COADY
ARCHITECTS

Architectural Design Statement

To accompany Part 8 Planning Application for

Dublin City Council

Proposed Development of 83 Social Housing Apartments at Collins Avenue, Whitehall, Dublin 9

April 2022 Job Ref: 2630

Table of Contents

Figure 1. View of Development on Collins Aveneue looking towards junction with Swords Road

1.0 Introduction and Executive Summary

1.1 Purpose of Report

This report has been prepared by Coady Architects to describe the architectural design of the proposed development, which has been developed in collaboration with the multi-disciplinary project team. The report is part of an application for planning permission by Dublin City Council, for a residential development of 83 apartments, at Collins Ave, Whitehall, Dublin 9 to Dublin City Council Planning Authority, under Part 8 of the Planning and Development Regulations 2001 (as amended).
This report addresses the 12 criteria of the Urban Design Manual 2009, companion document to the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas 2009.

1.2 Guidance Documents

The proposed scheme has been developed having regard to the following policy and guidance documents:

- *Dublin City Development Plan 2016-2022 (CDP)*
- *Quality Housing for Sustainable Communities 2007*
- *Urban Design Manual - A Best Practice Guide 2009*
- *Sustainable Residential Development in Urban areas (Cities, Towns & Villages) 2009 - Guidelines for Planning Authorities*
- *Sustainable Urban Housing - Design Standards for New Apartments December 2020, Guidelines for Planning Authorities.*
- *Design Manual for Urban Roads and Streets (DMURS, 2019)*
- *Urban Development and Building Height Guidelines for Planning Authorities 2018 (Building Height Guidelines 2018)*
- *Eastern and Midland Regional Assembly (EMRA) – Regional Spatial and Economic Strategy (RSES) (2019-2031)*
- *Universal Design Guidance for Houses in Ireland, (published by the Centre for Excellence in Universal Design)*

2.0 Site Context

2.1 Brief

The project brief is to deliver a social housing development of high-quality residential accommodation in the form of apartments across the site.

The site proposed for this development falls within DCC's 'Housing Area E. Housing List statistics collated in October 2019 indicate that Area E currently has 2,720 households with an identified social housing need. The total number of households with an identified social housing need is 4,781 when transfers are included. The brief mix provided by Dublin City Council (DCC) is based on this identified need:

- 35% 1 bed apartments
- 45% 2 bed apartments
- 15% 3 bed apartments

Space standards for the apartments are to be as set out in *the 'Sustainable Urban Housing - Design Standards for New Apartments 2020, Guidelines for Planning Authorities'*. 10% of units are to be designed to UD standards and to the recommendations outlined by the Centre for Excellence in Universal Design in their *'Universal Design Guidance for Houses in Ireland'*.

2.2 Site Location

The site is a brownfield site at Whitehall is located c. 3.6 km north Dublin City Centre at the junction of Collins Avenue (R103) and the Swords Road, an important artery linking Dublin City to Dublin Airport via the M50 making the site a gateway into the city and potential landmark site. The site is relatively flat and contains no trees or significant vegetation. 1950s-1960s two storey housing is typical of the surrounding area. To its north frontage a three-lane section of Collins Avenue comes to the junction with Swords Road. A pay and display car park is located opposite and a neighbourhood centre 120m further east. There is an existing vehicular entrance at Collins Avenue down from the junction.

A neighbourhood centre is located c. 120 east of the site. A range of community and public facilities are located within 1km, including the Holy Child Church, the Holy Child Boys National School and the Holy Child Girls National School, the Whitehall GAA pitches and the Rosmini Gaels GAA Club; the Highfield Hospital, Plunket College and the Homefarm Football Club.

There are two Dublin bus stops immediately adjacent to the site, one on Collins Avenue and one on the Swords Road. A Bus Connects route is planned on the Swords Road along the site's western boundary.

2.3 Development Site Area

The overall site provided by DCC for consideration by the Design Team as reduced by the planned Bus Connects route is **1.57ha.**

The full site is not required to accommodate the brief and the development site being submitted for planning approval is **1.07 ha**. The Eastern portion of the original site is put forward for consideration. The remaining Western portion is being retained by DCC for potential development in the future. Refer to Figure 2. below.

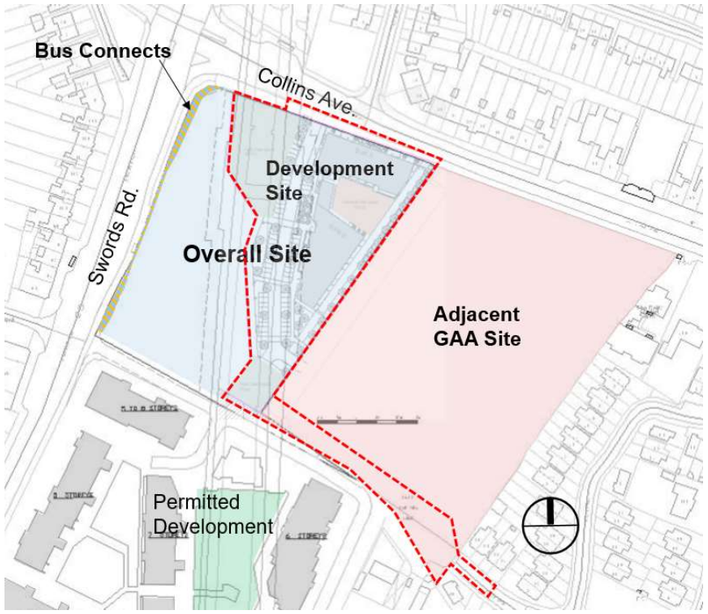


Figure 2. Development Site Area.

2.4 Planning Context

This site is covered by the provisions of the Dublin City Development Plan 2016-2022. Design Team Planning Consultants, MacCabe Durney Barnes, have produced a separate Planning Report which provides the planning background in detail. Outlined below are the planning requirements that have informed the development of the site strategies and design proposals.

Adjacent Lands - GAA lands to the east of the site are zoned residential but are currently in use as a GAA club house and pitches. These lands are in the ownership of DCC but currently leased to Whitehall Colmcille GAA Club. The lands have been

granted planning permission in September 2021 for a new skills wall, **ref 2536/21,** which indicates parking planned along the eastern boundary of the subject site.

The 2.73 Ha lands immediately to the South, at Hartfield Place is being developed by Eastwise Construction Ltd for private use and has been the subject of several planning applications. At the time of this application, planning permission has been granted for 374 private apartment units in seven 4-7 storey blocks over partial basement under planning **ref 3405/19.** The developer has also made a further application, planning **ref 3766/20**. This seeks to increase the height of a block perpendicular to Swords Road from 7 to 8 stories and increase the overall development by 18 units to 392 units.

A pre-part 8 has been developed for the lands to the north, opposite Collins Ave. and currently occupied by church car park. Early design development indicates a social housing development reaching 7 stories at the traffic junction and opposite our site.

Site Zoning - The site is zoned *'Z12 Institutional Lands (Future Development Potential)'* which objective is '*to ensure existing environmental amenities are protected in the predominantly residential future use of these lands'.*

Density: The density proposed by DCC as part of their original brief was 107 units per hectare.

Height: Whitehall is located in the Outer City where a max. height of 16m applies.

Public Open Space (POS) and Communal Open Space: 20% minimum requirement to be achieved in accordance with the Z12 zoning. Small play spaces for younger children and large areas for older children and teenagers will require to be considered in accordance with current planning authority guidelines. Communal and public open space should be clearly delineated.

Parking - maximum of 1.5 car parking spaces per unit is not to be exceeded. A lower ratio may be considered subject to justification.

Transportation and Access – A Bus Connect corridor is proposed along the western boundary. It would also include the upgrade of the junction located to the northwest of the site (Collins Avenue / Swords Road junction).

Dublin Port Tunnel – The Dublin Port Tunnel is located immediately under the site. For any development over the tunnel, assessment of the structural suitability and submitted applications is at present carried out by Transport Infrastructure Ireland (TII), acting on behalf of the Roads and Traffic Department of Dublin City Council. In accordance with MT22, a Development Assessment Report (DAR) is required to be drafted by a suitably qualified engineers and submitted to TII to carry out this assessment, prior to lodgement of the planning application.

RPS Group, consulting Engineers for the project are suitably qualified to carry out this DAR which they have prepared and submitted to the TII. The DAR demonstrates compliance with the Tunnel Specification documentation provided by TII. Development is not prohibited over the tunnel but is subject to the structural limitations as determined by the DAR which was developed through liaising with the TII. These limitations, as established by the DAR, are effectively related to two zones defined by the TII documentation. Zone 1 is the area within 6m of the outer edges of the tunnel. Zone 2 is the area from 6 to 18m of the outer edges. (see figure 3. below)

Community / Creche – A Community and Social Infrastructure audit has been prepared by McCabe Durney Barnes, planning consultants, and accompanies this application. It reviews capacity in the area.

Dual Aspect- a minimum of 50% dual aspect required

Environmental - The North Bull Island Special Protection Area (SPA) and Special Area of Conservation (SAC) (SPA Site Code 004006 and SAC 000206) is located c.5.1km east of the site and 2.7km of the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024). From the preliminary ecological desktop studies carried out this site has been assessed as carrying minimal risk of requiring a Stage 2 NIS

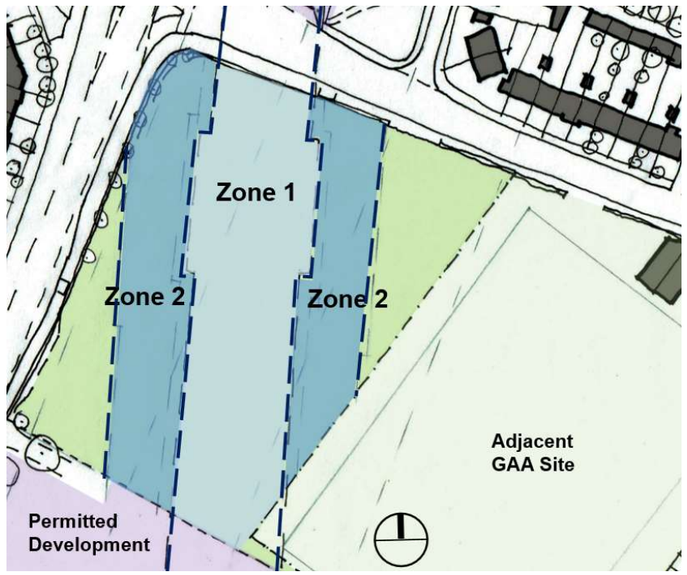


Figure 3. Tunnel Zones 1 and 2.

2.5 Site Description and Characteristic

This report discusses various site areas within the ownership of DCC as applicant. The terminology used to differentiate between them and their definition are as follows:

- The 'development site' is the site to which this Part 8 application applies and is 1.07 ha.
- The 'overall site' is the total site provided by DCC for consideration by the Design Team. It is 1.64 ha. and includes the area of the site to be transferred to TII in the future to facilitate a planned Bus Connects route.
- The 'adjacent GAA site' is the site to the east in ownership of DCC but currently leased to the GAA and currently occupied by a GAA club house and pitches. It is 2.03 ha.

The development proposal subject of this Part 8 has been designed so as not to prejudice the development potential of the adjoining adjacent site currently leased to the GAA. Any development on that site, will be subject to full design and relevant statutory procedures. The contextual analysis provided in this report is for information purposes to illustrate that the adjoining site can be developed.

The 'overall site' is brownfield with an area and red line boundary of **1.64 ha**. The site sits directly on the Southeast corner of the prominent junction of Collins Avenue and Swords Road. The Bus Connects' proposed corridor No. 2 Swords to Dublin City Centre envisages its preferred route along the Swords Road, immediately adjacent to the site on its western boundary and impacts on the developable site area. To its north frontage is a three-lane section of Collins Avenue as it comes to the junction with Swords Road. A pay and display car park is located opposite. Typical 1950s-1960s two storey housing can be found north and west of the site across the carriageway. The lands to the east are those leased to Whitehall Colmcille GAA Club

The Dublin Port Tunnel runs diagonally through the centre of the site, from its North-west to South-east corners.

The site is well serviced with gas, water, foul, surface water and ESB services located to the north and west of the site on Collins Avenue and Swords Road. IW connection passes through the adjacent GAA lands.

2.6 Site Constraints

Boundaries- A concrete block wall bounds the site on the north and west and a wire-mesh security fence defines the eastern boundary with the GAA. There is currently no physical boundary separating the site from the lands located to the south but foundations for a circa 2m high block and pier wall is under construction at the time of this application

Access- The existing entrance location is off Collins Ave. at the North-eastern corner. There is scope to bring access more centrally into the site but requires relocation of an existing bus stop.

Access along Swords Road is not available largely due to the restrictions imposed by the planned bus connects route here. Access to the permitted development to the south comes off the Swords Road just beyond this route. This runs along the southern boundary of our site but is to remain within private ownership after the development is complete and potential access off of this new road is therefore not available.

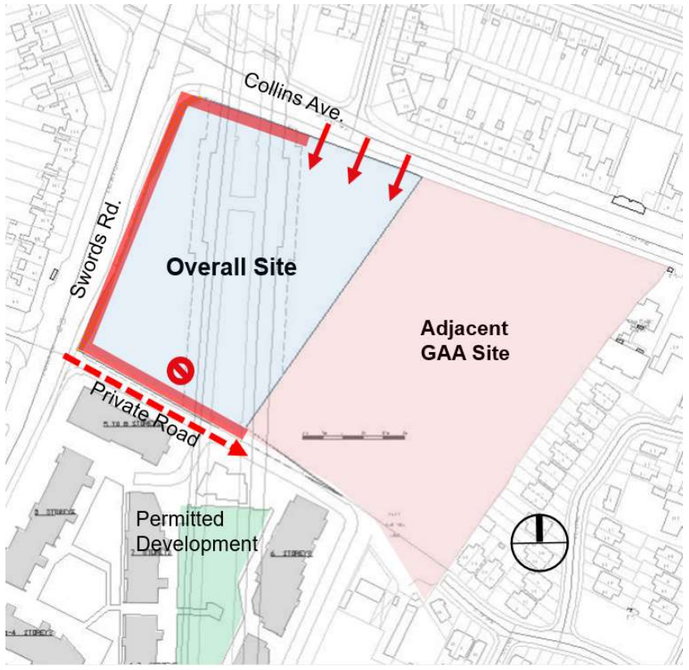


Figure 4. Access Road to Permitted Development in private ownership.

Contours- The site is relatively flat and contains no trees or significant vegetation. The footpath along Collins Avenue runs along the block boundary wall that separates it from the site, is at a slight gradient. Following culmination of the port tunnel works the ground within the site would appear to have been re-graded, creating a varying level difference between the site and the footpath for some of its length. The site is approximately 400-500mm higher at the N-E corner and becomes level again with the rising footpath somewhere halfway along this site boundary. However this is largely dumped earth.

Restrictions Imposed by the Port Tunnel- The DAR identifies that development within zone 1 cannot support buildings over 1-2 storeys but that zone 2 can support development up to 6 stories.

Whitehall : Site Analysis

- Port Tunnel Zones- Developable Area and engagement with TII
- Bus Connects
- Site Entrance locations- min. distance from junction- Impact on existing Bus Stop
- Gateway/ Landmark Site
- Relationship with lands leased to GAA
- Framework Plan Intentions and Adj. Planning Permission
- Appropriate scale & heights

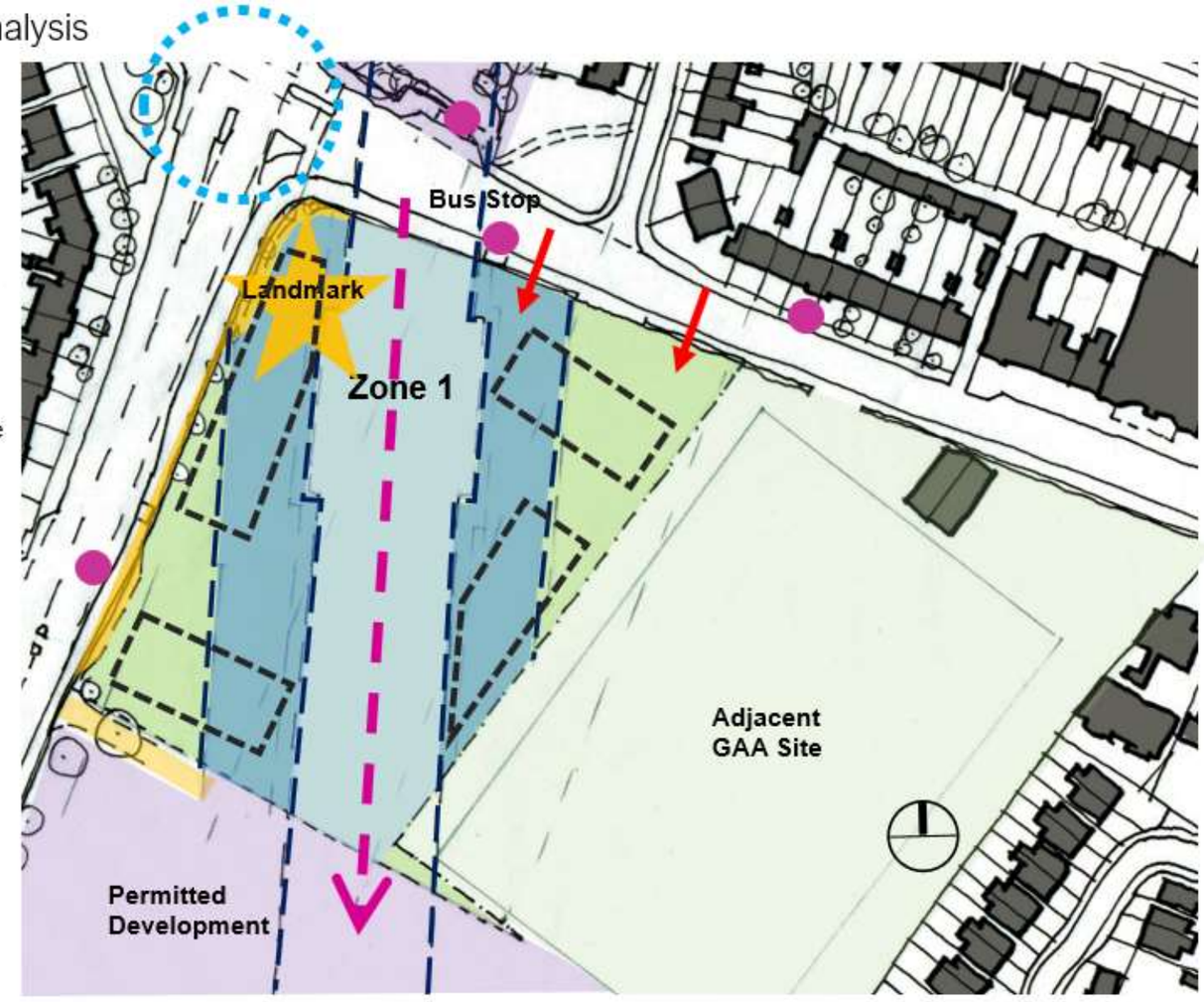


Figure 5. Early Site analysis indicating Landmark and Tunnel Zones

2.7 Site Context Analysis

At the outset an analysis of the area immediately local to the site was carried out to establish, in particular pedestrian, connections and desire lines to inform the overall site strategy and also to identify where urban edges should be established to consolidate existing streets and roads, and to inform the creation of new ones. It also helped consideration of how any development might support existing public spaces and identify the opportunity for new ones.

The analysis incudes the permitted development to the south of 7-8 storey private apartments as well as the established, largely 2 storey, housing and the 2-3 storey commercial elements in the area. Figures 6 & 7 illustrate this existing environment and Figures 8 & 9 show the key urban moves proposed to support existing edges and space as well as to provide the development opportunity to create proper new streets, active POS, new urban development and connections that tie back into the existing fabric.

Figure 6. Site & Context Analysis - Connections & Destinations

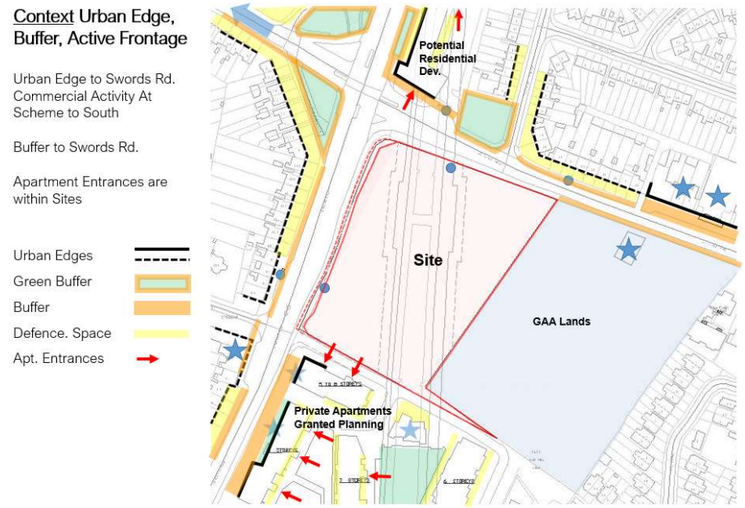


Figure 7. Context Analysis - Urban Edge, Buffer & Active Frontage

Stars graphically indicate the principal destinations, including commercial units proposed within the permitted development to the south, Bus stops are also key pedestrian destinations and it is noted that the DCU campus approximately 0.5 miles west along the continuation of Collins Avenue is also significant as a destination.

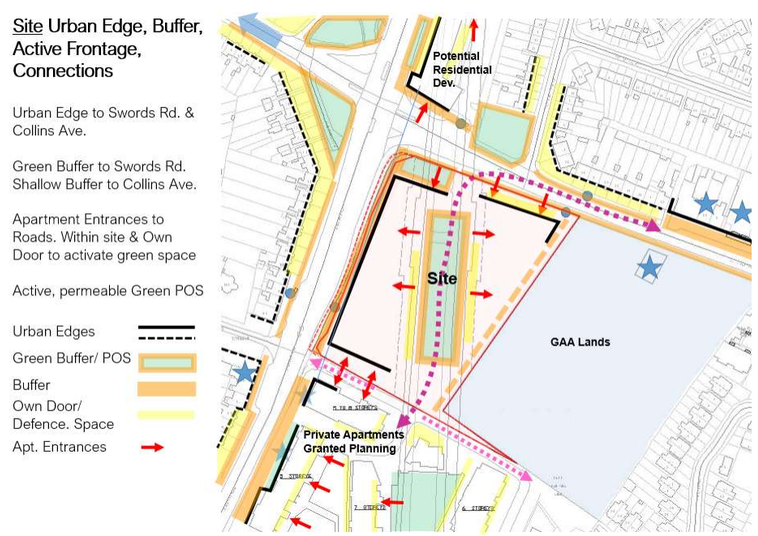


Figure 8. Site Analysis - Urban Edge, Buffer, Active Frontage & Connections

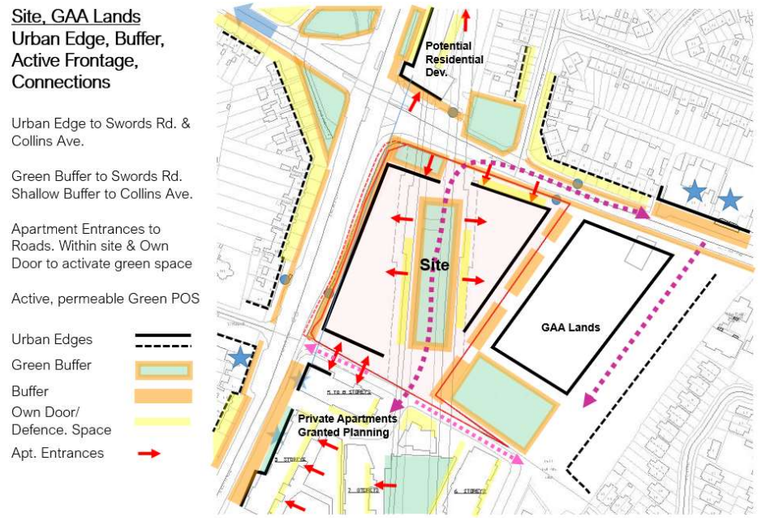


Figure 9. Site & GAA Lands Analysis

The principal conclusions relating to the overall site are:

- POS over the Port tunnel route allows connection through the site, and the adjacent permitted development, to local amenities and destinations.
- Urban edges to be established along Collins Avenue and Swords Road with associated apartment entrances and suitable defensible space.
- The new POS is off the existing arterial routes. Development along it should promote activity and provide passive surveillance. Own-door access and Block entrances here naturally creates the footfall and overlooking required to achieve this. In conjunction with this approach a new street can bring further activity and surveillance to the POS.
- New commercial and retail opportunity is greater at Swords Road as a significant frontage along an already established local pedestrian route between existing destinations, including bus stops.
- Potential urban space, or ‘plaza’, at the N-W corner of the site onto the busy junction. This may also be associated with a landmark and more significant commercial or retail outlets.
- There is an opportunity for POS to the south of the GAA lands and also to enhance a connection across the south these lands into the established residential area further east.
- The GAA lands are zoned Z12 institutional which may allow residential subject to provision of 20% POS.

3.0 Development Strategy

3.1 Vision

The vision for the development is to provide an attractive and desirable apartment development and community that has its own character but is also sympathetic to the local built environment. It is to be well connected to the surrounding area and is to accommodate potential future linkages.

The development is also to provide apartment dwellings that are sustainable, affordable, well designed, low energy, low maintenance and set within a high quality landscaped public realm and public amenity space.

3.2 Key Design Strategies & Principles

As part of the LA consultations process options were tabled that explored spatial strategies and the relationship of entrance, frontage, Public Open Space, roads and blocks. At an early stage design strategies and principles were established and taken through to the proposed development.

While the brief does not require development of the overall site provided for consideration by DCC, the development should form part of a strategy for the site and should support and facilitate any future development on it. An overall approach to the site has been considered out of which the development site, subject of this application, has been identified.

Site Masterplan Strategy: An overall site strategy has been considered that brings forward the conclusion of the Site Context Analysis, discussed in section 2.7 above, as well as consideration of planning objectives, site constraints, and delivery of the brief outlined above. From this the following guiding principles emerged:

- **Landmark** - The 'overall site' is a gateway site into Dublin city and any proposal should consider opportunities to deliver a landmark building onto the junction either now or in the future.
- **Urban Edge**- The development should form an urban edge to the roads with appropriate set back onto the public realm. Where proposals include development along the eastern boundary consideration should be given to the potential future development of the 'adjacent GAA site' lands as well appropriate treatment and set back from the car parking on these lands as indicated on the current planning application **ref 2536/21** for this site.
- **Tunnel Restrictions –** on building location and residual areas left over for development
- **Linear Public Open Space –** appropriate, due to development restriction**,** for the 20% minimum POS requirement to follow line of the tunnel below. It also connects in with POS of permitted development to the south.
- **Public Realm**– Treatment of the urban edges and edges to the POS are important to the creation of a positive public realm. Maximising own door apartments and entrances to apartment blocks here creates footfall, encourage activity and provides passive surveillance to this realm.
- **Communal Space –** Good Communal Space should be provided for each block and directly associated with it. It should be sheltered and private but well overlooked within the development.
- **Massing and Daylight –** the massing of blocks considers maximising the opportunity for dual-aspect, good daylighting and also light penetration into the central POS and into Communal Open space.
- **Height, External Space, Parking & Density –** Early sectional studies established that 5 stories is the maximum achievable for Social Housing within the 16.0m planning height restriction while also meeting current internal space, daylight, and other quality standards.

From this, options for the development to either side of the tunnel restrictions was tested to establish how parking, communal space, POS and density can all be achieved across the overall site. It is noted that the planning objective for 1.5 car parking spaces per unit is a maximum standard. Given its location on high capacity bus routes, the future bus connects route, guidance in the *Design Standards for New Apartments* and a national policy to reduce car use, ratios as low as 0.5 has been considered for the overall site. Refer also to the Mobility Management Plan prepared by RPS.

- **Site Access and Internal Street –** access is only available off Collins Avenue down from the junction. Only a single roadway is therefore available to serve the entire site and should be developed as a 'street'.
- **GAA Lands –** Set back along the eastern boundary to the GAA lands to take into account potential future residential development.

Following meetings with the Local Authority and the DHLGH an overall site strategy was arrived at. Figure 10 below illustrates this agreed strategy which incorporates the guiding principles outlined above.

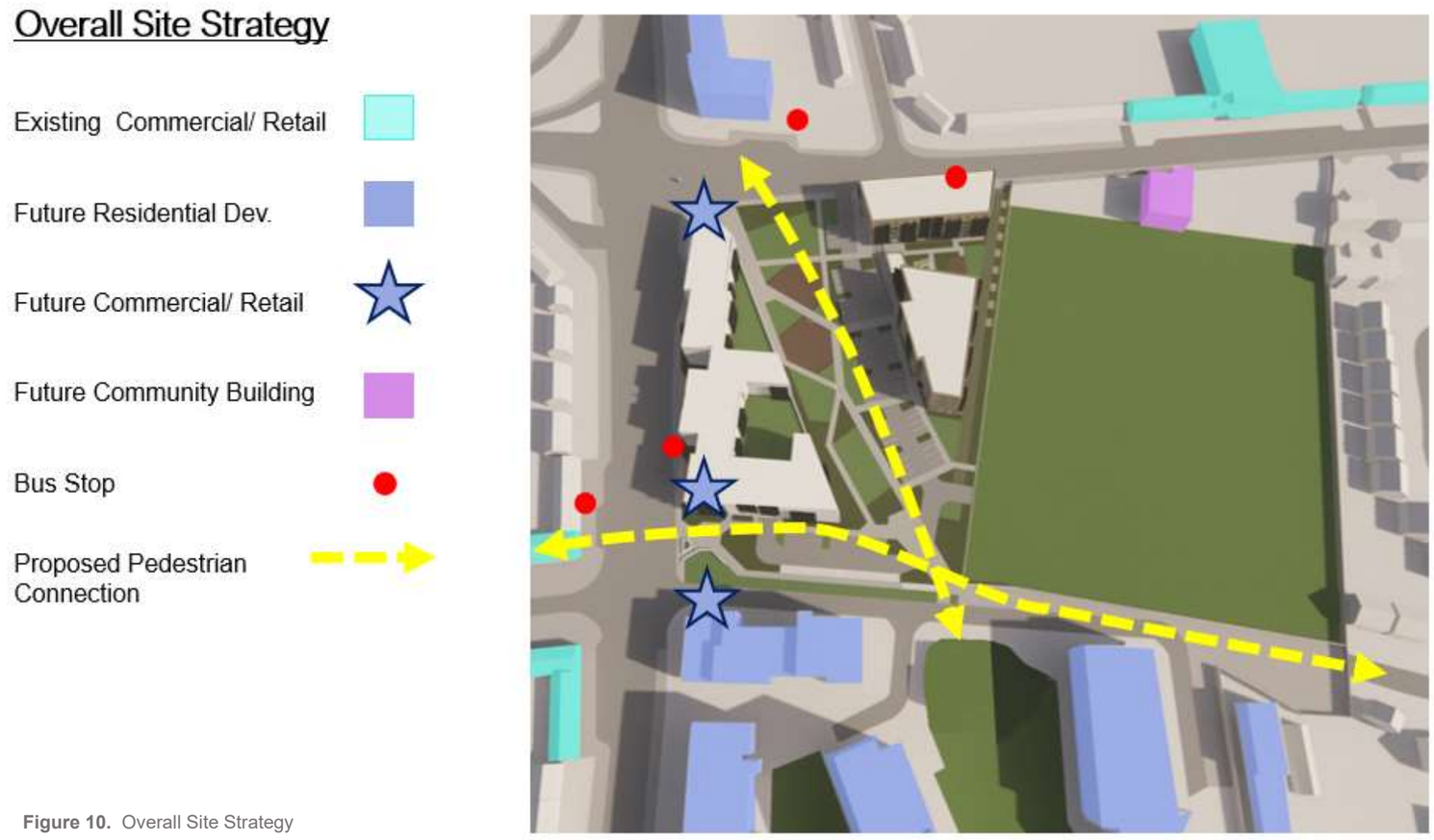


Figure 10. Overall Site Strategy

Development Site:

From the overall Masterplan site strategy, the development area to the east of the tunnel restrictions was identified as the most appropriate for the delivery of the Social Housing brief for a number of important reasons:

- **Site Size -** The size of the site is much better suited to deliver the brief numbers and brief density. The western site is larger and can accommodate more than the brief numbers.
- **Creation of a 'Street' -** Development to the East is directly off the internal access road. Development here can therefore provide an appropriate public realm and opportunity to make this road a 'street' rather than just an access road within an open space.
- **Integration with POS -** The route of this road is restricted by the point of access, down from the junction, and the desire not to cross and therefore divide the linear POS. Due to its relative remove from the western development, the internal road can be more easily integrated with the POS by delivering the Eastern development first.

Principles Guiding the Development Site:

Having identified the most appropriate area for development, the design strategies for the development site follow those of the Overall Site Strategy with the following relating specifically to the Development Site:

- **Collins Avenue**- Collins Avenue is the principal frontage. The development should encourage footfall and activity along it. It is considered that own door access and apartment block entrances is therefore appropriate to be provided here. The level of building set back off the footpath will have to consider how Part M compliant access can be achieved as it is currently lower than the site for a significant length.
- **GAA Lands –** Car parking is indicated on the GAA land along the eastern boundary as part of a planning application, ref **2536/21.** Screen is to be considered. Set back is also a requirement to allow future development of the GAA lands zoned Z12 residential. 7.5 - 8m from the building line here allows for scaffolding and buildability of minimum 1.5m deep balconies along this edge. It also allows for maintenance.
- **Site Access and Access for Future Development** – the internal road layout will have to serve both the development proposals and also any potential future development to the West on Swords Road. In particular the layout and alignment should allow for its future continuation onto the western part of the site while not dissecting the intended linear park envisaged for the overall site.
- **Internal 'Street'** – The internal road and parking off it to be developed as a residential 'street' with a strong connection to the residential development. This includes proximity to the apartments, direct overlooking of car park spaces, provision of trees or planting, and consideration given to possible traffic calming measures.
- **Defensible Space** – having established own door apartments and entrances to apartment blocks off Collins Avenue and the internal street the creation of defensible space as a buffer between the public realm and apartments is important
- **POS** – the POS delivered as part of the development site should be designed to facilitate its incorporation into the wider strategy for the linear public park.
- **Connectivity –** The development should support the pedestrian connections identified as part of the overall site strategy. Specifically connection to the POS space forming part of the permitted development to the south and potential for connection into the GAA lands to the east.
- **Masterplan Site -** is 1.57 ha as indicated by blue line in figure 11 below.

Figure 11. Site Masteplan Principles

3.3 Developed Proposal

Following agreement on the development site, the proposal developed from the overall site strategy, the the key design strategies and principles described in section 3.2 above, and the planning requirements outlined in section 2.4. The apartment development is split into two blocks around a central communal space. For convenience the block to the north, on Collins Ave., is here referred to as **Block A** and the block to the south is referred to as **Block B**.

Planning Application Site- The extent of PPP Co. works is indicated by the redline boundary of **1.07 ha** and is the extent being applied for planning permission. It includes works to the existing foot path on the Collins Ave. and works through the adjacent GAA lands associated with connection into IW.

Unit Number & Brief Mix - The presented design layout proposes to deliver 83 units on this site. A full breakdown of unit types, and planning statistics is included in the schedule provided in section 3.4 below.
DCC brief requires that 10% of units be designed to universal design (UD) standards to accommodate persons with a disability. This has been accommodated in the proposals and specifically to the standards set out by the Centre for Excellence in Universal Design in their *'Universal Design Guidance for Houses in Ireland'* as well as the *'National Disability Authority's Universal Design Standards'*.

Density- The development achieves **95.0 uph** based on a net site area of **0.874ha** that excludes the works to existing footpath and works to deliver the IW connection.

Street, Parking and Footpaths – The proposals are in line with the requirements of DMURS. Raised tables with pedestrian priority at crossings to the POS are proposed and have been introduced along the internal street as a passive traffic calming measure. It is intended that these crossings match in material to the footpaths and stand out from the tarmac of the road.
All parking has been provided on-street and located so as to be overlooked by the residents. It is divided into smaller groupings separated by tree planting bays for ease of recognition of individual parking spaces. Permeable paving is used as a part of the SUDs strategy but also to differentiate the parking areas from the road material and add to the street quality and sense of pedestrian priority.
The street is aligned such that it can be extended in the future to serve any future development to the west without impacting on the Overall site POS intentions. A hammer-head is provided for turning of fire tender, emergency and refuse vehicles.

Parking Numbers- A parking ratio of 0.58 is provide by 48 no. spaces. This is in line with *Design Standards for New Apartments* where it outlines the default policy for higher density apartment developments well served by public transport is for car parking provision to be minimised, substantially reduced or wholly eliminated in certain circumstances. Refer also to Mobility Management Plan that provides a detailed rationale for the car parking ratio. 3no. wheelchair parking bays are provided proximate to the UD units and main entrance of Block B. The bays are designed in full compliance with TGD Part M and the number of bays is also in compliance with TGD Part M requirement to provide 5% of the total number of parking spaces. 4no. Motorbike parking space are also provided. 2no. within the public realm for visitors and 2no. secure spaces within the communal open space for residents. This is in excess of DCC CDP requirement for 4% parking spaces as motorbike.

Cycles & Mobility Scooters – For visitor 42 no. cycle parking is provided as Sheffield style stands in the public realm, generally located close to entrances, meeting the requirement for 1 per every 2 units as set out in the *Design Standards for New Apartments.*
For residents a total of 136 no. cycle storage spaces are provided, meeting the requirement for a general minimum standard of 1 per bedroom. The development provides 132 bedrooms. **60** no. cycle spaces are provided within a dedicated enclosed bike store located between, and privately accessed through, the two apartment blocks and accessible off the Communal open space. 6 no. spaces for mobility scooters, or cargo bikes, is also located here.

The balance of cycle spaces for residents are provided as a number of external bike shelters within the Communal Open space, along the eastern boundary.
These bicycle spaces are provided as groups of Sheffield style stands within fully covered shelters and will be accessible to residents from each stair core. The shelters themselves will be fully secure and are over-looked by apartments while the Communal area itself is a secure area that is accessible to the residents only. Gates into this area will be locked at all times with key and/ or FOB access given only to residence and maintenance staff

Bins – Dedicated bin stores are provided at the ground floor of each block accessed from the off the communal open space

POS & Communal Space Provision –
The total public open space provision on the site is 2,037m2 or 23% of the net developable area. This is in excess of that required to meet the 20% as set by the *Dublin City Development Plan 2016-2022*. For calculation purposes only the POS is split into two areas, as the short incidental open space connecting them is less than 10m wide. In practice, the very close relationship of the two spaces and the incidental space connecting them are enjoyed and used as a single amenity and therefore as a single POS.
543m2 of communal open space is provided which is in excess of the 522m2 required. The communal space is directly associated with the apartment block at ground floor and is sheltered, private and well overlooked.

Trees – There are no trees of significance on the site

Figure 12. Google Map Montage of Proposed Development and Permitted Development to the South

Figure 13. Proposed Site Plan

Services– The site is generally well served. To accommodate the proposed wastewater connection an IW network extension will be required to accommodate the proposed Development. A new public sewer will be required from the southeast corner of the site, progressing along the southern boundary of Whitehall GAA grounds onto High Park Road.

ESB sub-stations are required for each block and are located to ensure minimum 3m distance from any window.

A separate plant room is also provided for each block. As Block A is split between two cores, a service route within the continuous first floor balcony soffit overlooking the communal space has been considered to connect between the two from a single plant room. Additional plant is also on the roof.

Building Height – As noted in section 3.2 above, early sectional studies established 5 stories to be the maximum achievable within the 16.0m planning height restriction while also meeting quality standards for Social Housing.

Storey heights have been established to provide good natural daylight, and also to comply with the apartment design guidelines. Floor to ceiling heights for ground floor apartments are a minimum of 2.7m and are 2.6m at upper floors.

Safe access to roof mounted plant and for maintenance of green roofs and potential PV provision is required. To keep the parapet as low as possible guarding at the roof edges is raked back out of the eye-line from the street. The achievable parapet line is 16.400 meters from the FFL at the entrance and high point along Collins Avenue. The FFL here is +42.550 and the parapet height is at +58.950. Lowering building FFL levels and site level adjustment to reduce the overall building heights further is significantly limited by the tunnel and tunnel launch pit being relatively close to the existing ground surface. Refer also to RPS DAR.

Daylight – A daylight study has been carried out which demonstrates compliance of all apartments with BRE guideline levels for Average Daylight Factor (ADF).

Composition of the Apartment Blocks – The 83 apartments are split in two 5 story blocks on either side of a central communal courtyard. This communal open space is provided at ground level as is cycle storage, bins, ESB sub-stations, and plant. All of these facilities are directly accessed from the secure and private cores.

A community room is also provided at ground floor in the western corner of Block A at the entrance to the site to be accessible not only to the residents but also the wider community and any future development of the wider site. It is located at a prominent corner at the front of the site to be highly visible and identifiable. This location is also at the fulcrum of the two blocks and therefore also equally accessible for all residents from the main stair cores.

To reduce service runs plant spaces are provided separately for each block, as is bin storage. All ground floor units onto streets are provided as own door units to maximise the number of entrance doors and therefore active street frontage.

Block A is North and South facing. It has been arranged such that all apartments facing North onto Collins Avenue are dual aspect. As a result, the cores in this

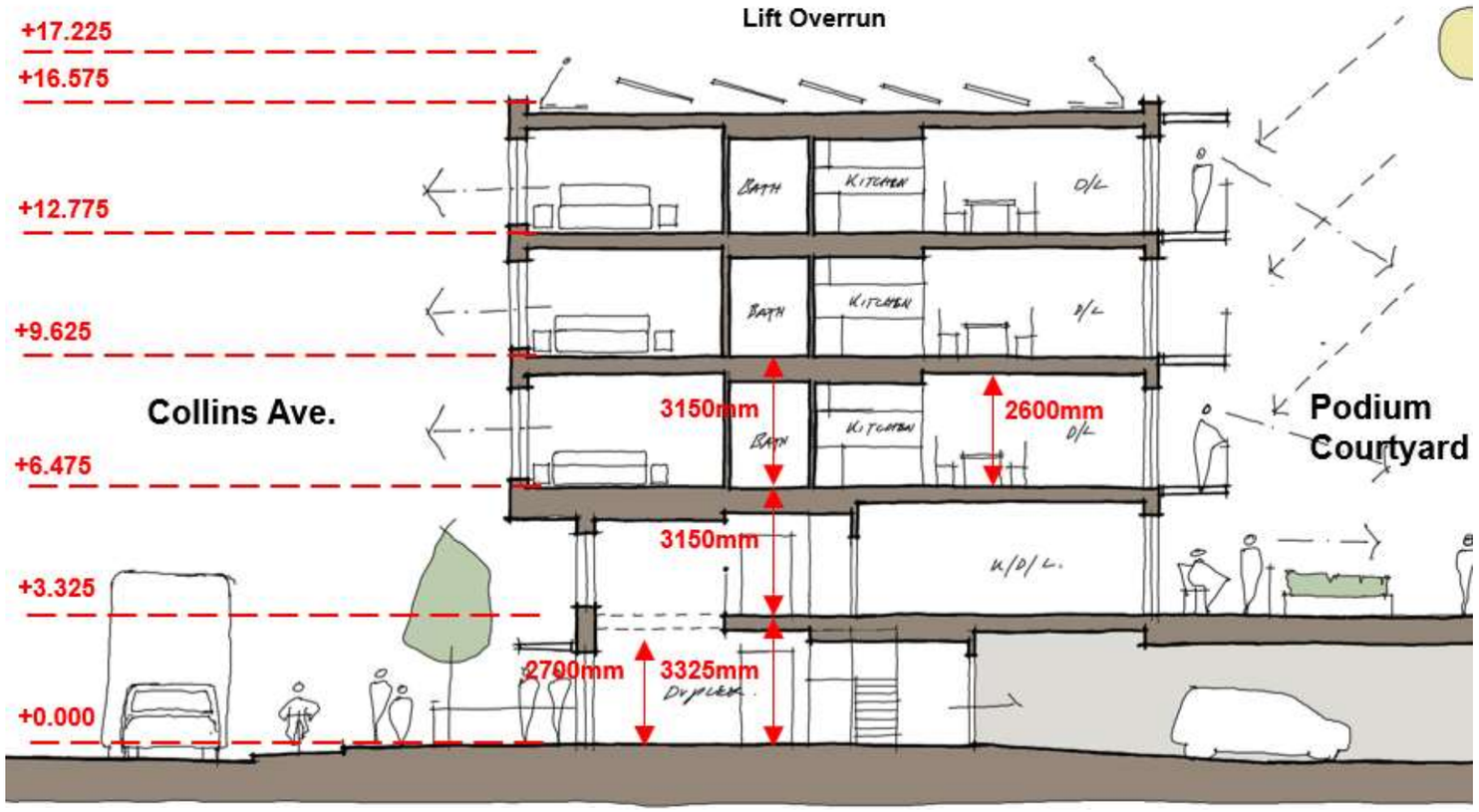


Figure 14. Early study of Typical Sections forming basis of heights

block are necessarily separate and serve 4 apartments each along a short corridor. This arrangement allows tight planning of units around an efficient core and maximises the number of dual-aspect units that can be achieved. At the upper levels a small number of 1 BR apartments are single aspect to the south, overlooking the communal space. There are no single aspect North facing units.

Block B has primarily West and East facing elevations onto the POS and GAA lands respectively. Due to the Port Tunnel restrictions and shape of the site, some block geometry here is triangular. The apartments are arranged along a central corridor connecting the main central access stair and lift core with a second stair core for fire escape. Along his corridor natural ventilation and daylight is provided through glazing at the north end and from borrowed light at the south stair core. Through ventilation can be achieved by passive vent through the southern stair well to south and use of windows to North and West. The straight corridor provides clear site lines to discourage anti-social behaviour. Additionally, generous glazing is provided at both stair cores to provide good visibility.
In block B, dual aspect is provided for the larger apartments at the corners of this triangular block with single aspect 1 BR units to the east. Access to the stair cores are provided from the west to signal entrance off the internal street and also encourage footfall through the POS. Due to the geometry and location of the launch pit cap of the Port tunnel construction, a portion of the west elevation of this block sets back. The central units here therefore effectively step forward providing further opportunity for dual aspect. The overall development achieves 56.6% dual aspect. All apartments are provided with a balcony to comply with the requirement for private open space, except at ground where this is provided in the form of terraces. On Collins Avenue these terraces are secured from the public foot path behind a railing on low plinth. Within the communal space terrace curtilages are softer and defined by low planting. Balconies are typically projecting except on Collins Avenue where they are recessed. The layouts are repetitive on each floor, allowing for stacking of primary structure.

Fire & DAC Review - An accessibility review has been carried out for site levels and audit apartment blocks for compliance with TGD Part M. The Fire Safety Consultant have carried out a review of apartment block for compliance with TGD Part B and their comments incorporated into the layout designs.
The common areas are designed to be non-sprinklered and have taken into account minimum escape distances, provision of smoke shafts within and space allowance for dry risers. Stair widths have been sized to comply with the requirements of both TGD Part B and M. The block heights are below that requiring dedicated firefighting lifts. There are no issues with perimeter access for fire tenders. All apartments are planned with to visitable toilets, level thresholds and minimum width of apartment entrances in compliance with TGD Part B. Gated access to the North-East corner of the site into the Communal Open Space will be locked and access available only for fire tender, emergency vehicle and maintenance.

Figure 15. Prposed Ground Floor Plan

Landscape Strategies - the position of the internal road, car parking and POS has been considered with the Landscape Consultant. The landscape design, discussed in Section 4.0 below, has been developed along the following design intentions:

- Plaza space with feature paving, specimen tree planting and bench seating.
- Future intentions for green edge along Swords Road.
- Development of footpath and pedestrian connectivity through the site.
- Development of Home Zones along the internal road
- Development of POS, play space and grass kick-about.
- Development of planting strip to eastern boundary to provide screening from future GAA parking.
- Development of maintenance strips around buildings.
- Tree planting in POS and within car parking areas.
- Detailed curtilage design
- Incorporation of SuDS, such as planted swales, into principal POS.
- Provide biodiversity and pollinator planting.
- 85 to 100 sqm of play area for toddlers and children aged up to 6 as required for scheme greater than 25 units. This will be enclosed by a low painted railing with a self closing gate.

Boundaries – A 1.1m high curtilage boundary is proposed along Collins Avenue comprising galvanised and powder coated mild steel railing on a low brick plinth with granite capping along this prominent avenue. Paths to stair cores will be open and the private duplex curtilages gated. The main access off Collins Avenue will be open. The curtilage boundary to the ground floor apartments on to the internal street is proposed to match Collins Avenue with the addition of low hedging on the curtilage side while those within the communal space are to be low hedging only supported by post and wire.

The green strip along the eastern boundary is proposed for maintenance and to provide screening. It will have a 2.5m wide load-bearing surface to allow high reach cherry picker access and be planted with trees fully along the length of the existing 2m high security mesh fence to the GAA lands. This existing mesh fence is to be closed off with a new 1.8m high painted MS gated railings at its northern end, on Collins Avenue, and its southern end with a 2m high gated security mesh fence to match existing. Both of these gates are to be locked to the public and residents and for maintenance and emergency vehicle access only.

A 2m high weld-mesh security fence is proposed to define the eastern edges of the site fully along the POS here. Along the northern edge of the POS, on Collins Avenue it is proposed to continue the language of the 1.1m high curtilage boundary of steel railing on low brick plinth with the addition of 1.5m high brick piers defining 2m wide entry points into the POS.

It is noted that the boundaries to the western half of the overall site do not form part of this application and will remain as 2m high concrete block wall.

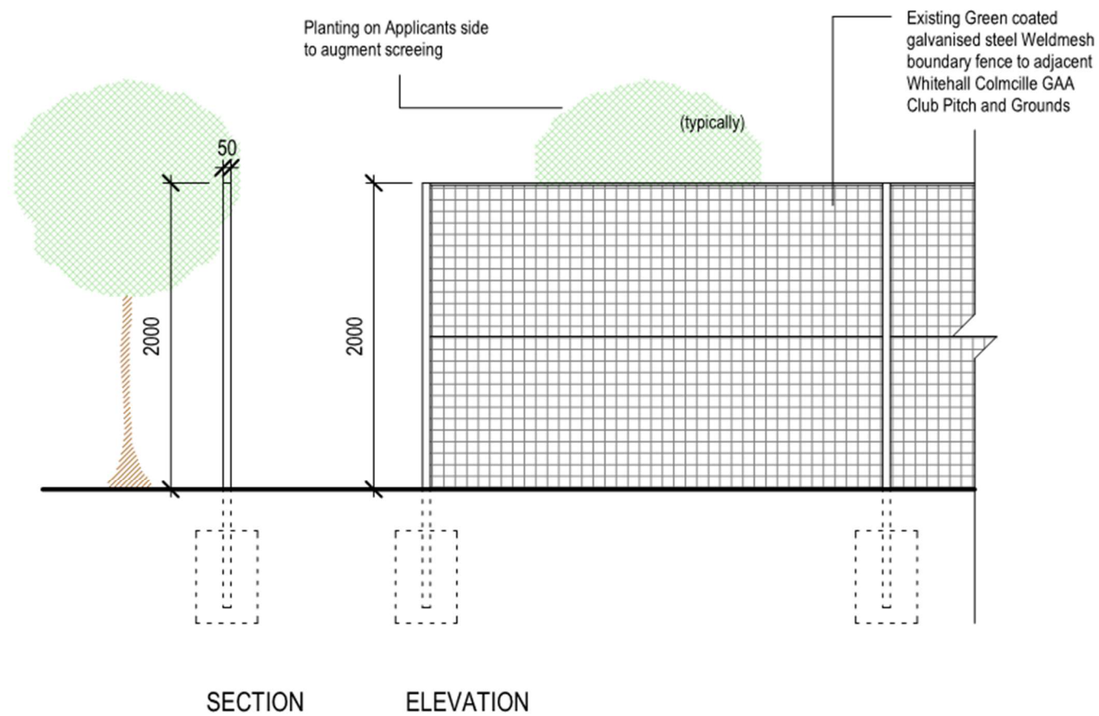


Figure 16. Existing 2m high green mesh security fence on Eastern Boundary to be planted with trees to augment screening

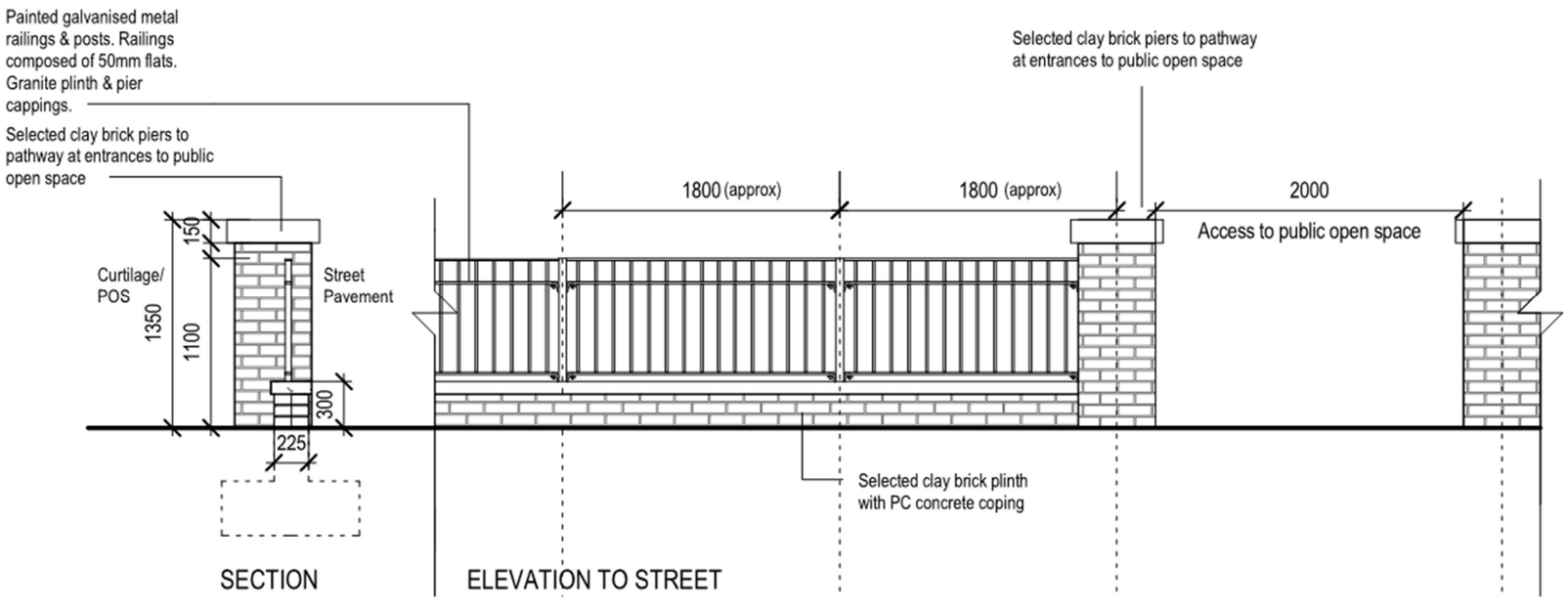


Figure 17. 1.1m low painted metal railings on low brick plinth and 1.5m high brick piers to POS and on-street curtilages

3.4. Proposal Accommodation and Standards

Schedule of Accommodation			
Apartments	**No.**	**Area (m2)**	**Comments**
Apartment A1 - 1B/2P	28	49.81m2	Sgl S or E aspect, Gr & Upr Fl. unit
Apartment A2 - 1B/2P	3	53.67m2	Sgl.W Aspect, Upr. Fl. unit
Apartment A3 - 1B/2P	6	54.57m2	Sgl.W Aspect, Upr. Fl. unit
Apartment A4 - 1B/2P UD	4	68.61m2	Dual N&S Aspect, Gr. Fl. unit
Apartment B1 - 2B/4P	2	80.39m2	Dual N&E Aspect, Gr & Upr Fl. unit
Apartment B2 - 2B/4P	4	79.68m2	Dual S&E Aspect, Upr Fl. unit
Apartment B3 - 2B/4P	3	82.05m2	Dual N&E Aspect, Upr Fl. unit
Apartment B4 - 2B/4P	1	77.00m2	Dual S&W Aspect, Upr Fl. unit
Apartment B5 - 2B/4P	3	80.69m2	Dual S&W Aspect, Upr Fl. unit
Apartment B6- 2B/4P	3	75.78m2	Dual N&W Aspect, Upr Fl. unit
Apartment B7 - 2B/3P UD	1	62.00m2	Dual N&W Aspect, Upr Fl. unit
Apartment B8 - 2B/4P	5	74.78m2	Dual N&E Aspect, Gr & Upper Fl. unit
Apartment B9 - 2B/4P	5	81.35m2	Triple S, E&W Aspect, Gr & Upr Fl. unit
Apartment C1 - 3B/6P	8	103.0m2	Dual N&S Aspect, Upr. Fl. unit
Apartment C2 - 3B/5P UD	4	96.46m2	Dual N&W Aspect, Upr. Fl. unit
Total apartments	**80**		
Duplex Apartments	**No.**	**Area (m2)**	**Comments**
Duplex D1 - 2B/3P	1	94.46m2	Sgl.W Aspect, 2 storey Gr & Upr. Fl. unit
Duplex D2 - 2B/3P	2	89.89m2	Sgl.W Aspect, 2 storey Gr & Upr. Fl. unit
Total duplex apartments	**3**		
Total Units	**83**		
Other planning statistics			
Planning Application Site		**1.07 ha**	
***Developable* Net Site Area** *(for purpose of Density & POS calculation)*		**0.874 ha**	
Density		95uph	
POS *(refer to section 7.4 for calculation method)*		2,037m2 or 23%	
Communal Open Space		543m2	
Plot Ratio		0.92	
Dual Aspect		56.6%	
Part M Disabled Parking		3 no. spaces *(5% of parking)*	
Total Parking provision		48 no. spaces *(0.58 ratio)*	

Brief Summary			
Unit	**Brief %**	**Proposed %**	**Unit No. s**
1 Bedroom	35%	49%	41
2 Bedroom	45%	36%	30
3 Bedroom	15%	15%	12
TOTAL	95%	100%	**83**

Figure 18. Principal Elevations. East onto GAA Lands, North on to Collins Ave., and West onto POS

4.0 Landscape Design

4.1 Public & Communal Open Spaces

The proposed development will include two areas of open space, a communal courtyard and a public open space to the west. Each area is designed for universal accessibility, habitat creation and both informal passive and active recreation.

Public Open Space

The public open space to the west will provide an appropriate new landscape setting for future residents. Due to the constraints of the port tunnel, proposed residential blocks have been positioned adjacent allowing for a south-facing public open space to emerge. The space will have a legible network of footpaths creating connectivity with the wider area and will utilize a hierarchy of surface materials to aid wayfinding. It has also strategically been designed to merge seamlessly into a potential future phase development.

Within the proposed landscape, and with consideration to the future development, the space to the northwest will offer both passive and active amenity. The northern edge will be buffered with native tree planting and a generous depth of lower shrub planting. Bands of wildflower meadow seeding will edge mown open grass areas for seasonal interest, habitat value and informal play opportunity. Public bicycle parking will also be provided in areas. A location for public art is located to the northwest edge acting as a creative wayfinding/focal point from the Collins Avenue/Swords Road junction looking into and from within the proposed site. Further provision for public art will be provided for in phase 2 insuring a connectivity throughout any future development. While the large grass area to the north will provide scope for informal ball games, a designated 275m2 play space is also provided. This will be finished in a wetpour play safety surfacing. Both spaces are edged by bench seating to allow for spectator and resting opportunities.

The centre and to the south of site will include provision for vehicular and pedestrian access. To minimise the impact of the access road numerous paved crossing points are indicated to prioritise pedestrian use and to calm traffic. The road will also have a coordinated and consistent rhythm of street tree planting, lighting columns and services. Carparking surfacing will be a permeable block paver and will be encompassed with hardy shrub and groundcover planting to minimise its visual impact. The central carparking sits adjacent to a bioswale which will assist the overall site SuDS drainage strategy. This will be fully planted with appropriate wet tolerant species to encourage an additional ecology type and enhance general biodiversity within the site. An additional bioswale is also located further to the south, at the lowest corner of site.

Figure 19. Proposed Landscape Plan

Communal Courtyard and Eastern Boundary

The communal courtyard measures at approximately 22m x 30m and provides for both informal passive and active recreation. A minimum of 2m depth of buffer shrub and tree planting is shown to the edges ensuring privacy screening into ground floor units. To the west a bench seating space is included with a raised central planter acting as an informal seating edge. A designated 108m2 play space for toddlers and younger children adjoins a grass lawn space for spill out play to the east. The eastern boundary consists of a reinforced grass surfacing to allow access to the covered bicycle parking and access for general maintenance. Access is controlled and a native hedgerow and tree planting mix will establish a green interface and boundary with the adjacent GAA grounds. Edges of the reinforced grass will be seeded with wildflower to promote self-seeding pollinators.

To ensure that Communal Courtyard is safe and secure for residents' access to it will be from the stair cores and the gated access next to the bike store only. The gated access, off the public realm, will be key or FOB access for residence and maintenance staff only. It is note that there are also two gates at the N-E and the S-E of the scheme that lead into Communal Courtyard. These will be locked off to both the general public and residence and are intended for fire tender, emergency vehicle and maintenance access only.

4.2 Planting Strategy

The general planting strategy throughout the scheme is for significant structure tree planting with 2 metre clear stems to provide a leafy canopy layer, softening the proposed buildings and a base layer of shrub planting to create low level seasonal interest and colour softening the hard surfaced areas and car parking. Eye level between the two planting types is kept clear to maintain sight lines throughout the scheme.

Open space structure trees

Predominantly native and naturalised tree species are to be planted within the public open space to increase opportunities for native wildlife. These will ultimately be large scale trees to designate a parkland character.

Street trees

Street tree planting will consist of species with fastigiate or neat forms suitable to the scale of the streetscape and those which will thrive in a streetscape environment. Street tree planting is located to avoid impacts with street lighting. Street trees will be planted into a minimum of 1.2m3 topsoil (or to the requirements of the local authority parks department, whichever is greater), with the use of urban tree soils and topsoil loaded rootcells to increase rooting areas outside the main tree pit area as necessary

Figure 20. Courtyard, public open space and designated play area precedents

Figure 21. Street tree and pollinator friendly planting. Eye level between planting types is kept clear to maintain sight lines

5.0 Urban Design

5.1 Description

This chapter describes the proposal under each of the twelve criteria listed in the Urban Design Manual - A Best Practice Guide 2009, to demonstrate the urban design of the proposed development.

5.2 Context

01 Context - How does the development respond to its surroundings?

Urban Context

The stretch of Collins Avenue between Grace Park Road and Swords Road was built around the early 1950's. This established the current Whitehall area of largely 2-storey rendered semi-detached housing and a 2-3 storey, brick, neighbourhood centre that included the now is dis-used 'Grand' Cinema built in 1954.

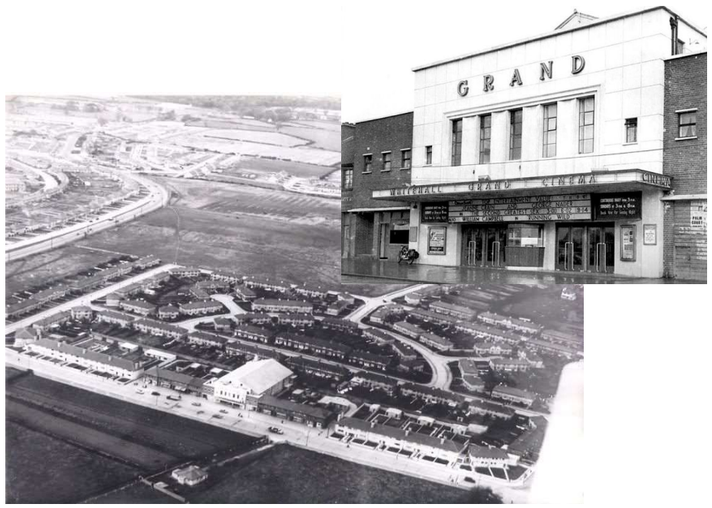


Figure 22. Newly built Whitehall and the 'Grand' Cinema in the 1950's

Since that time significant infrastructure changes have had an impacted on the area. The Swords Road was developed and widened as part of N1 motorway towards Dublin Airport around 1985. It was at that time that the crossroads at Whitehall became the significant junction that it is today with Collins Avenue opening up from a two-lane road along the neighbourhood centre to 6 lanes along the development site where it meets Swords Road.

The Port Tunnel was completed in 2006 leaving an approximately 55-meter wide strip of land cutting diagonally across the site that has limited capacity to build higher than a single story, but which naturally lends itself to development as a public space or linear park with suitably scaled buildings looking on to it.

Now, recent plans to extend Bus Connects is part of this continuation to improve, but also increase and widen, the roads infrastructure. Development of building in the area meanwhile has been relatively limited and therefore the scale of buildings has not yet caught up with the scale of infrastructure. This is now just beginning to change with, for example, the Hartfield development, to the south of the site, proposed to deliver 392 Apartment units over 4 – 8 stories.

The lands immediately to the east, currently leased to the GAA, are zoned residential. Currently the development site is enclosed by an unsightly 2-meter-high painted block wall.

The proposed new development responds and adds to its context in the following key ways:

- Introduces height and frontage onto Collin Avenue at the point where it significantly widens to 6 lanes.
- Demolishes a complete length of painted block wall along Collin Avenue and replaces it with more attractive 1.2 high rail on brick plinth defining the curtilage of Block A and the edge of a POS.
- It anticipates potentially 5 story residential development on the GAA lands by setting back from it along the eastern boundary and presenting a mannered elevation to it.
- Develops a significant new POS, in the form of a linear park, as being the most appropriate usage of the restricted zone over the Dublin Port Tunnel.

Material Context

The development can be considered to forms part of a larger block to the south of Collins Avenue taking in the lands of; the GAA club, the housing development of High Park and the Beech Lawn Nursing home both accessed off Grace Park Avenue, and the new permitted Hartfield development accessed off Swords Road. All the buildings within this block are entirely brick of different hue except the High Park housing which is partially red brick. Housing on the opposite side of Swords Road are a mixture of red brick and render.

Other buildings of significance to the area include The Holy Child RC Church and the Dublin City Mortuary which are both traditional red brick. There are also instances of buff brick currently in the area, particularly at Beech Lawn Nursing home.

The new building takes its cue from this by adopting brick externally. The red multi-brick proposed is similar to that in the area but includes elements of buff to tie in more broadly into the area. This colour also distinguishes it from the grey/ brown proposed for the private apartment development to the south.

Figure 23. Development forms part of a larger block

5.3 Connections

02 Connections - How well connected is the new neighbourhood?

The development proposes a new internal street coming off Collins Avenue and along the edge, but not traversing, the new POS, designed to provide vehicular access to the proposed development but also to the development of the western part of the overall site in the future. The alignment of the road to the side of the POS promotes pedestrian connection through the new linear park to the established neighbourhood centre and provides potential for connection to other commercial areas and the permitted apartment development to the south of the site. There is also opportunity for connections into any future residential development on the GAA lands.

The site is on significant routes into Dublin city centre, the airport and to local DART and railway stations serving wider Dublin and the country. As part of the development the bus stop on the site side will re-located slightly west towards the junction in line with that proposed for a future Bus connects route on Collins Avenue. A new bus shelter will be provided as part of this work.

Continuity of the proposed development's POS with that of the permitted SHD scheme POS, to the south, is accommodated by bringing the principal footpath alignment to a raised table crossing and POS access within the SHD scheme. Vehicular access to any future development to the west has also been accommodated by locating the attenuation tank outside of the potential future road alignment, thereby ensuring that any future vehicle access can be provided within the overall DCC site without encroaching on any adjacent site.

5.4 Inclusivity

03 Inclusivity - How easily can people use and access the development?

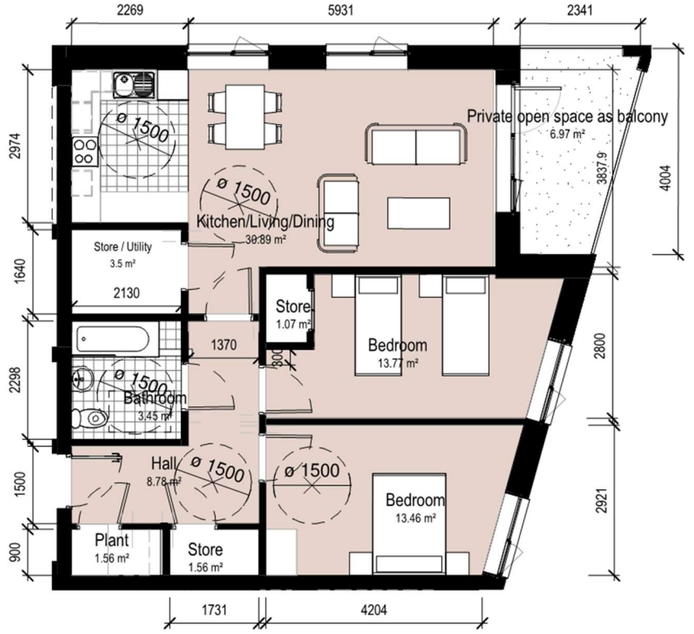
The brief includes that a minimum of 10% of the 83no. apartments are to be designed to Universal Design standards. 11 no. (13%) UD units are provided. To cater for various family units a mix of apartment types are provided - 4no. 1 bed, 3 no. 2 bed and 4 no. 3 bed is proposed. The 1 bed UD are provided at ground floor and a part M compliant lift and UD common circulation areas ensures access to all facilities is available form upper floor units.

The UD apartments have been designed to provide for a broad spectrum of particular needs. This includes increased space standards within living spaces, a potential connection between the main bedroom and primary bathroom, and larger room sizes throughout. It is proposed that some units are provided with as wet-rooms with showers and some with baths.

All apartments are designed to be compliant with Part M of the Building Regulations and feature level access with flush thresholds to front entrances and rear patio doors. All have visitable bathrooms. The overall site layout has been developed in line with Urban Design Manual and 'Universal Design Guidelines for Homes in Ireland'. Footpath gradients are gently sloped at no greater than 1:21, and the proposed paving surfaces comprise concrete, paviours, and tarmacadam.

Public spaces are proposed that allows for flexibility in recreation activity, for social interaction and active play as well as spaces that are quieter, calming, accessible and inclusive for all ages and abilities. The principal POS has a legible network of footpaths with a hierarchy of surface materials to aid wayfinding and raised tables are provided with pedestrian priority at all major crossing points into the public open spaces.

Collins Avenue falls across the frontage of Block A. FFLs here step with the footpath to avoid ramping towards entrances thereby providing an easy, level approach. Due to the proximity to the ground of the Port Tunnel structure and launch pit, Block B FFL levels have had to remain high relative to block A. The communal space between them has been carefully considered to ensure level changes between the two blocks can be delivered Part M compliant with a minimum of ramping and ensure access to amenities and facilities for all users.



7 APT - 2 Bedroom Apartment Type B3 Floor Plan
1 : 100

Figure 24. UD Apartment

5.5 Variety

04 Variety – How does the development promote a good mix of activities?

A good mix of tenure types are proposed within the development, ranging from 1bed to 3bed apartments, some of which are to UD standards and including duplexes. This will help to develop a mixed community, with the anticipation that larger apartments will be occupied by families.

A 47m2 Community Unit is provided for the residents at ground floor, including a lobbied accessible WC. It is also has level access and independently accessed from the entrance to the site off Collins Avenue. This is in line with the recommendations of the *Design Standards for New Apartment,* to provide community facilities particularly for larger apartment schemes.

The range of spaces within the primary public open space and the communal space contribute to the character and amenity of the development. The POS will be a central feature for the community supporting a variety of activities –exercise, walking, cycling and kick about and also a playground for younger children and associated seating. The amenity within the central communal space differs from that in the POS providing bench seating, a raised central planter acting as informal seating and play space for toddlers and adjoins a grass lawn strip useable by younger children.

The internal road has been designed as a street with own door access off it promoting footfall and activity along it. The division of parking into bays with trees planted between and the use of raised tables to connect into the POS enhances the quality and safety of the street and footpaths to further encourage their use for a variety of activities.

5.6 Efficiency and Density

05 Efficiency – How does the development make appropriate use of resources, including land?

The site is a brown field site that has been left derelict since the completion of the Port Tunnel in 2006 and is currently excellently placed and served for efficient development. It is well serviced with gas, water, foul, surface water and ESB services located to the north and west of the site on Collins Avenue and Swords Road and has excellent public transport links and access to local amenities. A neighbourhood centre is located c. 120 east of the site on Collins Avenue and a range of community and public facilities, including schools, colleges and sports facilities are located within 1km. DCU college is also circa 1.1 km to the west along Collin's Avenue. Its location in the 'Outer City' zones allows development of up to 16 meters.

The proposal achieves a density on the development site of 95uph. The development site however provides the infrastructure to develop the wider site and therefore provides the potential to achieve higher densities for the overall site.

Figure 25. View within Courtyard

Apartments are split between two blocks that are tightly planned around a communal space. The blocks are at a slight angle to one another due to the site geometry and are generally at least the 22m apart traditionally considered to provide adequate separation between directly opposing windows. At its narrowest point the communal space, and distance between the blocks, reduces to 19m. In order to avoid a blank portion on the elevation at this end on the northern Block B, and to maintain passive surveillance into the communal space here, 8no. windows limited to the living rooms of 4no. upper floor apartments are introduced. These are additional to that required to meet daylight factors and can be closed over by residents without compromising daylight. While less than 22m away from opposing living room windows, they are at an angle and therefore not directly opposing the windows opposite in Block B, and they do not look across to more private bedroom spaces. On balance it is considered that the introduction of these windows provides added benefit to the scheme. The communal space is closed off to the west by the single storey bicycle store,

sheltering it from the prevailing westerly winds and providing privacy from the internal street and car parking. It is open to the GAA pitches to the east but screened from them by the planting of new trees along the existing 2m high green wire-mesh boundary fence. The central POS makes best use of the area over the tunnel which is otherwise has very limited development potential. The space is well overlooked by the proposed blocks, is well connected and creates a new attractive edge to Collins Avenue and is fully open to the South. Both the POS and the communal space are designed to provide amenity (refer to section 5.4 above) and biodiversity within the landscaping as well as providing swales contributing to the SUDS strategy. Green roofs are also proposed.

Apartments have been designed with modest plan depths, generous window sizes and dual aspect to the majority of units, to benefit daylight and reduce energy consumption from artificial lighting. A full daylight analysis has been completed for all apartments and is included with this submission. In addition, daylight and sunlight to open space has been considered, and also with respect to overshadowing of adjacent dwellings. Bin storage and recycling facilities have been allowed for within bins store provided separately within each block at ground and readily accessible for residents as they exit the building.

It is proposed that combustibles will not be used for space heating or hot water generation. Instead, centralised air source heat pumps will be considered to deliver heat and hot water, with a large extent of operational energy coming from renewable electricity. A generous provision of infrastructure will also be provided for charging of battery electric vehicles, and all parking spaces will be ducted to allow for the easy addition of further charging infrastructure in the future.

5.7 Distinctiveness

06 Distinctiveness – How do the proposals create a sense of place?

The site layout is largely defined by the POS which will provide a new public park for the wider community in the local area as well as to the development itself. Taking its cue from the tunnel below, it has been designed as essentially a linear space defined by a strong North-South pedestrian routes with play space and other green space off it. As such it will retain a unique association with the tunnel below and this may be reflected in its naming.

The apartment blocks themselves are arranged to create a distinct central communal space for the residents. Level changes across it dictated by the tunnel structures close to the surface are used to its advantage- stepped seating and ramping define naturally split up and define areas within the space.

While the elevations are unified by material and a consistent approach to window arrangements and parapet height they do differ depending on their location and what they address. The north elevation creates a frontage onto the busy Collins Avenue and has limited balconies and where they are provided, they are fully recessed for privacy and noise. It is distinct from the other elevations in having a two-story plinth to the street, created by slightly projecting the upper stories. This projection becomes a full cantilever forming a gateway at the entrance to the development. The east elevation on to the GAA pitches uses a composed distribution of projecting balconies to create a mannered elevation while the western elevation on to the POS is enlivened by a combination of recessed and projecting balconies within a more articulated block form.

Entrances to the apartment blocks are characterised by setbacks in the elevation and coloured metal canopies. Feature panels are also introduced here and help to enliven the street.

The arrangement of blocks around a communal open space results in elevations that are highly visible within the public realm on all sides and therefore the visual quality and character of the material to all elevations is considered important. Brick has been chosen for the entire development due to its robustness and quality. This is consistent with other built and proposed developments locally, as described in section 5.2 above. The red and buff clay multi brick proposed here ties in with these

but is also distinct from them and particularly from the grey/ brown proposed for development to the south.

Within the courtyard, private rear curtilages feature additional planted screening, to ensure sufficient privacy to private open space, and to differentiate between public and private realm.

Figure 26. View of Development from Linear POS.

5.8 Layout

07 Layout – How does the proposal create people friendly streets and spaces?

The design strategy ensures that the internal streets are places for people with primary focus on pedestrian movement. The streets are designed as attractive places with quality landscape treatments throughout. All parking for the dwellings has been provided on-street and located so as to be overlooked by the residents. Parking is divided into smaller groupings separated by tree planting bays for ease of recognition of individual parking spaces. Traffic speed is controlled by the use of raised footpaths crossing into the public park.

The layout provides for activity on streets by creating active street frontages. The inclusion of private curtilages and front doors helps to activate the ground floor and create good active frontage onto to Collins Avenue, the new internal street and the open spaces. This provides natural surveillance, enhances activity and reduces the potential for anti-social behaviour.

5.9 Public Realm

08 Public Realm – How safe, secure and enjoyable are the public areas?

Within this development there are three forms of public realm. The existing public footpath along Collins Avenue, a new internal street, and the new Linear Park POS.

Existing Public Footpath

The existing 2-meter-high block wall along the site boundary with Collins Avenue is oppressive and there is no passive surveillance, on either side, of the road at this point as it approaches the main junction. This boundary will be demolished entirely along this edge and a new one created. The new edge is proposed to be a railing on low brick plinth, 1.2 m high. Its open nature allows passive surveillance from ground floor apartments and also from casual users of the POS running along fully along the top half of the footpath. The building line is set back 3.3m allowing the creation of a private landscaped curtilage strip defined and separated from the public realm by the railing. This also allows a transition from public to semi-private and a welcoming arrival space at the apartment block entrances, sheltered by canopies.

New Internal Street

The new internal street forms a piece with the new linear park and is designed to be integrated with it. The footpaths associated with the street share surface material with those in the park in the form of paviours sets. They dissect the street as raised crossings, level with the POS further strengthening a connection while acting as traffic calming, giving pedestrian priority and naturally dividing up the parking bays. The foot path along the parking providing access to the building entrances is generous and generally wider than 2meters. Along this footpath the curtilages remain low and open, adding to the sense of shared space and community on a street.

The car parking is directly associated with the apartment blocks which overlook them for safety and security. Permeable paving sets create a ‘softer’ surface while contributing to the SUDS strategy and the bays are further sub divided by tree planting into groups of 4 or 5 - all contributing to a pedestrian friendly atmosphere. Wheelchair bays are provided close to the building as are a significant portion of visitor bicycle parking provided as robust Sheffield style stands. The balance of visitor bicycle parking is integrated into the public park.

New Linear Park POS

A 23% allocation of POS is provided as a new linear park for the Whitehall community. It also provides an attractive new open edge to Collins Avenue as it approaches the junction with Swords Road. Entrance points along here are clearly indicated by brick piers at openings in the railings. The space will be well it and is overlooked by the adjoining development

This new space is accessible and inclusive for all ages and abilities providing flexibility in recreation, social interaction, and active play as well as areas that are quieter and calming. Children’s play opportunities include a new playground. Exercise opportunities for older children and adults are provided in a combination of formal and informal provisions. The different types of planting grassed areas and play spaces in the public and communal open areas are described in more detail in the landscape architect’s design statement in section 4.0 above.

Secure Access to Communal Open Space

In order to ensure the safety and security of the resident’s key or FOB access will be provided to all entrances off the public realm, including the gates into the Communal Open Space. Where required for escape in the event of fire they will be

free opening from the inside only, thereby maintaining security. As noted above, in Section 4.1, the two gates at the N-E and the S-E of the scheme that lead into Communal Courtyard will be locked off to both the general public and residence and are intended for fire tender, emergency vehicle and maintenance access only.

5.10 Adaptability

09 Adaptability – How will the buildings cope with change?

The buildings provide for a range of apartment types, ranging from 1 bed 2 person to 3 bed 5 person apartments. As the apartments are not for private sale and are to be rented to residents of DCC's housing list, this gives some flexibility should a resident have changing needs and wish to be relocated within the same community. 11no. apartments have been designed to Universal Design Standards. This will allow for more flexibility for longer term changing needs of those residents in-situ

The design of the dwellings has been developed so that they are comfortable, adaptable to changing needs, cost effective to build, and economic to manage and maintain. The apartments have been designed to a high standard of energy efficiency, are NZEB compliant and the scheme as designed will achieve IGBC Home Performance Index certification.

The majority of apartments are dual aspect, with at least one, and sometimes 2 facades benefitting from a south, south east or south west aspect to benefit solar gain. Window openings are large enough for sufficient daylight provision, without being too large to the detriment of heat loss or solar overheating.

The design aims to facilitate future adaptability, with homes that are accessible for older people, the very young, and people with disabilities. The aim is to ensure that dwellings can meet the changing needs of occupants as much as possible over their lifetimes, including needs associated with moderate mobility difficulties and the normal frailty associated with old age. Older people or persons with moderate disabilities, who wish to remain independent in their own home, should be able to do so without the need for costly and disruptive remodelling of the dwelling. The bathroom layout facilitates later adaptation for wheelchair users, if required.

5.11 Privacy and Amenity

10 Privacy and Amenity – How does the scheme provide a decent standard of amenity?

Each apartment has direct access from its main living space to a balcony or terrace with a flush level threshold. Each achieves at least the minimum areas set out in the *Design Standards for New Apartments* for private open space and are a minimum 1.5m deep and sheltered to accommodate sitting out. Balconies are sheltered by either stacking them or setting them into the façade and all are drain through dedicated outlets connecting back to RWPs secreted in the façade.

Ground floor apartments feature a private terrace onto the communal open space courtyard. Upper-level apartments feature a generous balconies that overlook either the communal courtyard, the new linear park or the GAA pitches to the east. Balconies to Collins Avenue are deeply recessed within the façade, to enable residents to use the balcony in relative privacy. The proposed balustrade treatment for all balconies utilises a series of vertical fins that allow direct views out from the balcony and adjacent living space but ensure that oblique views into the balcony are restricted, for improved privacy.

Figure 27. Stacked Balconies to Courtyard and GAA lands

Figure 28. Recessed Balconies onto Collins Avenue

The majority of all apartments are dual or corner aspect with 100% of all apartments having a northern aspect also having a south, east or west aspect. There are no north facing 1-bedroom apartments. As noted in section 5.6 above, directly opposing windows are generally at a minimum of 22m apart and positioned or angled to avoid direct views into opposing apartments.

All apartments for the development feature generous storage provision, spread throughout the unit and achieve the minimum areas set out in the *Design Standards for New Apartments.* All storage is arranged to be useful and accessible, and of good proportions. Where possible large storage spaces will be serviced to allow their use as utility rooms able to accommodate washing machines. Kitchen layouts allow for the sorting and storage of recyclables and there is direct and private access to communal bin store at ground floor via 4no stair cores. The Lifecycle Report outlines that waste management is to include management of Recyclable Waste

Apartments are arranged to be consistent over each storey as much as possible, with living spaces and bedroom spaces located beside similar space within adjacent apartments. This will reduce the requirement for any special acoustic requirements at party wall locations. Apartment floors and flanking structure will be detailed in accordance with building regulations and best practice, to ensure that potential for noise nuisance between floors is minimised.

A spatial hierarchy of public through semi-private to private zones has been established at building edges by providing minimum 3m curtilages, and landscape elements, designed to protect the privacy of the ground floor accommodation while also promoting social interaction, safety and security.

5.12 Parking

11 Parking – How will the parking be secure and attractive?

The 48no. parking spaces are overlooked by residents and are generally shared throughout the scheme with an average of 0.58 spaces per dwelling. Parking is not designated so that parking needs for those with relatively high levels of car ownership can be offset by those that do not own a car

Parking is divided into smaller groupings for ease of recognition of individual parking spaces. Parking surface materials are to be distinct from the adjacent street surface and will be finished in permeable paving. This means that the parking elements of the public realm are clearly defined, and the separate delineation helps with speed control on the adjacent carriageway. The on-street parking has been detailed to create attractive, pedestrian footpaths that are protected from the road. The site infrastructure has been designed to facilitate the future installation of electric car charging points to the public parking areas, should demand require this.

42no. bicycle parking is provided within the public realm for visitors. The larger portion of spaces are located adjacent to the main entrance of Block B and the balance within the new linear public park. For residents **60** no. cycle spaces are provided within an enclosed bike store accessible off the Communal open space. 3 no. spaces for mobility scooters, or cargo bikes, is also located here. In order to provide the quantum of cycle parking noted in the enclosed bike store, two-tier racks are proposed, which are to be gas-lift assisted. The cycle parking facility has been arranged in accordance with the most onerous standards advised in both commonly available stacked parking systems, and Dublin Cycling Campaign Design Guidance (2017). This includes for a minimum 1.5m aisle width and 1m between stands. The store width exceeds the minimum 5.5 width required to accommodate 2 banks of cycle storage stacked parking with 1.5m minimum aisle width. An overall ceiling height of 2.9m has been allowed. These standards will typically exceed the standards required for stacked parking, depending on the system chosen, and therefore a mix of double stacked and Sheffield stand single stack solutions may be proposed to deliver the quantum of cycle parking noted.
A further 76no. cycle stands are provided in external bike shelters along the eastern boundary over-looked by apartments. All bicycle parking is provided as robust Sheffield style stands

5.13 Detailed Design

12 Detailed Design – How well thought through is the building and landscape design?

Generally, materials to both the public realm and buildings have been proposed to strike a reasonable balance between aesthetics, cost effectiveness and long-term maintenance. Due to the visibility of all facades, its robustness and precedent in the area a clay multi-brick has been chosen for the entire development. Windows, window cills, doors, rainwater goods and parapet capping, will all be metal with a painted or PPC coating for longevity and to minimize maintenance.

The canopies to main entrance doors will feature a flat roof, with PPC metal fascias to visible edges (including soffits), and with a membrane or metal capping to the upper surface. Canopies to ground floor own door apartments are also provided.

Balconies are easily accessed for regular maintenance - either from the street or from the courtyard and eastern green strip along paths wide enough to accommodate cherry pickers and designed for vehicular loading. Balconies are to be drained, with an open balustrade to the street edge, finished with PPC vertical metal railings. The vertical balcony railings are to have a deep profile and an approx.100mm spacing. This will offer screening for privacy when viewed obliquely, while also allowing direct views out from the balcony to the street below. Within each block one stair is carried up to the roof to allow easy and safe maintenance of the grass roof, roof gutters and outlets, roof mounted plant and any potential pvs. Safe access to the perimeter of the roof is ensured by provided continuous 1.1m high metal guarding as edge protection. The guarding is sloped back so as not to be seen from street level. The plant itself is hidden by PPC metal screening and all other roof projects such as lift over runs and the access stair will have a render finish and robust, drained flat roofs with PPC aluminium capped parapets.

The main public and communal spaces, as well as the more ancillary external spaces, are generous in size to facilitate a range of activities and ease of maintenance. Painted pre-galvanised metal railings and gates, and brick plinth and piers used to define POS and curtilages within the public realm are particularly robust and low maintenance as are Sheffield style bike hoops. The use of varying hard surfaces helps to define different uses for external areas, provides visual interest, and softens the feel of these spaces. Each surface material is chosen to be extremely hard wearing and resilient to the varying weather extremes. These include various paviour types for footpaths, permeable paviours to parking bays, tarmac roads. And wet pour surface to playgrounds. Levels have been established to always allow good drainage.

As it is proposed that all apartments will require centralised plant for space and water heating, it is not anticipated that there will be a requirement for any plant within the private open space or curtilage of each apartment. The majority of plant will be at roof level, and sufficient plant space has been provided here to allow for various heat pump and other systems.

Figure 29. View of East Elevation looking onto GAA Lands

Figure 30. View along Internal Street

6.0 Apartment Design

Space standards for all the dwellings are generally in accordance with the requirements set out in the *Quality Housing for Sustainable Communities 2007,* the *Sustainable Urban Housing - Design Standards for New Apartments December 2020, Guidelines for Planning Authorities* and the relevant sections of the *Dublin City Council Development Plan 2016-2022.*

All apartments have also been designed to comply with *TGD Part B* with particular regard to escape distances in the even of fire, and *TGD Part M Section 3 – Access & Use of Dwellings* to ensure all apartments are visitable.

6.1 Apartment Layouts

Minimum Space Requirements

The development provides a mix of one-, two- and three-bedroom apartments. Two beds are provided as both 3 person and 4 person apartments. The Housing Quality Assessment, included in **Appendix A** below, demonstrates full compliance with all the space standards set out in the *Design Standards for New Apartments December 2020.* The majority of apartments are over 10% of the minimum areas. In addition to the space standards set out in these apartment guideline, minimum widths for bedrooms and living spaces are also met in all cases and as follows:

From Design Standards for New Apartments December 2020	
Apartments	**Minimum living/ dining widths**
One bedroom	3.3 meters
Two bedroom	3.6 meters
Three bedroom	3.8 meters
Bedroom	**Minimum bedroom widths**
Single bedroom	2.1 meters
Double bedroom	2.8 meters
Twin bedroom	2.8 meters

In addition, *TGD Part M Section 3* minimum widths are achieved through out. All corridors are a minimum 01050mm wide with minimum hallway width proposed as 1200mm for all one-bedroom apartments and 1500mm for all 2 and 3-bedroom apartments. All bathrooms are visitable and comply with Diagram 34 section 3.4 to allow side transfer onto the WC for Wheelchair users and internal doors to all habitable rooms are sized to achieve a minimum 800mm clear width.

Each of the building typologies have been refined, with areas optimised and plan forms simplified. The apartments have a compact form with minimised internal circulation area for a rational and efficient layout. For procurement reasons, apartments must allow for flexibility in delivery of building structure and services. An internal plant space of 1.5m2 has been allocated internally within each unit, and internal walls are thicker than typical to allow for various construction options. This results in a number of apartments are in excess of the minimum target as set out in the *Design Standards for New Apartments* 2020 standards.

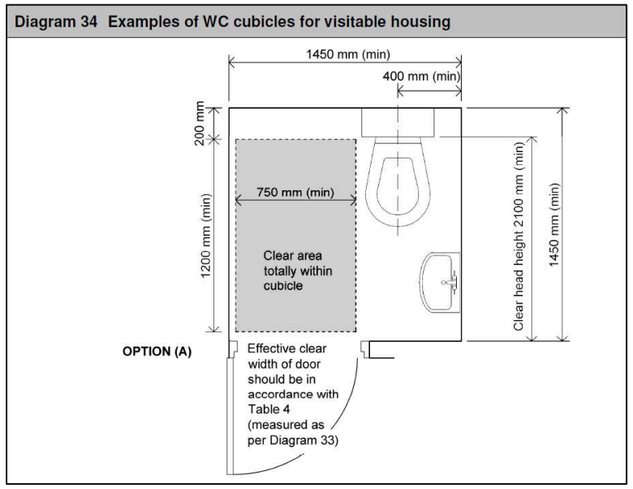


Figure 31. Extract from TGD Part M – WC cubicle for visitable housing

Quality & Adaptable Layouts

The design of the apartments has been developed so that they are comfortable, adaptable to changing needs, cost effective to build, and economic to manage and maintain. The design aims to facilitate future adaptability, with homes that are accessible for older people, the very young and people with disabilities.

Living rooms are generally provided to the front of the houses with the dining / kitchen areas to the rear. Balconies and terraces are provide level access directly off the main living space and are a minimum of 1.5m depth to facilitate sitting out.

Use of natural daylight and sunlight has been optimised with windows brought down to FFL to allow good daylight penetration. Story heights to comply with apartment guidelines. They have been set at a minimum of 2.7m for ground floor apartments and 2.6m living spaces at upper floors. A daylight analysis has been carried out which demonstrates that all spaces achieve BRE guideline levels for Average Daylight Factor (ADF).

.Storage is provided in compliance with the *Quality Housing for Sustainable Communities*. It is distributed throughout the units and designed to optimise the benefit for daily living. Practical aspects of access and use have been considered in detail, with particular reference to part M of the Building Regulations. The maximum size of storage is 3.5m2 to discourage their use as a small bedspace as they have restricted ventilation and no natural daylight. Storage spaces are distributed throughout the circulation areas, living spaces and bedrooms, with kitchen cupboard spaces and worktops being provided to meet (or exceed where possible) the requirements set out in table 5.2 of the Quality Housing for Sustainable Communities document. Some larger storage areas have been identified as possible to be plumbed for washing machines to allow their use as utility rooms.

Living rooms layouts give consideration to location of TVs and bedroom layouts to the location of free-standing wardrobes and side tables and minimum area for movement around beds. Kitchen are planned based on standard unit modules. Baths are a minimum 700 x 1700mm and showers 900 x 900mm.

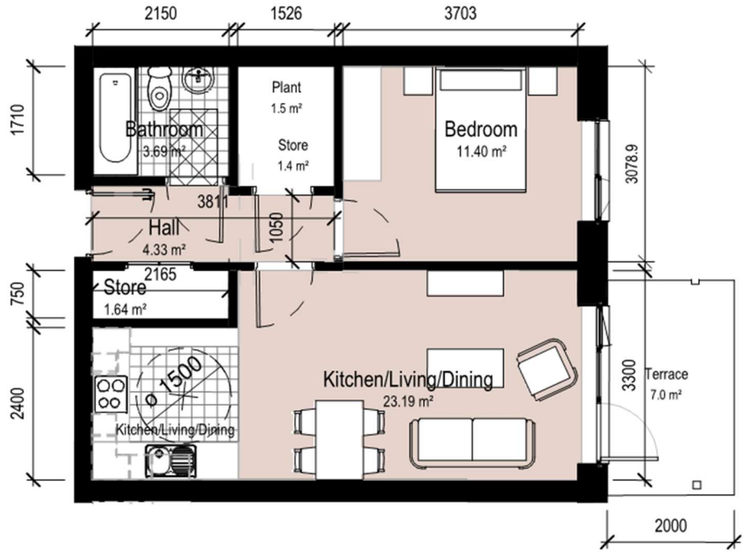


Figure 32. Typical Apartment – 1 bedroom Type A1

UD Layouts

To comply with DCC's disability strategy, a minimum of 10% of new residential units must be suitable for persons with disability. In total, 11no. units have been identified as being suitable for disabled residents, with the Universal Design principles and standards incorporated in the design of such units.

The aim is to ensure that dwellings can meet the changing needs of occupants over their lifetimes, including needs associated with moderate mobility difficulties and the normal frailty associated with old age. Older people or persons with moderate disabilities, who wish to remain independent in their own home, should be able to do so without the need for costly and disruptive remodelling of the dwelling. The bathroom layout facilitates later adaptation for wheelchair users, if required. Walls adjacent to baths and WCs are to be of sufficient strength to allow the fixing of such equipment as additional grab rails, etc., should these be required at a later date.

6.2 Elevations and Material Expression

The development of a material palette has been driven by DCC's aspirations for high quality, selected for longevity and robustness. The arrangement of blocks around a communal open space results in elevations that are highly visible within the public realm on all sides and therefore the visual quality and character of selected clay brick to all elevations is considered important. Housing in the area is characterised by brick on the Swords Road and largely render on Collins Avenue. The neighbourhood centre is largely composed of taller 2-3 story brick buildings. New apartment developments in the area, both built and those granted Planning permission, are brick of various colour and texture. For this new development brick is proposed for robustness and longevity. Varieties will need to be carefully selected to ensure that they are complimentary.

Figure 33. New development to be clay multi brick – buff base with reds and burnt blends to tie-in with tones in the local area.

A consistent architectural expression is carried throughout the scheme to bring a uniformity and identity while maintaining a simplicity to the elevations. The architectural language is contemporary in expression. A limited palette of materials is proposed, also in keeping with the surrounding area. As noted above, the predominant material is brick.

Windows and entrance doors will be robust, low maintenance powder-coated aluminium finish. Windows will be framed with simple opening sections with a simple contemporary expression

Balconies will be open, powder-coated metal railings with flashings and trims coloured to match. Handrails will be either painted to match or will be stainless steel or hardwood. The balance between visually open and privacy is provided by proposing guarding made up of deep section uprights. This closes down openness to the public when viewed obliquely while remaining visually open from on the balcony itself

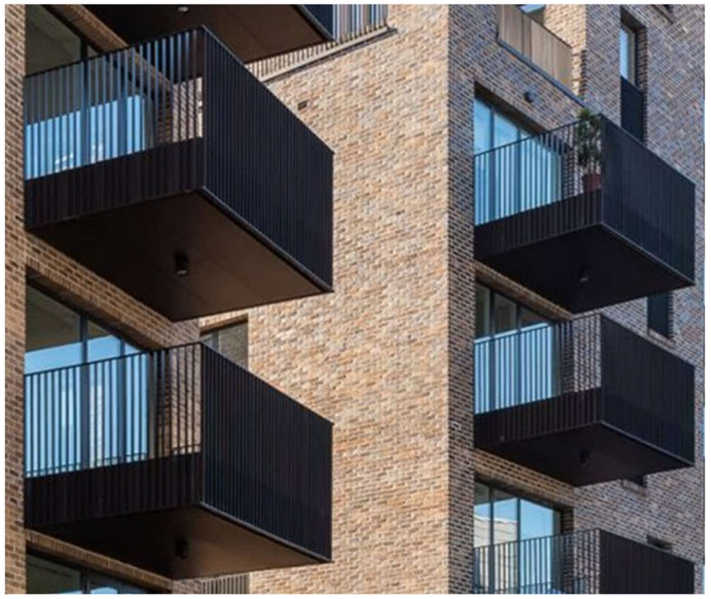


Figure 34. Balconies with deep section uprights and powder-coated metal windows.

Canopies are provided as shelter to the main entrances blocks and own door apartments. Quality of visible element, such as facias, soffits and gutters etc will be as PPC aluminium for longevity.
Roofs are to be flat green roofs with potential for PVS. Roof plant is well set back and hidden behind by PPC metal screening. Parapets will have a capping to selected colour and raked guarding behind. Lift over runs and other low projections above the roof will be low, set well back and finished in metal panels to match PPC metal screening.

Roads will be asphalt with in-situ concrete kerbs, and parking bays will be permeable paving. Pavements are proposed to be brushed concrete and two types of selected paviours in the POS and public realm. Railings will be powder coated metal to selected colour with plinths and piers clay brick to match the buildings.

6.3 Sustainability and Energy Efficiency

The strategy to deliver sustainable, low cost, energy efficient design in response to climate change includes the following measures and is further elaborated in the Energy Strategy by Semple & McKillop Ltd submitted with this planning application:

- All external envelopes to units will be highly insulated to reduce heat loss.
- Windows are sized to balance heat loss and potential solar gain.
- The detail design will consider the most efficient and appropriate heating system, including heat pumps combined with demand control ventilation.
- Green roofs are proposed for the development as part of the SUDS strategy with potential areas of PVs.
- Potential PV locations are indicated on the roof plans. The extent and location of PVs, if any, will be the subject of detailed proposals by the developer. This design will be subject to both the requirements of the granted Fire Safety Certificate (FSC) and the Development Plan minimum requirement of 70% green roof. For clarity, where the FSC restricts PVs over green roofs this will limit the PV option for the developer and not the delivery of the minimum requirement for 70% green roof.
- Materials with long life and low embodied energy.
- The energy performance of each apartment will comply with the building regulations, achieving NZEB with a BER of A3/ A2 or better.
- The detailed design will consider water saving measures.
- SUDs compliant tree pits, the use of planted swales and permeable paving will be developed through the detailed design.
- Storm water is managed, by means of infiltration tanks, to discharge at a limited flow rate to the public sewer.
- The landscape proposals have been designed by Mitchell Associates to contribute to the sustainability of the design, including a swale strip and planting along the western edge of the car park.
- Variety of new trees and other planting to support greater biodiversity.

Figure 35. PVS on Flat roof or Green roof image

7.0 Sustainable Urban Housing: Standards

7.1 DMURS

The proposed development has been designed to be compliant with the recommendations set out in the Design Manual for Urban Roads and Streets (DMURS).
DMURS seeks to put well-designed streets at the heart of sustainable communities and it provides the practical measures to achieve:

- Highly connected streets which allow people to walk and cycle to key destinations in a direct and easy-to find manner.
- A safe and comfortable street environment for pedestrians and cyclists of all ages.
- Streets that contribute to the creation of attractive and lively communities.
- Streets that calm traffic via a range of design measures that make drivers more aware of their environment.

DMURS advocates a balanced approach and sets out four core principles to guise a more place-based/integrated approach to road and street design.

Design Principle 1, Connected networks:
The proposed development has been designed to provide strong pedestrian routes along desire lines and public amenity spaces, and to provide connectivity to adjoining lands. This is to make it more attractive to walk and use of public transport than to use the car to connect to the neighbourhood within the development and the local town.

Design Principle 2, Multi-Functional streets:
The development includes a mix of apartment types, with a range of family sizes, which will provide for a range of residents. This will enliven activity on the street and engagement between residents of different ages.

Design Principle 3, Pedestrian focus:
Streets in the development are short in length with tight radius turns and directly serve apartments, naturally slowing traffic ensuring greater pedestrian safety and use. Tree planting also improves enclosure and breaks up longer vistas, slowing movement and enhancing the character of the scheme. Raised tables at crossing points, with pedestrians given priority over cars. The design has evolved with the contribution of the whole design team and with audits by the consultant civil engineer to ensure the proposed scheme is compliant with these principles.

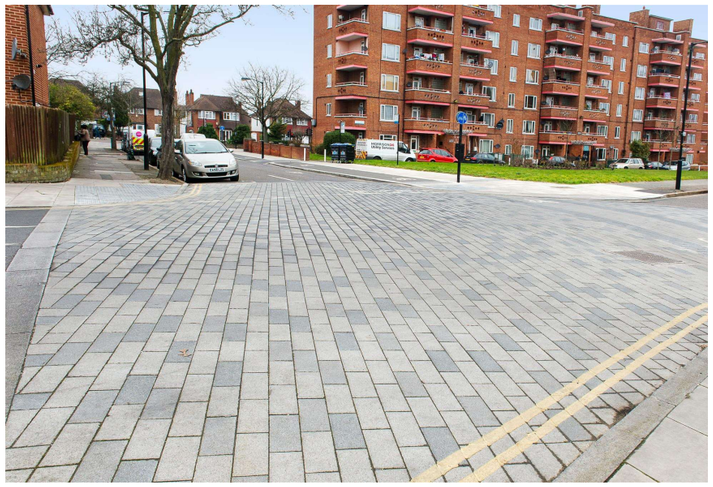


Figure 36. Example of a raised table

7.2 Accessibility

The overall site layout has been developed in line with Urban Design Manual and Universal Design Guidelines. Footpath gradients are gently sloped at no greater than 1:21, and the proposed paving surfaces comprise concrete, paviours and tarmacadam.

A range of apartment types have been proposed in terms of both design and size. All units are designed to be compliant with Part M of the Building Regulations, and feature flush thresholds to front entrances and rear balcony and terrace doors and all have visitable bathrooms.

Signage and wayfinding will be designed with text size, format and colour contrast to provide enhanced accessibility. Lighting will be designed to enhance the environment for all users.

7.3 Housing Quality Assessment

The apartments comply with the requirements of the design guidance set out in **Sustainable Urban Housing - Design Standards for New Apartments** published by the Department of Housing in 2020. An audit of compliance with the spatial requirements of these guidelines is included in **Appendix A.**

7.4 Density and POS Calculations

Density:

The density is calculated based on the net site area as defined by Appendix A of the *Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas* and therefore excludes:

- Major and local distributor roads;
- Open spaces serving a wider area; and
- Significant landscape buffer strips.

The Gross Site area includes all of the area of the red line on the site layout plan. The Net Site area excludes the following from this area:

- Works to the existing public footpath
- IW connection through GAA lands

Gross Site area:	1.07 hectares (total area of red line planning extent)
Net Site area:	0.874 hectares
Proposed no of Units:	83
Density:	**95 units per hectare**

Public Open Space:

The Public Open Space calculation is based on all lands within the proposed apartment development, including roads, footpaths, POS and other green strips. This area is referred to here as the POS Calculation Area and is equivalent to the Net Site area.

POS Calculation Area:	0.874 hectares
Public Open Space:	23% of the POS Calculation Area

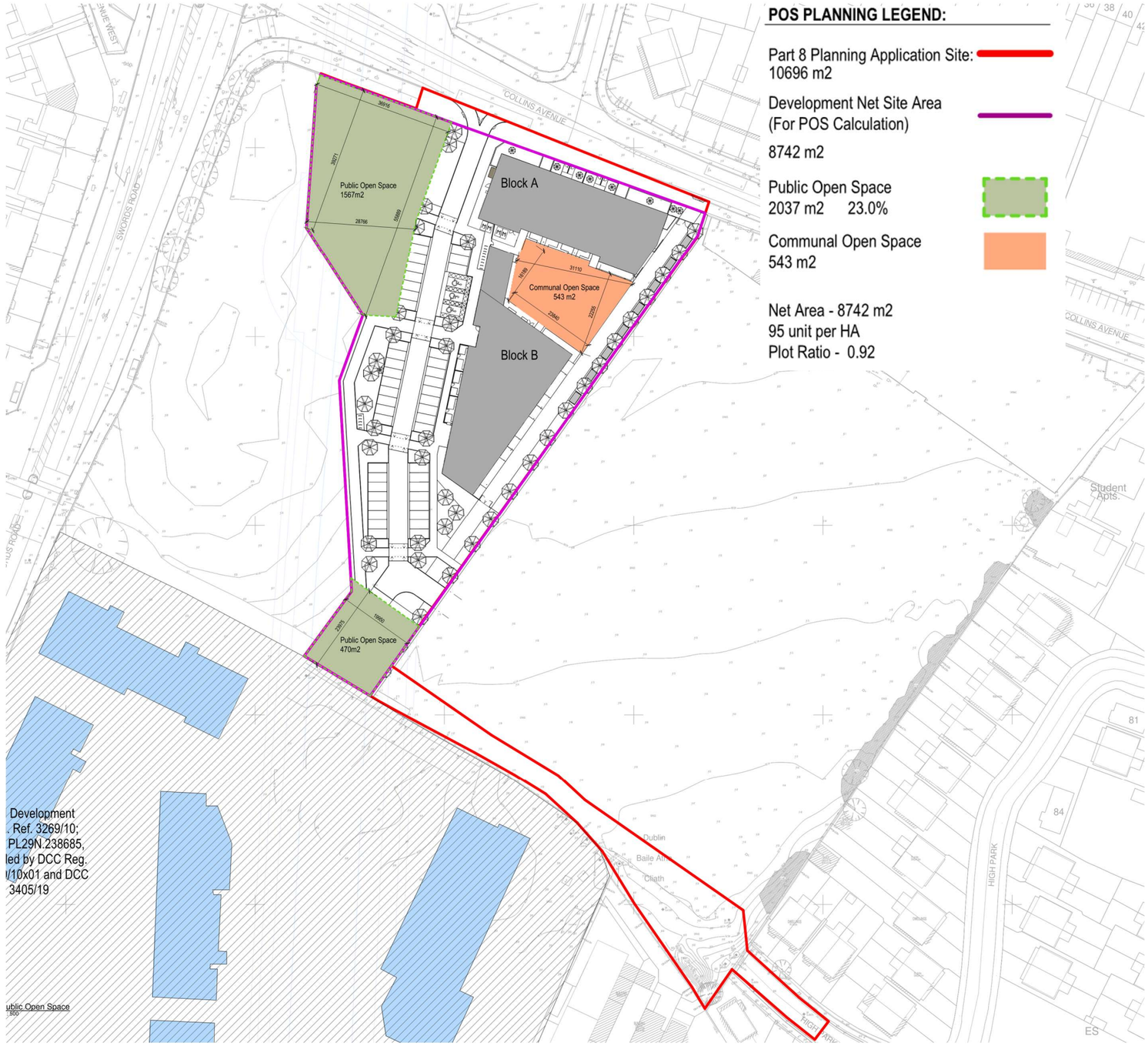


Figure 37. Net Developable Area and POS

APPENDICES

A. Housing Quality Assessment

Unit No.	Unit Type	Apartment/Duplex Type	Apartment/ Duplex Type Ref				Area (m^2): Bedrooms							Area (m^2): Storage							Area (m^2): other		Private open space (m^2):			
				Min Gross Floor Area (m2)	Proposed Gross Floor Area	Over 10% Min Gross Floor Area	Kitchen/ Living/ Dining	Required Aggregate	Proposed Aggregate	Bed 1	Bed 2	Bed 3	Required Aggregate	Proposed Aggregate	Store 1	Store 2	Store 3	Store 4	Store 5	Required Aggregate	Proposed Aggregate	Bathroom	Hall	Required Aggregate	Front Terrace	Rear Terrace	Balcony/ Terrace
1	Apartment	1B/2P (1 storey) UD	Apartment A4	45.00	68.61	Y	25.83	23.00	25.83	13.14			11.40	13.14	3.3					3.00	3.3	5.94	14.44	5.0	12.9	14.9	
2	Apartment	1B/2P (1 storey) UD	Apartment A4	45.00	68.61	Y	25.83	23.00	25.83	13.14			11.40	13.14	3.3					3.00	3.3	5.94	14.44	5.0	13.5	14.9	
3	Apartment	1B/2P (1 storey) UD	Apartment A4	45.00	68.61	Y	25.83	23.00	25.83	13.14			11.40	13.14	3.3					3.00	3.3	5.94	14.44	5.0	13.5	14.9	
4	Apartment	1B/2P (1 storey) UD	Apartment A4	45.00	68.61	Y	25.83	23.00	25.83	13.14			11.40	13.14	3.3					3.00	3.3	5.94	14.44	5.0	12.9	14.9	
5	Apartment	2B/3P (1 storey)	Apartment B7	63.00	68.83		28.03	28.00	28.03	13.00	7.10		20.10	20.10	2.5	1.5	1.0			5.00	5.0	3.70	6.60	6.0			7.0
6	Apartment	2B/4P (1storey)	Apartment B4	73.00	78.38		30.57	30.00	30.57	13.00	11.40		24.40	24.40	3.2	2.8				6.00	6.0	3.94	7.64	7.0			11.0
7	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			13.8
8	Apartment	3B/6P (1 storey)	Apartment C1 A	90.00	102.69	Y	34.10	34.00	34.10	13.40	11.40	11.40	31.50	36.20	2.7	3.5	3.2			9.00	9.4	4.60	11.40	9.0			9.2
9	Apartment	2B/4P (1 storey)	Apartment B6	73.00	80.68	Y	30.14	30.00	30.14	13.30	13.00		24.40	26.30	2.2	2.1	2.0			6.00	6.3	3.51	8.65	7.0			7.8
10	Apartment	2B/4P (1 storey)	Apartment B5	73.00	82.24	Y	34.50	30.00	34.50	13.00	11.69		24.40	24.69	3.3	2.7				6.00	6.0	3.73	7.67	7.0			11.0
11	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
12	Apartment	3B/6P (1 storey)	Apartment C1	90.00	105.49	Y	34.26	34.00	34.26	14.28	11.66	11.67	31.50	37.61	3.3	3.4	2.4			9.00	9.1	4.83	12.59	9.0			9.2
13	Apartment	2B/4P (1 storey)	Apartment B6	73.00	80.68	Y	30.14	30.00	30.14	13.30	13.00		24.40	26.30	2.2	2.1	2.0			6.00	6.3	3.51	8.65	7.0			7.6
14	Apartment	2B/4P (1 storey)	Apartment B5	73.00	82.24	Y	34.50	30.00	34.50	13.00	11.69		24.40	24.69	3.3	2.7				6.00	6.0	3.73	7.67	7.0			11.0
15	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
16	Apartment	3B/6P (1 storey)	Apartment C1	90.00	105.49	Y	34.26	34.00	34.26	14.28	11.66	11.67	31.50	37.61	3.3	3.4	2.4			9.00	9.1	4.83	12.59	9.0			9.2
17	Apartment	2B/4P (1 storey)	Apartment B6	73.00	80.68	Y	30.14	30.00	30.14	13.30	13.00		24.40	26.30	2.2	2.1	2.0			6.00	6.3	3.51	8.65	7.0			7.6
18	Apartment	2B/4P (1 storey)	Apartment B5	73.00	82.24	Y	34.50	30.00	34.50	13.00	11.69		24.40	24.69	3.3	2.7				6.00	6.0	3.73	7.67	7.0			11.0
19	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
20	Apartment	3B5P (1 storey)	Apartment C1 B	90.00	98.36		34.63	34.00	34.63	13.00	11.90	7.10	31.50	32.00	3.5	2.9	2.6			9.00	9.0	4.60	11.40	9.0			9.2
21	Apartment	2B/4P (1 storey)	Apartment B1	73.00	78.93		30.30	30.00	30.30	13.10	11.40		24.40	24.50	3.2	2.8				6.00	6.0	3.70	8.70	7.0	36.2		7.5
22	Apartment	3B/6P (1 storey)	Apartment C1 A	90.00	102.69	Y	34.10	34.00	34.10	13.40	11.40	11.40	31.50	36.20	2.7	3.5	3.2			9.00	9.4	4.60	11.40	9.0			9.2
23	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			13.8
24	Apartment	2B/4P (1 storey)	Apartment B2	73.00	80.50	Y	30.79	30.00	30.79	13.24	11.42		24.40	24.66	2.5	3.5				6.00	6.0	4.94	8.38	7.0			12.0
25	Apartment	2B/4P (1 storey)	Apartment B1	73.00	78.93		30.30	30.00	30.30	13.10	11.40		24.40	24.50	3.2	2.8				6.00	6.0	3.70	8.70	7.0			7.5
26	Apartment	3B/6P (1 storey)	Apartment C1	90.00	105.49	Y	34.26	34.00	34.26	14.28	11.66	11.67	31.50	37.61	3.3	3.4	2.4			9.00	9.1	4.83	12.59	9.0			9.2
27	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
28	Apartment	2B/4P (1 storey)	Apartment B2	73.00	80.50	Y	30.79	30.00	30.79	13.24	11.42		24.40	24.66	2.5	3.5				6.00	6.0	4.94	8.38	7.0			12.0
29	Apartment	2B/4P (1 storey) UD	Apartment B3	73.00	84.12	Y	30.89	30.00	30.89	13.77	13.46		24.40	27.23	3.5	1.6	1.1			6.00	6.1	3.45	8.80	7.0			7.3
30	Apartment	3B/6P (1 storey)	Apartment C1	90.00	105.49	Y	34.26	34.00	34.26	14.28	11.66	11.67	31.50	37.61	3.3	3.4	2.4			9.00	9.1	4.83	12.59	9.0			9.2
31	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
32	Apartment	2B/4P (1 storey)	Apartment B2	73.00	80.50	Y	30.79	30.00	30.79	13.24	11.42		24.40	24.66	2.5	3.5				6.00	6.0	4.94	8.38	7.0			12.0
33	Apartment	2B/4P (1 storey) UD	Apartment B3	73.00	84.12	Y	30.89	30.00	30.89	13.77	13.46		24.40	27.23	3.5	1.6	1.1			6.00	6.1	3.45	8.80	7.0			7.3
34	Apartment	3B/6P (1 storey)	Apartment C1	90.00	105.49	Y	34.26	34.00	34.26	14.28	11.66	11.67	31.50	37.61	3.3	3.4	2.4			9.00	9.1	4.83	12.59	9.0			9.2
35	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			11.0
36	Apartment	2B/4P (1 storey)	Apartment B2	73.00	80.50	Y	30.79	30.00	30.79	13.24	11.42		24.40	24.66	2.5	3.5				6.00	6.0	4.94	8.38	7.0			12.0
37	Apartment	2B/4P (1 storey) UD	Apartment B3	73.00	84.12	Y	30.89	30.00	30.89	13.77	13.46		24.40	27.23	3.5	1.6	1.1			6.00	6.1	3.45	8.80	7.0			7.3
38	Apartment	2B/4P (1 storey)	Apartment B8	73.00	77.05		30.05	30.00	30.05	13.00	11.90		24.40	24.90	2.6	3.5				6.00	6.1	4.17	6.96	7.0			7.0
39	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			7
40	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			7
41	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			7
42	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			7
43	Apartment	2B/4P (2 storey)	Apartment B9	73.00	81.44	Y	30.01	30.00	30.01	13.30	12.00		24.40	25.30	3.5	2.6	0.9			6.00	7.0	4.88	8.20	7.0			7
44	Duplex	2B/3P (2 storey)	Duplex D1	70.00	89.97	Y	32.58	28.00	32.58	13.50	7.70		20.10	21.20	3.2	3.3	3.3			5.00	9.7	5.28	23.05	6.0	15.2		6.8
45	Duplex	2B/3P (2 storey)	Duplex D2	70.00	86.28	Y	37.10	28.00	37.10	13.40	7.30		20.10	20.70	2.1	3.4	1.5			5.00	7.1	4.55	19.97	6.0	15		6.8
46	Duplex	2B/3P (2 storey)	Duplex D2	70.00	86.28	Y	37.10	28.00	37.10	13.40	7.30		20.10	20.70	2.1	3.4	1.5			5.00	7.1	4.55	19.97	6.0	16.3		6.8
47	Apartment	3B/5P (1 storey) UD	Apartment C2	90.00	98.81		34.03	34.00	34.03	13.00	13.00	7.13	31.50	33.13	3.3	2.3	1.1	1.0	1.3	9.00	9.0	4.48	10.45	9.0			15.5
48	Apartment	2B/4P (1 storey)	Apartment B8	73.00	77.05		30.05	30.00	30.05	13.00	11.90		24.40	24.90	2.6	3.5				6.00	6.1	4.17	6.96	7.0			7.0
49	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
50	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
51	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
52	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
53	Apartment	2B/4P (2 storey)	Apartment B9	73.00	81.44	Y	30.01	30.00	30.01	13.30	12.00		24.40	25.30	3.5	2.6	0.9			6.00	7.0	4.88	8.20	7.0			7
54	Apartment	3B/5P (1 storey) UD	Apartment C2	90.00	98.81		34.03	34.00	34.03	13.00	13.00	7.13	31.50	33.13	3.3	2.3	1.1	1.0	1.3	9.00	9.0	4.48	10.45	9.0			15.5
55	Apartment	2B/4P (1 storey)	Apartment B8	73.00	77.05		30.05	30.00	30.05	13.00	11.90		24.40	24.90	2.6	3.5				6.00	6.1	4.17	6.96	7.0			7.0
56	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
57	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
58	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
59	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
60	Apartment	2B/4P (2 storey)	Apartment B9	73.00	81.44	Y	30.01	30.00	30.01	13.30	12.00		24.40	25.30	3.5	2.6	0.9			6.00	7.0	4.88	8.20	7.0			7
61	Apartment	1B/2P (1 storey)	Apartment A2	45.00	53.66	Y	23.28	23.00	23.28	13.04			11.40	13.04	1.4	1.1	1.0			3.00	3.4	3.69	5.91	5.0			6.8
62	Apartment	1B/2P (1 storey)	Apartment A3 A	45.00	52.10	Y	23.25	23.00	23.00	11.40			11.40	11.40	3.0					3.00	3.0	3.80	6.40	5.0			6.8
63	Apartment	1B/2P (1 storey)	Apartment A3	45.00	54.55	Y	23.25	23.00	23.25	11.92			11.40	11.92	3.0					4.00	3.0	4.70	7.25	5.0			6.8
64	Apartment	3B/5P (1 storey) UD	Apartment C2	90.00	98.81		34.03	34.00	34.03	13.00	13.00	7.13	31.50	33.13	3.3	2.3	1.1	1.0	1.3	9.00	9.0	4.48	10.45	5.0			15.5
65	Apartment	2B/4P (1 storey)	Apartment B8	73.00	77.05		30.05	30.00	30.05	13.00	11.90		24.40	24.90	2.6	3.5				6.00	6.1	4.17	6.96	7.0			7.0
66	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
67	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
68	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
69	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
70	Apartment	2B/4P (2 storey)	Apartment B9	73.00	81.44	Y	30.01	30.00	30.01	13.30	12.00		24.40	25.30	3.5	2.6	0.9			6.00	7.0	4.88	8.20	7.0			7
71	Apartment	1B/2P (1 storey)	Apartment A2	45.00	53.66	Y	23.28	23.00	23.28	13.04			11.40	13.04	1.4	1.1	1.0			3.00	3.4	3.69	5.91	5.0			6.8
72	Apartment	1B/2P (1 storey)	Apartment A3 A	45.00	52.10	Y	23.25	23.00	23.00	11.40			11.40	11.40	3.0					3.00	3.0	3.80	6.40	5.0			6.8
73	Apartment	1B/2P (1 storey)	Apartment A3	45.00	54.55	Y	23.25	23.00	23.25	11.92			12.40	11.92	3.0					3.00	3.0	4.70	7.25	5.0			6.8
74	Apartment	3B/5P (1 storey) UD	Apartment C2	90.00	98.81		34.03	34.00	34.03	13.00	13.00	7.13	31.50	33.13	3.3	2.3	1.1	1.0	1.3	9.00	9.0	4.48	10.45	5.0			15.5
75	Apartment	2B/4P (1 storey)	Apartment B8	73.00	77.05		30.05	30.00	30.05	13.00	11.90		24.40	24.90	2.6	3.5				6.00	6.1	4.17	6.96	7.0			7.0
76	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
77	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
78	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
79	Apartment	1B/2P (1 storey)	Apartment A1	45.00	49.83	Y	23.19	23.00	23.19	11.40			11.40	11.40	1.4	1.6				3.00	3.0	3.70	4.33	5.0			5.0
80	Apartment	2B/4P (2 storey)	Apartment B9	73.00	81.44	Y	30.01	30.00	30.01	13.30	12.00		24.40	25.30	3.5	2.6	0.9			6.00	7.0	4.88	8.20	7.0			7
81	Apartment	1B/2P (1 storey)	Apartment A2	45.00	53.66	Y	23.28	23.00	23.28	13.04			11.40	13.04	1.4	1.1	1.0			3.00	3.4	3.69	5.91	5.0			6.8
82	Apartment	1B/2P (1 storey)	Apartment A3 A	45.00	52.10	Y	23.25	23.00	23.00	11.40			11.40	11.40	3.0					3.00	3.0	3.80	6.40	5.0			6.8
83	Apartment	1B/2P (1 storey)	Apartment A3	45.00	54.55	Y	23.25	23.00	23.25	11.92			11.40	11.92	3.0					4.00	3.0	4.70	7.25	5.0			6.8
				Total Units Over 10% of Min. Gross Floor Area		69																					
				% Units Over 10% of Min. Gross Floor Area		83.10%																					

COADY ARCHITECTS

Mt Pleasant Business Ctr, Ranelagh, Dublin 6, D06 X7P8
Unit 8A Oran Point, Main St, Oranmore, Co. Galway, H91 Y36X
01 497 6766 | 091 788 325 | admin@coady.ie | www.coady.ie

PERSPECTIVE

European Partners
Antwerp, Dublin, Helsinki, Lisbon, Madrid, Milan, Paris, Poznan, Stockholm
www.perspective-architecturalgroup.com

■ **International Design Partner**