

BUILD-TO-RENT RESIDENTIAL DEVELOPMENT AT BARRINGTON TOWER, BRENNANSTOWN ROAD, CABINTEELY.

Prepared By:

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EastPoint Business Park, 5Alfie Byrne Rd, East Wall,

Dublin 3

Mechanical & Electrical Engineers:

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Bat Eco Services

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CGIs / Photomontages / Visual Impact Assessment:

Modelworks.

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Landscape Architects:

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Avison Young

86 Merrion Square S, Dublin 2

Waste/Acoustic Analysis:

AWN Consulting Ltd

The Tecpro Building, Clonshaugh Business & Technology

Park, Dublin 17

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Archaeological Consultant:

Irish Archaeological Consultancy Ltd

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Ecology:

Altemar

Templecarrig Upper, Greystones, Co. Wicklow.

Site Surveys:

Land Surveys Ltd.

22 Mellifont Ave, Dun Laoghaire, Co. Dublin

Arboriculture:

The Tree File Ltd.

Ashgrove House, Kill Avenue, Dun Laoghaire, Co. Dublin

CONTENTS

- 1. Introduction
- 2. Context
- 3. Connections
- 4. Inclusivity
- 5. Variety
- 6. Efficiency
- 7. Distinctiveness
- 8. Layout
- 9. Public Realm
- 10. Adaptability
- 11. Privacy and Amenity
- 12. Parking
- 13 Detailed Design



RESPONSE TO ABP INSPECTOR'S REPORT ON RECOMMENDED OPINION - ABP-310942-21 - SPECIFIC INFORMATION REQUIRED (POINT 13.1.3.):

4 - Cross-sections at appropriate intervals, photomontages, and any other information deemed relevant, illustrating topography of the site and showing proposal relative to existing development in the vicinity, including Barrington Tower.

The topography of the site defined the generating design idea of the scheme, and every step of the design process considered its relationship with the neighbouring sites. Please refer to section 2, Pages 17, 18 and 19. The proposed development's relationship to the city, neighbourhood and Brennanstown Road are explained in pages 38, 39 and 40 of section 6. For photomontages related to existing development in the vicinity, please refer to Modelworks visual impact assessment report.

For scaled sections please refer to RAU drawing numbers:

- BRT-1-02-ZZZ-ZZZ-DR-RAU-AR-3001_CONTIGUOUS SECTIONS AA BB and CC.
- BRT-1-02-ZZZ-ZZZ-DR-RAU-AR-3002_CONTIGUOUS SECTIONS DD EE and FF.
- 5 Layout, location and hierarchy and quantum of open space provision, both communal and public open space (POS). Clarity with regard to compliance with Development Plan standards.

The open space is divided into public and communal, defining different activity areas.
Please refer to section 8, pages 42 and 43.

9 - Supporting design rationale should be given to improving residential amenity for future occupants by demonstrating the maximisation of sunlight to apartments and addressing issues to do with daylighting, overlooking and overshadowing.

The proposed scheme comprises high levels of daylight and sunlight performance. Please refer to section 11, pages 50 and 51 and to the Daylight/Sunlight Report by Avison Young.

10 - A visual impact assessment. Long range views / photomontages of the proposed development from the surrounding area.

Please refer to Modelworks visual impact assessment report.

13 - A life cycle report shall be submitted in accordance with section 6.13 of the Sustainable Urban housing: Design Standards for New Apartments (2020). The report should have regard to the long-term management and maintenance of the proposed development. The applicant should consider the proposed materials and finishes to the scheme including specific detailing of finishes, the treatment of balconies in the apartment buildings, landscaped areas, child friendly spaces, pathways, and all boundary treatments. Particular regard should be had to the requirement to provide high quality and sustainable finishes and details which seek to create a distinctive character for the development.

Please refer to section 13, page 58 and 59 for materials and finishes of buildings, to Murray and Associates Landscape Architecture report for Imaterials and finishes of landscape areas and to the Life Cycle report for management and maintenance of the development.

17 - A response to the matter raised with respect to section 8.2.6.3 of the Dun Laoghaire Rathdown County Development Plan, 2016 – 2022 regarding convenience shops, justification of the type and size of the retail unit proposed.

Please refer to Mc Gill Planning report.

Project Description

Construction of a Build to Rent (BTR), Strategic Housing Development (SHD) comprising the following:

- •Demolition of existing unoccupied dwelling ('Winterbrook'), and derelict, former dwelling attached to Barrington Tower (Protected Structure RPS 1729).
- •Construction of 534 no. apartments (30 no. studios, 135 no. 1 -beds, 318 no. 2-bed, and 51 no. 3-bed) within 8 no. blocks ranging in height from 3 to 9 storeys (over lower ground floor).
- •Provision of creche, retail unit, and Resident Support Facilities/ Resident Services and Amenities.
- •Provision of car and cycle parking, at basement (2 levels) and ground level.
- •Provision of vehicular and pedestrian/cyclist accesses from Brennanstown Road with public access through the development to future Brennanstown Luas Stop to the south.
- •Provision of public and communal open spaces including an enhanced landscaped setting in the vicinity of Barrington Tower.
- •Provision of all landscaping, play areas and boundary treatment works, ESB substations, plant areas, waste management areas, and all other site development works, and site services required to facilitate the proposed development.

The site is bounded by Brennanstown Road to the north and the Luas Green line to the south.

The development is designed to be compliant with:

- Sustainable Urban Housing: Design Standards for New Apartments (2020).
- Best practice guidelines Quality Housing for Sustainable Communities (2007).
- Sustainable Residential Development in Urban Areas Guidelines for Planning Authorities (2009).
- Design Manual for Urban Roads and Streets or 'DMURS' (2013).
- Retail Design Manual (2012).
- Childcare Facilities Guidelines for Planning Authorities (2001).
- Smarter Travel A New Transport Policy for Ireland (2009-2020).
- Urban development and building height guidelines for Planning authorities(Dec 2018).
- Dun Laoghaire Rathdown Develpment Plans 2022-2028.

This Design Statement forms part of a planning submission for a proposed residential Build to Rent development (BTR) at Barrington Tower Site, Brennanstown Road, Cabinteely, Dublin 18 and describes the proposed scheme using the twelve criteria of the Department of Environment, Heritage and Local Government "Urban Design Manual" as a set of evaluation principles.

| Site Statistics | |
|---|-------------------------|
| Total Site Area | 3.81ha |
| No. of Units | 534 |
| Total Gross Area - Proposed (exc. basement) | 55,484m² |
| Total Gross Area - Residential (inc. amenity) | 54,528m² |
| Site Coverage | 22% |
| Plot Ratio | 1:46 |
| Gross Density | 140units/ha |
| Total public open space | 9,370m² |
| Total communal facilities for residents | 5,696m² |
| Resident's external amenity space | 4,200m² |
| Resident's internal amenity space | 1,496m² |
| Retail unit at at ground floor of blocks CD | 336.8m² |
| Crèche at at ground floor of blocks CD | 356.5m² |
| Basement car park spaces for residents | 400 |
| Surface car parking spaces for ancillary support f users, staff and visitors. | asilities' |
| Basement motorcycle park spaces | 17 |
| Basement bicycle parking spaces for residents | 1,058 |
| Surface bicycle parking spaces for ancillary suppusers, staff and visitors. | oort facilities' 182 |
| Stacked bicycle parking spaces for Luas commut | ers. 26 |

Bat House

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

Description of Existing Site and Surrounding Area

The existing site (highlighted in red) is located in south Dublin. The part green field/ part developed site contains the protected structure Barrington Tower at Brennanstown Road, Cabinteely, Dublin 18. The site area amounts to 3.81Ha.

As demonstrated in the following diagrams, the site is centrally placed in a residential suburb with direct access to the existing Luas line.

Equinox 21st March Summer 21st June

Luas Line — — — — — —

Future Luas Stop

Carrickmines Luas Stop —

SITE ANALYSIS -ACCESS / ORIENTATION -EXISTING CONDITION

SITE ANALYSIS - SITE PHOTOGRAPHS





View 01: Main Entrance from Brennanstown rd to South Site



View 02: Entrance from Brennanstown rd to North Site



View 03: Brennanstown Rd looking at North Site Boundary







Aerial view from South

SITE ANALYSIS - SITE PHOTOGRAPHS



View 04: From Tower Looking South



View 05: From Tower Looking East



View 06 From Main Entrance on to Brennanstown rd







2.0 Context - Planning Context

Site Analysis - DLRCC Development Plan

Zoning

The subject site is zoned Objective A within the current Dun Laoghaire-Rathdown County Council Development Plan 2022-2028. Objective A of the Development Plan states 'To protect and/or improve residential amenity'.

Zoned Policies

The Council's Development Plan policies relevant to the site are as follows:

- Policy RES3: Residential Density

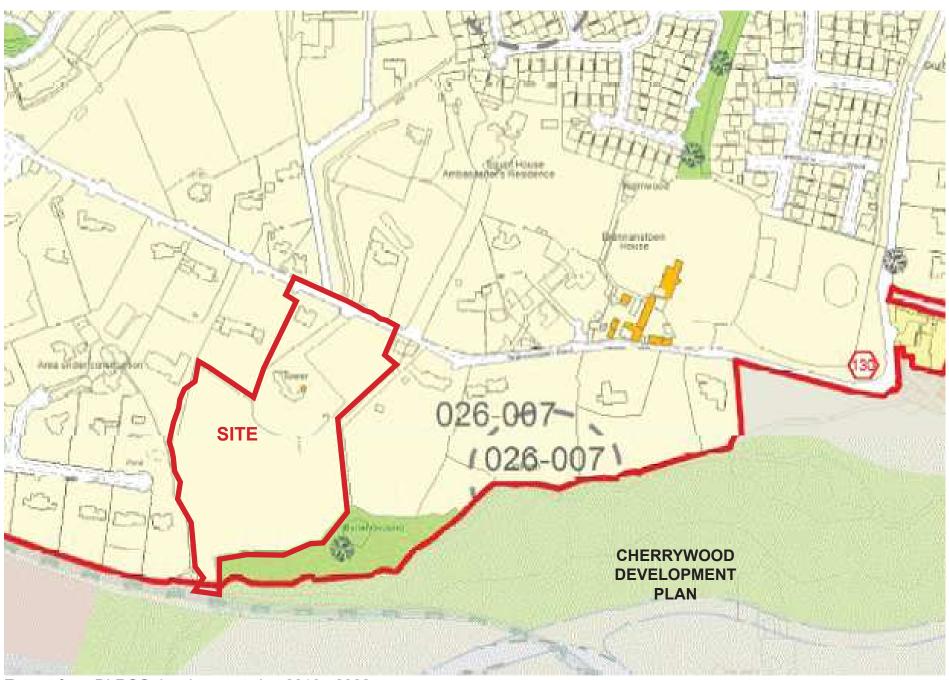
'It is Council policy to promote higher residential densities provided that the proposals ensure a balance between the reasonable protection of existing residential amenities and the established character of areas, with the need to provide for sustainable residential development. In promoting more compact, good quality, higher density forms of residential development it is Council policy to have regard to the policies and objectives contained in the following guidelines'.

- Policy RES7: Overall Housing Mix

'It is Council policy to encourage the establishment of sustainable residential communities by ensuring that a wide variety of housing and apartment types, sizes and tenures are provided within the County in accordance with then provisions of the Interm Housing Strategy'.

Cabinteely/Killiney/Sallynoggin

'130 - To limit development along the Brennanstown Road to minor domestic infills and extensions until a Traffic Management Scheme for the area has been completed and its recommendations implemented.'

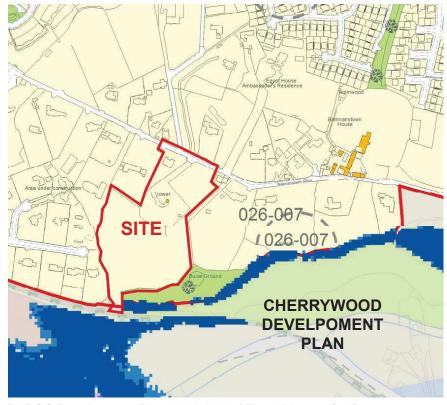


Extract from DLRCC development plan 2016 - 2022

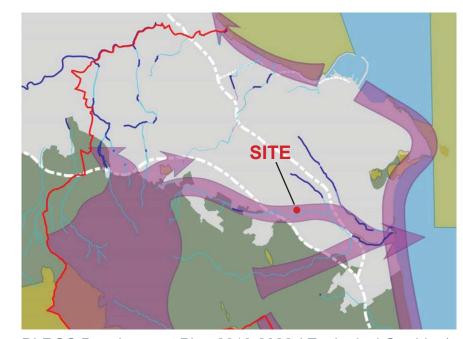
USE ZONING OBJECTIVES

| Objective A | To protect and-or improve residential amenity. | |
|------------------|--|--|
| Protected Struct | ures | |

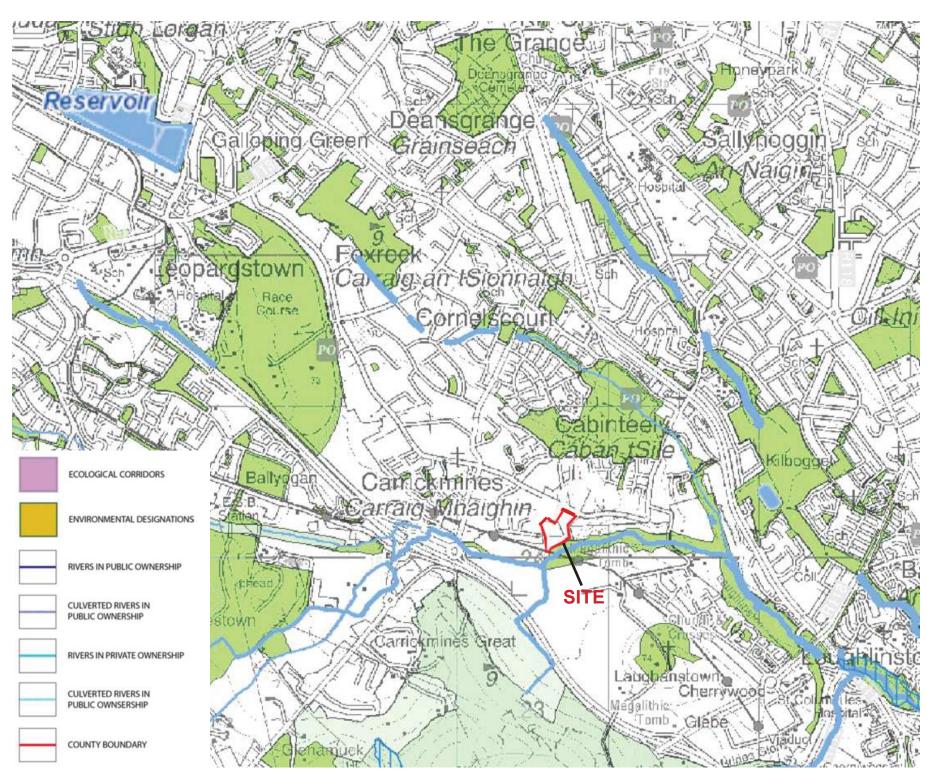
Site Analysis - DLRCC Development Plan



DLRCC Development Plan 2016-2022 (Flood Maps 7 & 10)



DLRCC Development Plan 2016-2022 (Ecological Corridors)

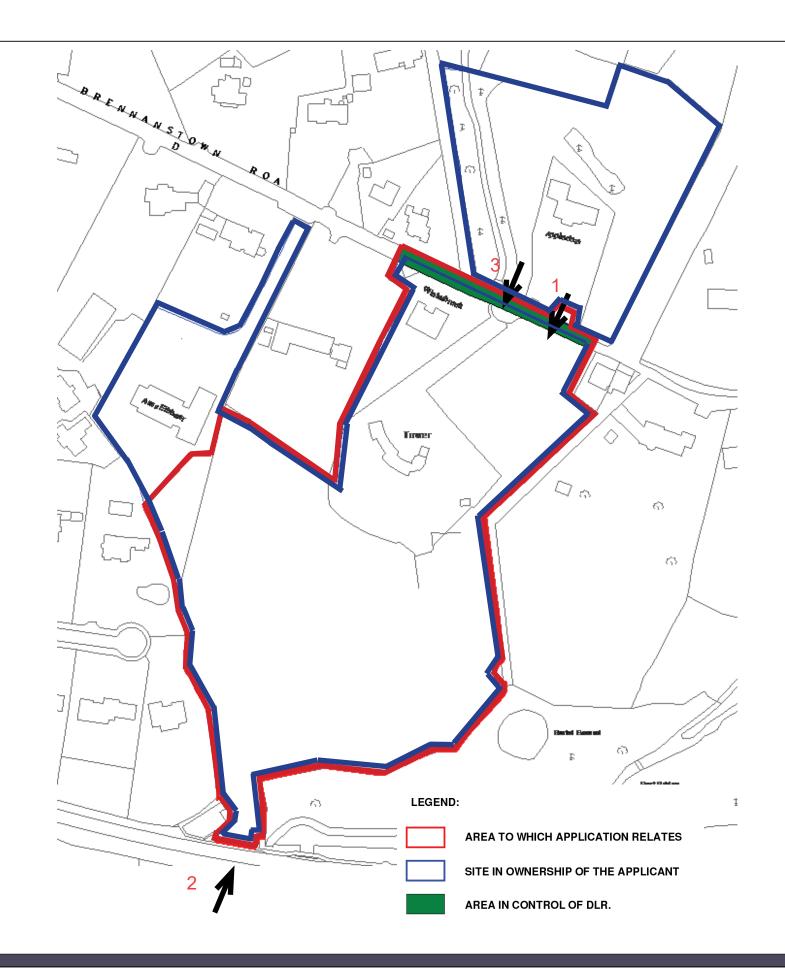


DLRCC Development Plan 2016-2022 (*Hydrology Map*)

2.0 Context - Planning Context

Site Boundary

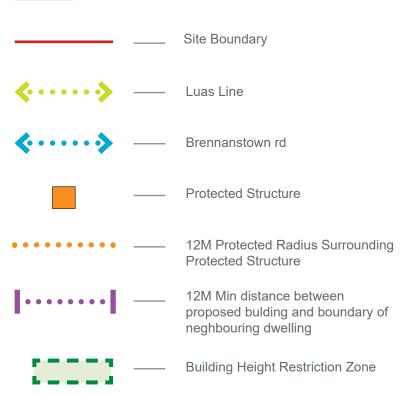
The subject site area as outlined in red on the adjacent map is under the full ownership of Cairn Homes excluding the green area along Brennanstown Road. The site area extends to 3.81 Ha. The site has a public general access point to the north off Brennanstown Road (1). The fall in topography and physical boundary allow for an opening between an existing ESB substation and the wooded area to the south, creating a second public access point to the site off the existing Luas track (2). An exclusive pedestrian access for residents is also provided from Brennanstown road(3).

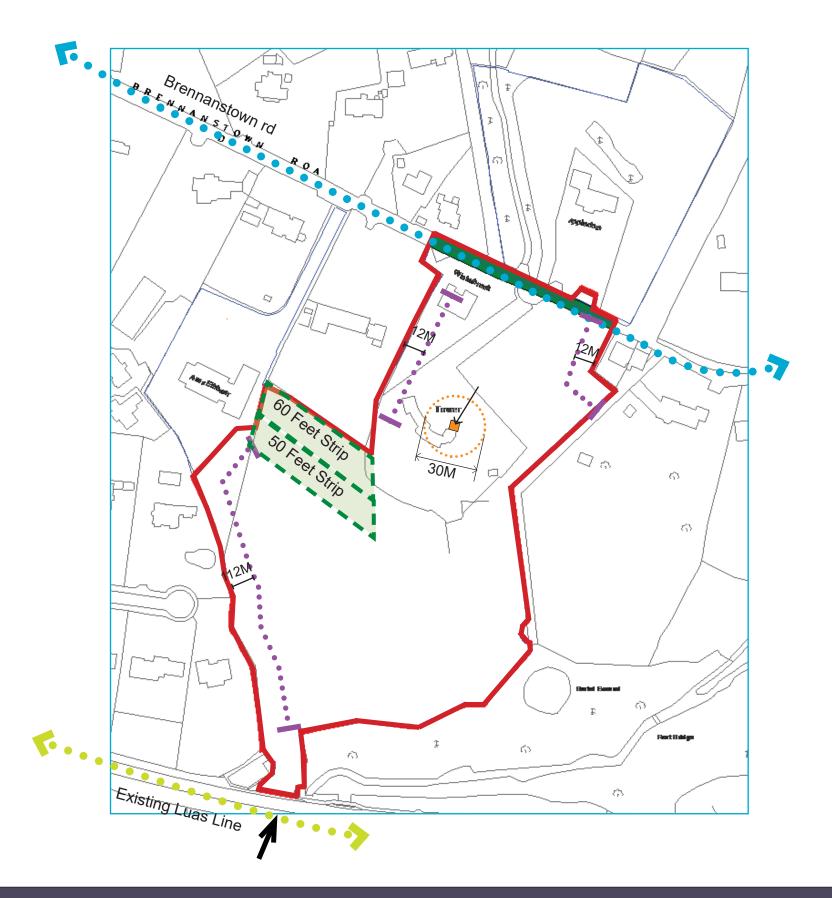


Site Analysis - Site Constraints

The site restrictions are driven by the existing protected structure, Barrington's Tower, the close proximity to the existing neighbouring dwellings and the general topography that comprises a sharp difference of levels, mainly decreasing form north to south.

LEGEND:



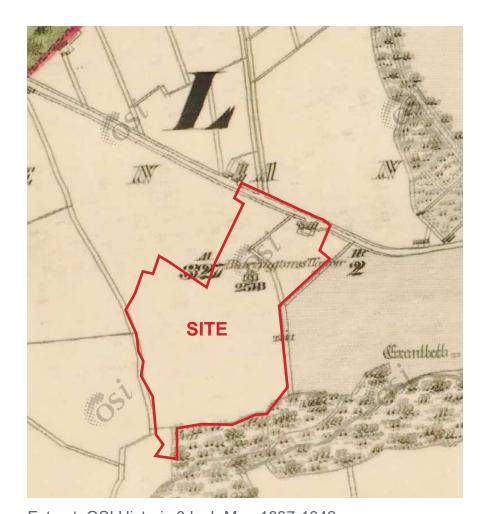


2.0 Context - Site History

History of the Site

John Barrington, a Dublin-based soap and candle manufacturer and Quaker, built a home at Brennanstown in 1808 known as Glendruid House. He leased 70 hectares of land including the Druid's Glen.

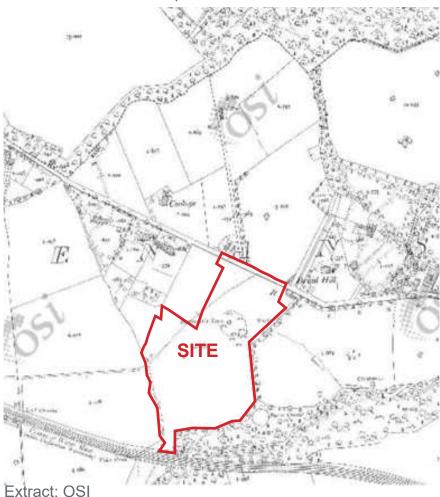
The glen was set out as a pleasure ground, and the property had outbuildings to cater for the needs of the family, including extensive stables. The most striking of the features he provided was Barrington's Tower, which was a belvedere tower, built further west along the valley from the house to avail of the striking views. This tower was later incorporated into a private house.



Extract: OSI Historic 6 Inch Map 1837-1842

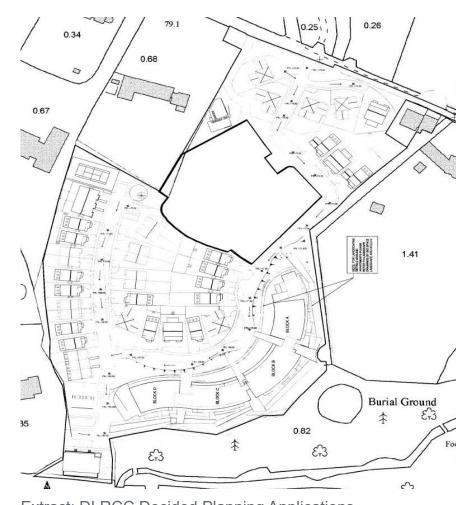


Extract: OSI Historic Map 25 Inch 1888-1913



Granted Planning Application

Permission was granted 23 Oct 2007 by Dun Laoghaire-Rathdown County Council for a residential development of 158 no. dwellings. The scheme, submitted by applicant Bill Doyle, consisted of 25 no. detached houses ranging from single to three story units, 12 no. three story semi-detached houses and 6 no. three story terraced houses. The granted development also included 4, five story, apartment blocks to the south of the site containing 109 no. units, 2 no. community rooms and 6 no. units provided in a fifth, 3 storey apartment block.



Extract: DLRCC Decided Planning Applications

Brief History and description

Barrington Tower stands in Brennanstown, part of Carickmines and one of the earliest known references to it was the Christ Church of 1654, which owned the tithes, and which recorded it as then consisting of a thatched castle, a tuck mill and a corn mill. The Walsh family, who owned nearby Carrickmines Castle were, at this point, recorded as occupying it. Though subject to an inevitable degree of artistic licence, Rocque's 1760 map of the County of Dublin is nonetheless insightful. It depicts a Bryanstown – possibly a transliteration of Brennanstown – to the west of Carrckmines, before the Brennanstown Road was cut through. It shows that there was at this point a notable building complex – possibly a precursor house to Brennanstown House - near where Brennanstown Road today turns sharply northwards at its eastern end.

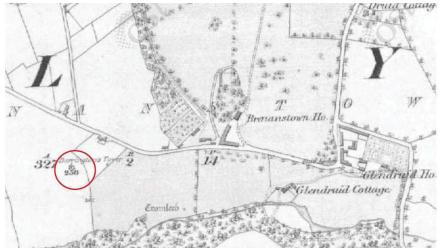
Glendruid was built for John Barrington, a Dublin-based soap and candle manufacturer in 1808. The original estate comprised one hundred and twenty-six acres and included the dramatic Druid's Glen which was converted by Barrington to a pleasure landscape and had outbuildings to cater for the needs of the family, including extensive stables and ancillary buildings and market garden, clearly seen on the 1837-42 Ordnance Survey map. Barrington planted trees, set out paths and constructed two cottages in the Glen.

Glendruid House itself is five-bay two-storey over basement with a projecting entrance porch, and a bow on its eastern side. It is set on an elevated site within its own mature grounds overlooking Carrickmines River Valley. The house is accessed via the original gated entrance, which includes a single-storey gate lodge. There is an interesting range of outbuildings to the rear of the house, which are accessed through a tall granite arched gateway. The site is bounded by a combination of high stone walls, mature trees and hedges, giving it a great sense of enclosure. Today Glendruid is set within a much reduced estate but maintains a distinctive landscape encompassing a river valley and mature woodland to the south, with borrowed views above the tree canopy towards the mountains. The original house is largely screened from the public road with glimpses visible from the river valley on Lehaunstown Lane to the southeast.

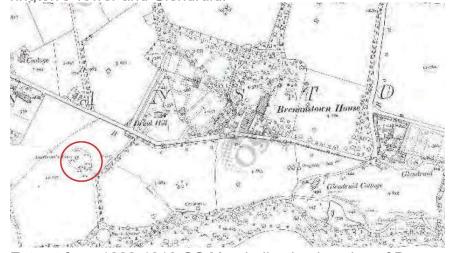
The most striking of the features Barrington erected was a belvedere tower (1818), built further west along the valley from



Extract from 1760 Roque Map.



Extract from 1837-1842 OS Map indication location of Barrington's Tower and Glendruid.



Extract from 1888-1913 OS Map indication location of Barrington's Tower and Glendruid.

the house to avail of the striking views across the glen, which he named Tillientudelem, after the castle in Sir Walter Scott's novel Old Mortality, published two years earlier, which was located on a very precipitous bank, formed by the junction of a considerable brook with the Clyde. It later became known as Barrington's Tower, described in John D'Alton's History of the County of Dublin (1838) as a lofty pleasure turret erected near [the site of] a castle (p.836). Its single bay square plan form first appears as Barrington's Tower on the 1837-42 Ordnance Survey map. In the 1837-42 edition enclosure and mounding around the tower are apparent.

On the 1837-42 maps Brennanstown Road was more meandering at this point with no discernible entrance off it to the tower. By the time of the 1888-1913 maps, the walls along Brennanstown Road appear to be straighter and more geometric, with a number of new entrances made in them, including for Druid Hill, a house sited to the north west of the road, which suggests that Brennanstown Road was straightened and the walls rebuilt – possibly reusing the original stone – sometime between 1842 and 1888.

There also appears to have been a discreet path leading from the eastern side of a new house adjacent to the road to the south-east of Barrington's Tower, before turning sharply towards the burial ground to the south. Both the Glendruid and Brennanstown House complex had grown considerably with infill between the first OS map and the 1888 map.

Between 1888 and 1996, the Ordnance Survey maps shows that there were a number of significant changes to the area and the Glendruid estate. Over time, the lands to the west of Glendruid, including Barrington's Tower, passed into different private ownerships with the area around the house and to the south remaining part of the estate.

In the 1950's, with the addition of a fan shaped flat roofed neo Georgian structure, the free standing tower was subsumed as part of a private dwelling. Currently disused, it lies derelict and in a state of disrepair after a relatively recent fire with partial collapse of the roof and being open to the elements. The fire caused considerably more damage to the extension than to the tower with the thick external stone walls of the tower remaining relatively intact. The extension contains timber work reclaimed from Platten House (1700; demolished 1954-5) that has survived in good condition and can be further reclaimed and stored until an appropriate use can be found for it.

2.0 Context - Conservation

Statutory Designations of Barrington Tower

Barrington Tower is on DLRCOCO Record of Protected Structures (RPS) as:Former Folly only RPS 1729 Barrington Tower Brennanstown Road, Cabinteely, Dublin 18.

It is included on the National Inventory of Architectural Heritage (NIAH) and is considered to be of 'Regional' interest for 'architectural/technical' merit.

The NIAH describes it as follows:

Attached single-bay three-stage folly, built 1810, on a square plan originally detached. Extended, 1956, producing present composition to accommodate alternative use. Now disused, set in overgrown grounds with rusticated rendered piers to perimeter having stringcourses below capping supporting wrought iron double gates.

Appraisal

A 'faux' Irish tower house folly erected by John Barrington (1764-1824) of nearby Glendruid representing an integral component of the early nineteenth-century built heritage of south County Dublin with the architectural value of the composition...confirmed by such attributes as the compact square plan form; the battered silhouette; and the crow stepped parapets embellishing the roofline.

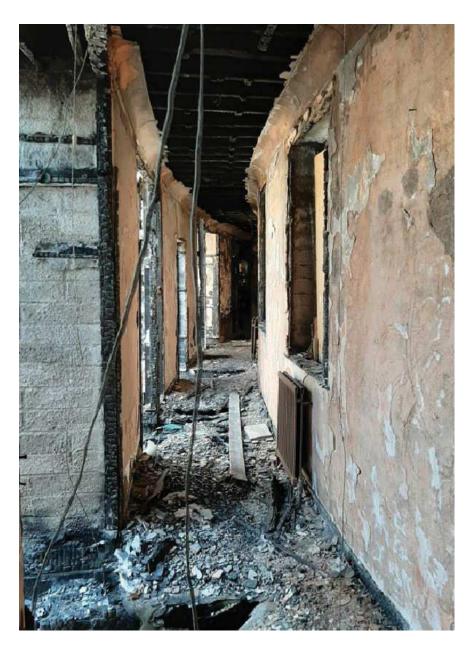
NOTE: An adjoining "fan-shaped" neo-Georgian house not only repurposed the folly, but also timber work reclaimed from Platin Hall (1700; demolished 1954-5), County Louth.

Platten Hall, Drogheda

From Maurice Craig's Classic Irish Houses of the Middle Size: pp.37-8

Platten Hall, County Louth dated from c. 1700 and was built for Alderman John Graham of Drogheda: Maurice Craig proposed the architect responsible was Sir William Robinson.

The Platten and Castle Martin doorcases are of great splendour as is that of Santry Court...glazing of the fanlight resembles that in the north courtyard doorway into the hall of the RHK, and the flanking windows are of Dublin Castle type. The house was probably of about 1700, and possibly by Sir William Robinson (1670-1712). It had a large hall with an open well staircase, and much panelling, and was demolished in the mid-1980's. The green marble lions survive.



Internal photograph of extension showing current condition - June 2020



Internal photograph of tower showing current condition - June 2020

Conservation and Design Strategies

Barrington's Tower is to be seen as a significant landmark for the development, the use of which will be considered as a starting point of the overall masterplan to create a central space and focal point within the larger development. The existing extension is to be removed. The tower will be left as a stand-alone element within the development. A steel stair will connect the tower's three levels allowing the development's residents and general public to enjoy the belvedere at the top of the tower.

Much like the monument in Westport or the clock tower in Enniskerry, Barrington's Tower will form the focal point to create a central public place for the development. The créche and communal amenity facilities like gym and co-working spaces are to be located around the tower and accessed off this central space.

Barrington Tower will be connecting pedestrians and cyclists from Brennanstown Road to other parts of the development and the Luas station to the south. The apartment buildings to the south will have their facing gables of living spaces and balconies expressed to address and overlook the space to create a sense of place and community.

Existing Walls

As part of the necessary improvement works along the frontage of Brennanstown Road, the existing walls are to be taken down, stored and rebuilt to create a new boundary and entrance for the new development.

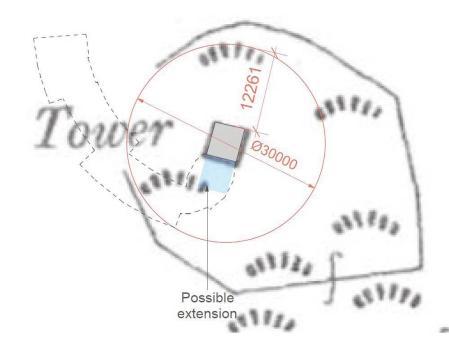


Diagram indication extension to be removed and 30m diameter curtilage to create public space and tower as focal point.



Existing boundary wall.



Westport 'Octagon' - town public space with focal point.



Enniskerry - Village central space with focal point.

2.0 Context - How a development responds to its surroundings.

Design Strategy

- Appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users
- Form, architecture and landscaping have been informed by the development's place and national, regional and local policy & objectives
- The development positively contributes to the character and identity of the neighbourhood
- Appropriate responses are made to the nature of specific boundary conditions

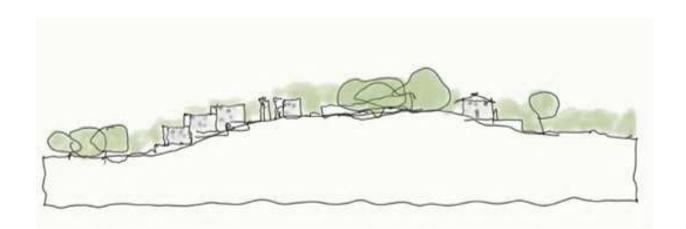
The vision is to create a new, modern residential community, with focus set on providing high standard residential amenity, as well as sustainable design, to meet the needs of the local community and the increasing demand of quality housing in this area, along with minimizing the negative environmental impact.

The strategy reflects the current design standards for new apartments, Urban Development and Building Heights Guidelines. The site will relate to its immediate context as well as provide urban, architectural and landscaping solutions, which create opportunities for transforming the current underutilised land, into a place of vibrancy and activity. Considering the constraints resulting from sharp differences in levels, the design shows ways of transforming these into opportunities for the provision of better public and communal open space and amenity.

The generating design idea is to create belvedere gardens stepping down the hill. Buildings on the hill tops, looking over the Glen connecting faraway places, Balcorus Lead Mines.

The approach is to connect the special experience of living on the Hill, to the Glen and to the views of the Wicklow Mountains.





2.0 Context - Design Development

Development of Blocks Layout

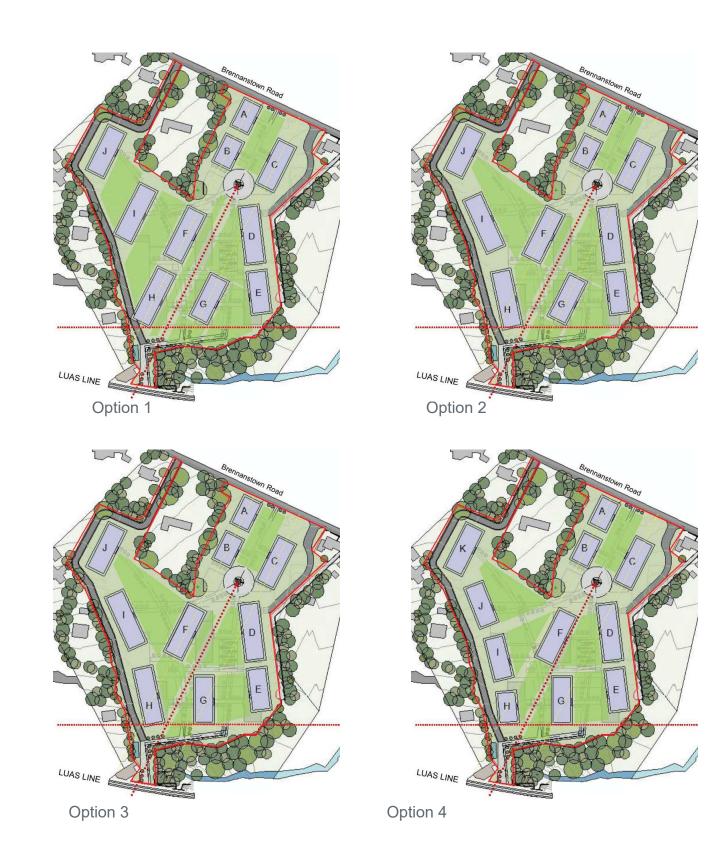
Alterations of the blocks were made along the design process to achieve the desired aspirations: Option 1 was the original development proposal, working through with improvements to Option 6 which was the latest option prior to the current proposal. The changes were as follows:

OPTION 1 - All blocks provide linear geometry with the entire scheme running perpendicular to Brennanstown Road aside from Blocks D & E. Both enrtrances to the site, north from Brennanstown Road and south, from the Luas line, allow views to Barrington Tower. This option still does not provide appropriate vehicular access into the site, nor does it meet Part M accessibility requirements. It also impacts on the trees on the eastern boundary. Finally, the orientation of most blocks is less than optimum in terms of daylight sunlight.

<u>OPTION 2 -</u> Blocks H and I provide a slightly better orientation for sunlight and daylight, however issues with part M, vehicular access and trees along the eastern boundary remain.

<u>OPTION 3 -</u> The rotation of Block G improves its orientation and allows for greater spacing between the blocks.

<u>OPTION 4 -</u> Repositioning of Block F provides a better area to the west to accommodate public space, but it breaks the hard line of the central route of the scheme. Blocks I and H from the previous option are splited into three blocks to achieve a higher number of dual spect units.



<u>OPTION 5 -</u> The desirable sightline from the Luas stop to the listed tower is still obstructed by the repositioning of Block F, however, the movement of this block allows for Part M access through the site, towards the western edge. There is also a more central public open space. There is still a concern about the proximity of the blocks along the eastern and western boundaries, the impact on the adjoining trees and vehicular access.

<u>OPTION 6 -</u> North South orientation of the blocks allows for all apartments to face East or West, avoiding North facing units. Hinged junctions between Blocks B&F and C&D help to maintain an axial composition and a hard line is preserved amongst the seven Eastern blocks, identifying a direct route organised around the listed tower. The staggering of Blocks H,I and J allows for them to be in close proximity to each other whilst maintaining dual aspect. There is concern about their impact on the adjoining trees.

OPTION 7 (Stage 2 submission). After considering all the above alternatives, we concluded that this option was the best as addressed the main challenges of the site: The scheme's layout acknowledges the location of the protected structure, enhancing its importance. It achieves good orientation of all residential units, maximising the potential of daylight and sunlight not only to the apartment's main rooms, but also to the communal external amenity spaces. Building blocks are well set back from the boundary lines avoiding overshadowing and overlooking to neighbouring properties. External spaces, public, semi-public and private are well defined and connected between them at the same time. Part M compliant pedestrian routes from Brennastown Road to the Luas Station at the south are achieved. Vehicular traffic will only take place at the eastern boundary comprising mainly a car free development. Finally, views to the south, Dublin mountains are maximised.

<u>PROPOSED OPTION</u> - The Aras Eibhear's site and consequently Block K have been removed from this proposal due to site specific constraints. Cairn are considering a number of options for the future use of this land. The current proposal includes the realignment of the southern boundary and retention as a standalone dwelling.



Option 5



Option 7 (Stage 2 Option)



Option 6



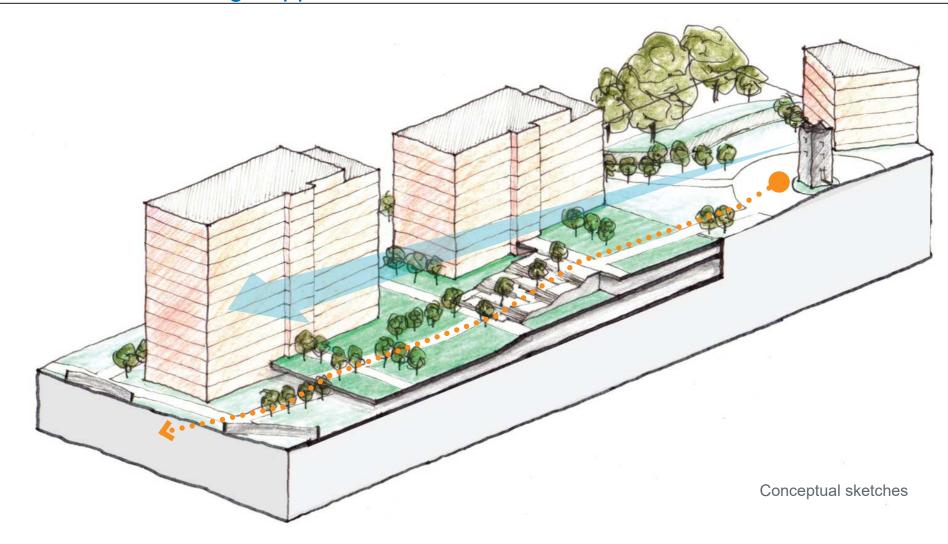
Current option

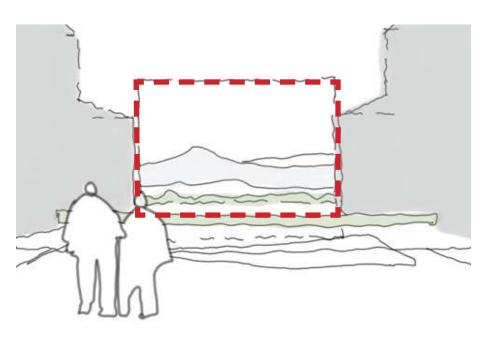
2.0 Context - Proposed Development - Architectural Design Approach

Concept Development

The stepped blocks frame the views and create a series of tree top living rooms which peep into the far distance.

The Lower Basement Car Park provides the majority of the schemes parking requirements. The split level structure steps down the hill towards the glen, accommodating for the sites extreme fall in level to the south. The large basement slabs double in function providing the base for the stepped terrace gardens.









2.0 Context - Proposed Development - Architectural / Design Approach

Height Form and Massing

With the publication of the new national height policy 'Urban Development and Building Heights Guidelines for Planning Authorities 2018, a key objective is therefore to see greatly increased levels of residential development in our urban centres and significant increases in the building heights. An overall grouth in density of development is not only facilitated but actively sought out and brought forward by our planning processes and particularly so at national and local authority levels.

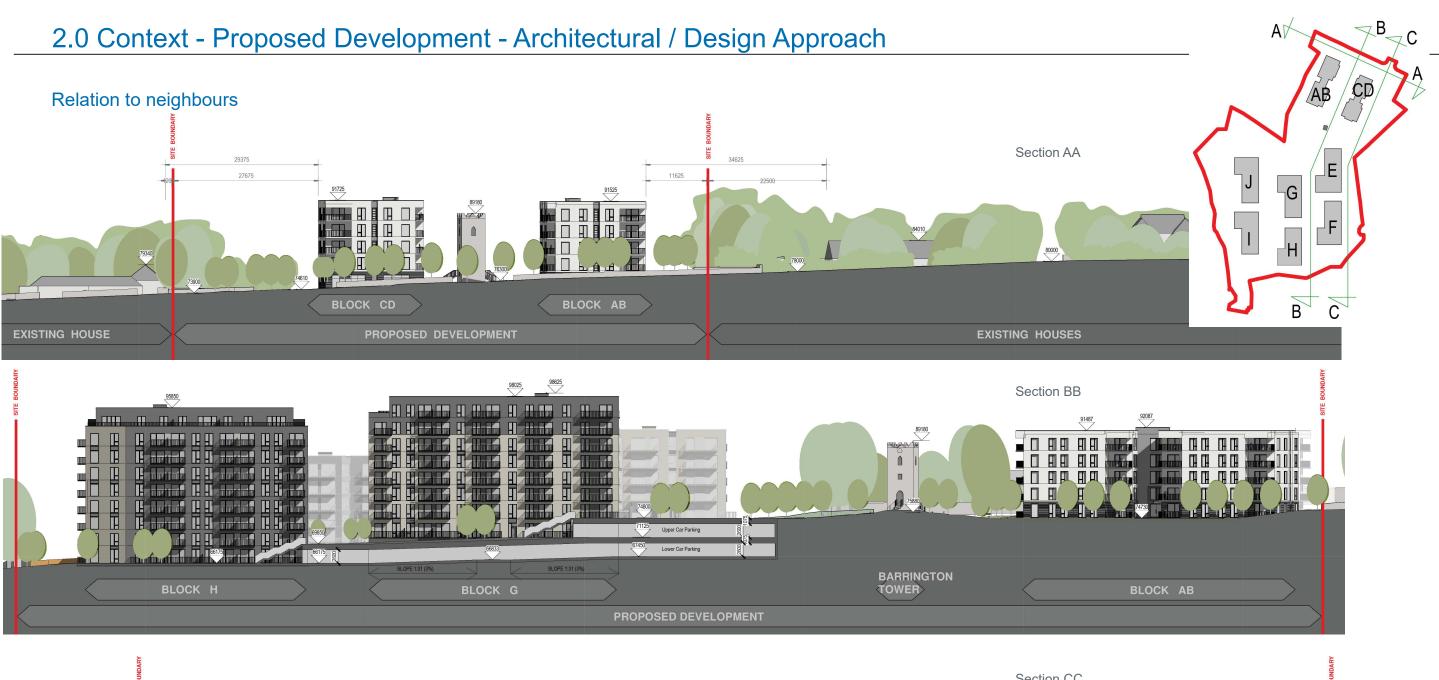
Design Quality

For our clients, achieving design quality is key to ensuring the whole life of a building is durable and will perform well throughout its duration. Marrying robustness with aesthetics is key to achieving lasting quality. The apartments will be designed to enrich the lives of the tenants.

The residential development and landscape areas are designed for use by all users. Large turning circles are provided in internal communal spaces to facilitate electric wheelchairs. Doors and bathrooms are designed to provide better access. Corridors are straight, opening into generous lift lobby spaces and corridor junctions, providing better accessibility.



CGI View of Proposed Massing to South of the Site





2.0 Context - Proposed Development - Architectural / Design Approach



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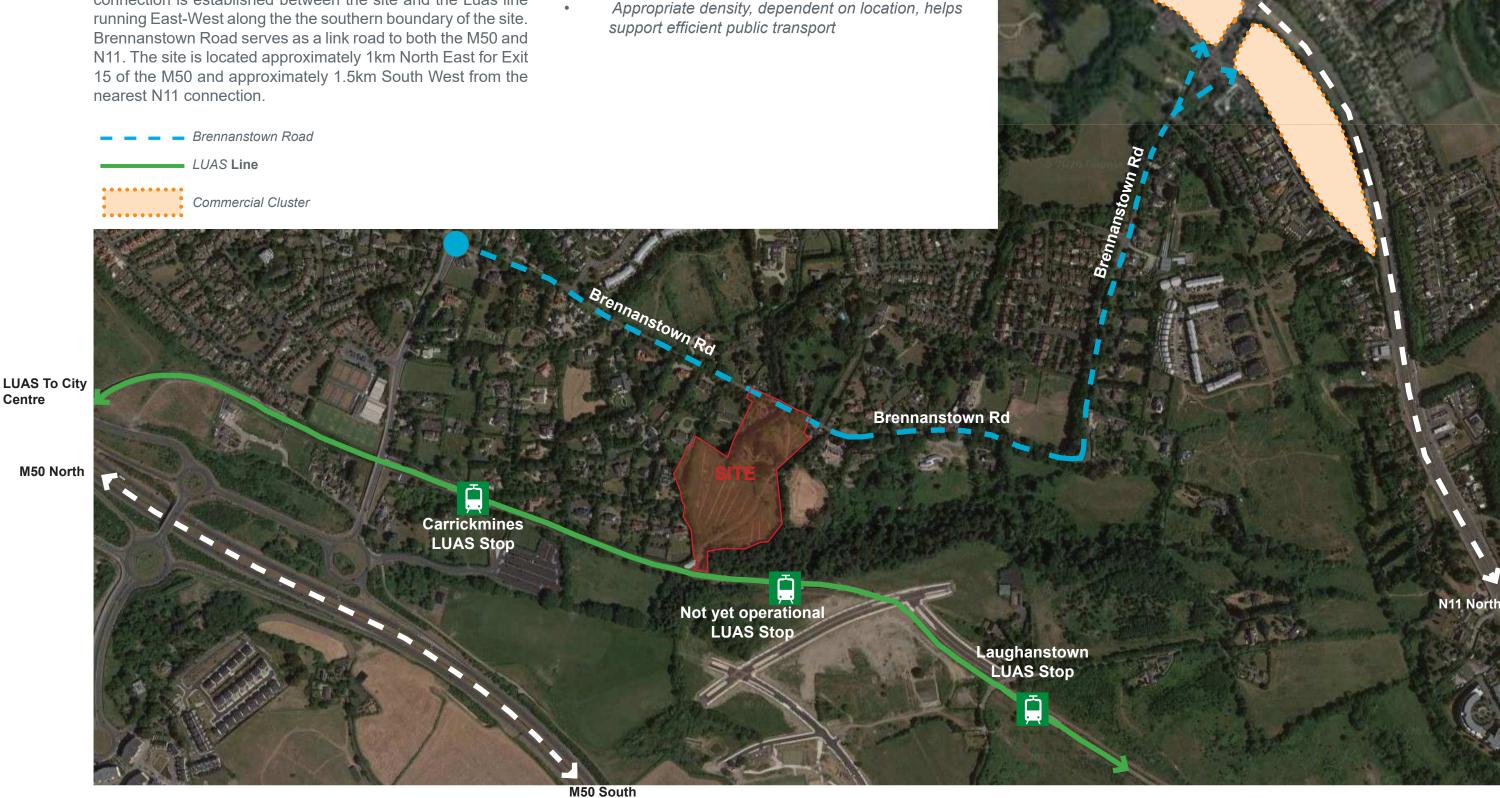
3.0 Connections- How well is the new neighbourhood site connected?

Connectivity to the Site - City Links

In a suburban plot, the site is relatively close to the city centre offering various options of transport links. A valuable connection is established between the site and the Luas line

The layout links to existing movement routes and the places people will want to get to

Appropriate density, dependent on location, helps support efficient public transport



Centre

M50 North

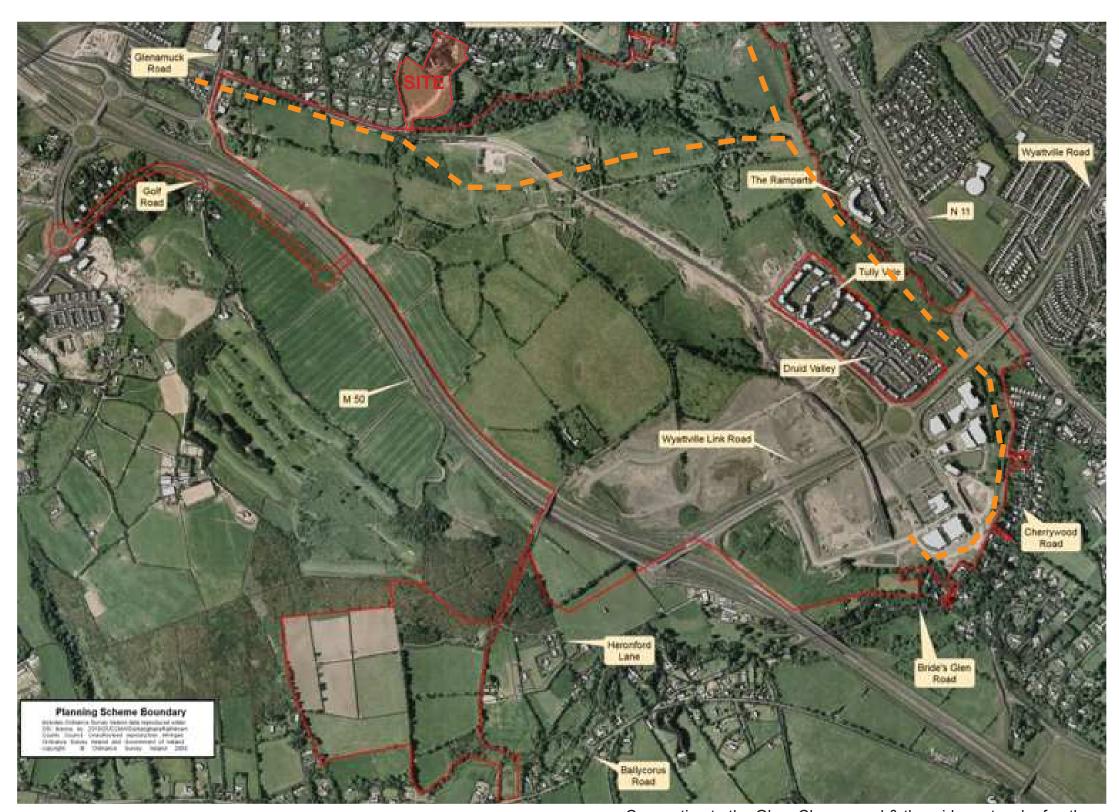
3.0 Connections

Site Analysis - DLRCC Development Plan / Connectivity with Cherywood Development

Cherrywood Natural Greenspace Green Route: - -

A new infrastructure development, currently under consultation, proposed by Dún Laoghaire-Rathdown County Council: Cherrywood Natural Greenspace Green Route (common infrastructure project) extending approximately 5.0km from Brides Glen to Brennanstown comprising pedestrian and cycle connections to the N11, Wyattville Link Road, Cherrywood Avenue and Brides Glen/Cherrywood Road.

The project, if adopted, will link the southern part of the site.



Connecting to the Glen, Cherrywood & the wider network of paths

Connectivity to the Site - Local Context

••••• Pedestrian route to operational Luas Stop -1km -13 m inutes walk Pedestrian route to
Bus Stop - 9 m inutes
walk

LEGEND

LUAS Stop

Dublin Bus Route

Dublin Bus Stop LUAS Line (2017)



Connectivity to the Site - Pubilc Open Space





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

Permeability

The scheme's permeability will be achieved through a pedestrian, bicycle and vehicular access route off Brennanstown Road at the northeast of the site connecting the Luas stop to the south.

The vehicular access for residents and visitors is proposed off Brennanstown Road at the northeast of the site. Maintenance, emergency and delivery vehicles will also share this access route. Pedestrians accessing from this route will meet with a direct view of the tower standing at the core of the scheme, from where it will pivot to the west and eventually leading south to the Luas stop. The route branches off in numerous directions throughout the journey, providing access to each of the residential blocks.

The public open spaces and the public pedestrian routes are clearly identifiable as such and are open to all for access.

"Inclusive design is defined as that which meets the needs of all users, regardless of age, gender, race or sensory and mobility abilities. In its broadest sense, it also means creating places that can be enjoyed by people from all cultural and socio-economic backgrounds."

- •New rental homes meet the aspirations of a range of people and households
- Design and layout enable easy access by all
- •There is a range of public, communal and/or private amenity spaces and facilities for people of different ages.
- •Areas defined as public open space will be clearly defined, accessible and open to all.
- •New buildings present a positive aspect to passers by avoiding unnecessary physical and visual barriers.

The site's immediate proximity to the future Luas stop allows for exceptional public transport access to the site and from the surrounding established residences.

The main public open space around Barringtown Tower and public pedestrian routes are clearly defined by the proposed apartment blocks, which will ensure both active and passive uses.

The layout and design of the development provides a clear distinction between public, communal and private areas through designation of the public routes and spaces.

Consideration has been given to the accessibility for all building users. All pedestrian routes around the site will meet the requirements of Part M. Level access will be provided to both commercial and residential units throughout the scheme. They will be compliant with Part M access requirements. Positioning of disabled parking bays will be allocated to ease movement at basement and surface levels. Lifts and Part M compliant stair ways are proposed for all circulation cores.

LEGEND: Site Boundary Luas Line Brennanstown rd Vehicle Route Resident's Pedestrian Route Public Pedestrian Route Bicycle Route Maitenance, Emergency and Delivery Vehicle Route

Key Context & Linkages Diagram

4.0 Inclusivity

Proposed Access - Roads Engineering Strategy

As part of the subject development works, it is proposed to upgrade a further 250 metres of Brennanstown Road and extending eastwards to the entrance to Egypt House. The new access to the subject proposed development will be located on this upgraded section of Brennanstown Road.

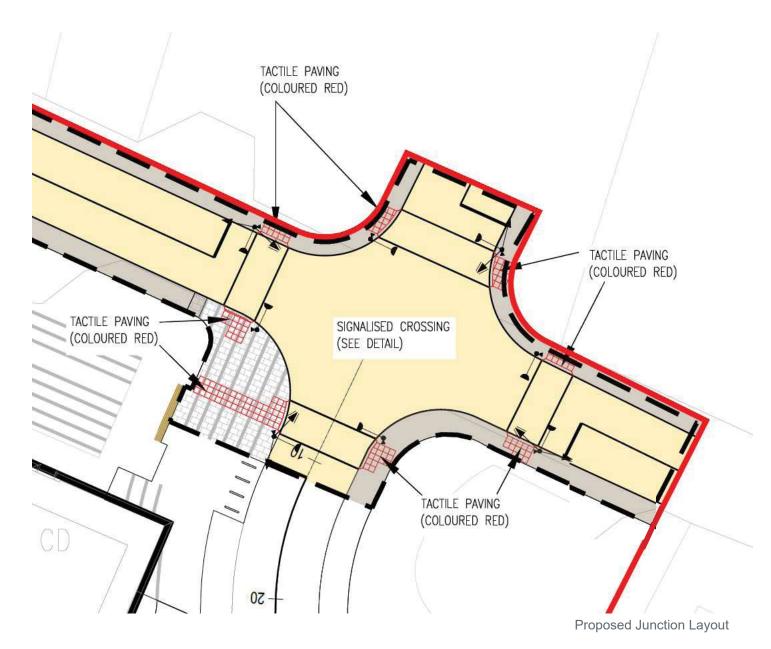
Vehicular access to the subject site is proposed via a new four-armed signal-controlled junction to be located on Brennanstown Road. Brennanstown Road will form the eastern and western approaches of the junction, the southern approach will provide access to the proposed development site and the northern approach will be reserved for a potential future residential development.

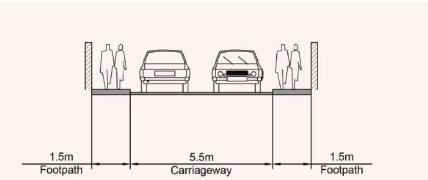
The images to the right show access to the zoned lands at Barrington and Apollo /Appledore. The layout is in keeping with the objectives of the County Development Plan and has been co-ordinated with the traffic management proposals for the neighbouring sections of Brennanstown Road.

Brennanstown Road is a single carriageway road with a length of some 1.9 km (1,940 metres) between Glenamuck Road and Old Bray Road. The road provides access to a large number of single residential units provided along its extent.

The single Internal vehicular road in the proposed development is mainly designed for the exclusive use of the residents and their visitors. Drop off areas for the créche and for Luas Commuters are also considerd. Routes for emergency and maintenance vehicles will blend with the landscape design.

The pedestrian/cyclist infrastructure proposed consists of two north-south and one east-west spines running across the site - one along the eastern side running from the proposed signalised junction on Brennanstown Road up until the southern point of the site, one greenway along the western side also running from Block J up to the southern point of the site, and one greenway running on the centre of the site connecting both north-south spines. The southern point of the site is directly adjacent to the Luas Green Line where the Brennanstown Stop is located.





Proposed Junction Cross-Section

5.0 Variety - How does the development promote a good mix of activities?

"The most successful and sustainble communities are the ones that contain a good variety of things to do, see and enjoy. For larger scale developments, this means providing a good mix of uses, housing, facilities and amenities that help to engender a successful community. For smaller infill developments, it means ensuring that the proposed uses and housing types complement those that already exist so that a balance is struck"

- •Activities generated by the development contribute to the quality of life in its locality.
- •Uses that attract the most people are in the most accessible places.
- •Neighbouring uses and activities are compatible with each other.
- •Housing types and tenure add to the choice available in the area
- •Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood.

The proposed development will contribute to the unit mix in the surrounding area, which is mainly of 2-3 storey detached houses. In this way, variety is ensured for all households and so resulting in a vibrant and dynamic neighbourhood.

This scheme can support a variety of people through all stages of their lives. The range of studios, one bedroom, two bedroom and three bedroom apartments will provide a balance of apartment options and quality apartment accommodation.

The internal communal spaces will be multi-functional to maximise flexibility of use for the BTR residents ensuring a variety of uses.

To support the proposed development, we have included a number of facilities which have been arranged at ground and first floor level of blocks E and I. They contain generous amenity space for residents of all blocks. The facility includes concierge desks, postal storage, work sharing space, lounges, meeting rooms, gym, multipurpose rooms and ancillary back room offices and toilets.

Block C-D has a retail commercial space which feeds from a small plaza off Brennanstown Road and a créche that overlooks Barrington's Tower and main public space to serve the development and the local community.









Apartment Layouts



Internal Amenity



Crèche / Childcare Facility

Notwithstanding the Planning Guidelines for Childcare Facilities (2001) which recommend the provision of one childcare facility (equivalent to a minimum of 20 child places) for every 75 dwelling units, the threshold for provision of any such facilities in apartment schemes should be established having regard to the scale and unit mix of the proposed development and the existing geographical distribution of childcare facilities and the emerging demographic profile of the area. There are however, no specific guidelines in place for Build To Rent schemes.

On the basis of the Sustainable Urban Housing: Design Standards for New Apartments, one-bedroom or studio type units should not generally be considered to contribute to a requirement for any childcare provision and subject to location, this may also apply in part or whole, to units with two or more bedrooms.

From initial research, we believe that there is limited capacity within existing childcare facilities along the Brennanstown Road.

The minimum provision of space is 2.32 m² per child as per the Childcare Guidelines. The proposed childcare facility will be designed to cater for the appropriate age groups.

Location:

The proposed location for the crèche is to the North East of the site at ground floor level of Block C-D, off the access road.

The location of the crèche has been considered carefully in regards to both the overall scheme and the requirements within the Child Care (Pre-School Services) (No.2) Regulations 2006. The location facilitates easy drop off space provision for cars at the east of the building block.

The area of the crèche has been determined by the total number of 2 and 3 bed BTR residential units contained within the scheme.

The combined total number of BTR residential units within the proposed scheme is 534.

The ratio of places to unit is 20 places per 75 two bed and three bed units. This equates to 99 places.

The overall area of the ground floor is 340m² excluding the refuse store.

. The floor to ceiling height will be min 2.7m. The area of the individual child care rooms are above the requirements.



Site Plan- Crèche Location

Crèche / Childcare Facility

| Creche [20places per 75 units - 2Bed & 3Bed only] | | |
|---|--|--------------|
| | | PROVID ED |
| Places Req. | Int. Play Area Required (2.5 m² per child) (m²) | Area (m²) |
| | | 340 |
| | | |
| | 5 A | |

| 99 | 248 | 340 |
|----|-----|--------------|
| | | 3.43 |
| | | m² per child |



Creche Design:

Access to the crèche is provided off the access road at ground floor level of Block C-D and will comprise:

Main Entrance/Reception Area

Office - Parent Consultation Room.

Baby/Toddler/Child Place Facilities.

Separate staff wc.

Staff Facilities/Kitchen

External play space.

References

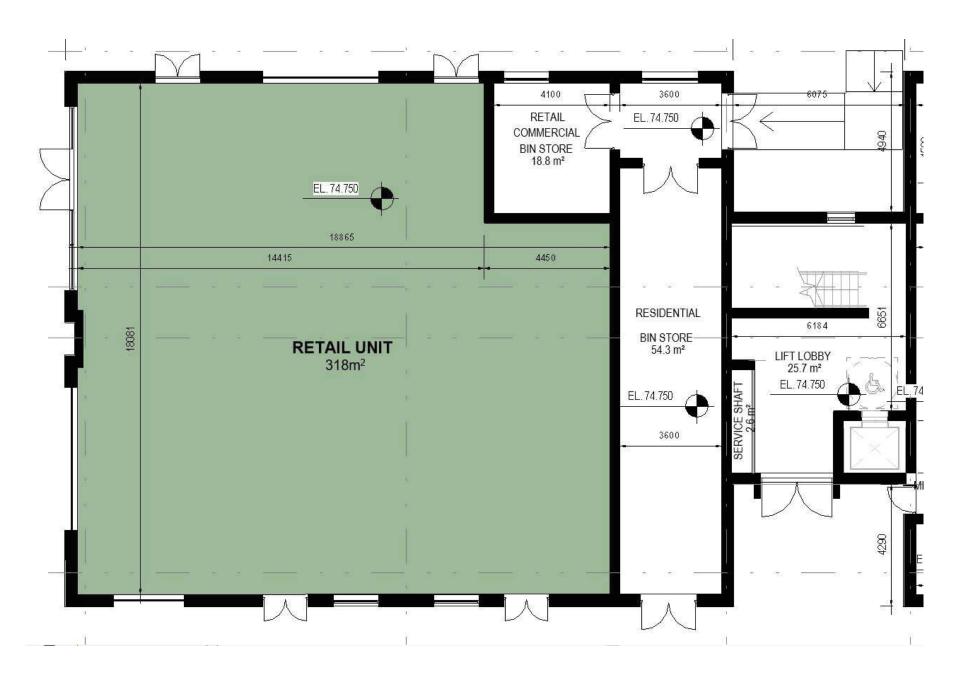
All crèche development standards have been taken from the following statutory documents:

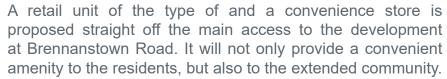
- Childcare Preschool Services (No02) Regulations 2006
- Child Care Act 1991



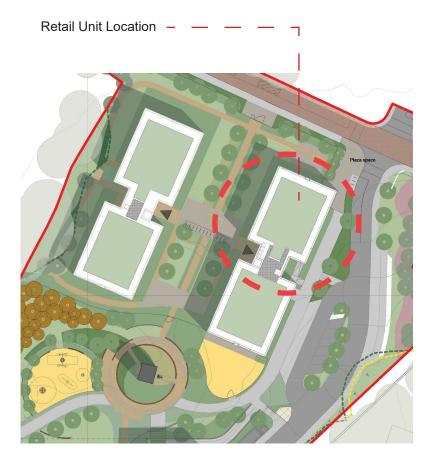
Crèche Table 1

Commercial/ Retail





Retail unit indicative layout





Related image

6.0 Efficiency - How does the development make appropriate use of resources, including land?

"High level Government policy in the shape of NSS and the Climate Change Strategy establishes the importance of reducing the energy requirements and greenhouse gas emissions associated with residential development.

There are two main strands to designing places for climate change - mitigation and adaptation. This criterion seeks to cover mitigation, which addresses how places can be designed to reduce the impact of development on climate change."

- •The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design.
- •Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems.
- •Buildings, gardens and public spaces are laid out to exploit the best solar orientation.
- •The scheme brings a redundant building or a derelict site back into productive use.
- · Appropriate recycling facilities are provided.

The proposed development will increase the efficient use of this part green field site by generating a density of an appropriate level taking into consideration the location relative to an excellent public transport network.

This proposed design acknowledges the scale and privacy of the neighbouring properties by the careful consideration of the massing of the new buildings, apartment orientation and the distance between blocks. This approach will also ensure that the maximum access to natural daylight and sunlight for the apartments is achieved.

The predominantly north south alignment of the proposed residential blocks ensure that all apartments within the development have no single aspect north facing orientation.



6.0 Efficiency

Sustainabe Surface Water Drainage

The proposed development respects the principles of Sustainable Drainage Systems (SuDS) as embodied in the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS) and will significantly reduce run-off rates and improve storm water quality discharging to the public storm water system. The GDSDS addresses the issue of sustainability by requiring designs to comply with a set of drainage criteria which aim to minimize the impact of urbanization by replicating the run-off characteristics of the greenfield site.

These drainage design criteria are as follows:

- Criterion 1 River Water Quality Protection
- Criterion 2 River Regime Protection
- Criterion 3 Flood Risk Assessment
- Criterion 4 River Flood Protection

The requirements of SuDS are typically addressed by provision of the following:

- Interception storage
- Treatment storage (not required if interception storage is provided)
- Attenuation storage
- Long term storage (not required if growth factors are not applied to Qbar when designing attenuation storage)

All blocks will also include a mix of intensive and extensive green roofs covering 60% of the general roof areas. Please see typical green roof sections to the right and refer to Waterman-Moylan Consulting Engineers scaled detailed drawings.

Flood Risk

The flood risk assessment has been carried out by Waterman-Moylan Consulting Engineers in accordance with the OPW publication "The Planning System and Flood Risk Assessment Guidelines for Planning Authorities".

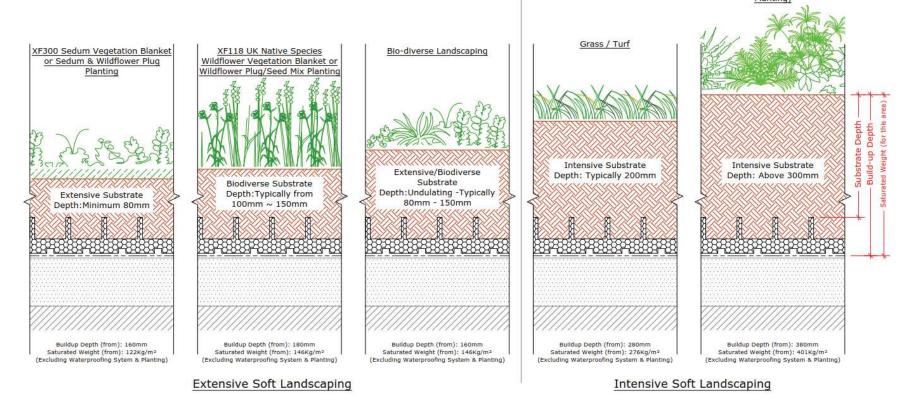
The stages involved in the assessment of flood risk are listed in these publications as follows:

- Stage 1: Flood Risk Identification
- Stage 2: Initial Flood Risk Assessment
- Stage 3: Detailed Flood Risk Assessment

The OPW publication also outlines a sequential approach for determining whether a particular development is appropriate for a specified location in terms of flood risk.

Please see Civil Engineering Infrastructure report prepared by Waterman-Moylan Consulting Engineers which accompanies this application. The findings of which show there is a no risk of flooding affecting the site from fluvial sources, so it is possible to develop the site within Flood Zone C. Any flood events do not cause flooding of the proposed development, and the development does not affect the flood storage volume or increase flood risk elsewhere.

Planting (Medium Sized Mixed



Substrate Based Landscape Options

At the scale of the relevant city/town:

"The site should be well served by public transport and high capacity, frequent service and good links to other modes of public transport."

The site is located immediately adjacent to the future Luas stop, linking the site to the city centre, the outer suburbs and natural public transport infrastructure networks.

"Development proposals incorporating increased building height, including proposals with architecturally sensitive areas, should successfully integrate into/enhance the character and public realm of the area, having regard to topography, its cultural context, setting of key landmarks, protection of key views. Such development proposals shall undertake a landscape and visual assessment by a chartered landscape architect."

The scale of the buildings and the rising topography from south to north allows to the proposed apartment blocks F and H to merge with blocks G and E. The northern part of Block E steps down in heigh enhancing the protected structure and main public open space.

The stepped blocks, all having direct views to public or communal open spaces frame the views to the Dublin mountains.

The development seeks to make the most of it's resources, capitilising on sustainable drainage and soft landscaping, ensuring direct sunlight penetrates open spaces as far as reasonably possible. Appropriate massing and building scale have been considered to ensure that it maximises the use of the site in accordance with Planning Policy and it's surrounding context.

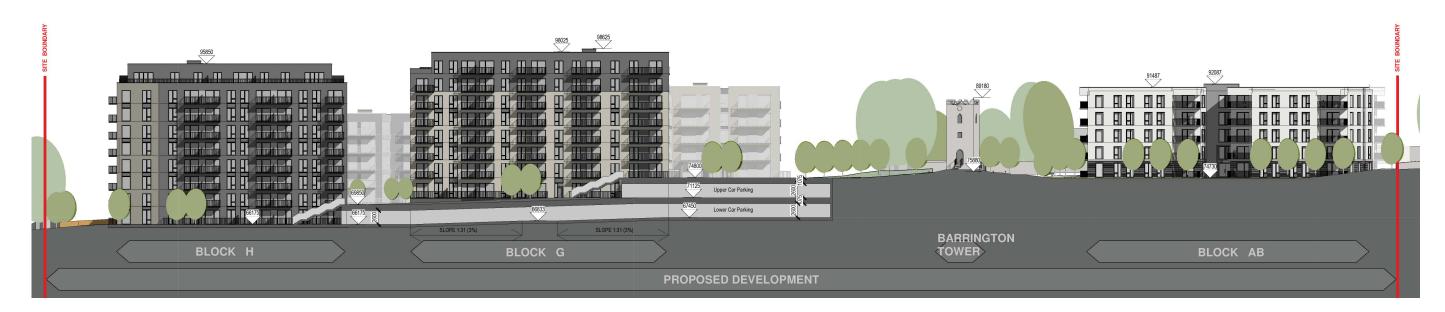
The homes will be sustainable through the use of low energy materials, efficient energy systems and by using the highest quality materials to provide a truly sustainable development. The blocks are laid out to optimise the solar orientation and ensure apartments have excellent daylight.

This proposed design acknowledges the right of privacy and daylight /sunlight of the neighbouring properties by the careful consideration of the massing and location on the site of the proposed building blocks.

The design solution will exceed the performance requirements of Part L of the Building Regulations and will be NZEB compliant by optimising efficient lighting, heating, cooling and ventilation technologies. A structural framework system insulated with brick / block with render outer leaf walls will deliver 'u' values in excess of Part L standards. High technical detail at construction stage will ensure minimal thermal conductivity at the fabric perimeter.

"On larger urban development sites, proposed developments should make a positive contribution to place making, incorporating new streets and public spaces, using massing and height to achieve the required densities, but with sufficient variety in scale and form to respond to the scale of adjoining developments and create a visual interest in the streetscape."

The proposed development facilitates a new pedestrian and cycle link from Brennanstown Road to the Luas stop, feeding to new public open spaces. These parks will be wrapped with the high density blocks creating a sense of place.

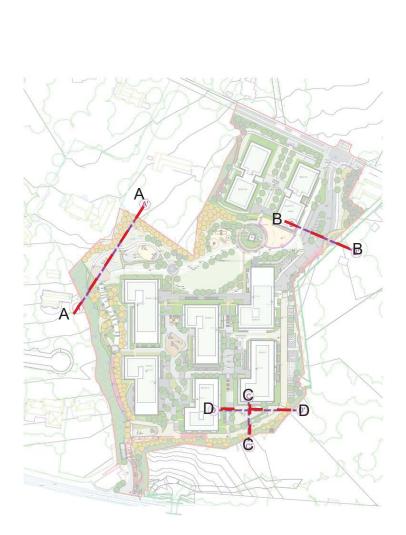


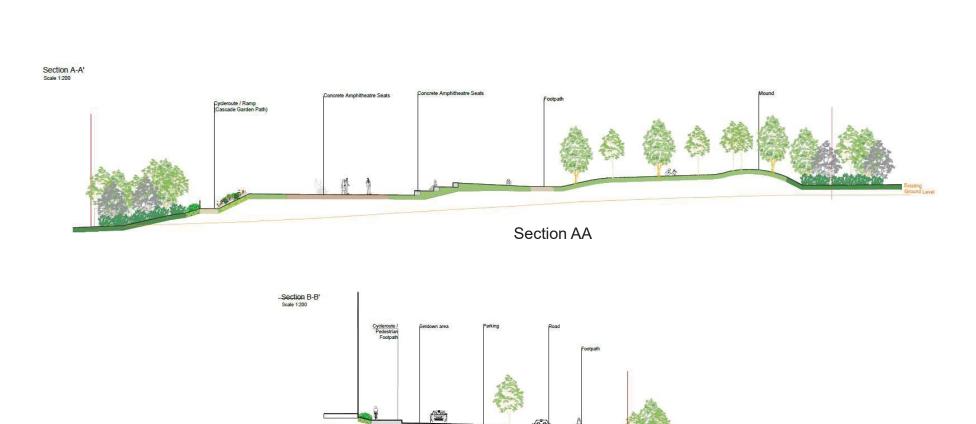
Section South / North

6.0 Efficiency

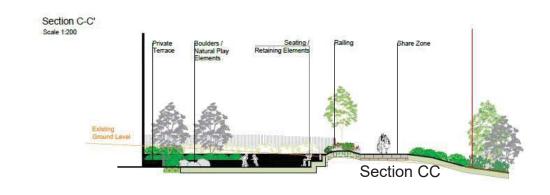
Topography of the site

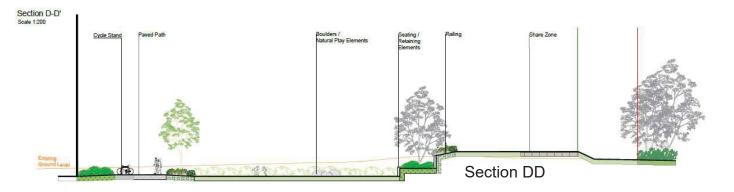
This landscape proposal of the scheme acknowledges the challenging topography of the site providing many oportunities to create different character areas and interesting public and communal open space.





Section BB





6.0 Efficiency

At the scale of district/neighbourhood/ street:

"The proposal should respond to its overall natural and built environment and make a positive contribution to the urban neighbourhood and streetscape. The proposal should avoid long, uninterrupted walls of building in the form of perimeter blocks or slab blocks with materials / building fabric well considered."

Block A-B and C-D to the north and J and I to the west will be lower than the central blocks, blending with the heights of neighbouring properties.

Brick will be the main material used in the building's elevations, in tune with neighbouring properties.

"The proposal should enhance the urban design context for public spaces and key thoroughfares and marine frontage, thereby enabling additional height in development form to be favourably considered in terms of enhancing a sense of scale and enclosure while being in line with the requirements of "The planning system and flood risk management - Guidelines for Planning Authorities" (2009).

routes and views through the buildings.

The existing Barrington tower sets the tone for the development. Perched on a hill, the tower is the pivot point of navigation routes and views through the buildings.

"The proposal should make a positive contribution to the improvement of legibility through the site or wider urban area within which the development is situated and integrates in a cohesive manner."

The scheme will provide an urban pedestrian and cycle link between Brennanstown Road and the Luas station.



View from Brennanstown Road

7.0 Distinctiveness - How the proposal creates a sense of place?

"Each successful community has a distinct and special character. That is not to say that each community should compete with or try to upstage the rest - Some of the most successful areas have a quiet an easy charm. nonetheless each sussessful neighbourhood will have its own raison d'etre that makes people choose to live there over other places. Much of an aea's character will be derived from elements considered in the other 11 criteria including - but not limited to - the variety of uses, layout and architecture. But these must come together in such a way as to make the neighbourhood memorable."

- •The place has recognisable features so that people can describe where they live and form an emotional attachment to the place.
- •The scheme is apositive addition to the identity of the locality.
- •The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout."
- •The proposal successfully exploits views into and out of the site.
- •There is a discernible focal point to the scheme, or the proposal's reinforce the role of an existing centre.

The scheme will respect the challenging topography of the site. Vehicular, cycle and pedestrian routes will meander mainly from north to south adapting to the different levels of the land. The development will include different pedestrian proposed entrances. To the north, one public route and one for residents. To the south, one public entrance from the Luas stop.

At the north east, an open square enhances the entrance of a retail store (ground level of block C-D).

The residents' entrance between blocks A-B and C-D will exploit views into the site and its main focal point of the development, Barrington Tower. This protected structure and its public plaza will reinforce the scheme's centre. The crèche, located at ground floor of block C-D and the communal amenity space located at ground and first floor level of Block E will contribute with their active uses. As a landmark, the tower, will be easily recognisable ensuring the place will be easy to locate and navigate around.

All pedestrian and cycle routes will make visual connections to the Dublin Mountains as making their way from north to south.

Terraced gardens between building blocks addressing the two under-croft parking levels will also open their views to the south, helping the new development to achieve a strong sense of local identity and place.



View from East of Barrington Tower

8.0 Layout - How the proposal create people friendly streets and places?

"How the site is laid out is one of the key determinants of successful places. The layout of a neighbourhood can help to determine an area's character and sense of place – the same buildings arranged differently will have a very different feel to each other - its safety and security and how well it works. Many of the mistakes that are attributed to bad planning are often errors of layout – for instance, a dead end that does not connect with the route to the school, or a lonely footpath that is a haven for crime and anti-social behaviour. The layout of a site can affect a scheme's sustainability in a number of keyways, including solar orientation, permitting the provision of Sustainable Drainage Systems, and encouraging residents to walk and cycle in preference to using the car."

- Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.
- The layout focuses activity on the streets by creating active frontages with front doors directly serving the street.
- The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers.
- Traffic speeds are controlled by design and layout rather than by speed humps.
- Block layout places some public spaces in front of building lines as squares or greens, and some semi-private space to the back as communal courts.

The design layout arrives from a considered response to site and brief, providing a clear distinction between public, communal and private areas through designation of the public routes and spaces.

The sharp differences in levels stepping down from north to south and from west to east defined the generating idea of the site's layout. The pedestrian and cycle routes which meander through the site follow key desire lines, connecting two points (Brennanstown Road and the Luas Line) in the most efficient way possible, taking into account the terrain's topography.

This has resulted in an interesting, varied and organic layout, where different buildings organise the space and provide passive surveillance over all public and communal open areas. The location and orientation of these structures have been carefully considered to maximise sunlight and avoid overshadowing to public and communal open spaces as well as neighbouring properties.

The vehicular and bicycle route access for residents and visitors is proposed off Brennanstown Road at the northeast of the site. Maintenance, emergency and delivery vehicles will also share this access route. Pedestrians accessing from a footpath beside this road will meet with a direct view of the tower standing at the core of the scheme, from where it will pivot to the west before moving south to the Luas stop. The route branches off in numerous directions throughout the journey, providing access to each of the residential blocks.



Framed Views Plan

The access road for cars, located at the northeast of the site includes a set down area that allows for drop offs at the crèche and the Luas. This road then continues to the south allowing access to the basement's parking.

The proposed site plan will create people friendly environments by providing sheltered courtyards for the residents to enjoy.

Semi-private / private realms will be created in front of the ground floor apartments to create 'defensible' space where residents have a barrier between the public / communal spaces and their homes.



Accessible Routes Plan

8.0 Layout

Public Open Space

Public open space will provide visual breaks between and within residential areas facilitating biodiversity and the maintenance of wildlife habitats.

• Site Area: 38,100sqm - 3.81ha

Public Open Space Required: 3,810sqm

Primary Public Open Space Provided: 6,346sqm

Our client wishes to retain possession of the public open space from a management point of view and do not anticipate handing this over to the Council for taking in charge. It will be independently managed by an operator. A management operational plan shall accompany the application demonstrating how the space will be maintained and how it will be managed.

Please see accompanying landscape architects report for further detail on the design strategy for the public open spaces.



Primary Public Open Space: 6,346m²

Communal Amenity Space: 4,200m²



Secondary Public Open Space: 3,024m²



9.0 Public Realm - How safe, secure and enjoyable are the public areas?

"The most successful neighbourhoods contain streets, squares, parks and public gardens that are as good quality – if not better, than the private buildings and spaces within the neighbourhood. A neighbourhood with poor quality public spaces will rarely be improved by even the highest quality architecture – whilst a neighbourhood of ordinary buildings can be transformed through improvements to the public realm."

- All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use.
- The public realm is considered as a usable integrated element in the design of the development.
- Children's play areas are sited where they will be over looked, safe and contribute to the amenities of the neighbourhood.
- There is a clear definition between public, semi-private, and private space.
- Roads and parking areas are considered as an integral landscaped element in the design of the public realm.



Barrington Tower is the aesthetic focus and heart of the scheme. Around the tower are paths and viewing areas which allow the visitor to view the tower from all angles.

9.0 Public Realm - How safe, secure and enjoyable are the public areas?

The scheme shows a clear definition between public, semiprivate, and private space.

Passive supervision, openness and managed public realm have been considered in the design to ensure the safety of residents. The communal courtyard will be managed using access control providing secure and enjoyable spaces for the residents.

The open spaces will deliver a high level of natural passive surveillance from the apartments above, creating a robust relationship between the private home and public space. Residents will be encouraged to feel a strong sense of ownership over the public realm which will reinforce its safety and security by ensuring that anti-social behaviour will not go unchallenged. Additionally, it will lead to the public spaces being better maintained.

The site will be connected and permeable, although an implied hierarchy of open space will be present, delineated by scale, materials, planting, typology and soft division of areas. Hard landscape elements will also help to define spaces.

The public area around Barrington Tower will have an open character, although somehow enclosed by the surrounding urban blocks. The pathways through the open spaces will also be free in character facilitating legible pedestrian movement. The scale will be reduced in the terraced courtyards allowing a more passive recreational use for residents.

Semi-private / private realms will be created in front of the ground floor apartments to create 'defensible' space where residents have a barrier between the public / communal spaces and their homes.



Cascading garden showing sloped route (2m wide) and the stepped route (3m). Crossing points between the routes are demarcated with N rumble strips and deflectors.

10.0 Adaptability - How will the buildings cope with change?

"The success and sustainability of a housing development can be measured by its longevity. Much of the most successful housing of the past is still in use because it has been able to adapt to changing circumstances – for example by adapting to changing family sizes, different forms of space heating and increased car ownership."

Residential apartments offer less physical adaptability to residents when compared to individual houses, which can be loose for homes that allow future modifications including extensions and attic conversions.

The build-to-rent apartments can provide choice and flexibility to households where traditional house ownership may not be a priority. These might be younger people starting out in their careers, those who move frequently between countries or those looking to downsize from larger properties. The scheme therefore offers adaptability to lifestyles and in addition to the area's housing stock.

In terms of physical adaptability, apartment buildings are traditionally concrete column and slab construction allowing all walls to be lightweight construction and non-load bearing. This offers the opportunity to be able to modify apartments' layouts if required or merge /split apartments at a future point in time if circumstances dictate.

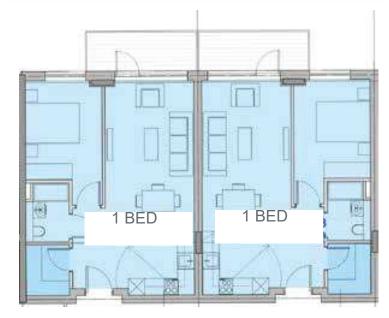
The design of the buildings will limit the amount of energy required for its operation and the amount of carbon dioxide (C02) emissions associated with this energy use insofar as is necessary practicable. The key issues to be addressed to provide energy efficient homes equipped for challenges anticipated by a changing climate are:

- Assuring that the energy performance of the dwelling is such as to limit the calculated primary energy consumption and related carbon dioxide emissions insofar as is reasonably practicable, when both energy consumption and related carbon dioxide emissions are calculated using the Dwelling Energy Assessment Procedure (DEAP) published by Sustainable Energy Authority of Ireland.
- Assuring that, for new dwellings, a reasonable proportion of the energy consumption to meet the energy performance of a dwelling is provided by reasonable energy sources, limiting heat loss and where appropriate, and availing of heat gain through the fabric of the building.
- Commissioning efficient energy space, water heating systems, heat sources and controls.
- Assuring that gas fired boilers will meet a minimum seasonal efficiency of 90%.
- Assuring that the dwelling's residents will have sufficient information about the building, the fixed building services and their maintenance requirements, so that the controls can be operated in such a manner as to use no more fuel and energy than is necessary.

Future Adaptability:

Please see figure below showing how two one bed unit could be redesigned in the future to a two bed unit.





Example of 2 one bed apartments converted into 1 two bed apartment.

11.0 Privacy and Amenity - How do the buildings provide a reasonble standard of amenity?

| | | | | Proposed Mix of Apartments (Number of Units) | | | | | | | Ca | Public Open Space 10% of 3.81 ha (m²) | | | | | |
|-------|-----------------------|-------------------------|--------|---|-------|---------|----------|-------|-----------|-----------------------|--------------------------------|---|------------------------------|---------------------|--------------------|--------------|----------------------------------|
| | Proposed number of | Proposed Total Appts | | | | | | | | | Indoo | r Req. | Outdoor Req. | PROV | /IDED | | PROVIDED |
| Block | levels | per Block | | Studio | 1 bed | 2 bed C | 2 bed DB | 3 bed | 3 bed (P) | Total Req. (m²) | (2.5m² per Appt) (m²) | Mngmt (m²) | Total less Indoor (m²) | Out door (m²) | In door (m²) | Req. (m²) | Primary and Secondary (m²) |
| AB | 5 | 40 | П | 0 | 0 | 40 | 0 | 0 | 0 | 280 | 100 | | 180 | 1,134 | | | |
| CD | 5 | 32 | _ | 0 | 0 | 32 | 0 | 0 | 0 | 224 | 80 | | 144 | 1,104 | | | |
| E | 7+LG | 68 | _ | 0 | 3 | 31 | 32 | 0 | 2 | 474 | 170 | 75 | 304 | | 646 | | |
| F | 9+LG | 96 | | 0 | 10 | 42 | 39 | 1 | 4 | 662 | 240 | | 422 | | | | |
| G | 7+LG | 89 | \Box | 14 | 30 | 8 | 21 | 12 | 4 | 553 | 223 | | 331 | | | | |
| Н | 9 | 99 | | 0 | 63 | 23 | 9 | 0 | 4 | 575 | 248 | | 328 | 3,066 | | | |
| I | 5+LG | 48 | Π | 6 | 16 | 11 | 3 | 8 | 4 | 310 | 120 | 75 | 190 | | 850 | | |
| J | 5+LG | 62 | | 10 | 13 | 15 | 12 | 8 | 4 | 402 | 155 | | 247 | | | | |
| | | | - 1 | | | | | | | | | | | | | | |

| | | | | Studio | 1 bed | 2 bed C | 2 bed DB | 3 bed | 3 bed (P) | | 1,335 | 150 | | | | | |
|----------------|--|------|-------|--------|-------|---------|----------|--------|-----------|-------|-------|-----|--------|--------|-------|-------|-------|
| | | | | | | 202 | 116 | 29 | 22 | | 1,4 | 185 | 2,145 | 4,200 | 1,496 | | |
| GRAND TOTAL | | 534 | | 30 | 135 | 31 | 18 | | 51 | 3,480 | | | | 5,6 | 96 | 3,810 | 9,370 |
| 100.0% | | 5.6% | 25.3% | 37.8% | 21.7% | 5.4% | 4.1% | 0.35ha | | | 0.57 | ha | 0.38ha | 0.94ha | | | |
| | | | | 59. | 6% | | 9.6% | | • | | | | | | | | |

"Privacy and amenity are basic human needs. Such matters are particularly important in higher density schemes where good space standards, sound insulation and access to private open space can make the difference between acceptable urban living and a poor living environment."

- Each home has access to an area of useable private outdoor space.
- The design maximises the number of homes enjoying dual aspect.
- Homes are designed to prevent sound transmission by appropriate acoustic insulation or layout.
- Windows are sited to avoid views into the home from other houses or the street and adequate privacy is affordable to ground floor units.
- The homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables.

Communal Amenity Space Calculation.

The required amount of communal amenity space for residents is as follows:

30no. studio apartments x 4m²= 120m² 135no. 1 bed apartments x 5m²= 675m² 318no. 2 bed partments x $7m^2 = 2,226m^2$ 51no. 3 bed apartments x 9m²= 459m²

Total amenity space required: 3,480m²

Total internal amenity space provided: 1,496m²

Total external amenity space provided: 4,200m²



Secondary Public Open Space: 3,024m²







The design maximises the number of homes enjoing dual aspect

Apartment Aspect

| | Proposed number of levels | Proposed Total Appts per Block | | DUAL ASPECT | | | | |
|-------|---------------------------------|--------------------------------------|---|---------------|-----|--|--|--|
| Block | | | | Total (units) | % | | | |
| AB | 5 | 40 | П | 33 | 83% | | | |
| CD | 5 | 32 | | 28 | 88% | | | |
| E | 7+LG | 68 | | 33 | 49% | | | |
| F | 9+LG | 96 | П | 45 | 47% | | | |
| G | 7+LG | 89 | П | 38 | 43% | | | |
| Н | 9 | 99 | П | 42 | 42% | | | |
| I | 5+LG | 48 | П | 23 | 48% | | | |
| J | 5+LG | 62 | H | 27 | 44% | | | |

| GRAND TOTAL | 534 | 269 | 50.4% |
|----------------|--------|-----|-------|
| | 100.0% | | |

Private Amenity Space

All the proposed apartments within the development have their own private amenity space in the form of balconies, patios or roof terraces.

Internal Communal Amenity Space

The residents will have access to dedicated communal amenity space at ground and first floors levels of blocks E and I, where concierge and postal storage facilities will be located. These areas will also include work sharing space, lounges, meeting rooms, gym, multipurpose rooms and ancillary back room offices and toilets.

These facilities will be supported with a dedicated outdoor space for outdoor events and gatherings.



Typical Floor Layout showing Dual Aspect Units



11.0 Privacy and Amenity

Overshadowing, Daylight / sunlight

The massing and location of the different residential blocks are primarily thought to avoid overshadowing and maximise sun and light access to internal layouts and communal external areas.

The orientation of the residential blocks ensure that all apartments within the development have no single aspect north facing orientation.

The Proposed Development performs well against the minimum recommended BRE targets, representing a high level of daylight performance, with most rooms meeting the minimum recommended daylight standards. It is also acceptable in terms of neighbouring daylight, sunlight and overshadowing.

Please refer to the Daylight/Sunlight Report by Avison Young for further details on daykight/sunlight analysis.

Privacy

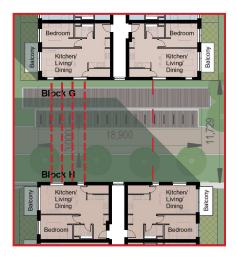
Generally, all residential blocks will be at least 22 metres between each other. In only a few instances,



11.0 Privacy and Amenity

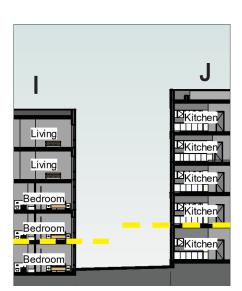
The site's topography inevitably guides the position of all apartment blocks at different levels. This difference will also help to avoid the overlooking between units when distances between blocks are shorter. Windows will be also strategically positioned or have translucent glass to avoid direct view to neighbouring buildings.



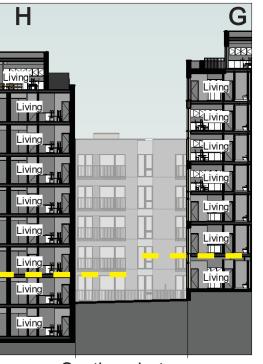








Sections between Blocks I and J



Sections between Blocks H and G



Sections between Blocks F and E

11.0 Privacy and Amenity

Waste Management

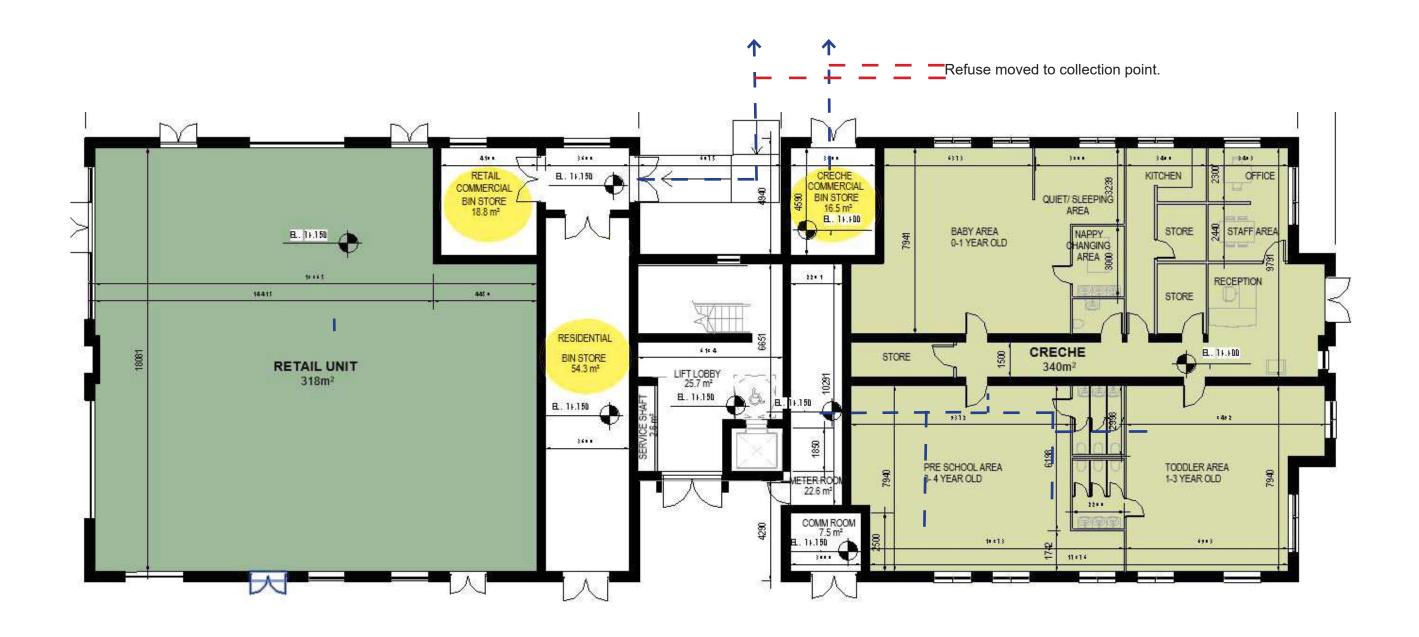
The objective of the Operational Waste Management Plan is to maximise the quantity of waste recycling by providing residents sufficient waste segregation facilities at source infrastructure (3 bin system in kitchens), waste reduction initiatives, waste collection and waste management information.

All waste storage areas will accommodate a three bin system including visible guidelines for residents on how to correctly segregate their waste.

Each building will have access to their own respective bin store.

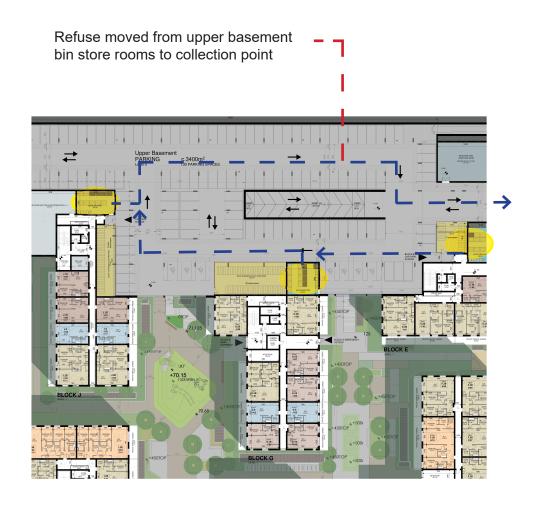
All waste storage areas will be easily accessed by residents, management staff and refuse collectors. Staff will bring the bins from the stores to a staging area.

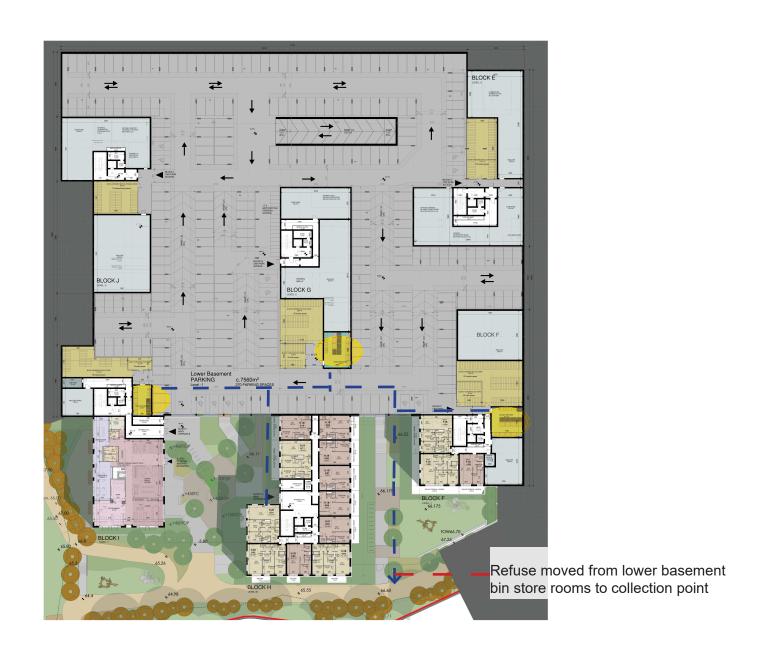






Plan showing waste storage in Block C-D Ground Floor Plan.





Refuse Store

Plan showing waste storage in upper basement areas.

Plan showing waste storage in lower basement areas.

"How parking is dealt with on a development site can significantly affect the success of a development. The most successful developments tend to provide sufficient parking to cope with demand in a way that does not overwhelm the appearance and amenities of the public realm.

Appropriate car parking is on-street or within easy reach of the home's front door, unless the development is designed as carfree, as in the Vauban experience. "

- Parked cars are overlooked by houses, pedestrians and traffic, or stored securely, with a choice of parking appropriate to the situation.
- Parking is provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces.
- Materials used for parking areas are of similar quality to the rest of the development.
- Adequate secure facilities are provided for bicycle storage.



Related image showing secure bicycle parking.

An undercroft basement layout split in two levels provides most of the scheme's parking requirements.

The adjacency of the development to the existing Luas stop allows the development to minimize car parking facilities.

Set down areas for Luas' commuters, crèche and delivery vehicles has been also considered in the scheme.

The vehicular access is proposed off Brennanstown Road at the northeast of the site, taking a short route to underground and surface parking facilities, minimizing traffic and serving the scheme, both in terms of its security and visual amenity.



Secure bicycle parking for use by the residents will be provided both at basement and surface level. Provision for bicycle parking has also been incorporated for use by the commercial units and for Luas' commuters at the south of the site.







Site Plan showing Bicycle Surface Parking





Plan showing parking layout in upper basement areas.

Plan showing parking layout in lower basement areas

13.0 Detailed Design - How well thought through is the building and landscape design?

"While strategic considerations such as location, connections, and sustainability will determine much of the success of a scheme, the finished quality can have a significant effect on a development's character, sense of place and legibility. Quality in the detail of the architecture and landscape design will help each of the elements covered by the previous 11 Criteria to meet their full potential."

The materials and external design make a positive contribution to the locality.

- The landscape design facilitates the use of the public spaces from the outset.
- Design of the buildings and public space will facilitate easy and regular maintenance.
- Open car parking areas are considered as an integral element within the public realm design and are treated accordingly.
- Care has been taken over the siting of flues, vents and bin stores.

The architecture and landscape design of the scheme will work together to make a high quality coherent scheme. Particular attention has been paid to the materials and facade design.

Proportions in elevation, general massing and window and balcony sizes, have all been carefully considered, comprising a high quality simple palette of external building materials. These principles have been thought in a contemporary manner.

All buildings will reveal brick and render finish and powder coated balconies to all elevations. Different contrasting colours of brick and renders will be spread through the development to maintain distinctiveness and variety whilst promoting character areas where they co-reside.

All selected finish materials are hard wearing and low maintenance.

Flues from plant rooms will be contained within the buildings and ducted to high level where they do not impact on residents.

Most bin stores, car parking and bicycle storage are proposed in the basements to maximise public open space throughout the development.

Please refer to the landscape design report by Murray and Associates for further details on the landscape design and materials.



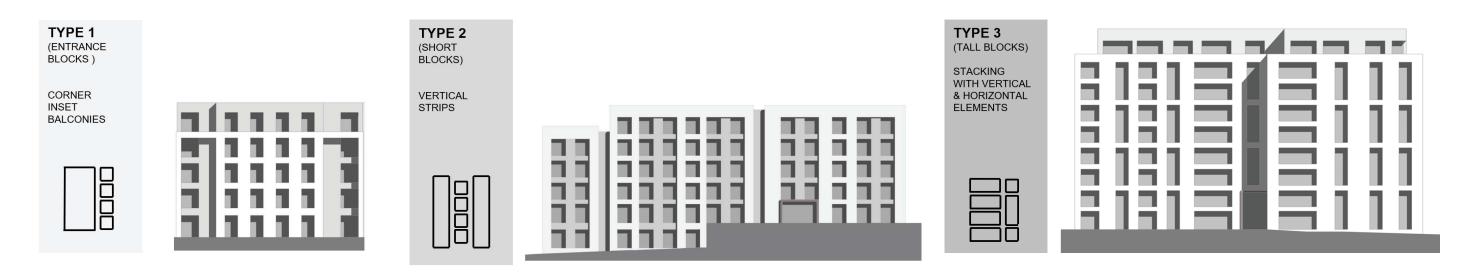






13.0 Detailed Design

Facade Design - Materiality







Facade Materials

A distinctive facade to Central Plaza offers the stepping blocks a unique identity. Barrington Tower forms the focal point off the plaza with the buildings as a backdrop. Easily distinguished as the primary facade, features include:

- Brick finish with brick return detailing
- Brick / rendered facades
- Selected Windows
- Metal balcony railings













Samples Render Finish









Example Brick Option_ **Buff Brick**



Example Brick Option_ Red Brick



Example Balcony Detailing



at ground floor level for Blocks AB &CD