

**ABK Architects**

Architectural Design Statement  
Masterplan

Shanganagh Castle Residential Development,  
Shankill, Dublin

January 2020

ABK Architects 34 lower leeson street dublin 2





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## 1.0 Introduction

### 1.1 Executive Summary

This Design Statement has been prepared on behalf of Dun Laoghaire County Council and Land Development Agency in support of the planning application for the development of lands at Shanganagh Castle, Shankill, Co Dublin.

The design has been developed in consultation with Dun Laoghaire Rathdown Co.Co. by an integrated Design Team Led by ABK Architects and consisting of:

Design Team leader, Architect and Project Coordinator: ABK architects

Assigned Certifier: ABK architects

PSDP: ABK architects

Planning Consultant: HRA Planning

Building Services Engineering: Homan O'Brien Consulting Engineers

Energy Expert Services: Mosart

Civil & structural engineering Services: Punch Consulting Engineers

Quantity Surveying Services: Aecom

Landscape Architectural Services: Aecom

Ecological Consultant Services: Aecom

Ecologist Services: Aecom

Fire Consultant: Jeremy Gardner and Associates

Accessibility Consultant: O'Herlihy Access Consultancy

Archaeological Consultancy Services: Shanarc

Architectural Conservation Consultant: Sunni L. Goodson Historic Building Consultant

Landscape & Visual Impact Assessment: Aecom

The master plan sets out a framework for the delivery of residential units together with ancillary support accommodation consisting of:

- 597 Residential units ( 51 houses, 546 apartments in blocks ranging in height from 2-6 (plus a 7 storey set back on Block G)
- The provision of a community crèche of approx. 778 M2
- The provision of access road infrastructure
- The provision of public open space including a new square and park

The Subject planning application takes cognizance of national and Local Planning Policy Documents including National and Local Planning Policy Documents, Dun Laoghaire Rathdown Co.Co. Development Plan, the Woodbrook- Shanganagh Local Area Plan 2017-2023 and draft masterplans for Shanganagh Castle prepared by DLRCoCo, as well as guidance documents including DPHLG Design Standards for New apartments 2018, Design Standards For Urban Roads.

This document is to be read in conjunction with all other documents submitted as part of this application and in particular EIAR and Planning Statement prepared by HRA Planning.

### 1.2 Site Location

Shanganagh Castle Lands are located in South County Dublin between Shankill and

Bray adjacent the coastline of the Irish Sea on a relatively flat coastal plain and set against the backdrop of the Dublin and Wicklow Mountains.

Shanganagh Castle Lands are located in South County Dublin between Shankill and Bray. The site is within the Planning Jurisdiction of Dun Laoghaire Rathdown County Council and is covered by the Woodbrook- Shanganagh Local Area Plan 2017-2023.

The site, originally part of the historic Shanganagh Castle Demesne and with extensive views towards the Wicklow Mountains and the coast, makes up part of a swathe of landscape including Shanganagh Park, Shanganagh Cemetery and Woodbrook Golf Course, that extends from the Old Dublin Road to the Shankill Beach and the Irish Sea.

The site has good access to motor infrastructure with the R119 giving access to the M11 Motorway via the Wilford Interchange, while public infrastructure includes the DART commuter train line that runs between Bray and Dublin along the coast. (A new DART Station is to be constructed as part of the upgrading facilities in the area and is identified as a Local Objective in the County Development Plan.)

The site is mid-way between Shankill Village to the north where an array of shops provide local amenities and services and the established facilities of Bray Town to the south – designated a Level 1 Metropolitan Consolidated Town in the Wicklow Co Development Plan.



*Proposed Square*

### 1.3 Site Description

(Please refer to EIAR Chapters 12 and 13 prepared as part of this planning application for a comprehensive history of the site)

It should be noted that area of The Shanganagh Castle Site Framework Strategy as described in the Woodbrook Shanganagh Local Area Plan 2017-2023 is not currently in a single ownership. The majority of the site is in the ownership of Dun Laoghaire Rathdown. However the eastern section of the LAP site area including Shanganagh Castle and demarcated from the Subject Planning Application Area by a screen of trees is in the ownership of a private developer. For the purposes of this section, the entirety of The Shanganagh Castle Site Framework Strategy area has been described as a single entity.

The site is in the immediate grounds of Shanganagh Castle, an 18th Century house built in 1769 and extensively remodelled by Architect Richard Morrison in Georgian Gothick idiom of the day with its profusion of battlements and turrets. The Castle is a protected structure RPS no 1845 NIAH No 60260146

The original estate extended considerably further than the current boundaries, including a 'castle farm' to the north of the main castle building and the ruined Kiltuck Church, as well as the land that is now Shanganagh Park to the south and east. The farm included a large walled garden with adjacent outbuildings and stables constructed around a courtyard, with a separate entrance and drive from the Dublin Road leading to the farm buildings.

The formal estate entrance was from the Dublin Road to the south-west of the castle. A curved driveway, arcing around an informal sweep of parkland and following the upper contours of the site, led from a gate lodge on the Dublin Road to the Castle.

The land sloped from the line of the driveway to a 'parkland setting' planted with individual specimen trees, tree stands and enclosed with a plantation belt. An ornamental pond was created with its own island within the parkland. Perimeter areas of more dense woodland were developed incorporating picturesque paths.

In 1852, a freestanding monument was placed along one of the paths to the south-west of the Castle consisting of a two metre high, cut-granite column and base incorporating a decorative urn. Both urn and the column capital have been lost.

A single-storey modern block was constructed in the grounds immediately to the south of the castle and a large attached block was added in the 1950s to the north.

The castle building together with extensions were used as a Church of Ireland College of Education. It then served as an open detention centre for young offenders from 1969 until its closure in 2002. The building has been vacant since then. It was subsequently purchased by a developer but no development was carried out.

Dun Laoghaire Rathdown County Council Parks Department have been using part of the Castle grounds to the south-west of the castle woodland where they have constructed a nursery greenhouse, using an adjacent area as a Parks Depot. An area to the north-west of the nursery was let by the council as garden allotments. These are now closed. Part of the 'parkland' area to the front of the house was used over the years as a football pitch. This has been removed but a single fence line remains along the pitch boundary.

The informal romantic landscape approach to the house has been adversely affected by the filling of part of the site with spoil during the construction of the M50/ N11,

While there has been extensive loss of the original landscape, some features still remain: The historic woodland to the south-west of the castle with its decorative monument and woodland path remains. The ornamental pond with its island also remains, although somewhat overgrown and silted up. A dense grove of trees remains to the north of the gate lodge, however a detached house was built in the 70's a certain distance along the driveway impacting on this section of the route. The LAP has noted that Shanganagh Castle and its immediate grounds are important both architecturally and historically and merit classification as a significant site, albeit with some loss of integrity.

The LAP promotes the sylvan historic landscape character of the Woodbrook-Shanganagh area as an important element in creating a distinct identity and sense of place for the new residential developments.

It is intended that the historic castle building will be conserved, not merely for its architectural quality but also for its immense potential as a unique publicly accessible resource for vibrant community, cultural, educational or recreational uses.

### 1.4 Site Ecology

(Please refer to separate EIAR Chapter 7.0 Biodiversity prepared by Aecom as part of this planning application)

### 1.5 Site Constraints

Constraints as to the extent of development have been outlined in the LAP while Ecological and Conservation concerns have defined the buildable area of the subject site. These constraints include the following:

- An exclusion zone of approximately 20 meters around the existing ornamental pond for the purposes of protecting existing species.
- A 20-30 meter set-back from the Dublin Road is defined in Woodbrook-Shanganagh Local Area Plan 2017-2030 (SC-31) so as to retain the sylvan character of the area.
- The maintenance of a view corridor from the Dublin Road to Shanganagh Castle is defined in Woodbrook- Shanganagh Local Area Plan 2017-2023



Dublin Road View

## 1.6 Adjacent Uses

Dublin Road: The site has extensive frontage onto the Dublin Road to the northwest where it is bounded by a high stone wall.

While small sections of this wall running from the north to the existing gate lodge may be part of the original demesne boundary, no records have been found to date the construction of the majority of this wall which, from inspection, is modern in construction.

Anecdotal sources suggest that the wall, together with the entrance gates to the subject site, were constructed by the Prison Services when the Castle was in use as a detention centre for young offenders between 1969 and 2002. Alternatively, the wall may have been built as part of the upgrading and widening of the Old Dublin Road. Regardless it is clear from examination that inspection that the wall is of recent construction and is not part of the original demesne enclosure.

The character of the Dublin Road to the north is dominated by this wall which, while providing an acoustic barrier from heavy traffic to adjacent houses, creates a rather hostile environment for pedestrians negotiating this busy road. A margin of mature trees running along the section of Dublin Road to the south of the site provides a generous verge between road and pedestrian.

The Dublin Road is an existing bus priority route which forms part of the Bray-to-Dublin City Centre core bus corridor (comprising bus and cycle infrastructure) proposed under the National Transport Authority's core bus corridor project (Bus Connects).

Gate Lodge: A two storey domestic structure with surrounding garden designed in the gothic style with notable reference to the Arts and Crafts movement marks the north-eastern corner of the site. It was constructed circa 1925 in a similar location to the original 19th Century gate lodge. This was once the Gate Lodge to Shanganagh Castle and is currently a private residence. Although outside the site boundary for this development, the gate lodge is a Protected Structure with the same RPS no. as Shanganagh Castle being within curtilage of the Castle, itself is a Protected Structure.

Shanganagh Park: Shanganagh Park, which serves as a local amenity incorporating playing pitches and green spaces, abuts the site along the south eastern site boundary. The nature of the boundary treatment between site and Park varies from hedgerow and ditch to the southeast to extensive mature woodland planting along the north eastern edge

Shanganagh Park consists of a sequence of generous, linked, green spaces enclosed by trees and connected by a footbridge across the rail line that provide a scenic route from the Dublin Road to the Sea.

It is proposed that the park will become a Regional Amenity and a major Park Masterplan is currently being prepared by DLR as part of its upgrade.

Castle Farm: Castle Farm, a housing development consisting of semi-detached

houses with front and back gardens constructed in the early 1990's on the grounds and stable building of Shanganagh Castle, defines the northern perimeter of the site. The boundary between the subject site is defined by back garden walls, sections of fencing and walling reinforced with trees and the remnants of hedgerow. This boundary the same line that historically divided the working farm lands of the Castle from the 'landscaped' area of the Estate grounds. Pedestrian access is currently provided from this housing estate to Shanganagh Park.

Shanganagh Castle: A portion of land immediate to, and including, Shanganagh Castle abuts the Subject Lands along the north eastern site boundary. This area is not in the ownership of the applicant. This area however is included The Shanganagh Castle Site Framework Strategy as described in the Woodbrook Shanganagh Local Area Plan 2017-2023. Please refer to the section above that describes the entirety of the Shanganagh Castle Site Framework Strategy.

Under the Woodbrook-Shanganagh Local Area Plan 2017-2023, the Castle and its immediate environs are to be developed as a public amenity and possible future shared sports and community facilities.

A multi-disciplinary steering group has been assembled by Dun Laoghaire Rathdown CoCo to manage the integration and refurbishment of the Shanganagh Castle and building.

Currently the Local Authority is gathering site / building analysis information and is developing a strategy of the re-use and integration of the Castle and its building that accords with the objectives of the Local Area Plan in the context of the wider community, the proposed Shanganagh residential development and the surrounding high amenity park lands.

Shanganagh Cemetery: A PART 8 scheme (Ref/PC/PKS/02/16) for the construction of a new crematorium facility at Shanganagh Cemetery was approved in March 2017 by Dun Laoghaire Rathdown County Council. The facility is to be located on vacant land between the two existing burial areas and to the south of Shanganagh Park.



View westward along The Avenue

## 2.0 The Master Plan

In accordance with the requirement of Woodbrook Shanganagh Local Area Plan 2017-2023, a master plan has been prepared for the Subject Lands demonstrating how the objectives of the LAP have been achieved. The following outline the principles of this masterplan.

### 2.1 Masterplan - Organising Principles

The masterplan establishes a series of organising principles in line with the LAP that underpin the design. It anchors the project to its context by creating an integrated landscape strategy that provides connectivity to the greater Woodbrook-Shanganagh Area. These principles include:

- The establishment of a residential community with a focus on a publicly accessible facility in the refurbished Shanganagh Castle.
- The establishment of a central 'visual axis' or 'view corridor' focused on Shanganagh Castle together with secondary views and vistas to landscape features within and beyond the site as a principle organising device.
- The retention and realignment of the remains of the curved driveway that once formed the approach to Shanganagh Castle as a new access route to the Castle.
- The incorporation of the picturesque pond and 'Parkland' setting as both foreground to the Castle and as an amenity space for the proposed residential development.
- The scaling of residential development from south to north with taller (six-storey) development located towards Shanganagh Park reducing across the site to two-storeys to the residential estate of Castle Farm along the northern boundary.
- The zoning of the development into distinctive, characterful 'Quarters':

-An 'Urban Quarter' to the east consists of higher density residential development together with communal facilities focused on a new public space referred to as 'The Square'

-A 'Residential Quarter' to the west consisting of lower density residential development and housing organised around existing landscape features, streets and parkland to include the provision of crèche facilities to cater for the development.

- The creation of a new urban public space, 'The Square' as a focus for community life at the heart of the development

- The clustering of communal amenity and community facilities around the central 'Square' (to include shop and café, cinema room, gym, residential lounges, co-working spaces, community art gallery, function room, and business pods) so as to create an active, Social Hub for the community.

- The creation of 'Active Frontage' throughout the development at street level by locating apartment foyers and communal facilities along key street frontages combined with 'own-door' apartment units and houses to secondary streets.

- The creation of a sequence of external amenity spaces that generate an interconnected and permeable landscape that extends to Shanganagh Park and beyond.

- The creation of a series of secondary external spaces at nodal points throughout the development as places to meet, play, relax.

- The creation of a transport hierarchy that looks to give primacy to pedestrians and cyclists through the introduction of shared surfaces, pedestrian-only areas and traffic-calming in accordance with DMURs and current best practice.

- The creation of a new pedestrian / cycle route to the proposed Dart Station at Woodbrook via Shanganagh Park.

- The creation of a sequence of connections with adjacent development so as to create a high level of permeability through the development including:

- The introduction of a new north-south route from a new gateway to Castle Farm southwards to Shanganagh Park
- Connection with Shanganagh Castle
- Connection to the future playground

### 2.2 Building within an Historic Landscape

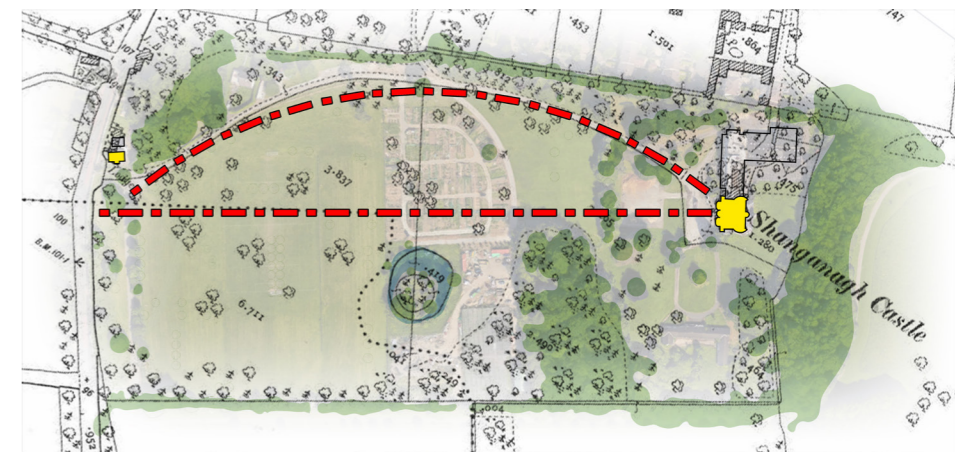
Cognizant of the fact that the proposed development is within the curtilage of a protected structure, the masterplan looks to work with the remains of the existing picturesque landscape established in the early 19th century while adhering to the design principles set out in the Woodbrook- Shanganagh Local Area Plan 2017-2023

The landscape set out under the patronage of Sir George Cockburn with its scenic approach, decorative pond and composed stands of trees is still legible although poorly maintained and much curtailed by recent development. These elements of cultural infrastructure underpin the masterplan and act as a framework for the proposed future development.

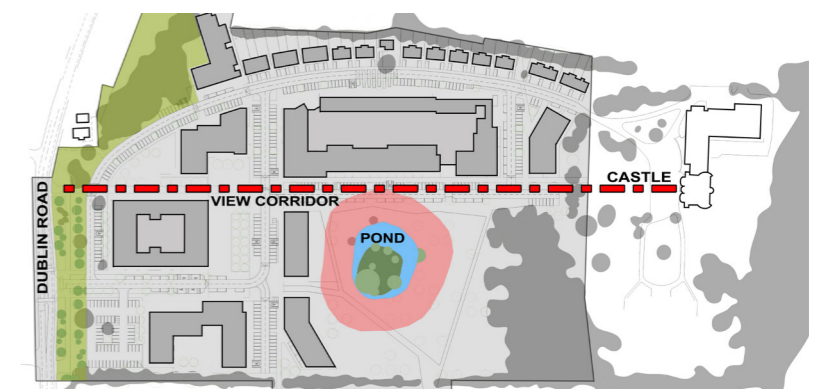
The master plan looks to reinforce these existing landscape characteristics and features and overlay them with a matrix of overlapping built and landscaped zones so as to create a coherent composition that meets with the objectives of the Local Area Plan.



1866 OS Map



Curved drive to Castle and View Corridor



Visual Axis

### 2.3 Reinforcing the Historic Landscape

The 1866 Ordnance Survey map describes the extent of the Shanganagh Castle Demesne landscape in its prime. Key characteristics that are apparent in this map include:

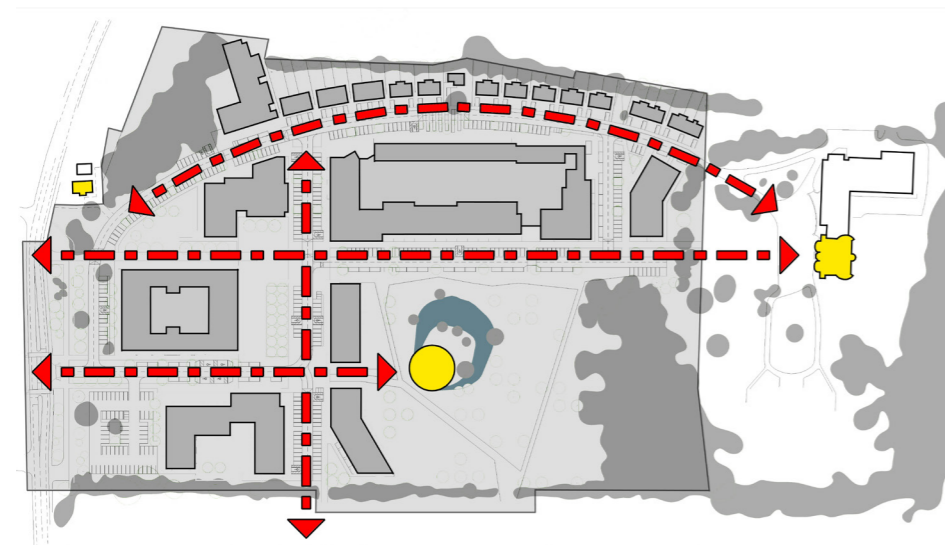
- The Driveway: Laid out to establish a visual axis with the castle before curving northward, passing stands of trees and arriving at the Castle forecourt.
- The 'Parkland' setting: Incorporating an ornamental pond and choreographed stands of trees that frame views to and from the Castle which together establish a 'naturalistic' foreground to the Castle.

The restructuring of elements of the existing historic landscape so as to incorporate certain 'picturesque' characteristics underpins the masterplan. The masterplan proposes the retention of trees where feasible together with the further planting of tree stands so as to reinforce certain spatial characteristics, in particular:

- The Stand of trees that defines the eastern edge of the castle forecourt and frames axial views eastwards to the mountains are to be reinforced with additional planting.
- The Stand of trees that mark the beginning of the original driveway to the castle are to be retained
- Additional trees are proposed to the parkland setting around the ornamental pond

### 2.4 Connections Routes and Axes

The masterplan proposes a series of organisational devices including the use of axes, vistas and routes overlaid on the existing landscape to generate a coherent order for future development. These include the following:



Connection Routes and Axis

### 2.4.1 The Avenue - A Central Organizing Vista

In accordance with the Woodbrook-Shanganagh Local Area Plan, a new 'Avenue' is proposed to be aligned with the symmetrical double-bow frontage of Shanganagh Castle so as to establish a formal relationship between the Protected Structure of the Castle and its hinterland. While establishing a single, organising vista through the development site, The Avenue varies in character and use along its length:

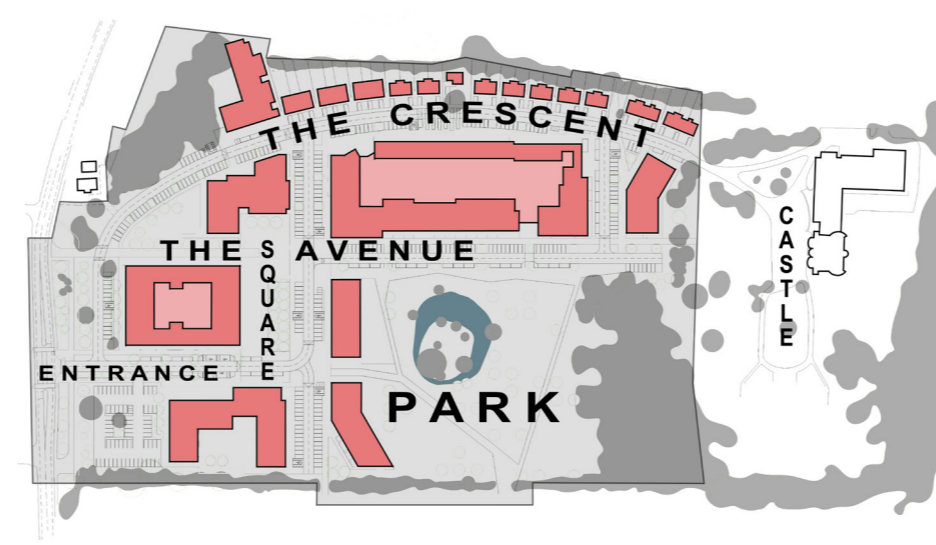
- It provides a new pedestrian-and cycle-only entrance to the development from the Dublin Road that extends eastwards before crossing the central public space of the development, 'The Square'.
- The remaining section of The Avenue continues as a 'Home Zone' incorporating path and cycle route with one-way access for cars. The section is open to the 'The Park' along its southern edge.
- The last section of The Avenue provides pedestrian and cycle access only to the forecourt of Shanganagh Castle at its eastern end.

This linear route, although varied in character, provides a constant visual reference to Shanganagh Castle, the historic generator of the original landscape.

### 2.4.2 The Crescent

'The Crescent' is a proposed scenic, tree-lined, curved route that broadly follows the line of the original approach to Shanganagh Castle from the Dublin Road. It provides access to the existing Gate Lodge to the west and future access to the upgraded facilities of Shanganagh Castle (by others) to the east where it will terminate in the Castle Forecourt. (Note: The final section of this route is outside of the Site boundary of the Subject Land)

Planted with trees and lined by residential villas and terraced houses, it maintains a



Streets and Areas

domestic scale that is appropriate to the adjacent residential scale of Castle Farm Housing Estate.

A series of shared surfaces and secondary spaces provide moments of incident as well as traffic calming in accordance with DMURs along its length:

- The Crescent crosses 'The Avenue' at its eastern end where priority is given to pedestrians and bikes providing traffic calming as well as a view towards the Castle.
- A shared surface to the front of the proposed crèche provides drop-off for children and a gathering space for parents to meet and chat.
- A shared surface between the residential terrace to the south and villa-houses is marked by the retention of a mature Cedar Tree and furnished with benches to provide a place for people to sit.
- The pavement is widened by cranking the final building so as to create a new space at the point where a potential future connection (subject to agreement) with the Castle Farm Estate intersects The Crescent.

### 2.4.3 Entrance Road

The Entrance Road is the principle vehicular access to the Development from the Dublin Road. Its central axis is aligned so as to enjoy a view of the island and ornamental pond to the east. It crosses the southern end of The Square as shared surface providing traffic calming before turning northwards. It provides access to the principle parking areas.

### 2.5 Primary Public Spaces: Park and Square

The masterplan proposes the creation of a series of urban and landscaped public spaces that together provide a spatial order to the development. These include:

#### 2.5.1 Gate House and Planted Buffer

A new, treed landscape is proposed as a buffer between the Dublin Road and the proposed development. It is conceived as the re-establishment of the woodland setting that once framed the approach to Shanganagh Castle and formed the setting for the original Gate Lodge. Where possible, existing trees are retained with additional specimens added to create a woodland area along the boundary.

A new low boundary wall with railings set back from the road will provide an enhanced landscaped space for pedestrians. Screened from the busy traffic of the Dublin Road by a band of trees, the new footpath connects with existing footpaths at the entrance to Shanganagh Park to create a generous wooded walk for passers-by.

This landscape motif of planted buffer and path is similar to that which occurs along extensive sections of the Dublin Road from Shanganagh Park to Cricken Church and is in keeping with Shanganagh Landscape Character Area Strategy as identified in Appendix 7 of the Dun Laoghaire-Rathdown County Development Plan, 2016-2022 which seeks to maintain the sylvan character of the Dublin Road.

### 2.5.2 'The Park'

It is proposed that the remains of original picturesque parkland setting with its ornamental pond that once established the foreground setting to Shanganagh Castle be retained and enhanced to serve as an informal amenity space for residents and an extension of the adjacent Shanganagh Park.

Proposed work to this landscape include the removal of the remains of allotments and redundant glass houses, the reinforcement of stands of trees, the planting of new specimen trees and the de-silting and restoration of the ornamental pond.

### 2.5.3 The Square

The Square is a new public space at the heart of the community that creates a unifying urban focus for the development. The Square runs North-South and is traversed by the Entrance Road at its southern end and by the cycle-pedestrian route that follows the visual axis to Shanganagh Castle at its northern end.

Designed as an urban square, the space is comparable in scale to such spaces as Jervis Square in Dublin. It is animated by a range of communal functions around its perimeter including shop, café, cinema room and gym. It is subdivided by landscaping features to create areas of incident:

A stand of trees along its south-eastern side creates a place of shade and shelter from traffic; a broader section to its northern end incorporates play areas for children and seating for the general public.

### 2.5.4 Shanganagh Castle Forecourt

As part of the future development of Shanganagh Castle by Dun Laoghaire Rathdown County Council, a new landscaped public space is proposed to the front of the Castle. This space will act as an arrival point to those visiting castle amenities, terminate the central pedestrian and cycle axis that runs through the development and extend connections to Shanganagh Park.

The master planning of the Subject Lands has been coordinated so as to accommodate initial draft plans prepared by the Local Authority for the upgrading of Shanganagh Castle. Detailed proposals for this area are outside of the remit of this development.

### 2.6 Secondary Public Spaces and Nodes

The primary public spaces are interspersed with secondary 'nodes' that provide activities and animation to the Public Realm. These include:

- A paved gathering space to the front of the crèche;
- A paved space to sit under an existing Cedar tree along The Crescent;
- A widened pavement incorporating seating along the pedestrian route to Castle Farm
- A Playground to the west of Block A
- A terrace to the front of the Café at the corner of Block F

### 2.7 Residential Zoning

The masterplan proposes residential zones of somewhat differing density and character to include:

- The Urban Quarter: This zone maintains a more urban character in terms of scale and spatial configuration
- The Residential Quarter: This lower-density zone consists of houses and terraces set amongst landscaped spaces.

#### 2.7.1 The Urban Quarter

The western end of the development is designed as an 'Urban Quarter' consisting of taller, higher-density residential zone together with communal facilities organised around a new public paved and planted space - 'The Square'

Building heights in this Quarter vary from four to six storeys in height and provide appropriate enclosure and scale to adjacent spaces –in particular Shanganagh Park, The Dublin Road, The Square and The Park. In keeping with the spirit of the Local Area Plan, taller buildings are located towards the park and away from adjacent domestic structures.

Block E: Varying in height from 4-6 storeys is an island block with a central courtyard. It addresses the Dublin Road to the east and The Square to the West where a colonnade at ground floor provides the building with a certain civic character. The ground floor contains shop, estate management offices and community room/gallery which provide public functions and active frontage onto The Square.

Block G: Varying in height from 4-6 storeys with a set-back, this block negotiates the boundary to Shanganagh Park and the southern end of The Square while addressing

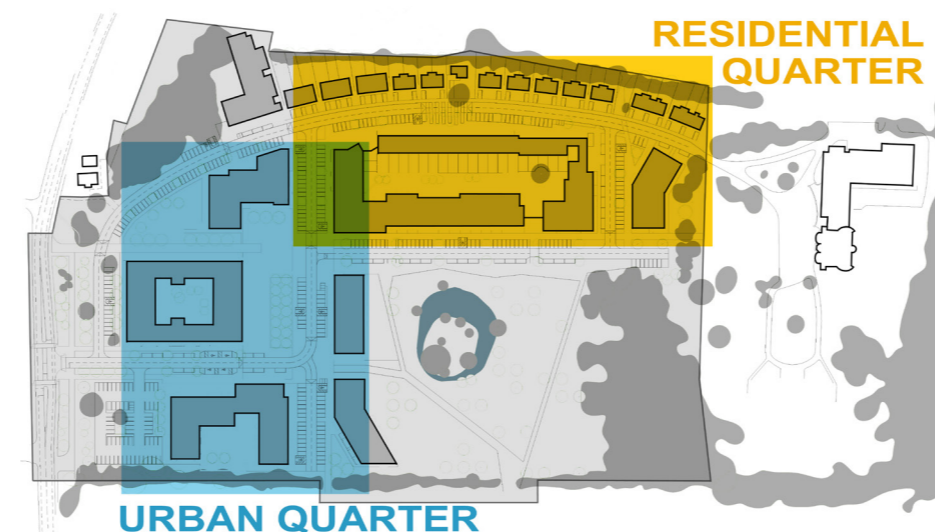
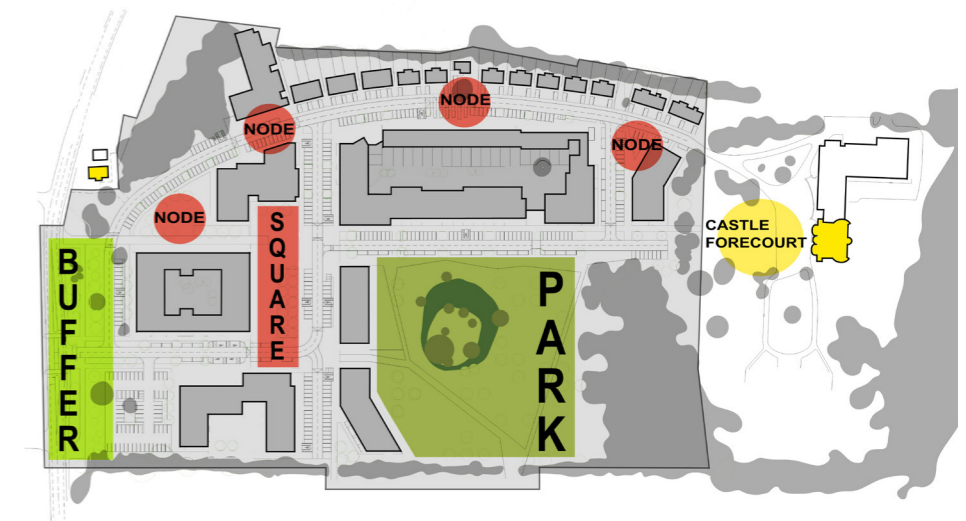


Diagram of Quarters



Public Spaces and Nodes

the Dublin Road to the west. It is U-shaped in plan and organised around a central court. The building presents a formal, framed elevation to The Square the paving of which extends across the entrance road to meet its base. Co-working spaces provide animation and public access to this elevation while own-door units provide active frontage along its perimeter

Block A: Varying in height from 5-6 storeys this block negotiates the transition between The Square to the south and the crèche with its domestic scale to the north. A public route at ground floor allows pedestrians to negotiate the 1.6meter change in level across the site to arrive at the front door of the crèche. The frontage onto the Square is animated by a Gym and Cinema / Games Room while the remaining perimeter is activated by own-door units. This Block incorporates the energy centre for the entire development.

Block F: 6 storeys in height with roof garden, this block negotiates the transition between The Square to the west and The Park to the east. Unlike other blocks which provide a mixture of residential and communal functions, this block is given over to communal amenity. A corner Café together with Residents' Lounge and Business Pods animate frontages onto both The Square and the Park working together to create an integrated and flexible communal amenity that may be used in a variety of ways.

Block H: 6 storeys in height with a set-back, this block cranks to negotiate the boundary to Shanganagh Park creating a small public space that connects through to the proposed Children's playground in Shanganagh Park



### 2.7.2 The Residential Quarter

The Residential Quarter lies predominantly to the north of the central axis to Shanganagh Castle and to the east of The Square. In contrast to the more active Urban Quarter with its focus on the civic life of The Square, the Residential Quarter is entirely residential in usage with a focus on creating streets with a more domestic scale and draws its character from existing landscape and topography. Building heights are in the order of two-four storeys and are scaled in response to adjacent development.

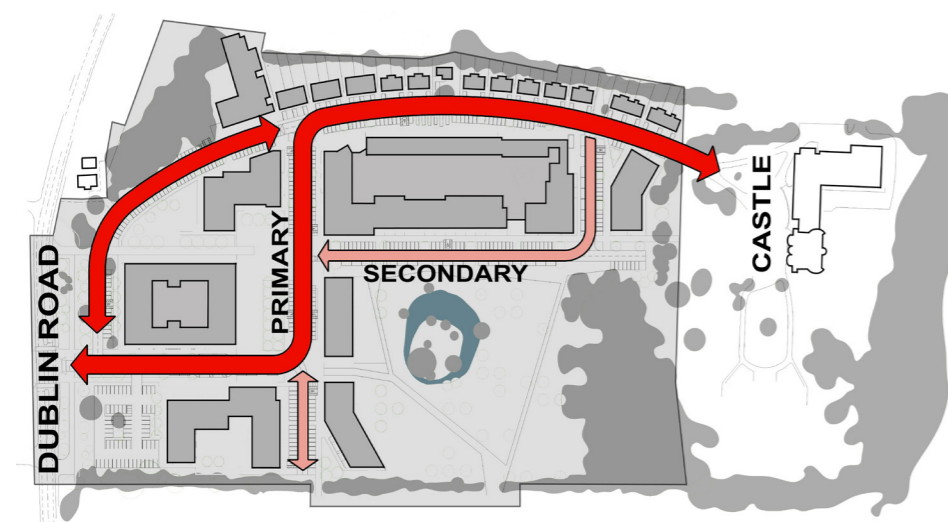
Block B+C: A perimeter block running east-west and made up of a mix of residential types - terrace houses and apartments - forms the core of the residential quarter.

The south face of this block consists predominantly of 4-storey apartments book-ended by a 5-6-storey element to The Square and a 5 storey block to the Castle. It aligns with the central axis of the Avenue and addresses the broad swathe of open space that is The Park with its ornamental pond.

The northern edge of this perimeter block addresses the sweep of the Crescent and consists of three-bed terraced houses with rear gardens backing on to the semi-public external space of the apartments to the south.

To the northern side of The Crescent, development consists of two-bed semi-detached 'villa' houses together with short terraces with front and rear gardens interspersed with planting. The creche is integrated into this residential streetscape.

Block D: This block varies from three to five storeys and is inflected in response to the adjacent Shanganagh Castle, so as to retain existing trees and to create a widened space in response to a potential north-south connection to the Castle Farm Estate.



*Vehicular Access*



*View along The Avenue towards The Square*

### 2.8 Access, Circulation and Servicing

The masterplan proposes a hierarchy of vehicular, cycle and pedestrian routes that traverse the site providing access to parking and facilities throughout the development. Vehicular movements are designed to be indirect so as to reduce speed and give primacy to cyclists, pedestrians and the communal activity. Please refer to PCE's Traffic and Transport Report included in this Planning Application.

#### 2.8.1 Vehicular Circulation

Vehicular access is via a new controlled junction on the Dublin Road which provides for right-hand turning into the development for vehicles travelling northwards along the Dublin Road as well as cycle and pedestrian crossing points.

Primary vehicular circulation consists of two routes:

- The 'Entrance Road' that runs east-west from the Dublin Road to The Square then turns northwards where it meets with the Crescent.
- 'The Crescent', a two-way, perimeter vehicular route that follows the boundary of the site connecting Entrance Road to Shanganagh Castle.

From these primary vehicular circulation routes, secondary routes are accessed in-

cluding The Avenue which takes the form of an elongated table accommodating local, one-way traffic.

#### 2.8.2 Traffic Calming

Traffic calming measures have been integrated into road design to create a safe environment for pedestrians and cyclists. Measures include the introduction of regular junctions throughout the development so as to limit the ability for cars to establish speed together with the introduction of 'Tables' or shared surfaces in accordance with DMURs to encourage slow vehicular speeds. These include:

- Incorporation of a Table where the Entrance Road meets the southern end of The Square. (The surface of The Square continues across the road to create a notional shared surface.)
- Incorporation of a series of 'Tables' along length of The Crescent that provide passive traffic calming specifically at the intersection with the Cycle-Pedestrian Route to the Castle, at the front of the Crèche and at the mid-point of the residential terrace.
- The eastern section of the Avenue is designed as a shared-surface/'home-zone' with a one-way-only exit at its western end incorporating cycle lane so as to give primacy is given to cyclists, pedestrians and residents.

### 2.8.3 Parking - Cars and Motor Cycles

The majority of parking is provided as on-street parallel and perpendicular parking distributed along access roads throughout the development and interspersed with planting. There is no underground car parking provision. Parking provision is based on 1 space per house and 0.5 spaces per unit. (Refer ABK Drawing 778 PA-1151 for details of car parking distribution)

Apartment parking spaces are distributed throughout the development predominantly on-street. A car park providing some 58 spaces is located immediately off the Entrance Road adjacent to Blocks E and G.

Parking for shops and café are located immediately adjacent to these facilities on The Square.

Residential off-street parking is provided in the front areas of semi-detached villas along The Crescent while dedicated parking is provided on-street for the terraced housing immediately adjacent with additional visitor parking provision distributed along the Crescent

Crèche parking is provided immediately adjacent to this facility.

10no GO-CAR 'car-club' spaces distributed throughout the development.

37no electrical parking spaces are to be provided with ducting provision to all parking spaces for future

Please refer to Homan O'Brien Drawing 1841-ME-1000 – Site Services Installation - for details of electrical parking provision

### 2.8.4 Motor cycle parking

Motor cycle parking is distributed throughout the development.

Refer to 778/PA 1151 for details of the overall site parking layout



View towards The Square by Block E and Block G

### 2.8.5 Cycle Routes

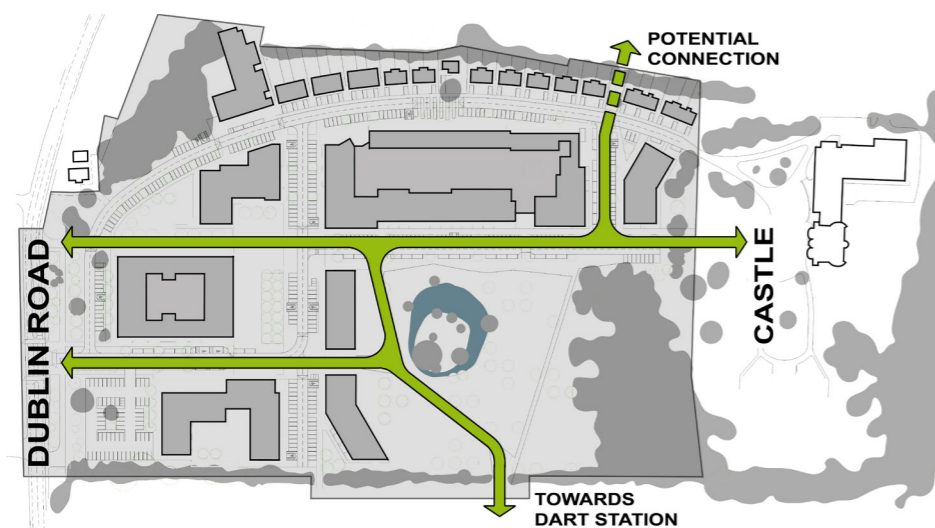
The masterplan looks to give primacy where possible to cyclists and pedestrians throughout the development.

The central axis, The Avenue, is dedicated to a shared pedestrian and cycle route that leads from the Dublin Road to the Square and onwards to the Castle. The same route branches southwards connecting the development via Shanganagh Park to the new DART station at Woodbrook.

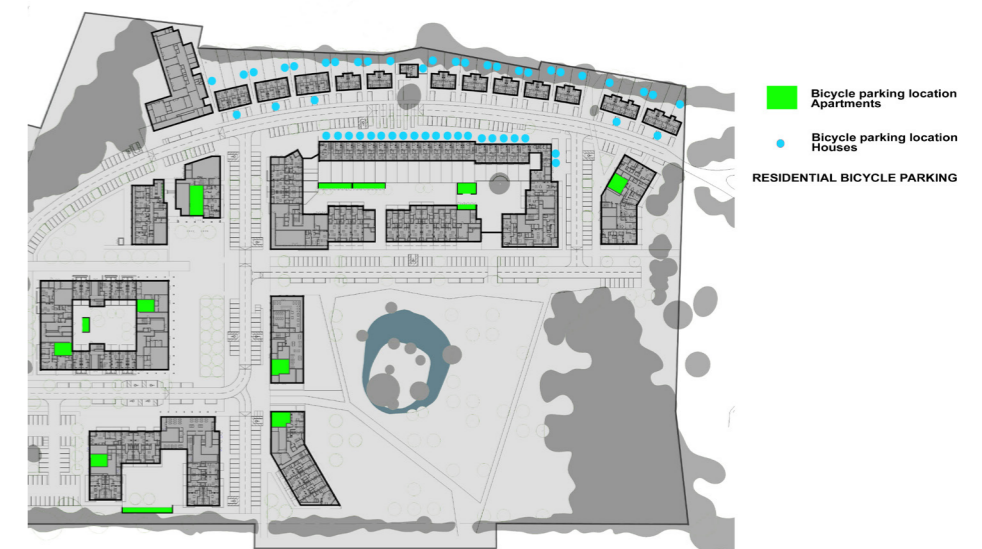
The potential for Cycle connectivity is also proposed between the Castle Farm housing estate and the DART station via a north-south route through the development (subject to agreement).

### 2.8.6 Cycle Parking

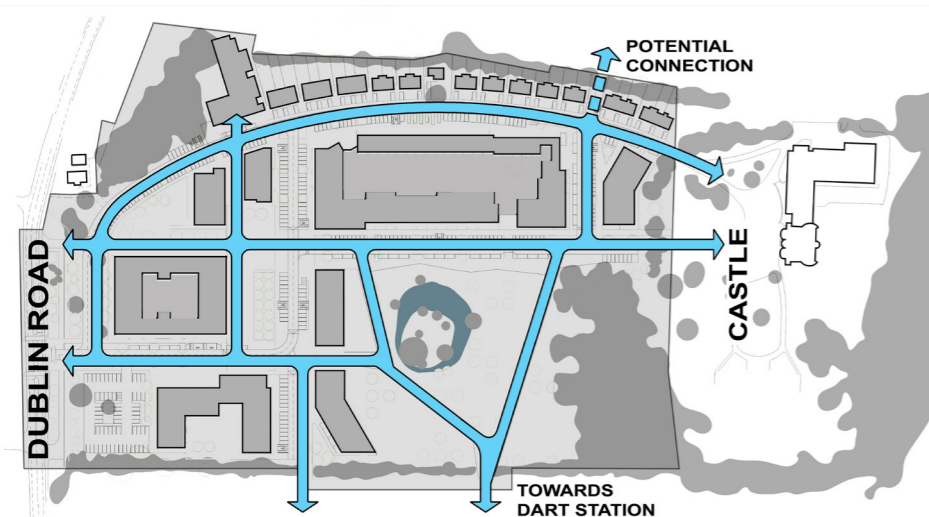
Cycle parking provision is made in accordance with DHPLG New Apartment Guidelines 2018. Spaces are provided at ground floor within apartment buildings generally for ease of access with covered external shelters integrated into the development in certain locations as part of the architectural language of the scheme.



Cycle Access



Bicycle Parking



*Pedestrian Access*

Visitor cycle parking is distributed throughout the development adjacent to apartment entrances and within primary and secondary public spaces. (Refer ABK Drawing 778/ PA-1152 for locations of bike stores)

**2.8.6 Pedestrian Circulation**

The masterplan provides a pedestrian- friendly, permeable framework that permits pedestrians freedom of movement within the development as well as extending connections beyond the site. The masterplan describes a series of pedestrian routes that north-south and east-west across the site: These include:

- A central pedestrian route that connects the Dublin Road to Shanganagh Castle.
- A pedestrian route from Castle Farm southwards to the Shanganagh Park and the DART station with provision being provided for a future connection (subject to agreement with adjacent landowner)
- A secondary pedestrian route that links the Crèche, via an internal route through Block A, to The Square and southwards to Shanganagh Park.
- A perimeter route following The Crescent that accommodates leisurely walks along the site perimeter

**2.8.7 Refuse Storage & Collection**

An Operational Waste Management Plan for the development, prepared by AWN Consulting, is included in this planning submission. The report demonstrates that the management of waste during the operational phase of the proposed development is undertaken in accordance with current legal and industry standards including the Waste Management Act 1996 – 2011 and associated Regulations, Protection of the Environment Act 2003, Litter Pollution Act 1997, the 'Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021', Dún Laoghaire Rathdown County Council (DLRCC) Bye-Laws for the Storage, Presentation and Collection of Household and Commercial Waste 2009 and DLR Refuse and Recycling Storage Guidelines This document demonstrates a robust strategy for storing, handling, collection and transport of the wastes generated at site.



*Active Frontage*

This OWMP provides a strategy for segregation (at source), storage and collection of wastes generated within the development including organic, dry mixed recyclables, glass and mixed non-recyclable waste as well as management strategies for green waste, batteries, WEEE, chemicals, textiles, bulky waste and light bulbs.

Waste generated by residents in apartments will be stored in dedicated communal waste storage areas (WSAs), strategically located adjacent to the lift/stair core for each block. House residents will leave their bins in front of their homes in the designated WSA for pick up. Waste generated by the crèche will be stored in a dedicated area within the crèche WSA. The WSAs have been adequately sized to accommodate weekly storage of organic, dry mixed recyclables, glass and mixed non-recyclable waste.

Bins from each residential block and crèche will be collected from the designated bin pick-up location by the nominated waste contractor. House residents will place bins in front of their homes for collection by nominated waste contractor.

Refer to ABK Drawing 778/ PA 1152 for the location of communal bin stores and collection points.

**2.9 Active Frontage**

The masterplan looks to create a safe, secure and animated streetscape through the provision of Active Frontage at street level throughout the development. This is achieved by locating apartment foyers and communal facilities along key street frontages and public spaces.

Communal and community functions (shop, gym, estate management offices, community rooms, cafe, communal lounges) are clustered around The Square so as to create a vibrant, social hub to the project. Apartment foyers are distributed so as to provide activity at key locations. Ground-floor, 'Own-door' apartment units, typically with front gardens, are distributed along apartment building frontages so as to provide an animated streetscape.

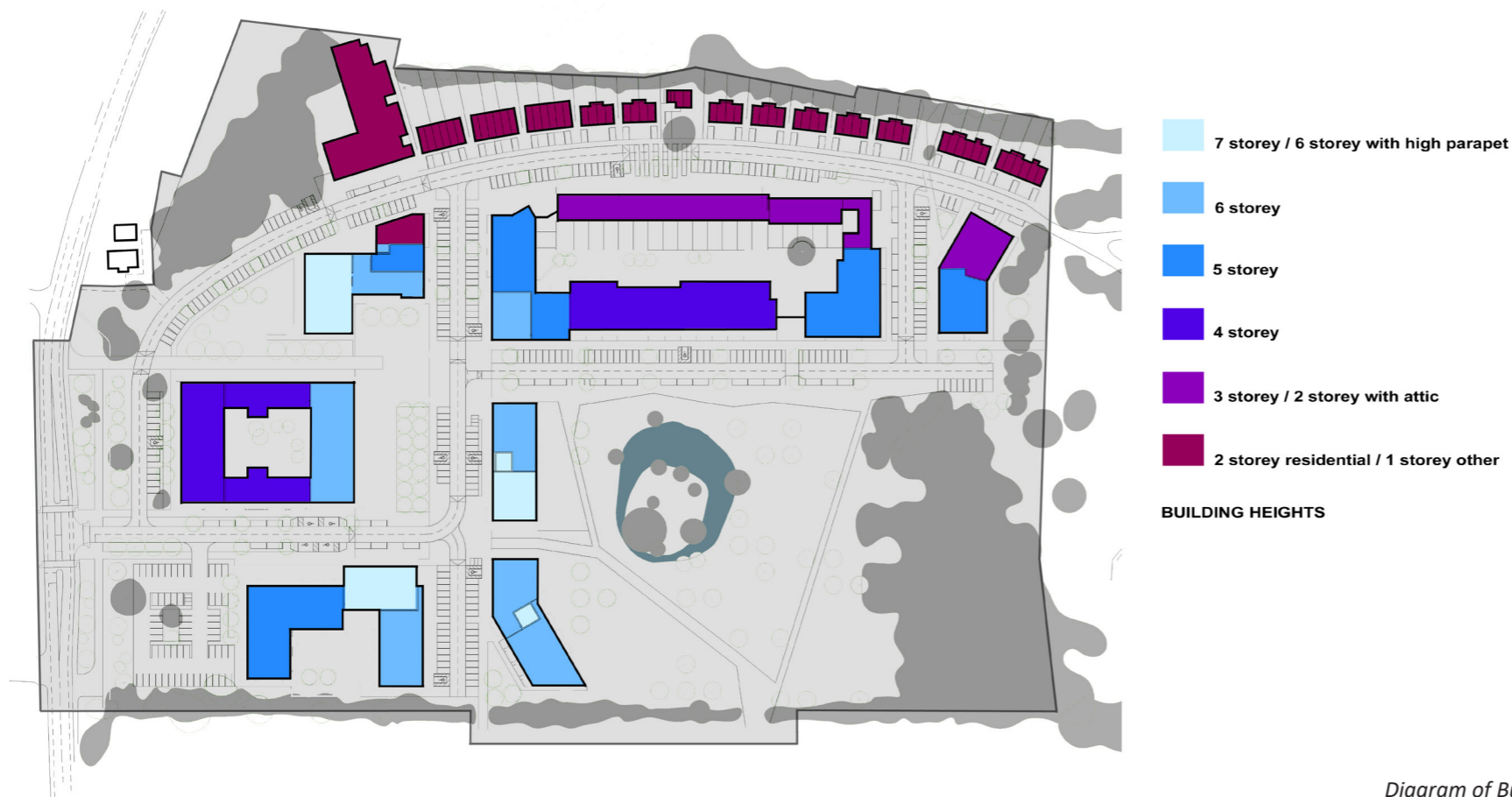
Terraced housing and Villa-type semi-detached houses provide individual front doors to The Crescent creating a familiar, domestic scale to the street.

**2.10 Building Heights**

The heights of building is scaled from south to north in line with guidance outlined in the Woodbrook- Shanganagh Local Area Plan 2017-2023 Taller (six-storey) development are located towards Shanganagh Park and around The Square. Building height reduces across the site to 2-4 storeys depending on context with a band of two-storey residential units and single-storey crèche distributed along the northern boundary to the residential estate of Castle Farm.



*Elevation along The Avenue of Block A and Block B*



*Diagram of Building Heights*

**2.11 Shadow Study Analysis**

We refer you to ABK Architects' Shadow Analysis Report that forms part of this application. This report compares the existing site condition with that generated by the proposed development by means of a shadow analysis model study. This provides a visual representation of any changes to the availability of sunlight that may arise due to the proposed development.

The study uses the Equinox 21st March, Mid-Winter (21st December) and Mid-summer (21st June) between the hours of 10am and 6pm to demonstrate average sun angles at mid-season and high summer and winter

As part of the design development, analysis was undertaken to assess the sunlight and overshadowing impact of the proposed development on external spaces throughout the development and adjacent to the site.

BRE recommends that "that for it to appear adequately sunlit throughout the year, at least 50% of a garden or amenity area should receive at least 2 hours of sunlight on March 21st.

**2.11.1 Impact on Adjacent Properties**

The analysis illustrates that the shadows cast by the proposed development are largely limited to the confines of the site itself. The surrounding properties are sufficiently

far away that they will be typically unaffected by shadows cast by the proposed development.

The shadow analysis carried out at equinox (March 20th) and Mid-summer (21st June) shows that the proposed development has no impact on neighbouring properties at these times of the year. Shadow casting is also minimal in early morning 10am in for 21st December where existing trees along the boundary to Castle Farm Estate already cast shadows on existing properties.

**2.11.2 Availability of Sunlight within the Site**

The analysis shows that for proposed external areas, communal areas and gardens within the site, 50% of open space will receive at least 2 hours of sunlight on 21st March as required by BRE. This study confirms that the development will be adequately sunlit throughout the year.



*Elevation of Block G*

## 2.12 Material Palette and Façade Composition

The development proposes the use of brick as the principle facing material throughout the development.

Brick colour and texture will vary in tone from block to block and within blocks so as to provide variation and a modulation of scale across the development while also contrasting with planting.

A light grey/buff tone is proposed for the majority of buildings, with Block E, contrasting in a somewhat reddish brick. The use of stone, precast concrete, and selected toned panels are proposed to provide variation to this palette.

Projecting PC balconies are constructed of concrete with facing treatments varying depending on location with the balustrading mastering the face of the balconies in certain conditions, whereas in others the finished concrete face is exposed.

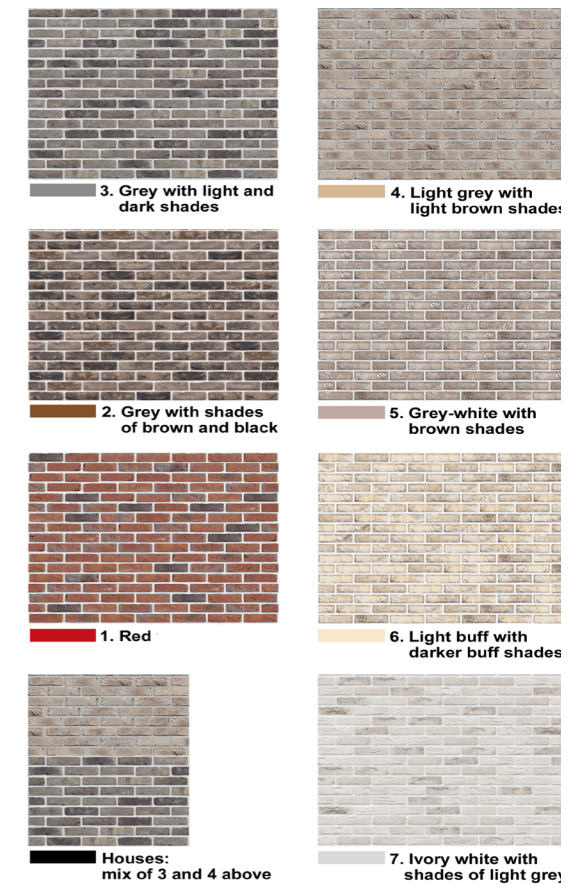
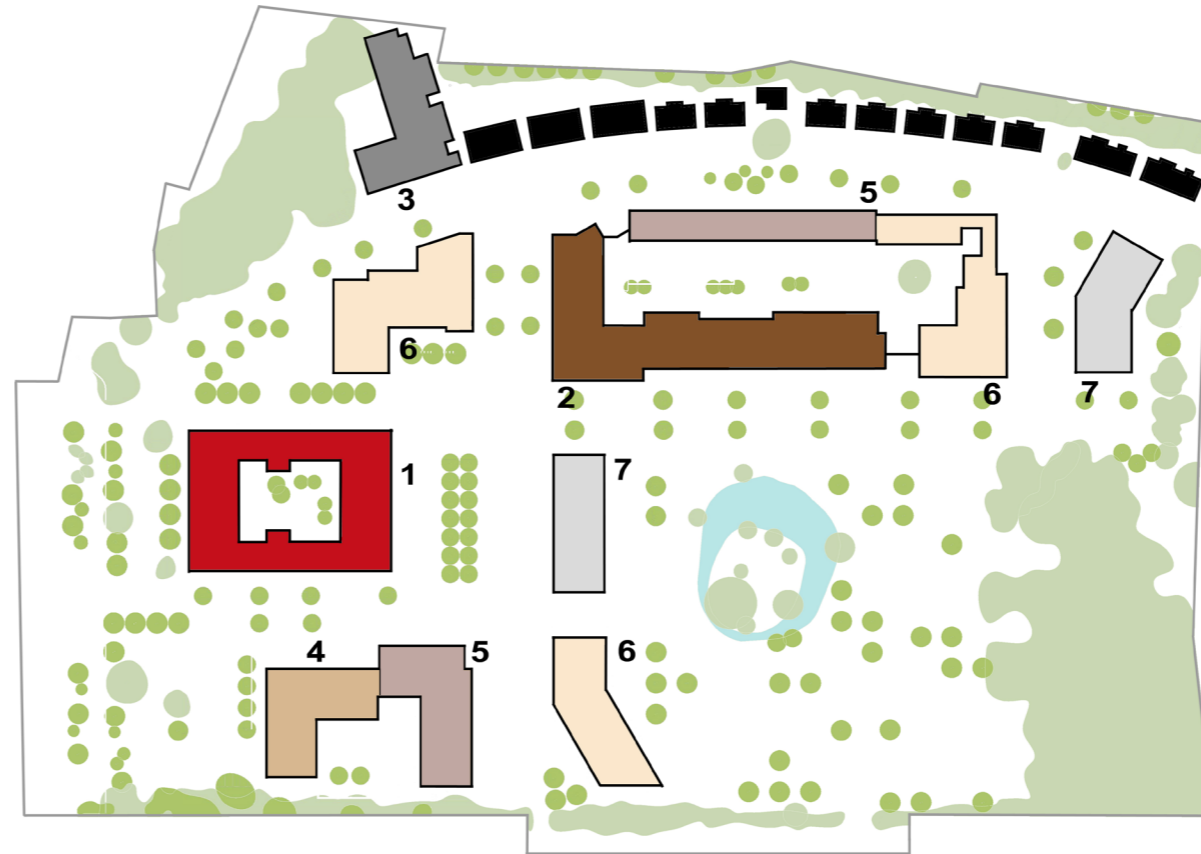
Framed, recessed balconies are proposed for facades to Blocks A and G where the buildings address The Square so as to provide a civic scale and order.

In Block A, piers are constructed of brick with horizontal banding of precast concrete. Balcony faces are modified on different levels so as to provide vertical variation and rhythm to the facade.

In Block, G, deep, precast concrete verticals and horizontals provide the structure for balconies and an ordered matrix to the façade.

Horizontal banding is proposed for a number of buildings as a device to modulate the façade and provide order. This will consist of selected precast concrete/stone/reconstituted stone.

Windows and balustrading will have a selected coloured/painted finish.



Palette of Selected Bricks



Elevation of The Square surrounded by Block E, A and F

### 3.0 Phasing – Delivery over Time

An outline phasing strategy for the delivery of the development over time has been prepared to facilitate construction, access to Shanganagh Castle as well as hand-over and occupation. Phasing / Construction Sequencing is proposed as follows:

#### Phase 1

- The construction of the landscaped buffer zone along Dublin Road including boundary wall, paths and planting.
- The construction of the Entrance Road and Avenue to enable construction access to future phases to include the provision of in-road drainage/service infrastructure but excluding final wearing finishes, parking, landscape.
- The construction of on-site attenuation (1 no tank) and foul and surface drainage connection via Shanganagh Park to new drainage infrastructure at Woodbrook provided by others.
- The construction of the section of new pedestrian and cycle route within Shanganagh Park including associated landscaping from subject lands to proposed new DART station at Woodbrook
- The construction of 51no. affordable-sale units - semi-detached 'Villa' houses and terraced housing along the Crescent
- The construction of the crèche to serve the Phase 1 occupants
- The construction of 'The Crescent' road to include landscaping, parking
- The provision of a temporary entrance at the end of the future Avenue to serve as an independent access point so as to separate residential access from future phases of construction traffic. (To be extinguished upon completion of later phases)

#### Phase 2

- Construction of Blocks A, B, C, and D totalling 195 Cost-Rental units and 35 Social units together with communal facilities and Energy Centre (located in Block A) to serve development
- The construction of the north end of the Square including paving and landscaping
- The construction of playground and western, 'cycle-pedestrian' section of the Avenue
- The completion of associated road infrastructure to the eastern section of The Avenue as well as link roads back to The Crescent to include parking and landscaping.
- The construction of pedestrian- cycle path from east end of site connecting to pedestrian and cycle route within Shanganagh Park constructed in Phase 1
- Access provided to Phase 2 via The Crescent so as to separate construction traffic from resident access.

#### Phase 3

- Construction of Block E and F totalling 104 Social units and 40 Affordable-Sale units together with communal facilities
- The construction of the south end of The Square including Attenuation tank, paving and landscaping.
- The construction of associated road infrastructure to The Entrance Road.
- The completion of landscaping to 'The Park' including rehabilitation, access paths and planting
- The construction of pedestrian-cycle path from Entrance Road connecting to pedestrian and cycle route within Shanganagh Park constructed in Phase 1

#### Phase 4

- Construction of Block G and H totalling 111 Cost-rental units and 61 Social units together with communal facilities
- The construction of the spur road together with car parking, landscaping and pedestrian connection with Shanganagh Park
- The construction of surface car parking together with landscaping



Block B Elevation Study

#### 4.0 Residential Building Design

The development provides a variety of residential accommodation in a number of built forms distributed throughout the development. These include:

- Semi-detached and terraced two-storey own-door access houses with back gardens,
- Duplex units with own-door access
- Apartments at ground floor with own-door access
- Apartments of varying sizes (Studio units to four-bed units) in multi-storey blocks (with 12 units or less being accessed from corridors served by lift and stairs in accordance with guidelines)

#### 4.1 Apartment Block Design

##### 4.1.1 Access and Common Areas

Apartment building entrances are located on principle streets and squares so as to be easily identified as well as for ease of access, navigation and a sense of security. Apartment entrances are key to creating a safe, secure and animated streetscape through the provision of Active Frontage at street level.

Ground floor apartments have own-door access so as to further animate streets and provide passives surveillance to the development.

Apartments are generally accessed via common entrance foyers giving on to lift and stairs that serve upper floor corridors. The maximum number of apartments accessed off a single corridor is 12no. Building service ducts and risers have been located where possible off common circulation areas for ease of access and maintenance.

##### 4.1.2 Communal and Recreational Services

As part of this BTR model, the proposed development will incorporate supporting communal and recreational amenities in accordance with Specific Planning Policy Requirement 7 (SPPR7) of the "Sustainable Urban Housing: Design Standards for New Apartments" as published by Department of Housing, Planning and Local Government in March 2018.

Residential Support Facilities: This comprises of facilities related to the operation of the development for Residents.

-A concierge / management office is provided in the ground floor of Block E addressing the Square. This will accommodate management and maintenance matters related to the development.

Residential Services and Amenities: These comprise of facilities for communal recreational activities for residents that can be booked on occasion by individual residents for their own use. These will include :

- Cinema room and a gym in the ground floor of Block A;

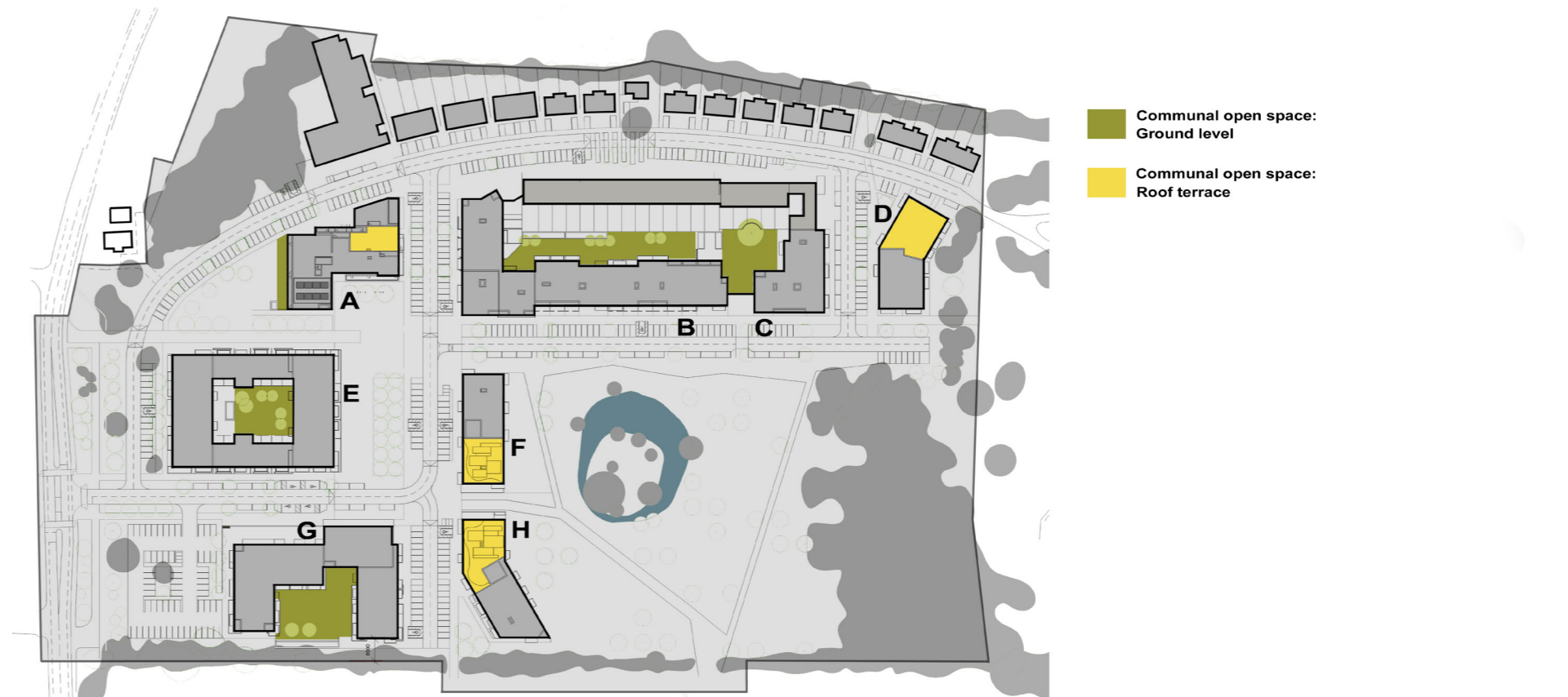


Diagram of Communal Open Space

- Residents Lounge and Community Room in the ground floor corner of Block B;
  - Shop in the ground floor of Block E;
  - Function Room and Business Pods together with space for a cafe in the ground floor of Block F;
  - Co-working Spaces to the ground floor of Block G;
- In addition to the above-noted facilities, a crèche will be provided for residents. Please refer below for a detailed description of this facility.

##### 4.1.3 Communal Amenity Space:

Secure, accessible and usable communal space is provided for residents and in particular families with young children and for less mobile older people based on space requirements defined by the guidelines. Communal space takes the form of roof gardens and ground floor courtyard/gardens accessible to residents only. Specifically:

- Blocks A: Linear Garden/Amenity Space located at ground floor between playground and west-facing block.
- Blocks A, D, F, H: Communal Garden/Amenity Space located at roof-top level accessed from residential lift core
- Blocks B, C: Linear Communal Garden/Amenity courtyard at ground floor level
- Blocks G: Communal courtyard Garden at ground floor level

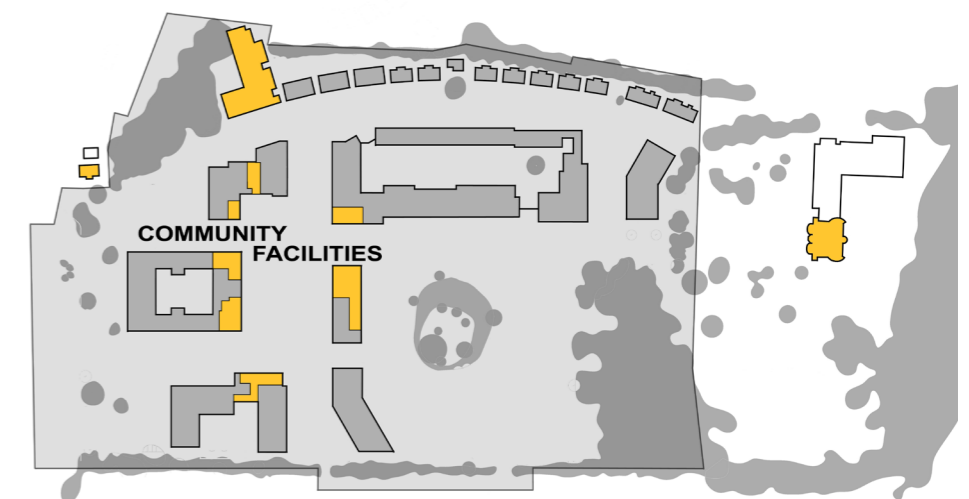


Diagram of Community Facilities

#### 4.1.4 Play Space

The recreational needs of children have been carefully considered in the overall landscape design for the project and in particular in the design of communal amenity spaces within apartment blocks. In summary:

- Appropriately landscaped play spaces will be provided within communal amenity space.
- A generous play space of approximately 650m<sup>2</sup> is provided to the west of Block A as an enclosed playground for children of a variety of ages.
- Parkland and public space generally throughout the scheme has been designed to be used as play amenity for children in particular 'The Park' at the centre of the project, 'The Square' and 'Nodal' spaces along The Crescent
- The project is immediately next to Shanganagh Park and pedestrian access is provided from the development to the park and in particular the existing playground facilities.

#### 4.1.5 Bicycle Storage

Dedicated, well-lit, well-signposted covered and secure cycle parking facilities are provided within each apartment block or within adjacent permanent structures integrated into the design.

Storage is adjacent to building entrances for ease of access and use and has immediate access to roads/ cycle lanes. The quantity of space provision is based on 1no space per bedroom and in accordance with Sustainable Urban Housing: Design Standards for New Apartments Guidelines.

Bike parking will be provided using a balanced, two-tier stacking system to maximise space use.

Please refer to ABK planning accommodation schedule for details of quantum and ABK Drawing 778/PA-1152 for locations of bike stores.

#### 4.1.6 Refuse and Waste Management

Waste generated by residents in apartments will be stored in dedicated communal waste storage areas (WSAs), strategically located adjacent to the lift/stair core for each block. House residents will leave their bins in front of their homes in the designated WSA for pick up. Waste generated by the crèche will be stored in a dedicated area within the crèche WSA. The WSAs have been adequately sized to accommodate weekly storage of organic, dry mixed recyclables, glass and mixed non-recyclable waste.

Bins from each residential block and crèche will be collected from the designated bin pick-up location by the nominated waste contractor.

#### 4.2 Apartment Design

Apartments mix and size have been designed in accordance with the spatial requirements as outlined in the "Sustainable Urban Housing: Design Standards



View from The Park towards Block F, B and C

for New Apartments" as published by Department of Housing, Planning and Local Government in March 2018.

Apartments typically are designed on the Build-to-Rent Model the exception being Block F which is designed for Affordable Sale. Within the Build-to-Rent Model Blocks D,E,A and H are Social and Blocks A,B,C,F and G are Cost Rental. The Tenure varies from block to block to create a mix throughout the site. Please refer to HRA's Sustainable Neighbourhood and BTR Justification Report that forms part of this application.

A Housing Quality Schedule has been prepared for each unit to demonstrate compliance and forms part of this submission.

#### 4.2.1 Apartment Areas

Apartment net internal floor areas are in accordance with the space requirements set out by in the "Sustainable Urban Housing: Design Standards for New Apartments" with room sizes according with the minimum sizes defined in this document.

Safeguarding of Higher Standards: In the interests of sustainable and good quality



Residential Tenure



urban development and so as to achieve a good mix of apartment sizes, apartments within Block F - Affordable Sale - exceed the minimum areas by 10%. We note that Build-to-Rent apartments are not required to meet this requirement.

#### 4.2.2 Dual Aspect

The proposed development is in an 'Intermediate Urban Location' as defined in Chapter 2.0 of Sustainable Urban Housing: Design Standards for New Apartments. Dual aspect ratios are in accordance with these standards with 50% of apartments are Dual Aspect, Where single aspect units are provided consideration has been given to orientation so as to maximise sunlight at some part of the day.

#### 4.2.3 Private Open Space

Private open space in the form of gardens/terraces (for units at ground floor) and balconies with a minimum depth of 1.5 metres has been provided in accordance with DHLG (Department of Housing, Planning and Local Government). Balconies / terraces typically are accessed from living spaces.

#### 4.2.4 Floor to Ceiling Heights

Floor-to-ceiling heights in Apartments are in accordance with or in excess of the guidelines Ground floor units will have a floor-to-ceiling height of 2.7M so as to improve daylighting.

#### 4.2.5 Internal Storage

As part of the minimum apartment floor areas, provision has been made for general storage and utility within units in accordance with the guidelines

### 4.3 Housing Design

Housing consists of semi-detached and terraced two-storey own-door access houses with back gardens located along The Crescent together with Duplex units with own-door access located within Block E.

Housing is designed in accordance with Best Practice Guidelines: 'Quality Housing for Sustainable Communities published by Dept. of Environment Heritage and Local Government. 2007 A Housing Quality Schedule has been prepared for each unit to demonstrate compliance and forms part of this submission.

#### 4.3.1 Affordable Sale Housing

Housing along The Crescent is designed for Affordable Sale. Parking allocation for these units is based on 1no space per unit. Parking is off-street for semi-detached units and on-street for terraced houses. In additional 10 visitor spaces are provided.

#### 4.3.2 Internal Space Provision

Space provision and room sizes are in accordance with Table 5.1 of Best Practice Guidelines: 'Quality Housing for Sustainable Communities published by Dept. of Environment Heritage and Local Government. 2007

#### 4.3.3 External Space Provision

External Space Provision is designed in accordance with Best Practice Guidelines: Quality Housing for Sustainable Communities published by Dept. of Environment, Heritage and Local Government 2007 and in line with Dun Laoghaire Rathdown Co.Co. Development Plan 8.2.8.4 Private Open Space Quantity with 48m2 provided for two-bed units and 60m2 provided for 3-bed units.

#### 4.3.4 Refuse and Waste Collection

Terrace housing will incorporate bin storage enclosures into the external boundary treatment to the front of units. Semi-detached houses with side access will store bins to the rear of units. Residents will place bins in front of their homes for collection by nominated waste contractor.

Duplex units in Block E will avail of the central waste management facility within that block.



Elevation Study of Terrace Houses



Bin Strategy Diagram

## 5.0 Crèche

In accordance with Dun Loaghaire Rathdown County Development Plan, a crèche will be provided to accommodate children resident within the development. The quantum of childcare accommodation is based on government publication 'Childcare Facilities – Guidelines for Planning Authorities' 2001 and in particular Appendix 2 which requires 20 childcare spaces per 75 dwellings in excess of one-bed.

The facility is designed in accordance with 'Universal Design Guidelines for Early Learning and Care Settings', a publication by Dept. of Children and Youth Affairs (DCYA.) It will provide care and early learning to children from birth to 6 years of age.

The crèche consists of approx. 780m<sup>2</sup> of childcare and support accommodation and caters for some 107 children and 20 staff.

Located along the west end of The Crescent, the crèche is set against the existing woodland copse to the north western corner of the site which provides an ideal backdrop for this child-centred facility.

Conceived as an extension of 'garden walls', the crèche terminates the curved terrace of houses and forms a small public space that incorporates traffic calming and a drop-off area for parents to gather and socialise. An entrance canopy provides shelter to those accompanying children into the facility while a generous lobby, overlooked by staff, provides storage for buggies and appropriate security.

The building itself consists of 'L'-shaped single-storey element organised around a courtyard that opens out to the adjacent trees. The primary circulation/play space runs north-south accessing a series of classrooms together with ancillary storage / WC's under pitched roofs for daylight. Classrooms open out onto adjacent, covered, external play spaces and an informal central playground. (Access to the adjacent woodland will be restricted by means of discrete fencing to detail.)

Staff and support facilities including kitchen, staff room and storage run along the eastern boundary and may be independently accessed by means of an external path that runs along the eastern boundary.

Refuse bins will be stored along this access path and will be placed on the pavement in front of the crèche for collection by nominated waste contractor.

The eastern 'leg' of the 'L' accommodates babies and toddlers in a separate annexe separated from the main body of the crèche. Storage is distributed throughout the building

Materiality: The crèche will be constructed of selected brick so as to form a consistent context with adjacent buildings. Pitched roofs will be metal standing seam/zinc.

## 6.0 Energy and Sustainable Design

The development has been designed to achieve Part L NZEB compliance with a minimum BER of A3 with the majority of units achieving A2. The design proposes a significant reduction in Primary Energy and CO<sub>2</sub> emissions compared to a Building Regulation Compliant Residential Building to Part L 2018.

The project will achieve an Air Tightness Test of 0.6m<sup>3</sup>/m<sup>2</sup>/hr an 88% improvement on the Building Regulations advised upper limit figure.

The project is designed such that multi-occupancy residential buildings are served from a central Energy Centre located at ground floor and roof top level of Block A. The Energy Centre will incorporate a combination of Air Source Heat Pumps with Back-up Gas Boilers for heat generation which will be distributed using a pumped LTHW distribution network.

Apartments will be fitted with a Heat Interface Unit (HIU) or heat exchangers which will provide heating through radiators and instantaneous hot water.

Note: Crèche and house units are not connected to the central energy centre and will be provided with individual air to water heat pumps.

Please refer to Homan O'Brien's Energy Report included in this planning submission.



*View of Crèche and along The Crescent*

## 7.0 Access for All

The proposed development is designed in accordance with TGD M of the Building Regulations. Apartment blocks, communal facilities, crèche and external communal space has been designed so that they are easy for people to use regardless of age or abilities. The development is in compliance with Part M of the Building Regulations. Entrance thresholds to apartment foyers, common areas and ground floor units and communal facilities are flush throughout. Access to upper floors is via lift together with the provision of TGD M compliant stairs. Accessible Apartments to Universal Design Standards will be provided in Blocks E and H (30 No. 1 Beds, 30 No. 2 Beds).

## 8.0 Landscape Design

An integrated approach to landscape has been developed by the design team that looks to retain elements of the historic landscape related to Shanganagh Castle while creating a contemporary environment for a new residential community. At the core of the strategy are the principles outlined in the master plan described in item 2.0 above.

Please refer to Aecom's Landscape Architecture and Public Realm Report and associated drawings together with Arborist's report that forms part of this application for details of the landscape design.

The report describes the approach to landscape including working within an historic landscape, the creation of landscape character areas, connectivity and the provision of amenity the management and integration of traffic and car parking. Character Areas include:

**The Parkland and Pond:** Proposals to this area includes the restoration of the existing ornamental pond including the development of a strategy for water management, the retention and reinforcement of existing woodland and introduction of specimen tree planting, the creation of pedestrian and cycle connections to the adjacent Shanganagh Park

**Urban Woodland Interface** Proposals for the space between the development and the Dublin Road include a new, treed landscape buffer with existing trees being retained and specimens added to create a woodland area along the boundary. A new low boundary wall with railings set back from the road will provide an enhanced landscaped space for pedestrians. New footpaths connect with existing at the entrance to Shanganagh Park to create a generous wooded walk for passers-by.

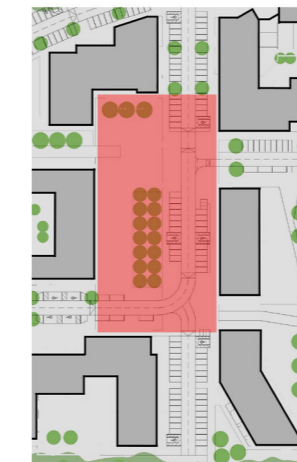
**The Square:** Proposals for the space include the creation of shared surface that extends across roads to create a pedestrian-friendly public space. The space is divided into sub-spaces to encourage activity. Features include a stand of trees to the south east corner.

**The Avenue:** The treatment of this linear space varies along its length, responding to

its various conditions including transition between historic and contemporary space  
**The Crescent Home zone:** Proposals for the space respond to the historic origins of this route as the approach to the Castle. Treatment included the creation nodal points integrated with traffic calming to create amenity spaces to the front of the crèche, at the mid-point of the Crescent generated by the retention of an existing tree and the potential connection to Castle Farm Estate. The treatment of privacy strips to dwellings is incorporated in this proposal

**Communal Areas:** Proposals for communal spaces on roof tops and within courtyards include the treatment of privacy buffers to ground floor units, formal and informal play and recreational opportunities.

### PROPOSED SQUARE



### COMPARATIVE URBAN SPACE



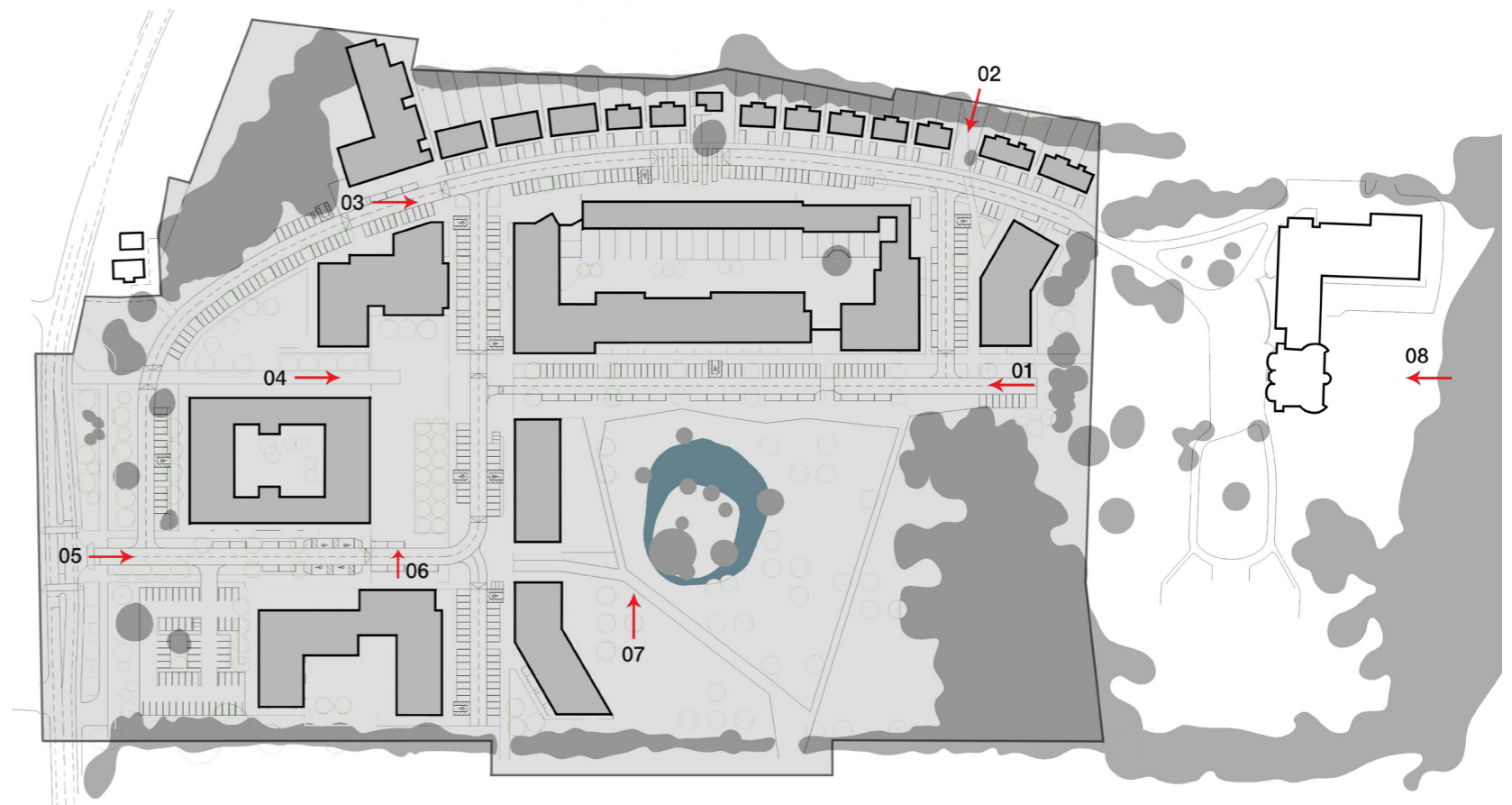
Comparative Square Analysis



Landscape Diagram: A shared surface extends across roads to create a pedestrian friendly public space.

APPENDICES

Appendix 1 Photomontages



Location of Views



01. View Westward along The Avenue



02. View from Future Pedestrian Entrance



03. View of The Crescent



04. View Eastwards along The Avenue





05. Entrance View towards Square and Park



06. View of The Square Northwards



07. View of Parkland and Pond



08. Aerial View Westward