

# CS CONSULTING GROUP

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Planning Department Dublin City Council Civic Offices, Block 4, Ground Floor Wood Quay, Dublin D08 RF3F

Sent By: Post Job Ref: C216 A - GF Date: 13-Aug-24

# RE: Proposed residential development at Block 5 and Block 6, Clongriffin, Dublin 13

# DMURS Statement of Consistency

#### Introduction

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by the Land Development Agency (LDA) to prepare a DMURS Statement of Consistency for a proposed residential development at Block 5 and Block 6, Clongriffin, Dublin 13. The objective of this document is to give an overview of the proposed development's compliance with the Design Manual for Urban Roads and Streets (DMURS).

The following CS Consulting drawings, submitted with this planning application, should be referred to in conjunction with this document:

- CLN-CSC-XX-XX-DR-C-0102
- CLN-CSC-XX-XX-DR-C-0107/0108
- CLN-CSC-XX-XX-DR-C-0117/0118
- CLN-CSC-XX-XX-DR-C-0119/0120
- CLN-CSC-XX-XX-DR-C-0121/0122
- CLN-CSC-XX-XX-DR-C-0123/0124
- CLN-CSC-XX-XX-DR-C-0125/0126
- CLN-CSC-XX-XX-DR-C-0127/0128
- CLN-CSC-XX-XX-DR-C-0139/0140
- CLN-CSC-XX-XX-DR-C-0141/0142

- Overall Layout and Key Plan
- General Arrangement
- Proposed Road Levels and Pavement Works
- Proposed Kerbs Footways and Paved Areas
- Proposed Road Markings and Traffic Signs
- Typical Cross Sections
- Road Profiles
- Road Details
- Swept Path Analysis
- Quality Audit Response

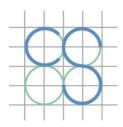
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KP & Associates Consulting Engineers Ltd. T/A Cronin & Sutton Consulting



### **Development Location**

The application site is located within zoned development lands to the north-west of Clongriffin railway station in Dublin 13. It is bounded to the north and west by recently completed residential developments, and to the east and south by undeveloped lands.

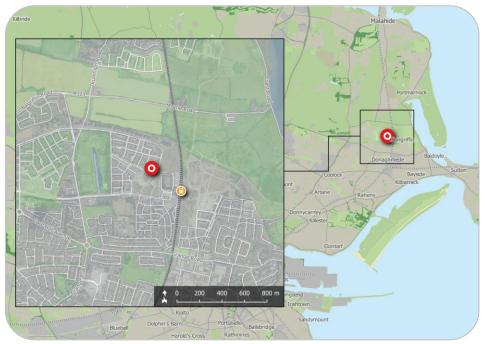
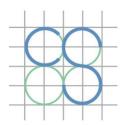


Figure 1 - Development site location (sources: EPA, OSi, OSM Contributors, Google)



Figure 2 - Development site extents and environs (sources: NTA, GoCar, OSi, OSM Contributors, Microsoft)



The site has a total area of approx. 2.2ha and is in the administrative jurisdiction of Dublin City Council (DCC), adjacent to the City Council's boundary with Fingal County Council. The location of the proposed development site is shown in **Figure 1**; the extents and context of the development site are shown in more detail in **Figure 2**.

## **Existing Site Condition**

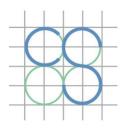
The subject development site itself is generally greenfield, although parts of it have been used for access and storage to facilitate construction on adjacent lands.

#### **Description of Proposed Development**

The proposed development will consist of the construction of two Blocks ranging in height between 3- to 7-storeys to provide 408 no. apartments (comprising 180 x 1 bed; 226 x 2 bed and 2 x 3 bed units) together with ancillary car-; bicycle and motorcycle parking provision. Ancillary communal amenity spaces are provided at podium level within the respective courtyards and at 4<sup>th</sup> floor roof terrace level.

At ground floor level provision is made for 1,209 sq.m Community / Arts and Cultural floorspace and a childcare facility of 413 sq.m (with an ancillary play area of 125 sq.m). Other facilities provided at ground floor level include refuse / bin stores; energy centre, plant rooms and integrated ESB substations and associated switch rooms. On-street loading bays are provided along Lake Street and Dargan Street.

Other works include the provision of road infrastructure and green infrastructure (in the form of a public open space / landscaped pocket park extending to 1,433 sq.m in area) together with street planting and public lighting throughout plus all associated engineering and site works (including an external multi-functional community / arts and cultural events space of 315 sq.m along Market Street and all underground services and utility connections) necessary to serve the proposed development.



### Previously Permitted Developments on Subject Site

The present application is for a standalone development, comprising 2no. apartment blocks only, and does not seek to amend or derive from any extant planning permission. It is however relevant to note that 2no. apartment blocks of very similar design (also referred to as Block 5 and Block 6) are currently permitted within the area subject to this application.



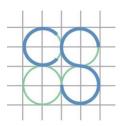
Figure 3 - Previously permitted developments within application boundary (sources: CCK Architects, OSM Contributors, Microsoft)

These permissions were granted on 13/12/2019 under separate but concurrent Strategic Housing Development (SHD) applications:

- Block 5 (138no. apartments) as part of the 500-unit SHD permitted under ABP ref. 305319, which also included blocks 4 and 14.
- Block 6 (270no. apartments) as part of the 1,030-unit SHD permitted under ABP ref. 305316, which also included blocks 8, 11, 17, 25, 26, 27, 28, and 29.

As permitted under ABP ref. 305319, Block 5 would comprise:

- 52no. 1-bedroom apartments.
- 83no. 2-bedroom apartments.
- 3no. 3-bedroom apartments.



- 4no. retail units with a combined GFA of 393m<sup>2</sup>.
- 42no. on-street car parking spaces on Park Street, Dargan Street, and Lake Street.
- 54no. internal (undercroft) car parking spaces, with vehicular access from Park Street to the west.
- 194no. secure long term bicycle parking spaces.
- 30no. publicly accessible short stay bicycle parking spaces.

As permitted under ABP ref. 305316, Block 6 would comprise:

- 123no. 1-bedroom apartments.
- 147no. 2-bedroom apartments.
- A crèche with internal GFA of 418m<sup>2</sup>, providing 59no. childcare spaces.
- 65no. on-street car parking spaces on Belltree Avenue, Lake Street, Dargan Street, and Park Street.
- 119no. internal (undercroft) car parking spaces, with vehicular access from Lake Street to the east.
- 550no. secure long term bicycle parking spaces.
- 22no. publicly accessible short stay bicycle parking spaces.

#### **Clongriffin Masterplan Road Network**

Development of the wider Clongriffin area to date has been carried out generally in accordance with a masterplan planning permission granted under DCC Reg. Ref. 0132/02 (An Bord Pleanála ref. PL29N.131058). This masterplan parent permission provided for a comprehensive network of internal roads for the masterplan area, with two principal link streets (Main Street and Marrsfield Avenue) that connect this network to the Hole in the Wall Road, to the west.

As shown in **Figure 4**, the majority of this Clongriffin road network has already been constructed, including streets on the northern, eastern, and western sides of Block 6 (Belltree Avenue, Lake Street, and Park Street). As part of the proposed development:

- Dargan Street will be constructed, connecting Park Street to Clongriffin Road and running between Block 5 and Block 6.
- Lake Street will be extended southward along the eastern side of Block 5, as far as its junction with Market Street.
- The initial section of Market Street will be constructed, extending from Park Street along the southern side of Block 5 as far as its junction with Lake Street.

Prior to construction of the proposed development, the remaining section of Park Street will also be completed, running along the western side of Block 5, as permitted under Reg. Ref. 0132/02. These works are to be carried by a third party under a condition of the land transfer by which the applicant acquired the development site.

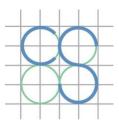
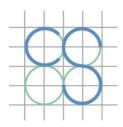




Figure 4 - Clongriffin masterplan road network (northern section) (sources: CCK Architects, OSM Contributors, Microsoft)

The existing Clongriffin internal road network comprises local streets with carriageway widths of between 5.0m and 6.0m. The majority of car parking is within dwelling curtilages, with some parallel on-street parking spaces. Extensive on-street parking is however provided along Marrsfield Avenue, Park Avenue, and Park Terrace. Raised footpaths are in place along all completed streets, with a minimum width of 2.0m generally. On-road cycle lanes are in place on Marrsfield Avenue only, terminating where this becomes Lake Street.



#### **Surrounding Streets**

As previously described, the proposed development includes the construction or extension of surrounding streets to enable access to the development via the existing Clongriffin road network. These street elements to be constructed include Dargan Street (located between Block 5 and Block 5), as well as sections of Lake Street and Market Street. On-street parking to serve the proposed development will be constructed as part of this expansion of the existing Clongriffin road network, and new loading bays will be provided on the new sections of Lake Street.

DMURS uses a hierarchy system to classify streets by movement function (see **Figure 6**), in the following categories:

- Arterial Streets
- Link Streets
- Local Streets

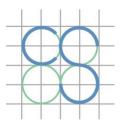
DMURS Description	Roads Act/ DN-GEO-03031	Traffic Management Guidelines	National Cycle Manual
Arterial	National	Primary Distributor Roads	Distributor
Link	Regional (see note 1)	District Distributor Local Collector (see Notes 1 and 2)	Local Collector
Local	Local	Access	Access

Note 1: Larger Regional/District Distributors may fall into the category of Arterial where they are the main links between major centres (i.e. towns) or have an orbital function.

Note 2: Local Distributors may fall into the category of *Local* street where they are relatively short in length and simply link a neighbourhood to the broader street network.

Figure 5 - DMURS terminology compared to other key publications (source: Design Manual for Urban Roads and Streets)

With the exception of Main Street and Marrsfield Avenue, which constitute link streets, the existing Clongriffin road network consists entirely of local streets, with carriageway widths of between 5.0m and 6.0m. The new sections of Dargan Street, Lake Street, and Market Street that are to be constructed as part of the proposed development shall have carriageway widths of 5.5m, as recommended by the Design Manual for Urban Roads and Streets (see **Figure 7**).



#### Figure 3.3: FUNCTION AND THE IMPORTANCE OF MOVEMENT

HIGHER



ARTERIAL STREETS



LINK STREETS



These are the major routes via which major centres/nodes are connected. They may also include orbital or cross metropolitan routes within cites and larger towns.



These provide the links to Arterial streets, or between Centres, Neighbourhoods, and/or Suburbs.



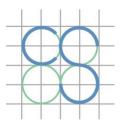


LOWER

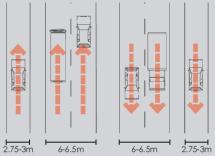


These are the streets that provide access within communities and to Arterial and Link streets.

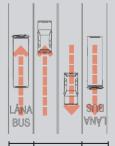
Figure 6 - DMURS street classification (source: Design Manual for Urban Roads and Streets)



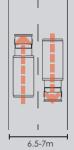
#### FIGURE 4.55: CARRIAGEWAY WIDTHS (note: Illustrations do not include cycle facilities)



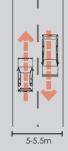
Carriageway widths for heavily-trafficked Arterial and Link streets in boulevard configuration. Main carriageway suitable for moderate design speeds. Includes access lanes with a lower design speed.



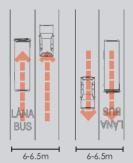
3-3.25m 5.5-6.5m 3-3.25m Standard lane/carriageway widths for multi lane Arterial and Link streets, including bus lanes. Range for low to moderate design speeds.



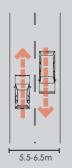
Carriageway width for Arterial and Link streets frequently used by larger vehicles.



Standard carriageway width for Local streets



Standard carriageway widths for multi lane *Arterial* and *Link* streets in boulevard configuration, including bus lanes.

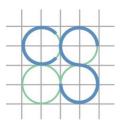


Standard carriageway widths for *Arterial* and *Link* streets. Range for low to moderate design speeds.



Carriageway width for Local streets with a shared surface carriageway.

Figure 7 – Carriageway widths (source: Design Manual for Urban Roads and Streets)



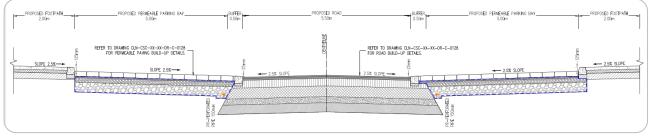


Figure 8 – Proposed Dargan Street cross-section (extract of drawing CLN-CSC-XX-XX-DR-C-0123)

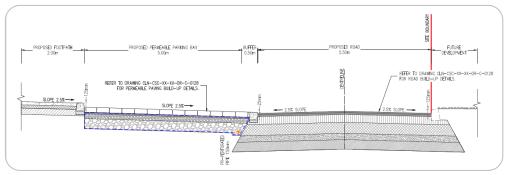


Figure 9 – Proposed Lake Street cross-section (extract of drawing CLN-CSC-XX-XX-DR-C-0124)

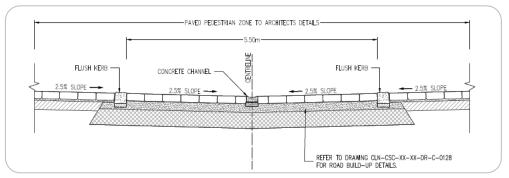
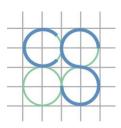


Figure 10 – Proposed Market Street cross-section (extract of drawing CLN-CSC-XX-XX-DR-C-0124)



#### **Vehicular Access**

Each of the proposed blocks has an internal (undercroft) car parking area. The Block 5 undercroft shall be accessed from Park Street, at the development's western boundary. That of Block 6 shall be accessed from Lake Street, at the development's eastern boundary. Each access has an effective width of 5.5m, allowing two-way vehicular traffic into and out of the development, and shall be access-controlled by means of a gate or barrier. Kerb radii at these accesses are restricted to 3.0m, which shall discourage high vehicle speeds on entrance to or exit from the development. Unobstructed sight distances in excess of 24m in either direction along Park Street and Lake Street are achieved for vehicles exiting the development, as measured from a set-back of 2.4m from the public road edge, in accordance with the requirements of the Design Manual for Urban Roads and Streets.

The development's access design therefore meets DMURS requirements with regard to:

- Junction kerb radii
- Sightlines

Refer to CS Consulting drawings **CLN-CSC-XX-XX-DR-C-0121** and **CLN-CSC-XX-XX-DR-C-0122** for details of the proposed development access arrangements.

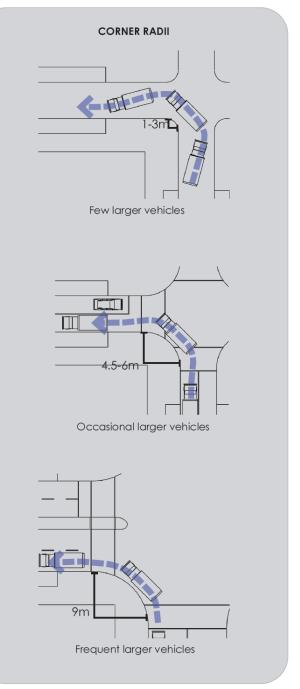
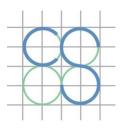
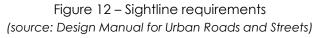


Figure 11 - DMURS corner radii guidance (source: Design Manual for Urban Roads and Streets)



Design Speed km/h)	SSD Standard (metres)	Design Speed (km/h)	d SSD Standard (metres)
0	7	10	8
.0	14	20	15
0	23	30	24
0	33	40	36
0	45	50	49
0	59	60	65



## Internal Layout

The undercroft car parking areas within the proposed Block 5 and Block 6 comprise circulatory aisles 6.0m in width, along which are arranged perpendicular car parking spaces. Marked pedestrian walkways are provided, giving defined routes between parking spaces and internal access doors. The development's internal car parking layout complies with the recommendations of the Design Manual for Urban Roads and Streets and the IStructE Car Park Design Guide.

## **On-Street Car Parking**

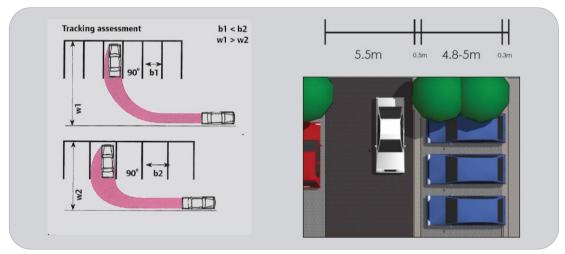
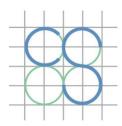


Figure 13 – Perpendicular parking arrangement guidance (source: Design Manual for Urban Roads and Streets)



The proposed development includes the provision of perpendicular car parking spaces on Belltree Avenue, Dargan Street, and Lake Street, as well as parallel spaces on Lake Street and Park Street. Where perpendicular car parking is in place on a street with a carriageway width less than 6.0m, the Design Manual for Urban Roads and Streets recommends that parking spaces be widened and/or a buffer provided between space and carriageway, to facilitate vehicle parking manoeuvres. As illustrated in **Figure 9** (proposed Lake Street cross-section), the proposed development follows this guidance by providing 5.0m-long perpendicular parking spaces, separated from the carriageway by a 0.5m buffer.

#### **Pedestrian and Cyclist Facilities**

Pedestrian access to the proposed Block 5 and Block 6 shall be directly from the surrounding streets (including those street elements to be completed as part of the development). Access to internal long term bicycle parking shall be via the main accesses to the undercroft parking areas. The development shall include a total of 858no. bicycle parking spaces, meeting the requirements of the Dublin City Development Plan 2022–2028.

Raised pedestrian footpaths with a minimum width of 2.0m shall be provided along all new street sections, in keeping with the design of the existing surrounding Clongriffin road network. The new section of Market Street that is to be provided as part of this development is configured as a pedestrian priority zone, further improving pedestrian and cyclist permeability along this axis.

#### **Independent Quality Audit**

A full independent Quality Audit of the proposed development's layout and access arrangements has been conducted by PMCE Consulting Engineers on behalf of the design team. This incorporates the following components:

- Access Audit
- Walking Audit
- Cycle Audit
- Stage 1/2 Road Safety Audit

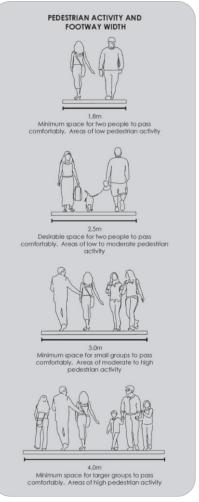
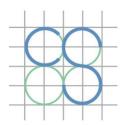


Figure 14 - Pedestrian activity and footpath widths (source: Design Manual for Urban Roads and Streets)



All observations made within the Stage 1/2 Road Safety Audit have been acknowledged by the design team and design changes made in response. Where these design response measures differ from those suggested by the audit, the alternative measures have been communicated to and accepted by the audit team. Refer to CS Consulting drawing nos. **CLN-CSC-XX-XX-DR-C-0141** and **CLN-CSC-XX-XX-DR-C-0142** for details. The independent Quality Audit report is appended to the accompanying CS Consulting *Traffic and Transport Assessment* report.

## Feedback Received from Planning Authority

Dublin City Council has reviewed the planning documentation submitted in respect of the current development proposals during the pre-application consultation phase of the LRD process and issued an LRD Opinion document on the 5<sup>th</sup> of July 2024. Matters raised in this Opinion that relate to the proposed development's road design and layout have been addressed as described in the accompanying CS Consulting *Traffic and Transport Assessment* report, following additional consultation with DCC's Transportation Planning Division.

Gordon Finn Civil Engineer BA, BAI (Hons), MAI (St), MIEI, Cert RSA

for Cronin & Sutton Consulting