street sections shall have a reduced carriageway width of 4.2m at points, increasing to a minimum of 6.0m where required to facilitate manoeuvres into and out of perpendicular parking spaces.

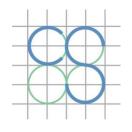
The provision of good permeability for pedestrians and cyclists, as well as efficient access to public transport, are all key objectives of the proposed site layout. The development layout ensures a high degree of pedestrian and cyclist permeability into and through the site. Pedestrian and cyclist access to the development shall be possible along the full length of the site's eastern and southern boundaries, as well as via the proposed bus ramp (and associated lift) to/from Clongriffin railway station at the site's western boundary. The development layout also allows for convenient future pedestrian and cyclist access to the lands north of the subject site, once these are developed.

Access to Clongriffin railway station for pedestrians and cyclists from the eastern side of the railway line is currently possible via lifts and stairs located within the subject site. As part of the proposed development, new lifts and stairs shall be provided at Stapolin Square, providing access to the railway station. The existing lifts and stairs shall be maintained in operation until such time as the proposed new lifts and stairs have been completed.

Raised pedestrian footpaths are provided along all internal roads within the development, and a pedestrian plaza shall be created at Stapolin Square.

The objectives of the evolving site layout design are:

- to ensure ease of access for emergency services and for refuse collection and servicing operations;
- to encourage walking and cycling;
- to create short walking routes to shops, public transport, etc.;
- to create a safe, secure, and pleasant environment for people, particularly vulnerable road users (VRUs) such as children.



# Road Alignments and Traffic Calming Measures

All internal roads within the development have been designed for a vehicular traffic speed of 30km/h. Kerb radii at internal junctions have been restricted to a maximum of 4.5m, in order to discourage high vehicle speeds, except where larger radii are required to facilitate bus movements (kerb radii of 6.0m, at the junction of Longfield Road with Red Arches Road only). At all internal road junctions, it has been ensured that forward visibility splays of at least 24m are achieved, in compliance with the Design Manual for Urban Roads and Streets (DMURS) requirements.

The presence of perpendicular and parallel on-street parking bays along significant portions of the internal road network shall have a natural traffic calming effect, as through traffic shall have to be alert to (and accommodate) parking manoeuvres into and out of these spaces. Kerb buildouts, which shall be provided at key points to prevent informal on-street parking, shall likewise perform a traffic calming function by forming a horizontal constraint to the carriageway.

**Niall Barrett** 

Director

Chartered Civil & Traffic Engineer

B.Eng (Hons), CEng, M.I.E.I, Cert Health & Safety, Cert RSA

for Cronin & Sutton Consulting