

Shanganagh Castle Landscape Architecture and Public Realm Design Report

Dun Laoghaire-Rathdown County Council

### **Quality information**

Document name	Ref	Prepared for	Prepared by	Date	Reviewed by
Landscape Architecture & Public Realm Design Report	Shanhanagh Castle	DLRCC	Bartholomew O'Doherty	24/01/20	Ross Loughnane
			Sylwia Charkiewicz		

Revision	Ref	Prepared for	Prepared by	Date	Reviewed by

This document has been prepared by AECOM Limited for the sole use of our client (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM Limited and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM Limited, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM Limited.

### Contents

01	Introduction & Analysis4	
	Overview	
	Context	
	Analysis	
02	Design Approach	
	Master Plan	
03	Design Principles	
	Design Principles	
	Master Plan	
	Character Areas	



## Introduction & Analysis 01

### **Overview** Project Understanding

### **Overview**

The Landscape Architecture design report provides a comprehensive presentation of the proposed external works for the Shanganagh Site. At the outset, the team;

- Identified the parameters upon which the brief for the public realm was developed;
- Conducted a site appraisal which included a review of related planning policy

The site appraisal formed the basis upon which the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was established in order to evaluate the assessment. The SWOT analysis which acts as the conclusion to this 'introduction and analysis' section of the report provides the foundation for the design approach to be set out for the external works.

### **Project Delivery**

In accordance with the agreed scope of stage services from Dun-Laoghaire Rathdown County Council (received from ABK in March 2018), the landscape architectural team at AECOM are to provide the following by definition:

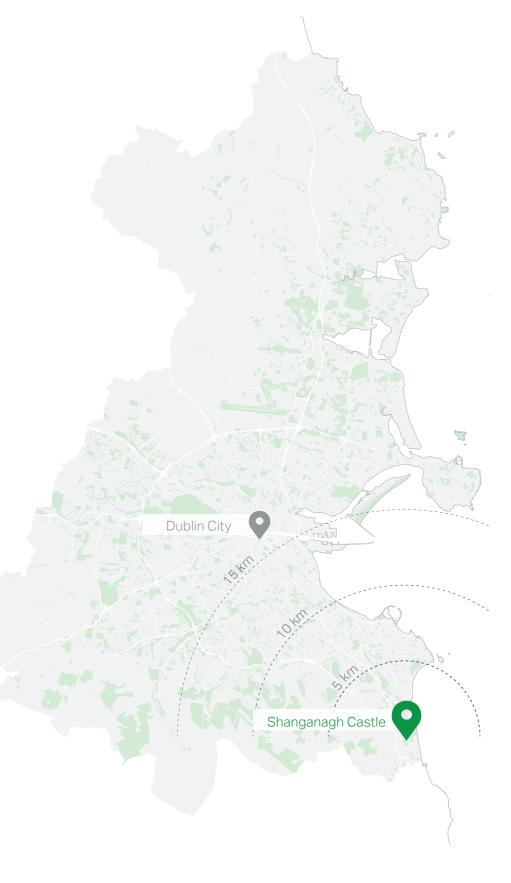
To provide Landscape Architectural services to complete the Master Plan and Infrastructural Master Plan and a Part 10 Planning Application to An Bord Pleanála for the site including an Arborists' Report; and to provide the services of a Landscape Architect through tendering for works contractors and completion of each phase of the works on site.

### **County Dublin Context**

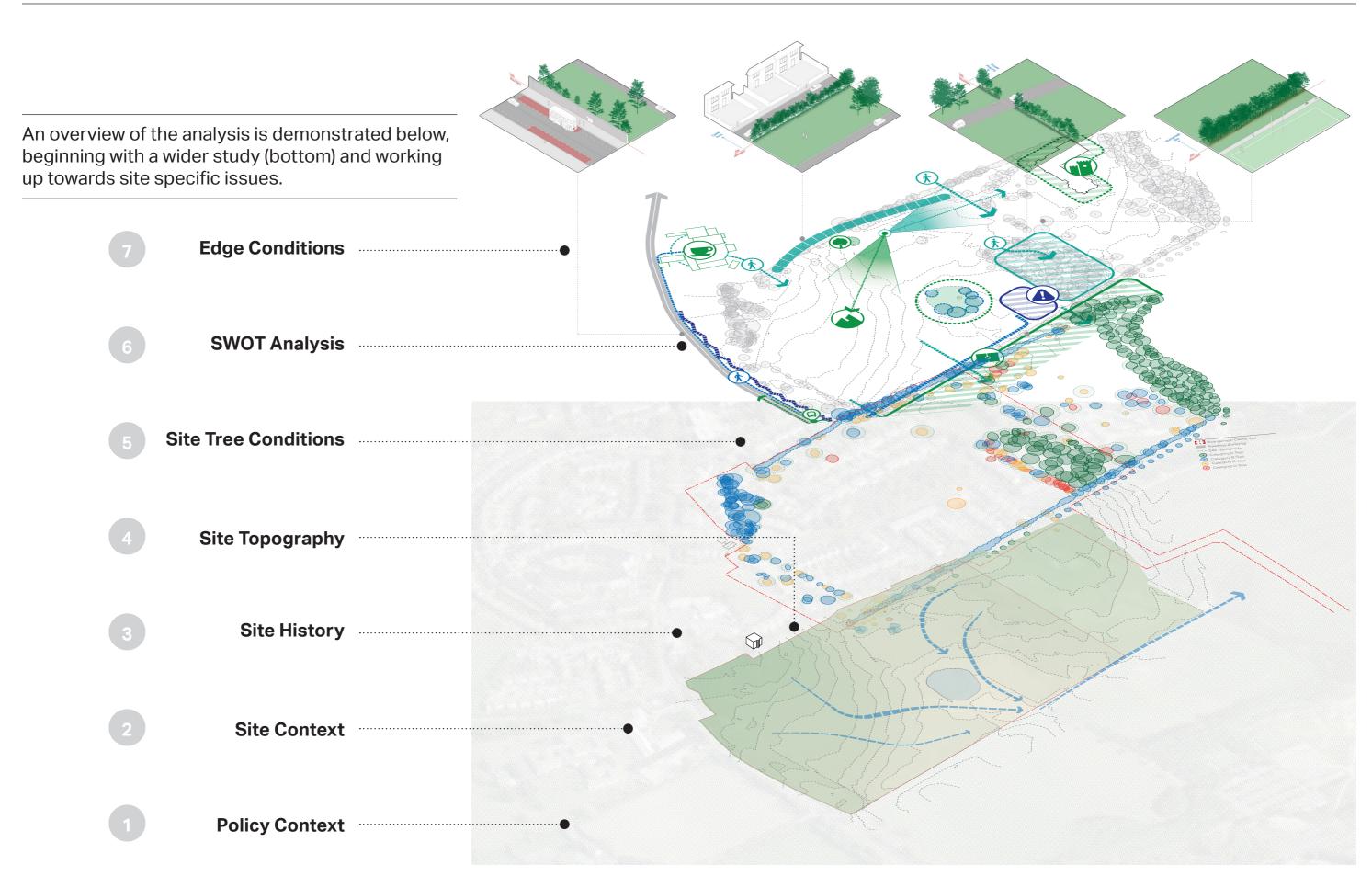
The site at Shanganagh Castle sits at the far south of County Dublin, on the periphery of northern Wicklow. The lands sit within a broader expanse of suburban development, including amenity parklands and Shanganagh Cemetery.

The regional DART train line hugs much of the coast line in this context; it is proposed to offer a new station (Woodbrook) along this network. This provision of public transport is seen as a key enabler for residential development at Shanganagh.





### **Overview** Approach & Methodology



### **Overview** Legislative and Policy Review

### Development Plan 2016 - 2022

Dun Laoghaire-Rathdown County Council

The County Development Plan sets out policies and objectives for the continuing sustainable development of the County, including the region of Shanganagh.

### 2. Sustainable Communities Strategy

2.2.7.1 Policy ST5: Walking and Cycling

As part of the Development Management process, new development will be required to maximise permeability and connectivity for pedestrians and cyclists to create direct attractive links to adjacent road and public transport networks.

### 4. Green County Strategy

### Vision statement

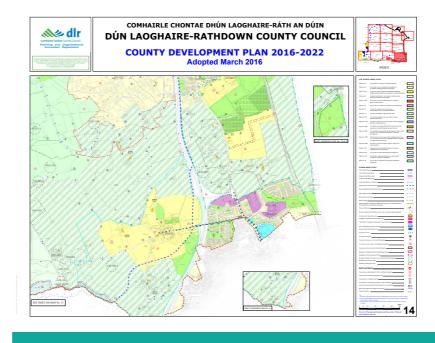
To promote and develop a coherent and integrated green infrastructure network across Dún Laoghaire–Rathdown which will secure and enhance biodiversity - including the protection of Natura 2000 sites - provide readily accessible parks, open spaces and recreational facilities, maintain historic and landscape character areas and provide for the sustainable management of water through facilitating the retention and development of a network of green spaces in urban and countryside locations to serve the needs of all citizens and communities in the County.

### 4.1 LANDSCAPE, HERITAGE AND BIODIVERSITY

Recognising the close relationship between the landscape, natural heritage and recreational open spaces. The distribution of landscape, natural heritage and recreational assets across the County are vitally important to creating an accessible County. The entire population of the County should have access to nature, parks and strategic public open space.

### 4.1.3.1 POLICY LHB19: PROTECTION OF NATURAL HERITAGE AND THE ENVIRONMENT

- Retention of trees, hedgerows and woodlands wherever practical
- Identification of Views and Prospects of special amenity value or special interest
- Working with local communities, groups, landowners, National Parks and Wildlife Service(NPWS) and other relevant parties to identify, protect, manage and, where appropriate, enhance and promote understanding of sites of local biodiversity value.



### 4.2 OPEN SPACE AND RECREATION

Objectives:

- To provide networks of accessible, high quality open spaces and sport and recreation facilities which meet the needs of all residents and visitors, are fit for purpose and are economically and environmentally sustainable.
- To protect and improve established green areas and public open spaces.
- To protect, improve and enhance recreational areas.
- To provide new parks and green spaces with proper facilities in new development areas and communities.
- To develop and improve physical linkages and connections between the network of parks and public open spaces in the County.
- To ensure proper access to the recreational facilities of the County for all.



### 4.2.2.5 POLICY OSR6: ALLOTMENTS AND COMMUNITY GARDENS

It is Council policy to support the development of additional public allotments and community gardens to improve their provision and distribution across the County.

The Shanganagh Community Garden was established in 2010 and it was extended in 2012. There are smaller such gardens in Fitzgerald Park and in Sallynoggin. The Council has established allotments at Goatstown and is exploring the possibility of providing allotments at Shanganagh Castle. In 2011 the Council prepared a draft policy on allotments and community gardens, which seeks to promote further provision and wider distribution of such facilities across the County.

### 4.2.2.3 POLICY OSR7: TREES AND WOODLAND

Trees, groups of trees or woodlands which form a significant feature in the landscape or are important in setting the character or ecology of an area should be preserved wherever possible.

The Council will identify and act on opportunities to provide for new tree planting in conjunction with new urban design/development and infrastructure and will plan for new planting to add to the overall 'urban forest' and so help improve the built environment. The term 'urban forest' embraces trees grown in, and close, to urban areas, including trees in streets, parks, gardens, on underdeveloped land and those in urban woodlands.

### 4.2.2.13 POLICY OSR15: PLAY FACILITIES

In line with the National Play Policy provision should be made to include suitable play opportunities for all ages of the child population within new residential developments.

### Woodbrook - Shanganagh LAP 2017 - 2023

### Dun Laoghaire-Rathdown County Council

The Local Area Plan for Woodbrook-Shanganagh seeks to reinvigorate the development potential for each of the development parcels. The plan provides development of a substantial and sustainable residential community incorporating parkland, recreation, green infrastructure and existing properties into the overall development scheme.

Shown below are the key components extracted from the LAP relating to the Shanganagh development scheme.

### 2.8 Vision

### for Woodbrook-Shanganagh

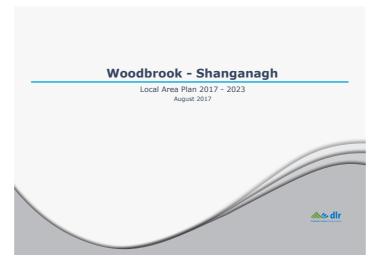
To create a walkable neighbourhood with key facilities within a 5-10min walk from future residential properties.

To create a distinctive and vibrant community offering an attractive place to live and visit underpinned by a high standard of urban design.

To achieve a thriving community with high-quality residential, community, civic and recreational amenities.

To promote a modal shift to more sustainable modes of transportation – with priority afforded to walking and cycling – to include the provision of a new DART Station at Woodbrook.

To improve pedestrian and cycle connections to, and through, Shanganagh Park providing both strategic and local routes through the LAP area and into the wider area.



### 4. Site Framework Strategies

### 4.3.2 Shanganagh Castle (Key Site Objectives)

PUBLIC REALM & OPEN SPACE

SC19 Ensure a high quality public realm that reflects the demesne and landscape character of the site.

SC20 Ensure an appropriate setting for Shanganagh Castle as a Protected Structure. This space may also have a civic quality and potential to accomodate temporary exhibitions or events.

SC21 Provide for generous key access points along the southern boundary of the site connecting into Shanganagh Park and to facilitate the creation of new north-west/ south-east linkages through the Park.

SC22 Explore the potential to achieve new linkages between Castle Farm and Shanganagh Castle in the interest of permeability and the creation of direct, safe routes to adjoining recreational amenities and/or community facilities.

SC24 Provide for an appropriate range of play facilities for young children as part of the communal open space provision and to ensure that passive and active recreational facilities for all age groups are provided in the immediate vicinity as part of the future Master Plan proposals for Shanganagh Park.

SC25 Potentially incorporate the central public open space element to be provided as part of the future residential proposal into the adjoining Shanganagh Park, so as to consolidate and reinforce the recreational potential of the Park and to enhance the potential for continous recreational routes between two sites.

S27 Create an attractive tree-lined avenue along the central avenue with the planting of appropriate native broadleaf species.

SC28 Retain the water pond or wetland area as an historic landscape feature and also for visual amenity and biodiversity value as part of the public open space provision on the site.

SC30 Seek to retain and protect the tree copses or substantial tree belts at the two locations as shown on the Site Framework Map and to undertake additional tree planting in the form of tree belt along the Dublin Road boundary. Design of vehicular access to the new residential neighbourhood shall minimise the loss of mature trees, whilst meeting road safety standards.

SC31 Ensure appopriate boundary treatment along all boundaries of the site, and in particular the northern boundary, in the interest of residential, visual and landscape amenity. In accordance with the Landscape Strategy set out in Map 16, the landscape buffer along the Dublin Road shall be between 20-30m wide to protect the sylvan character of the area.

SC32 That a low granite wall with railings be provided along the Dublin Road site boundary and the existing entrance pillars be relocated to the new vehicular entrance serving the future residential development of the Shanganagh Development Parcel.

### **Context** Public Transport Proposals

### City-wide Network BusConnects Plan

The currently proposed overhaul of the wider network of bus routes and infrastructures throughout Dublin is branded as BusConnects. This network aims to connect regional, suburban and peripheral areas directly to the city centre through a system of frequent radial routes.

# Shanganagh Castle

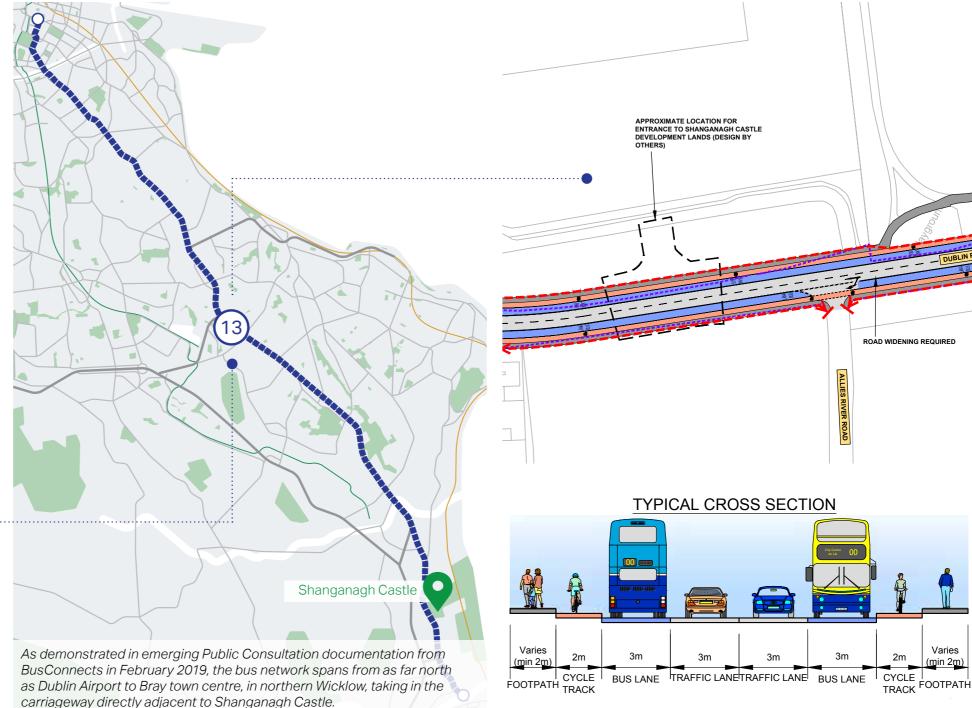
As demonstrated in emerging Public Consultation documentation from BusConnects in February 2019, the bus network spans from as far north as Dublin Airport to Bray town centre, in northern Wicklow, taking in the carriageway directly adjacent to Shanganagh Castle.

### **Emerging Plan** Number 13 Route

In the context of development at Shanganagh Castle, the most significant route in the wider BusConnects plan is route number 13. As demonstrated below, this proposed route provides service that links Bray to Dublin City centre, running directly adjacent to the site of proposed development.

### **Dublin Road Access** Shanganagh Castle

As indicated in the emerging preferred route (public consultation, February 2019), site access into the development site at Shanganagh Castle is being considered in the context of augmenting the bus network and carriageway. An indicative section below demonstrates a preliminary spatial configuration.



### **Context** Local

### **Shanganagh Castle Site**

The site is recognised as one of the key open spaces of South Dublin with a great potential for the future development. It has a very good access with the Dublin Road at the west boundary, and many recreational benefits with the Shanganagh Park at the south boundary and the Shanganagh Castle towards the east. The site itself contains a lot of mature planting and a water body which should be enhanced as part of the future residential development.

Shanganagh Park Site

Shanganagh Castle Grounds

Shanganagh Castle (RPS) +1950s Exclusions

Estate Building (1960s)

Nursery Facility

Residential Units

Existing Vegetation

Vegetation Constraints Zone

Water Body

Indicative Site-wide Drainage

Existing Carriageway

1) Site Entrance

2 Allotments (historic, out of use)

(3) Fence Line (Central)

4 Fence Line (Peripheral)

(5) Woodland Track

6 Port-a-cabin

7 Inaccessible (by drawn survey)

8 Gate Lodge building (RPS)

Crinken Cottage Lodge (Estate Manager's House)

Historic Monument (NIAH #60260147)



### **Context** History

An examination of the site's history as a rural castle estate through to a suburban settlement provides us with an understanding of a rich heritage.

### 1830s 6" Ordnance Survey Maps

An informal access avenue towards Shanganagh Castle is seen to weave from the central estate entrance along the north side of the estate. The castle farm is located north of the site, with a walled garden and outbuildings, accessed by a secondary northern entrance drive.

Wooded planting across the site is dense, notably around the site periphery. An ornamental pond and island are central, accessed by a secondary avenue from the Castle. This is expected to inform elements of the design direction, considering its anticipated ecological value. Though developed as part of the original estate, this water body is not of formal value, but rather environmental.

### Shanganagh Park Historic Mapping



### 1880s 25" Ordnance Survey Maps

Site access remains from the centre of the western boundary of the site, while castle access is formalised into a sweeping and arcing avenue. South of this, a clearing of woodland planting exposes a more usable open space, with clusters of trees retained to provide glimpses of the house upon approach.

Access towards the central water body is removed, while dense clusters of planting remain within the water body itself (on the island). A more formal clearing of vegetation appears around the water body, allowing views and access towards the water.

### Shanganagh Park Historic Mapping

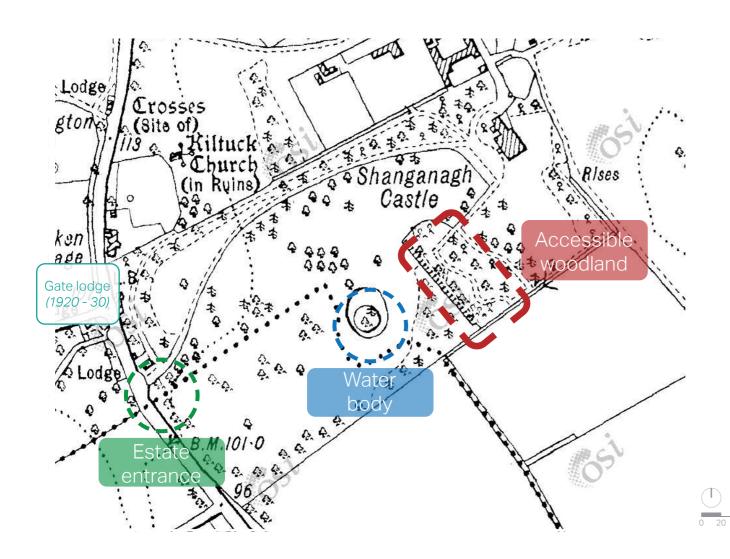


AECOI

### 1940s Cassini Mapping Survey

A network of site-wide avenues and drives span the northern periphery of the site, towards the castle. These routes are augmented into the site's dense woodland area directly south of the Castle (see additional information below).

Notable in this context is the clearing of woodland around the site particularly to the south, likely arising from more intensively agricultural use which is to eventually become Shanganagh Park and sports pitches. The Castle farm buildings remain to the north of the castle lands.



### 2017 GeoHive Map

Site access has moved to the bottom of the western boundary, creating a driveway that connects to the historic arching avenue towards the castle. The historic route going through the dense woodland located south of the castle is replaced by the new route running from the avenue, directly west of the woodland and leading to the greehouse. Due to the staggered clearance of woodland and tree clusters , the historic intent of the visual reveal upon arrival has been largely lost.

Access to the existing water body remains closed and the area is still densly populated by mature planting. Pathways remain within the eastern woodland.



### **Analysis** Site Topography

### **Flat Terrain**

Prior to visiting the site, it was understood from site survey material that there were no major topographical changes or challenges across the site. From the highest point in the north-west (+29.50m) to the lowest in the south (+24.00m) exists a general site-wide slope of  $\sim$ 1:50. As seen below, this change in level is not immediately noticeable once in the environment.

### **Existing Water Catchment**

As seen in the plan opposite, the water body that is found on site is pooled in the lowest part of the site, towards the south-east.



Shanganagh Castle Site

^--- Contour Lines

•24.00 Topogaphical Level

Indicative Site-wide Drainage

29.00

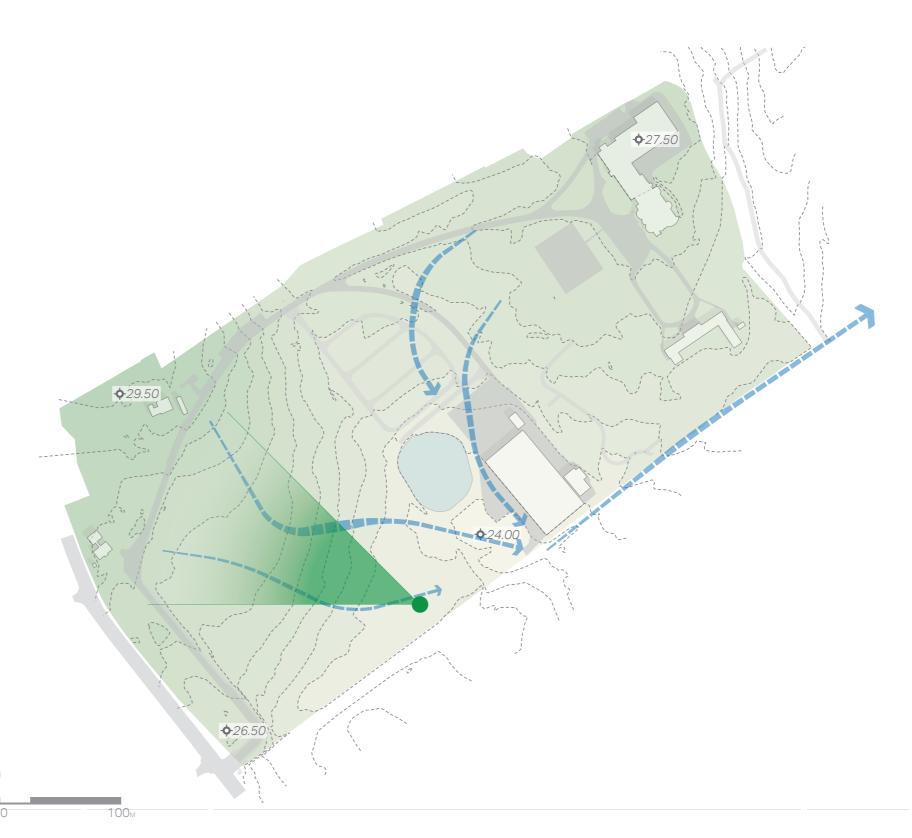
28.00

27.00

26.00

25.00

24.00



### **Analysis** Site Tree Conditions

### **Condition Assessment**

A condition assessment report was completed in September 2015 by Arborist Associates Ltd on behalf of Dun Laoghaire-Rathdown County Council, accompanied by a site-wide plan.

The site-wide tree conditions plan demonstrates a low number of Category U trees, sporadically located across the site. The highest concentration of Category A trees is to the site's north-east, while the majority of Category B trees is found along the north and west of the site.

Below are category descriptions, per Arborist Associates' 2015 report:

Category A: Tree of high quality / value with a minimum of 40 years life

expectancy.

Category B: Tree of moderate quality / value with a minimum of 20 years life

expectancy.

Category C: Tree of low quality / value with a mininum of 10 years life

expectancy.

Category U: Those trees in such a condition that any existing value would

be lost within ten years. Most of these species will be recommended for removal for reasons of sounds

arboricultural practice.

It is recommended from an arboricultural and landscape architectural perspective that removal of all Category C and U trees is undertaken, while the majority of Category B trees - where possible - should be retained for the purposes of residential screening, ecological value and site character. Category A trees will be retained in all places where development does not require their removal.



### Analysis Strengths, Weaknesses, Opportunities & Threats

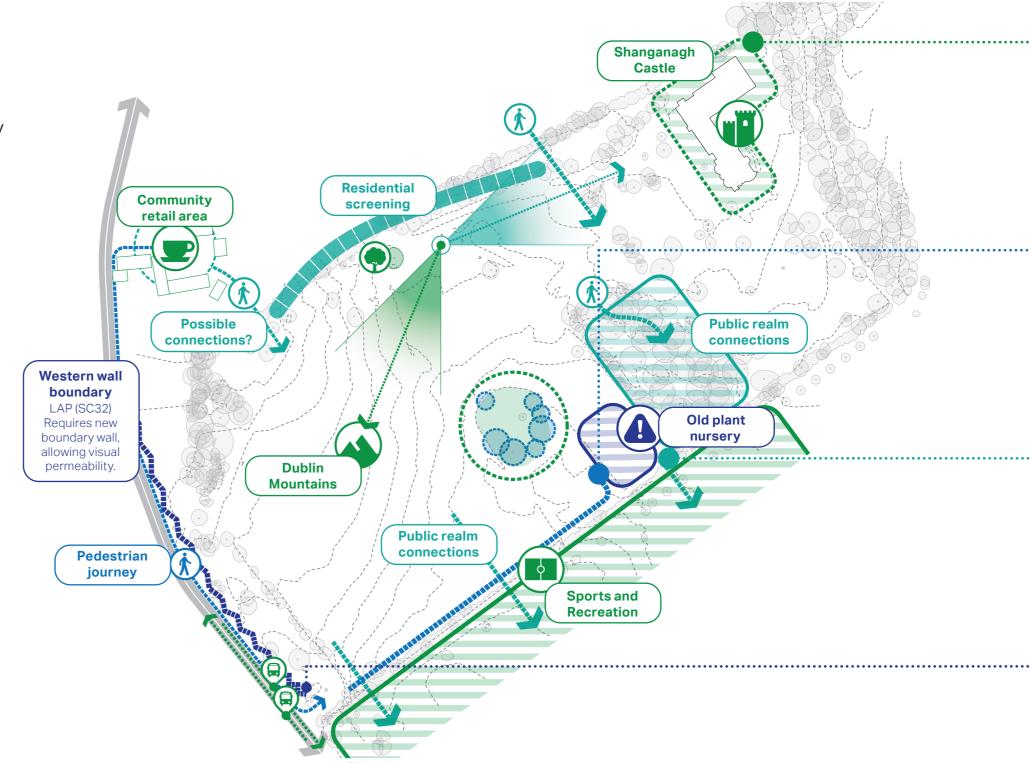
### **On-site Findings**

A spatial analysis exhibits the various strengths, weaknesses, opportunities and threats found across the site. This SWOT approach demonstrates a number of key observations that are to inform a public realm design approach.

### Categorisation

A colour-coded plan of these four categories illustrates a variety of findings (opposite). This framework provides the design team with a summary of findings from across the site.

Shanganagh Castle Ground Roadway (Existing)
Strengths
Weaknesses
Opportunities
Threats



### **Site Heritage**

Shanganagh Castle, rebuilt in the late 18th century and east of the site.



### **Notable Planting**

An existing cedar tree stands tall in the centre of the site.



### **Dublin Mountains**

A long view to the south-west looks towards Wicklow's Sugarloaf (500m.)



### **Southern Boundary**

Dense hedge between Shanganagh Castle (site) and Shanganagh Park.



### **Pedestrian Distance**

The existing entrance is a notable distance from local facilities. Per the LAP, the entrance is proposed to move to "new vehicular entrance serving future residential development", while retaining (moving) existing entrance pillars.



### Weaknesses

**Opportunities** 

Strengths

### **Parkland Connections**

Shanganagh Park offers a wealth of sports and recreation facilities.



### **Castle Grounds**

An existing avenue leads towards the historic Shanganagh Castle.



### **Residential Screening**

Existing housing is screened by dense planting.



### **Old Plant Nursery**

Low-use horticultIral facility located in the south-east of site.



### **Western Boundary**

A transport corridor lines the site's south-west edge, to be augmented per studies in 'Public Transport Proposals of this document'.

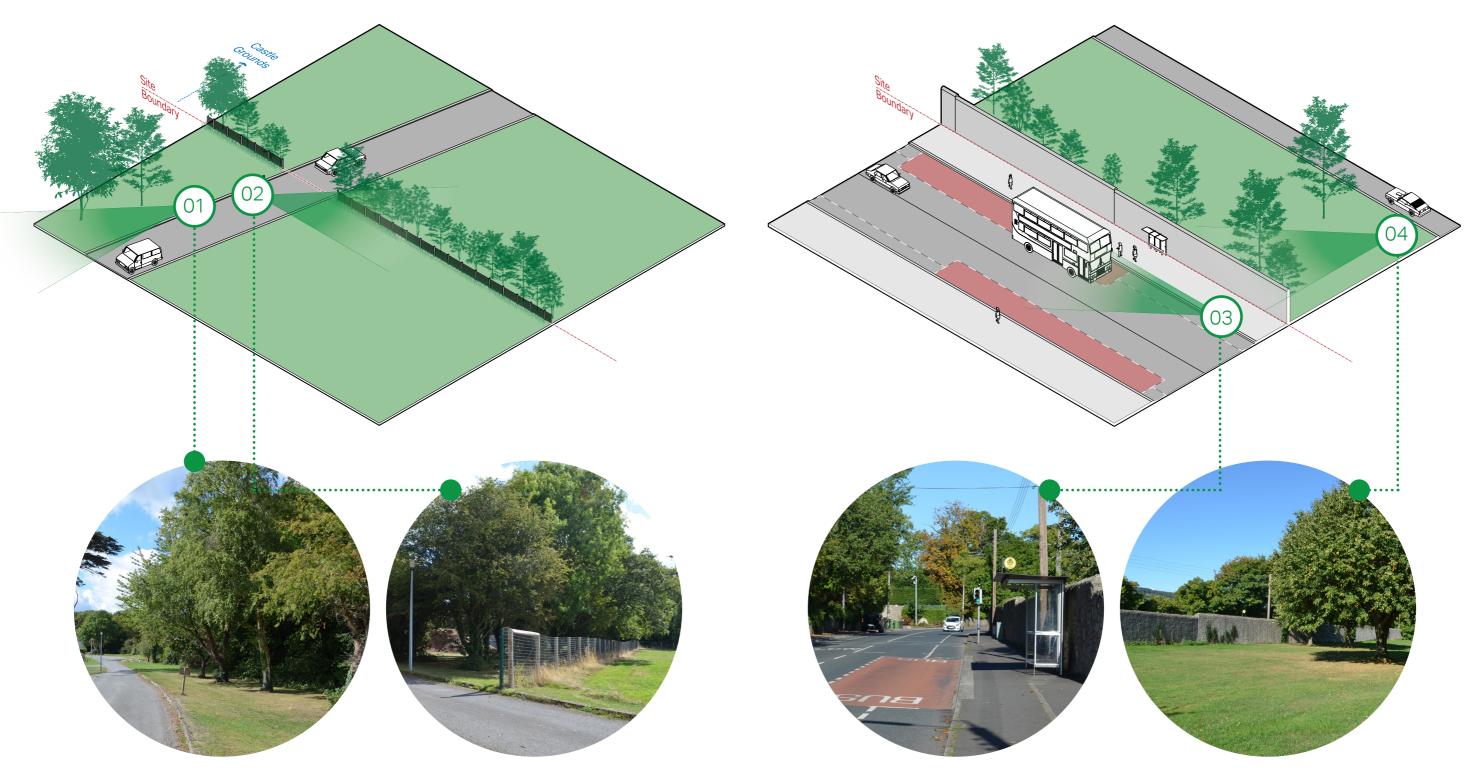


Threats

### **Analysis** Site Boundary Conditions

### **East Boundary** Shanganagh Castle

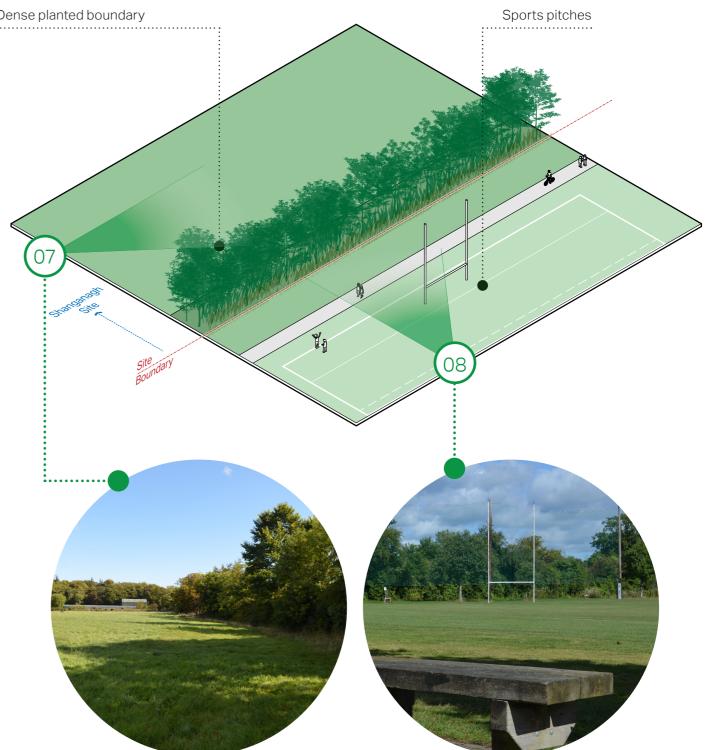
### West Boundary Carriageway (Dublin Road)



18

### North Boundary Residential Dense planted boundary Castle Farm Road Internal access road

### **Southern Boundary** Park & Recreation







### **Design Approach**

02

### **Design Approach**

The Design approach illustrates the design development and intent of the scheme in conjunction with the vision, policies and objectives as identified within both the Dún Laoghaire-Rathdown County Development Plan 2016-2022 and the Woodbrook-Shanganagh Local Area Plan (LAP) 2017-2023.

The following pages illustrate a sequence of iterative conceptual sketches aimed to create a responsive design for the scheme. This scheme has been consulted with a numerous departments within the council including the biodiversity officer and the parks team to ensure we provide a positive interface with the adjacent park and to enable clear understanding of the areas which will be taken in charge in the future.

This has been an iterative process with the team and others including the architecture, drainage and housing departments within the council whom we meet regularly. Furthermore, the design approach sets out the design principles that form the proposed intervention which include:

- Historic landscape retention
- Multi-modal connectivity
- Amenity through variety
- Resilience in design
- Landscape character

The starting point of the proposed intervention has been the quality of the receiving environment. The original historic components of the parkland landscape, namely the woodland stands and pond, form the framework of the open space intervention. Furthermore, the team have sought to reinterpret the principals of parkland landscape design within the new scheme through the creation of vistas, a sequence of spaces being revealed as one traverse the scheme and an alignment of the species that exist on site.

Arising from this a number of strands are intertwined to ensure the proposed interventions were responsive to the site and future community of Shanganagh. These are socially conscious, environmentally resilient and complement the proposed built form. As set out in further detail within the body of the report, the external works provide an overview of the proposed

permeable and legible network for pedestrian and cycle movement creating links to the adjacent park, Shankill and future developments to the south such as Woodbrook residential area, dart station and existing golf course. Furthermore, there is a hierarchy of networks within the site that seek to promote pedestrian priority such as shared spaces, raised tables and cycle infrastructure.

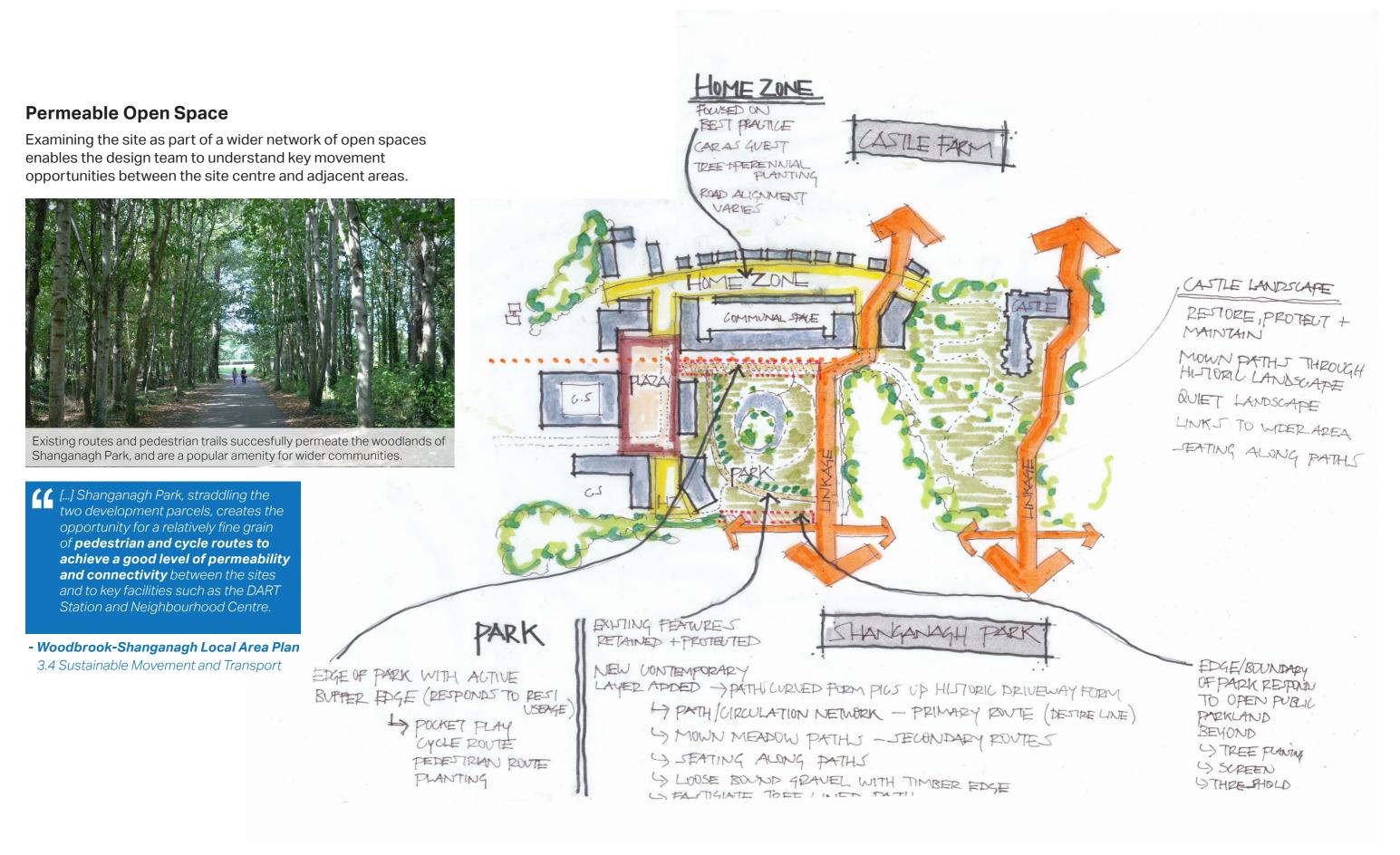
Acknowledging that there is a significant change in use for the site, there is a discreet approach to the landscape interventions which are visually appropriate. The team have set out to create several visual cues which will be found in the scheme that illustrate the historical landscape with an overlay of contemporary functionality which are complementary. For example, the interface between the Avenue streetscape and the parkland landscape is delineated by an upstand wall which overlooks the parkland meadow and is remnant of a ha-ha wall.

The development of distinct character areas across the scheme has been central to the programming and selection of hard and soft materials within both the of public and private open spaces, along with the streetscapes within this new residential community. These character areas function as part of a site-wide landscape architectural framework, ensuring suitable screening, visual and aesthetic interest, recreation and integration of the Proposed Development into its adjoining environs.

In conjunction to the fundamentals of designing the spatial framework for the reduced external landscape the team have sought to proactively integrate resilience through materiality and a holistic approach to water management. All disciplines in the team have developed a SuDS strategy which will add value to the landscape and create a sense of robustness. Roadside medians, usually seeded as standard amenity grass, are proposed as swales to act as collection trains from stormwater runoff, be visually attractive and reduce maintenance.

Overall, the landscape design approach aims at integrating the proposed development within the setting of a historic landscape. While some components of the historic landscape remain, it is proposed that these features are protected, retained and incorporated into the design of the proposed development to form an integral part of the future character, identity and placemaking for the site. The overarching design intention is to create of a strong sense of place and identity for this new residential community, whilst also respecting the historic sensitivities and heritage of the site,





### **Emerging Typologies**

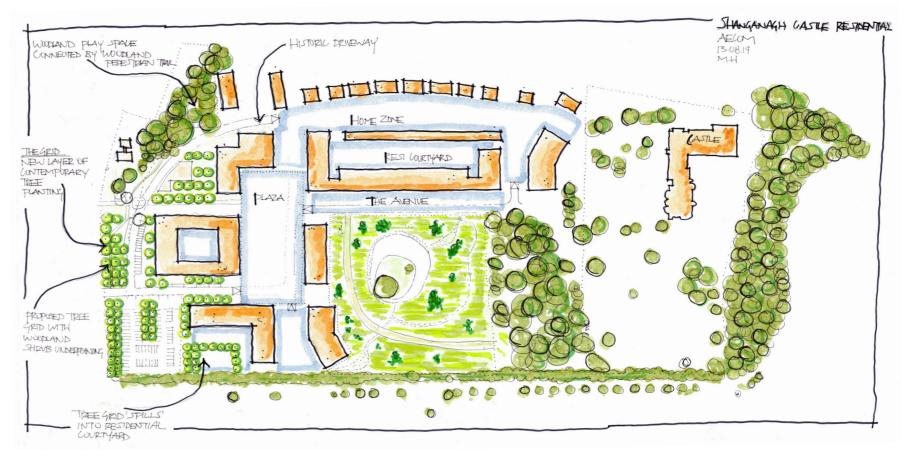
Systematically describing the site as a series of different characters or 'typologies' enables the design team to categorise their programme, scale, user(s) and materiality.

As sketched opposite, an understanding of sitewide typologies, their location and adjacency as well as the variety of open space connections that link these spaces allows for a structure to emerge from the existing and proposed elements.

To underpin the new residential community, the Plan must also deliver an attractive public realm, key civic spaces, a vibrant neighbourhood core and a linked open space network to facilitate permeability and passive / active recreational opportunities.

- Woodbrook-Shanganagh Local Area Plan

3.7 Urban Structure, Design & Public Realm Qualities











### **Open Space Programming**

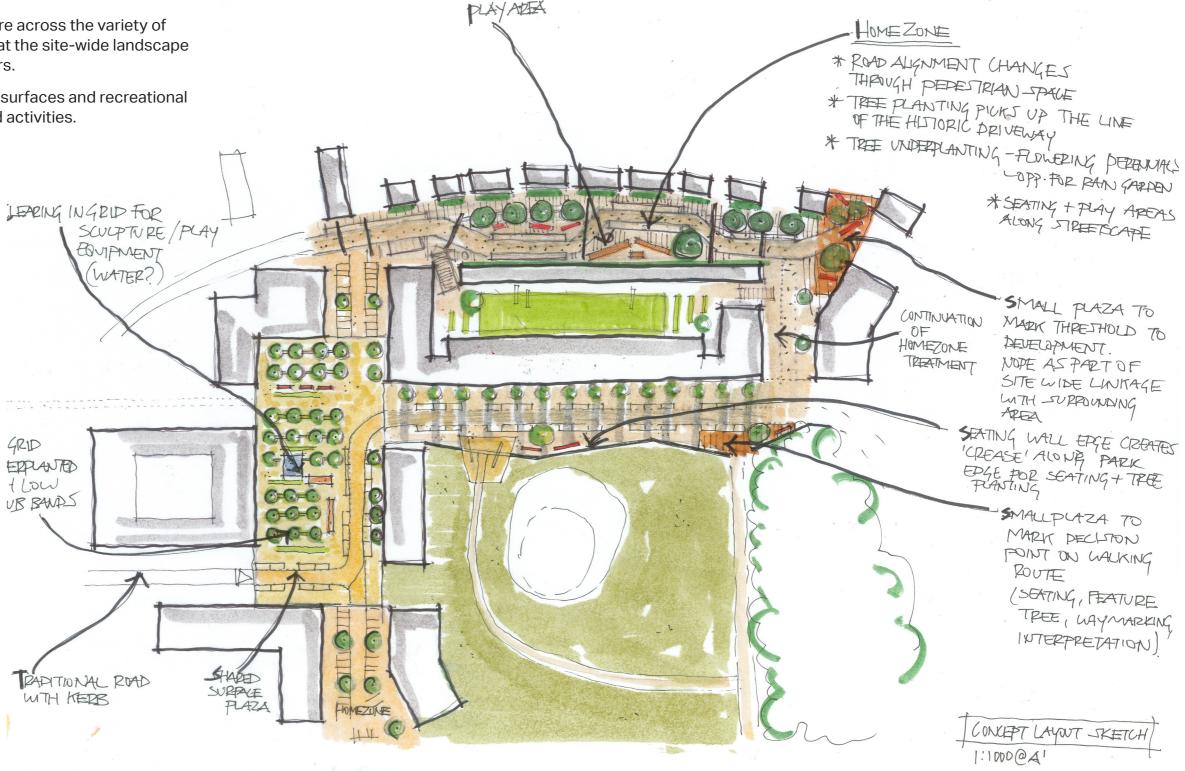
Providing an active programmatic core across the variety of open space typologies will ensure that the site-wide landscape encourages use by a wide mix of users.

Play areas, plazas, parklands, shared surfaces and recreational trails encourage a variety of uses and activities.

[Shanganagh] Plan envisaged to include the following:

- New children's play facilities;
- Upgraded paths and new cycleways, improving interconnectivity between the development parcels and public transport nodes;
- Additional landscaping measures to include

   landscape gardens, ornamental features and extending and developing natural habitats;
- New and improved recreational facilities to include improvements to pitches, new outdoor gym equipment, a new senior prunty pitch and all weather lighting, baseball and cricket area and a junior pitch.
- Woodbrook-Shanganagh Local Area Plan Shanganagh Park Plan



### **Sketch Concept Masterplan**

### **Programmatic Detailing**

Detailed examination of appropriate scales for each of the spatial typologies ensures that their detailing, configuration and adjacencies are considered as part of a wholistic master plan for Shanganagh Castle.

Shanganagh Castle. Materiality and connections between spaces are part of a wider Tree grid / consideration of programmatic detailing. woodland interface [...] New Master Plan Envisaged to include Homezone the following: Upgraded street paths and new cycleways, **O** O improving interconnectivity between the development 000 parcels and public 00 transport nodes. Congregation 0000 - Woodbrook-Shanganagh 00 <u>(COOOO</u>O Local Area Plan 00 Shanganagh Park Plan 00000000 Crossing table at junction 00 000000 0000 Central parkland 600 0000 000 000 000 ŎŌO Plaza with shared surface, festure trees, seating and 00000 **600**00 play space 0000 0000 00000 **Potential relocation** Pedestrian-focused street of car park and sports edge building

26

### **Masterplan** Proposed Woodland Strategy

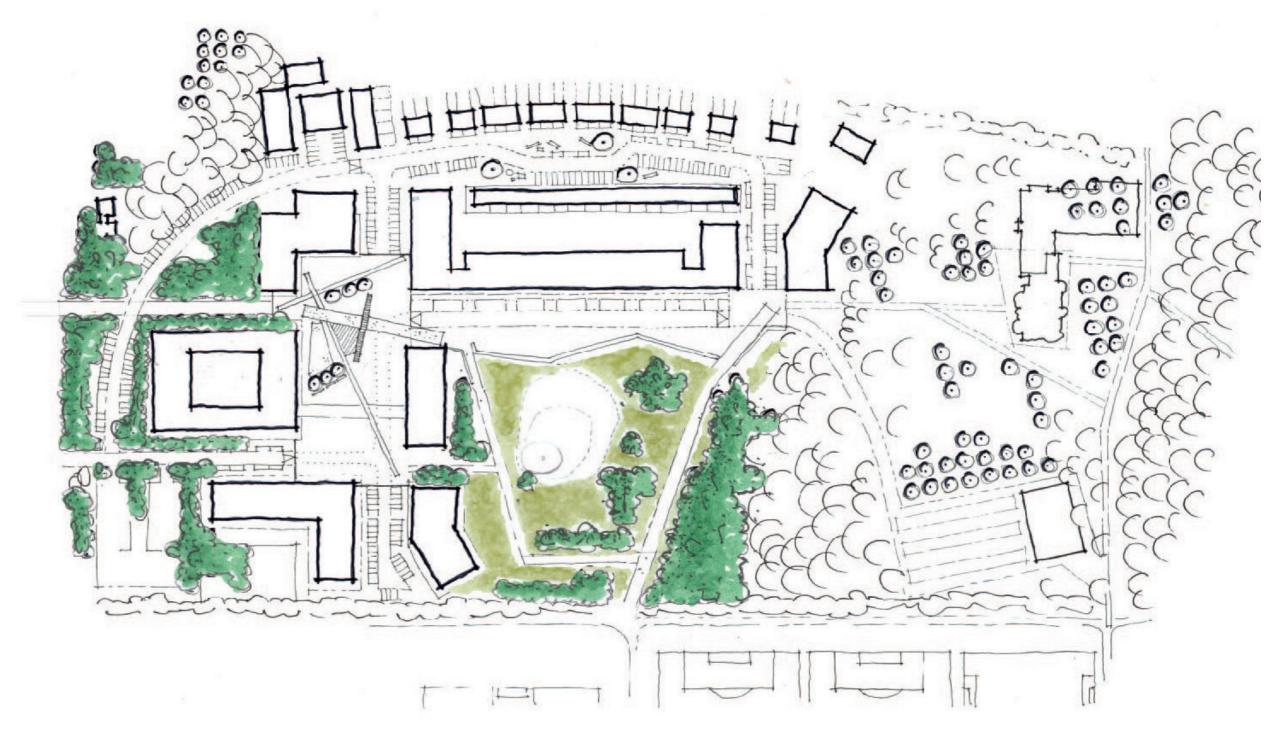
### **Materiality and Texture**

A development and softening of the structural canopy allows for the sitewide architecture to merge seamlessly with the surrounding existing woodlands.

The ambition is to create a new urban neighbourhood with a strong sense of place and where people will want to live, one that will attract a variety of residents and family types, providing an opportunity to live in a safe peoplefriendly environment with easy access to the area's unique recreational and amenity assets, including a range of neighbourhood facilities and social infrastructure.

 Woodbrook-Shanganagh Local Area Plan
 3.3 Delivering Homes and Creating Sustainable

Residential Communities



AECOM :



### **Design Principles**

03

### **Design Principles** Structure

### **Historic Landscape Retention**

Heritage is discussed across the Woodbrook-Shanganagh Local Area Plan (2017-2023) as a core component of the wider area and emerging designs for each of the development sites.

The woodland and the pond west of the Castle are the most significant remains of the original landscaping scheme as shown on the 1837 OS Map (See Map 12) and should be conserved as part of any development proposals. The quality of the open space should be retained and enhanced.

Woodbrook-Shanganagh
 Local Area Plan
 3.5 Built Heritage



### **Multi-modal Connectivity**

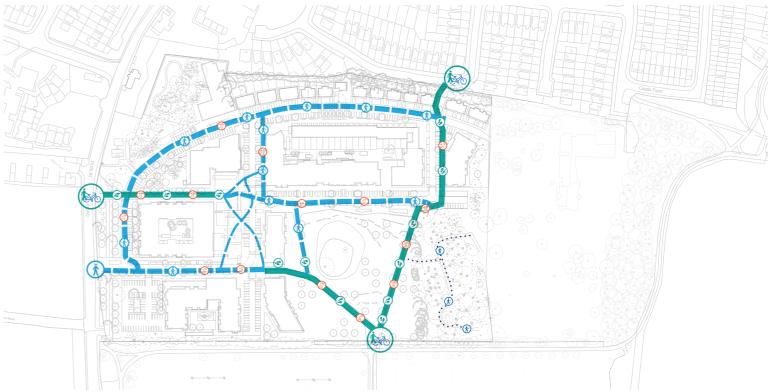
Provision and guidance is also given in the Local Area Plan for connections into the site (from each of the surrounding transport routes, facilities, parklands and prospective transport nodes) as well as routes through the site that allow for links between residential neighbourhoods and landscape facilities.

[The New master plan is to include] upgraded paths and new cycleways, improving interconnectivity between the development parcels and public transport nodes.

 Woodbrook-Shanganagh Local Area Plan
 3.5 Open Space, Recreation and Green Infrastructure







### **Design Principles** Structure



Existing woodland boundaries along the south-east of the site offer valuable screening and ecological value.



North-east boundary planting is in a quality condition, and to be generally retained.



Existing on-site connections allow for vehicles; the sweeping approach road is a strong reference point in the design.



Flat and central expanses of land on site allow for passive recreation and quality parkland movement.

### **Masterplan** Play Amenity



### **Masterplan** Play Amenity



Naturalised parkland play areas allow for framing distant views



Courtyard amenity areas combine natural and synthetic materials



Sculptural neighbourhood play spaces allow for unique nodal points



Natural materiality and vibrant colour in a community-centred space

### **Amenity through Variety**

Described with an aspiration towards an appropriate form, scale and material quality in each of the play spaces throughout the sites, the Woodbrook-Shanganagh LAP (2017 - 2023) outlines the various functions that amenity spaces will offer in developing a new mixed-use residential community.

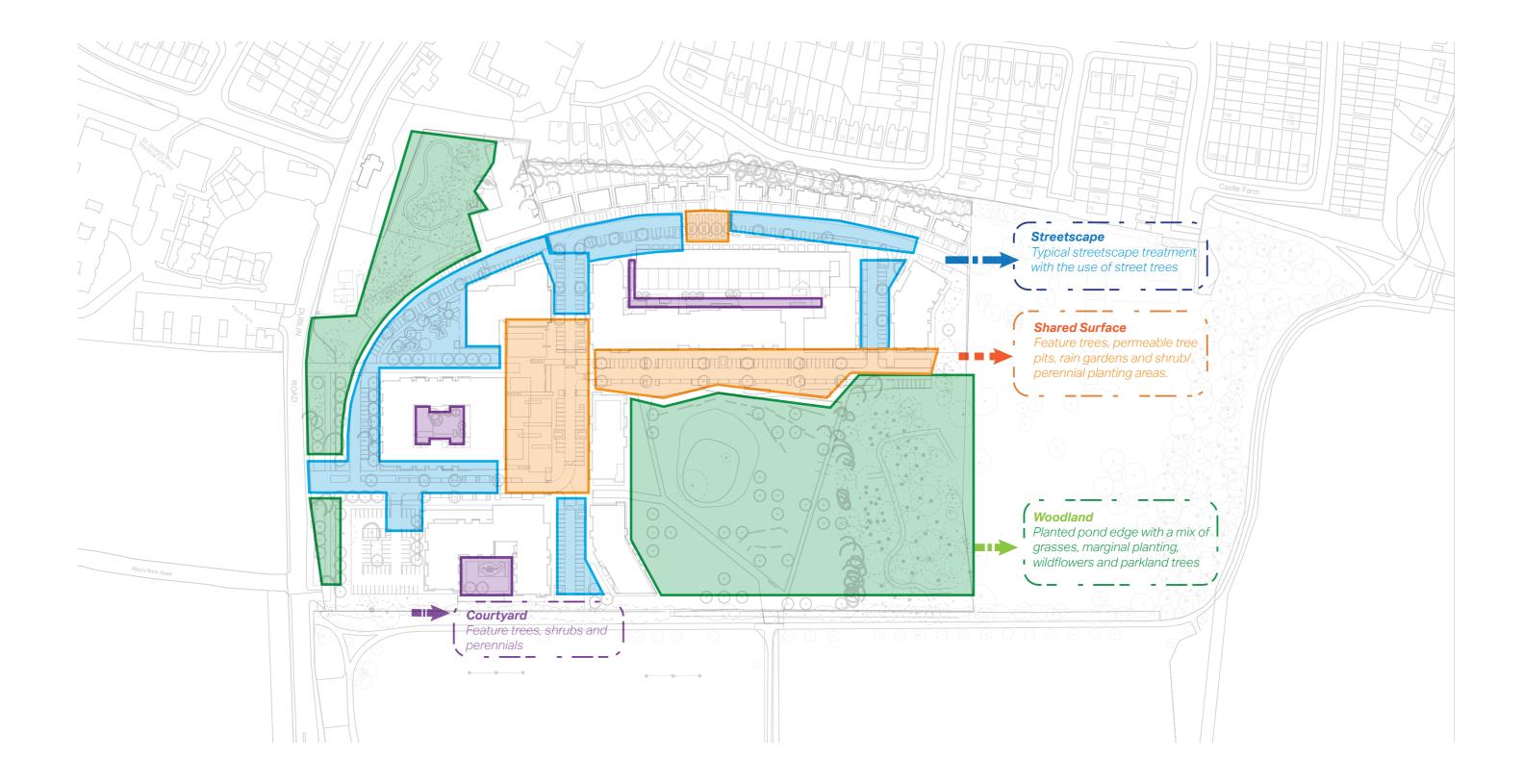
Stemming from these document studies, the open space network that is proposed for Shanganagh Castle development allows for a broad variety of play spaces: differing materiality, scale, surrounding built form and content ensure that each play area caters for varying age groups and skills.

Demonstrated across this spread is an indicative play strategy (left) with a broad pallette of materials, functions, scales and content (seen in the images opposite). These range from principle play areas, active amenity, sculptural play and courtyard play opportunities - connected with a comprehensive network of pedestrian and cycle routes.



Sports pitches and outdoor recreation in a wider parkland setting

### **Masterplan** Softscape Strategy



### Masterplan Softscape Strategy/ Existing trees to be retained



### Masterplan Softscape Strategy

The following sources have been used in the development of a suitable planting scheme that combines the overall design intent with a biodiverse planting palette to achieve a rich and sustainable softscape programme:

- South Dublin County Council Development Plan 2016-2022 Ch 8: Green Infrastructure and Ch 9: Heritage, Conservation and Landscapes
- Living with Trees: South Dublin County Council's Tree Management Policy 2015-2020
- All-Ireland Pollinator Plan 2015-2020
- National Biodiversity Action Plan 2017-2021

The landscape architecture proposal aims to create a diverse planting scheme that contributes to the overall biodiversity within the IT Tallaght Campus and the wider area. Plant species have been selected with direct reference to the 'All-Ireland Pollinator Plan 2015-2020' and the approach aims to align with the specific policies and objectives as set out in both the 'South Dublin County Council Development Plan 2016-2022' and 'Living with Trees: South Dublin County Council's Tree Management Policy 2015-2020'.

Pollinator friendly wildflower meadow has been provided to the areas north of the proposed sports building, including around the existing attenuation pond, and to the area immediately south of the proposed guad around the existing and retained hedgerow. Measures are proposed to include groups of native tree planting in the area around the existing attenuation pond to the north. It is further proposed to introduce a wetland grass and wildflower seed mix to embankment areas of the northern attenuation pond.

With regards to the loss of existing hedgerow on the site, it is proposed that the newly introduced meadow to the north of the sports building is partially enclosed by a new native hedgerow along the eastern boundary in order to create a wildlife refuge or 'room' on the site which is aimed at offsetting the loss of existing hedgerow and also increasing the biodiversity value in this part of the site. It is proposed that the existing hedgerow to the south is allowed to naturally regenerate as per the ecologists recommendations accompanying this planning application.

The overall planting approach is focused on creating a rich and biodiverse planting footprint in the context of a significant campus extension. The removal of existing hedgerows and grassland is offset by the addition of pollinator friendly wildflower meadows, tree planting and mixed native hedgerows to the north and south of the proposed sports building and quad.

All retained tree and hedgerow protection measures will be in accordance with the mitigation recommendations prescribed in the ecologists report.

### Softscape Strategy

The planting approach on the site at Shanganagh Castle is focused on the establishment of a new residential community with a distinctive sense of place and identity, set within the grounds of a former historic demesne landscape

with remaining areas of mature tree vegetation. The softscape strategy is broken down into four overarching themes that have informed and guided the application of planting material within the scheme:

### The Historic Landscape

Existing mature tree and woodland vegetation forms a significant and valuable asset on the existing site and has been a guiding principle in terms of the overall site layout and proposed landscape framework. Maximising the retention of existing tree vegetation within the historic landscape, particularly to the boundary of the parkland area at the centre of the site, and woodland adjacent to the Dublin Road boundary has been a successful outcome of the existing landscape proposals and contributes to the creation of a sense of place and identity on the site.

Where areas of mature tree vegetation are retained, these are bolstered and enhanced through the use of semi-mature, native parkland tree species to form a new contemporary layer of tree vegetation on the site. These trees are specified at a larger size than those used in the more urban areas of the scheme, such as within the public realm and along streetscapes, and are intended to reinforce and compliment the historic tree planting on the site.

### Biodiversity

The following sources have been used in the development of a suitable planting scheme that combines the overall design intent with a biodiverse planting palette to achieve a rich and sustainable softscape programme:

- Dún Laoghaire-Rathdown County Development Plan 2016-2022 Chapter 4 / Section 4.1.3 Biodiversity
- All-Ireland Pollinator Plan 2015-2020
- National Biodiversity Action Plan 2017-2021

The landscape architecture proposals aim to create a diverse planting scheme that contributes to the overall biodiversity within the proposed development site and the wider area. Plant species have been selected with direct reference to the 'All-Ireland Pollinator Plan 2015-2020' and the approach aims to align with the specific policies and objectives as set out in the Dún Laoghaire-Rathdown County Development Plan 2016-2022. Measures included within the landscape proposals include for the introduction of pollinator friendly wildflower meadow, a mix of native and non-native plant species across the site, and bee friendly perennials and shrubs across the various streetscapes, privacy strips and public realm areas.

### Character Areas

Character areas have been defined and outlined elsewhere in this report. Specific and unique planting palettes to reflect each of the character areas have been used to promote a strong sense of place, identity and neighbourhood character throughout the scheme which include street trees, feature trees, shrub and perennial mixes.



Carpinus betulus faastigiata



Amelanchier Lamarckii



# **Masterplan** Softscape Strategy

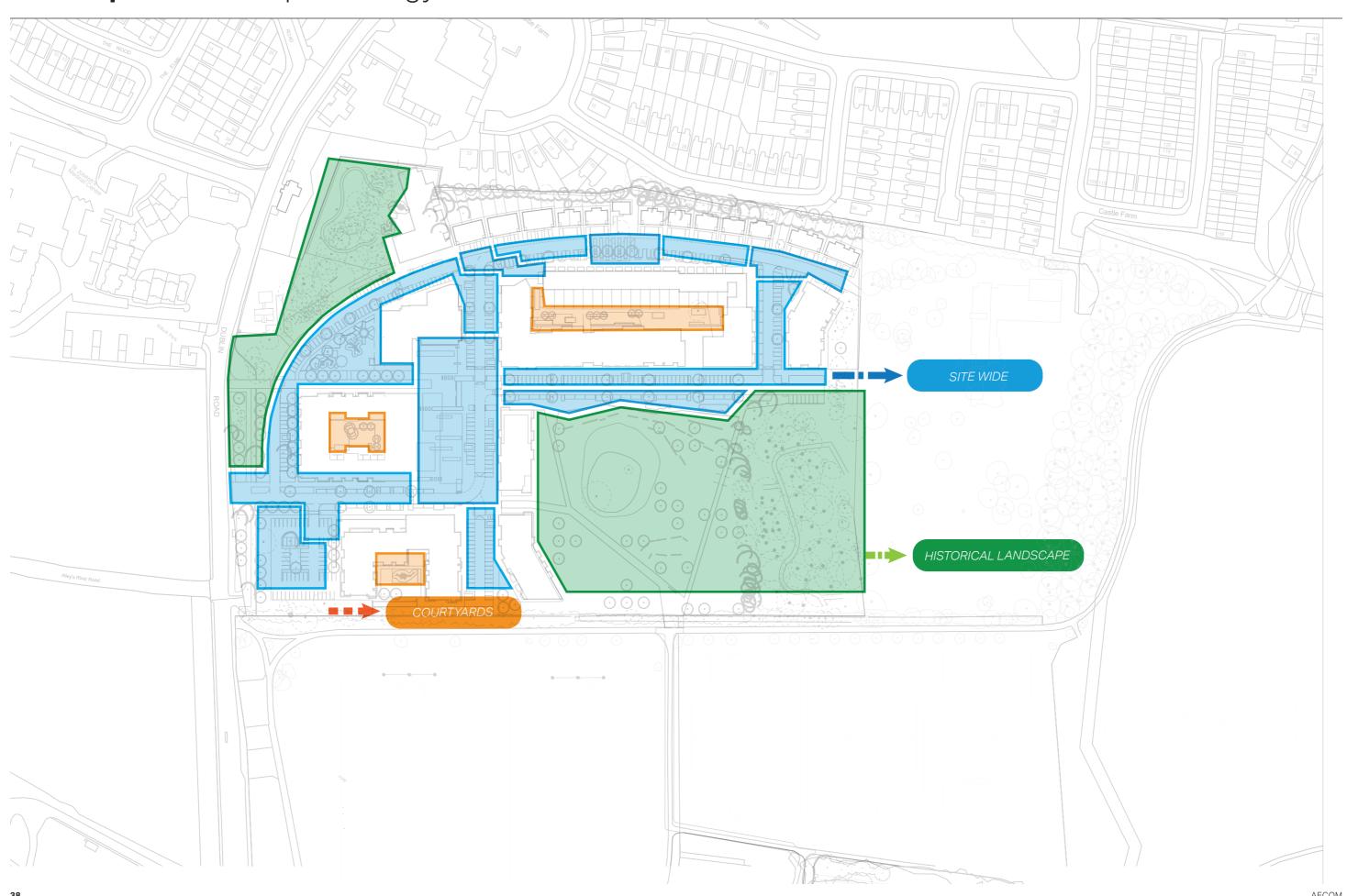
Iris pseudacorus.jpg



Shanganagh Castle Landscape Architecture and Public Realm Design Report

Dun Laoghaire-Rathdown County Council

# **Masterplan** Hardscape Strategy



# HISTORIC LANDSCAPE

# **Masterplan** Hardscape Strategy





**UNIT PAVING** 

(General surface areas along footpaths, plaza, seating areas, homezone and residential courtyards)

**P1: PCC Block Paving** (Permeable)

**P2: PCC Block Paving** (Permeable)

**P3: PCC Block Paving** (Permeable)

ACCENTS / FEATURES / HIGHLIGHT

(Feature paving, surface delineation, congregation areas and tree pits)

P4: PCC Block Paving

**P5: Resin Bound Gravel** (Permeable)

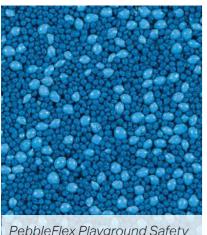
P7: HRA (Permeable)

#### KERBS / EDGES

(General surface areas along footpaths, plaza, seating areas, homezone and residential courtyards)

K1: Concrete Pin Kerb

**K2: Concrete Country Kerb** 





LOOSE BOUND SURFACING (Walkways, seating areas and tree planting)

P8: Loose Bound Gravel

ACCENTS / FEATURES / HIGHLIGHT (Feature paving, surface delineation, congregation areas

and tree pits) P4: PCC Block Paving KERBS / EDGES

(General surface areas along footpaths, plaza, seating areas, homezone and residential courtyards)

K1: Concrete Pin Kerb

K5: Stainless Steel Flush Edge





**UNIT PAVING** 

(General surface areas along footpaths, plaza, seating areas, homezone and residential courtyards)

P1: PCC Block Paving (Permeable)

**P2: PCC Block Paving** (Permeable)

**P3: PCC Block Paving** (Permeable)

ACCENTS / FEATURES / HIGHLIGHT

(Feature paving, surface delineation, congregation areas and tree pits)

P4: PCC Block Paving

P9: Timber Decking Boards

KERBS / EDGES

(General surface areas along footpaths, plaza, seating areas, homezone and residential courtyards)

K1: Concrete Pin Kerb

K5: Stainless Steel Flush Edge

# Masterplan SuDS Strategy

#### **Drainage as a Multi-functional Feature**

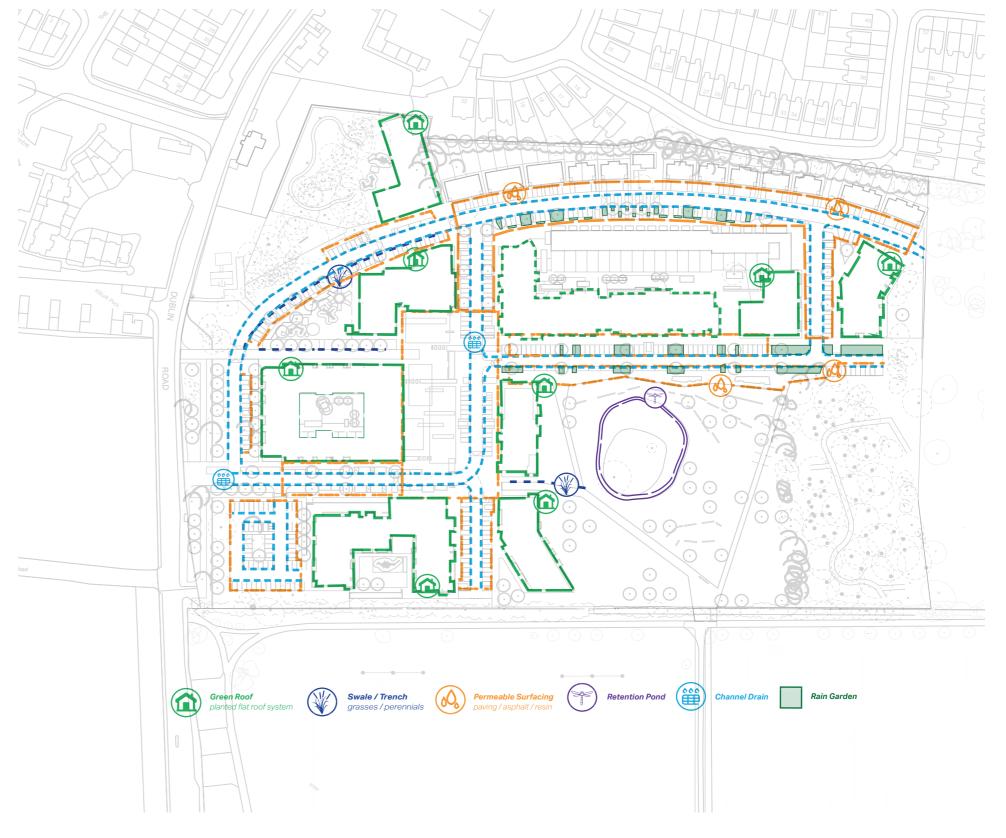
The green infrastructure concept involves the planning, management and engineering of green spaces in order to provide specific benefits to society. It is a network of green spaces, habitats and ecosystems within a defined geographic area and comprises of wild, semi natural and developed environments.

The proposal seeks to create a positive receiving environment and access in conveyance of water surface run off, which creates a better sense of place and a more aesthetically pleasing landscape. Sustainable drainage systems slow down the flow of rainwater entering drainage systems, they filter out pollutants, immediately improving water quality and allow groundwater to recharge.

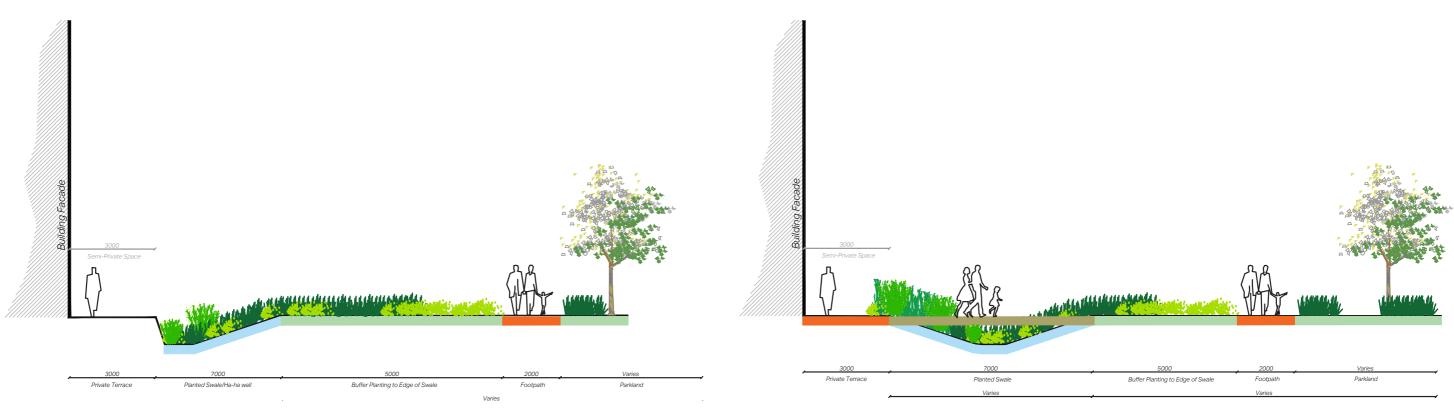
Designing streetscapes, green space and public realm with a sufficient green infrastructure strategy that works well during all seasons of the year can provide valuable community recreational space as well as important environmental infrastructure. The team have set out some SuDS measures that will be incorporated into the scheme for Shanganagh.

[...]All planning applications shall be accompanied by a surface water drainage plan which will include proposals for the management of surface water within sites and the protection of the water quality of existing water bodies and groundwater sources. The SuDS design will consider the most suitable and appropriate measures to accommodate groundwater recharge if required where groundwater supports any

 Woodbrook-Shanganagh Local Area Plan
 Sustainable Infrastructure



# **Masterplan** Swales









#### **Character Areas** Overview

#### **Intent of Landscape Character Areas**

As set out in the design approach the masterplan has set out a variety of external spaces within the scheme. In contrast to presenting these as streetscapes and open spaces the team have set out a number of character areas as presented in the adjacent diagram.

The approach of these spaces will supplement the framework of the masterplan by framing the development within a parkland context by further extending the tree coverage along the landscape buffer to the Dublin Road and retaining the existing stands of trees in the north-west and south-east corners of the site. This creates a unique arrival for residents and visitors while improving the screening of the development while allowing function such as parking and pathways to be provided below the canopy.

The principal focal points and anchors of the external works are the plaza and parkland spaces providing a counterbalance of contemporary congregation and roaming parkland (partially borrowed from the adjacent existing park).

Careful consideration has been provided to each pedestrian, cyclist and motorists on the streetscapes promoting each of these as a community focused public realm.

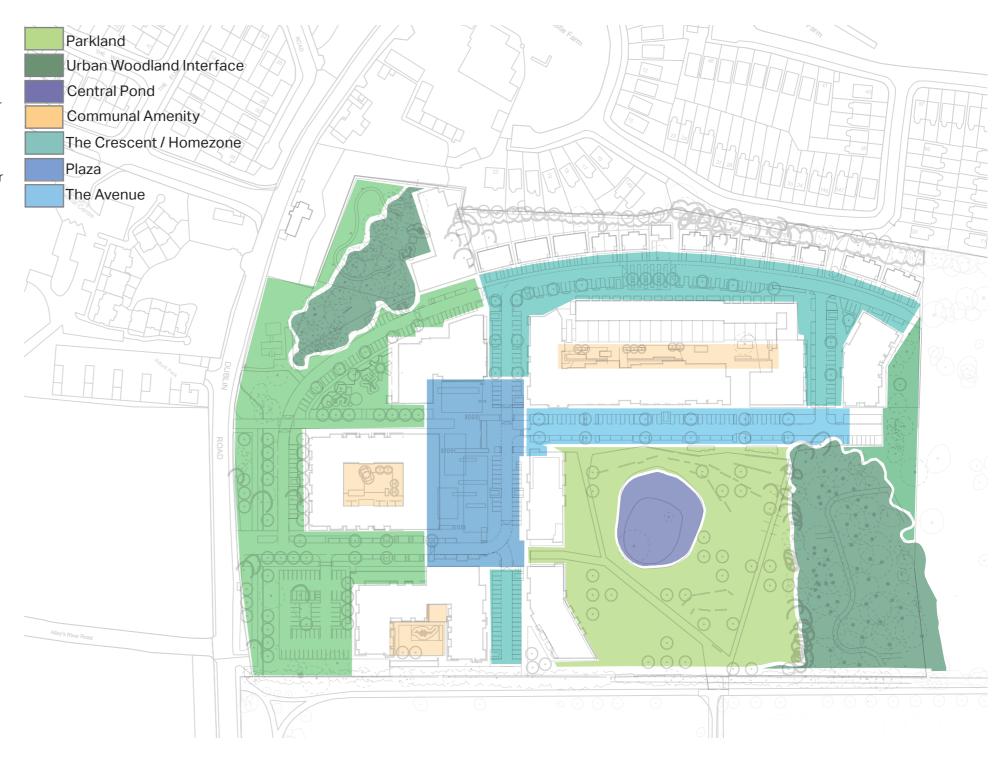
In the following pages each prescribed character area is presented with a design statement including key features supported by key precedent projects which will give an indication of the public realm intent.

The Council will seek to ensure a high quality public realm that subtly embodies the essence of the demesne landscape character which defines the area. The re-establishment of the historic walking routes and key views which were an important element of the overall landscape approach of the historic estate will be encouraged. These efforts will help to safeguard the identity of the area and improve permeability or connectivity between the key residential lands, Shanganagh Castle and the Park.

- Woodbrook-Shanganagh Local Area Plan

42

Visual Context and Landscape Setting



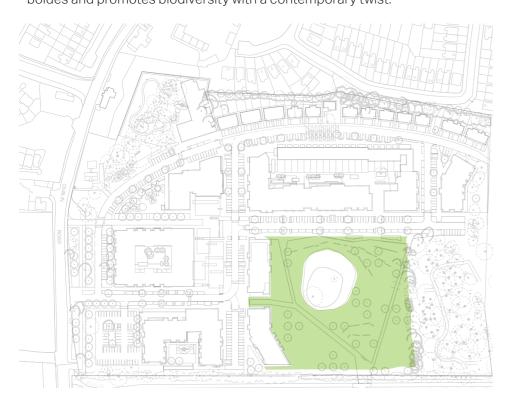
## **Character Areas**

#### **Characteristics, Opportunities**

- North South Connection
- Existing Woodland Retention
- Interface with Development
- Contemporary Approach to Pond
- Defined open Spaces
- Improved Biodiversity

#### Precedent Project Parc de Passeligne Pelissier

The project is situated on the meeting point of three elements: ground, water and human activity. Through this triptych, the park stages an environmental aesthetics between nature and artifice. While this project is bigger in scale some key aspects of it make it an appropriate refence: it provides connection from residential to recreation areas, adressess the interface with existing water boides and promotes biodiversity with a contemporary twist.









Pond with island and pier
Parc de Passelign Pelissier France



Path through tree grid and meadows
Parc de Passelign Pelissier France

# Character Areas Central Pond

#### **Key Principles and Opportunities**

- Retained historic feature
- Aesthetic focal point for parkland
- Functional feature accommodating surface water run off
- Improved curtilage of diverse softscape interventions
- Informal layered landscape to protect from water's edge
- Improved habitat for existing newts





Lower Factory Pond in Ziegelbrücke, Switzerland Softened pond edges are bolstered with grassland habitats and viewing points.





# **Character Areas** Central Pond



Momentary interactive points in the grasslands meadow landscape

Thalie Park Brussels, Belgium



Thalie Park in Brussels, Belgium
A central pond is surrounded with amenity landscape elements, trail routes and seating points.



Momentary interactive points in the grasslands meadow landscape **Thalie Park** Brussels, Belgium

# Character Areas Urban Woodland Interface

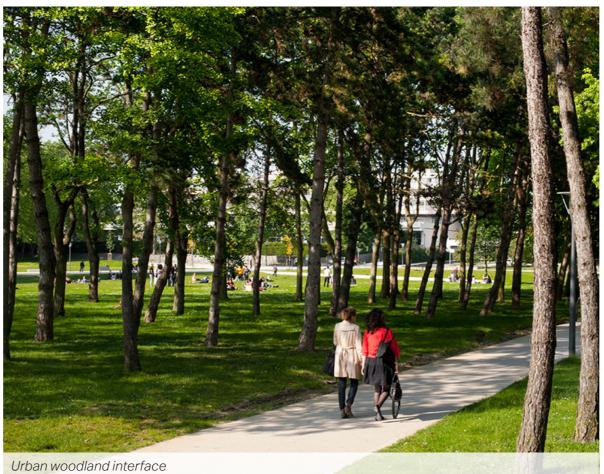
#### **Characteristics, Opportunities**

- Interface
- Connection
- Play Opportunities
- Integration into Existing Green infratstructure
- Privacy
- Biodiversity
- Softened Hard Surfaces
- Activites Under Tree Canopy

#### **Precedent Project Cloud**









Play opportunities under trees
Parc de Passeligne Agen, France



AECOM

Parc Francois Matterand Paris, France

## **Character Areas** Plaza

#### **Characteristics, Opportunities**

- Vehicular Traffic Along Periphery
- Shared Road Surface
- Protected Pedestrian/Cyclist only Zone
- Seating nd Play Opportunities
- Opportunities for Outdoor Extension of Cafe or Restaurant
- Wayfinding and Permeability
- Passive Traffic Calming Measures
- Water/Play/Seating/Scuplural Feature



Shared road surface through plaza Am Schliepsteiner, Bad Salzuflen

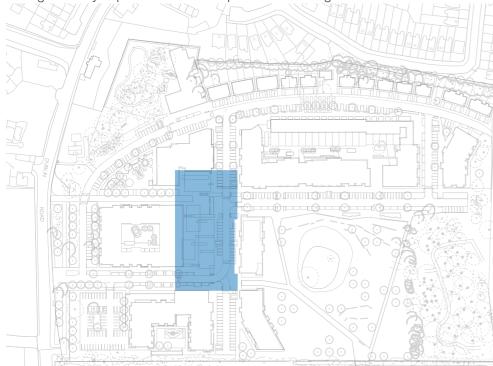
**Bad Salzuflen Schlipsteiner Germany** 



Shared space with water feature and seating opportunities **Ruhr West Universit Mulheim,** Germany

#### Precedent Project Am Schliepsteiner, Bad Salzuflen

The rehabalitiation of the city centre in Bad Salzuflen makes the central plaza and connecting street more pedestrian and cycle friendly by means of the introduction of shared surfaces, improved wayfinding and sightlines, decluttering and a series of passive traffic measures. Vehicular traffic is accommmodated along a peripheral shared surface, delienated only by a set of flush kerbs and using a variety of protective softscape and furnishing interventions.







Cycle infrastructure
Ruhr West Universit Mulheim, Germany



Sub-spaces defined by desire lines
Rijna Square, Hradec Kralove Czech Republic

# Character Areas The Crescent / Homezone

#### **Characteristics, Opportunities**

- Pedestrian and Cyclist Priority
- Sense of Space
- Character
- Play Opportunities
- Safe Environment
- Passive Surveillance
- Traffic Calming with Planting, Chicanes, Parking and Change of Materials
- Carved Out Open Spaces
- Privacy Strip to Dwellings
- Fluidity between Shared and Pedestrian-Only Areas



Carved out streetscape open space
Little Holland London, United Kingdom



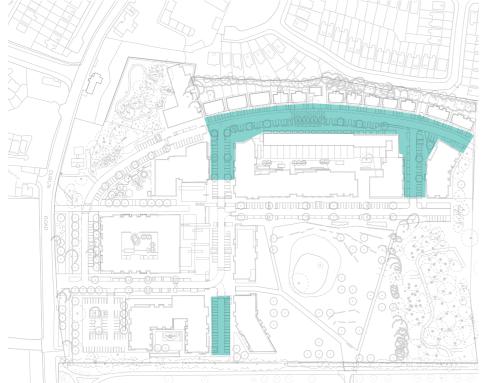


Privacy strip to front of dwellings

Copenhagen Denmark



Staggered parking
Homezone Manchester, United Kingdom



**48** AECOM

# **Character Areas** The Avenue

#### **Characteristics, Opportunities**

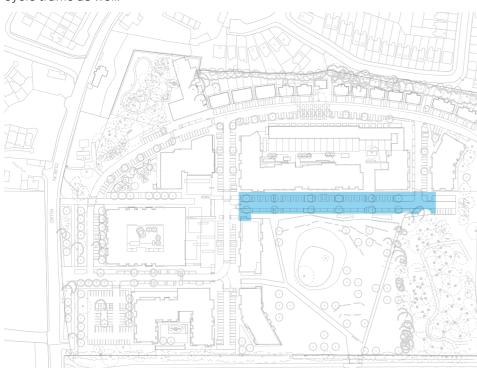
- Interface between Parkland and Residential
- Transition from Historic to Contemporary
- Pedestrian and Cyclist Connection
- Threshold to Parkland



The Goods Line Sydney, Australia

#### Precedent Project The Goods Line, Sydney

The Goods Line in Sydney is a linear pedestrian 'highway' framed by 2-8 storey buildings on one side and an existing urban woodland on the other providing an interstinng public realm that not only allows for through traffic but also also provides various formal and informal seating, resting and recreational opportunities for pedestrians whie it's wide enough so that it can accommodate cycle traffic as well.









Safe and convenient pedestrian and cyclist links
Trapeze Sevres, France

# **Character Areas** Communal Amenity

#### **Key Principles, Opportunities**

- Privacy Buffer for Ground Floor Apartments
- Pedestrian Circualtion
- Flexible Central Open Space
- Formal And Informal Play Opportunities
- Congregation And BBQ Opportuniy
- Recreational Opportunities
- Communal Garden Opportunity
- Storage provision
- Structural Planting with Seasonal Interest



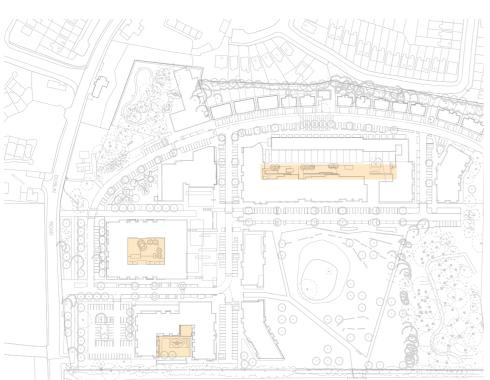
Privacy buffer
Billancourt Boulogne, France

Pasteurstrasses Berlin, Germany



Flexible central open space

Greenwich Millenial Village London, United Kingdom







St. Andrew's London, United Kingdom

AECOM

## **Character Areas** Green Roof

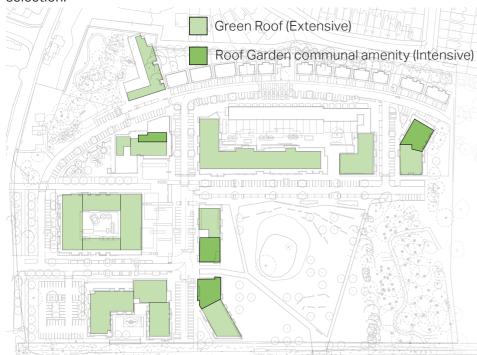
#### **Key Principles, Opportunities**

As shown in the below diagram there are areas of non-accessible roof gardens. Extensive green roofs use a very shallow growing medium to support plants in the grass and sedum families. These roofs will have a positive effect on heating and cooling costs. Concurrent to this they form part of the SuDS strategy by extending the train of collection and transfer of stormwater. It is considered to create a variety of sedum and wildflower blankets to further enhance recommendations by the ecologist to increase biodiversity.

The private communal spaces will be existing at grade and at roof level. Those at roof level will provide congregation spaces for the residents. There is limited programming in these areas; acting primarily informal congregation areas allowing views over the development and adjacent park.

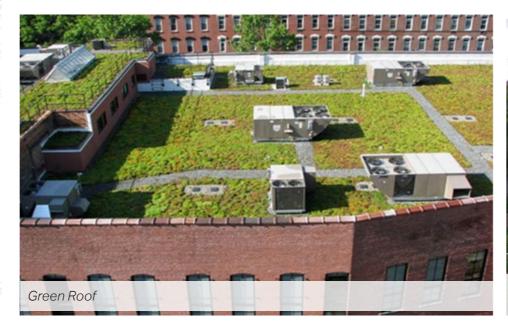
These intensive roof gardens will be a 50/50 balance of hardstanding and softscape. Raised planters are positioned against the prevailing wind to shelter residents and set back from the edge of the roof. Buffers help to create atmosphere as well as define space. A variety of edges will be used to create spaces which can have a diversity of uses. Flexible common areas are also provided to allow for picnics, casual seating areas and informal play in order to achieve a balance of flexibility and placemaking.

The planting scheme of the roof gardens are a key element of the design. The vegetation can work to create atmosphere, screen for privacy, delineate spaces, create visual interest, and provide for a variety of programming. That said resilience to the conditions will be an integral driver to the plant selection.





Green Roof
Swarthmore College of PA, Pennsylvania



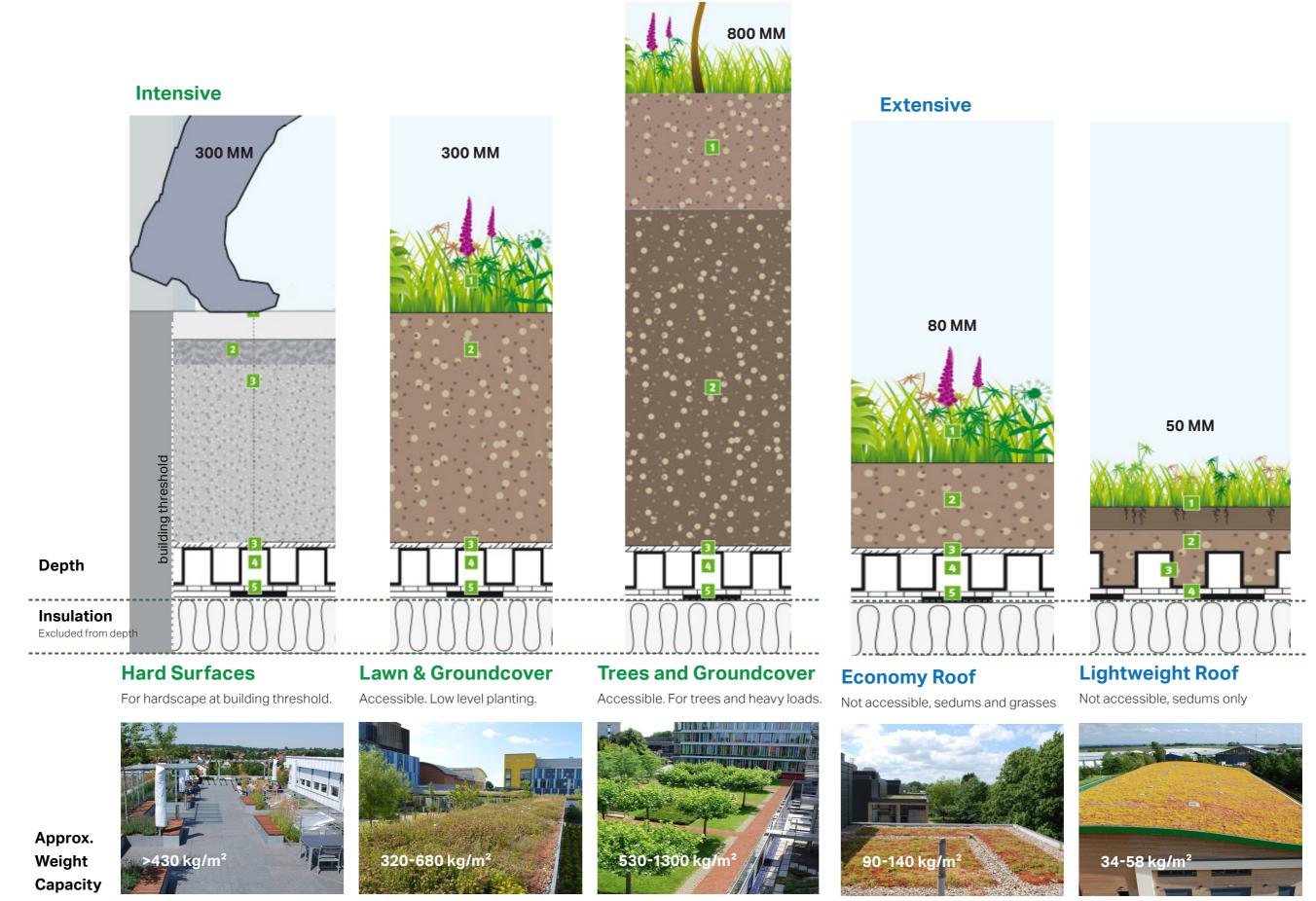


Roof garden communal amenity
JD Riverfront Nanjing, China



Roof garden communal amenity
Cincinnati Green Roof 300 lvy Green Roof, San Francisco, USA

# Character Areas Green Roofs build ups



This page is left intentional blank

About AECOM
AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately \$17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and @AECOM.