PROPOSED PART 8 RESIDENTIAL DEVELOPMENT

Dublin City Council

Landscape Report

October/ 2024

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Site Description

The proposed development will consist of the following:

- Construction of 288 apartment/duplex and housing units at a site of c. 2.6 ha (c. 2.2 ha net) bound by Balbutcher Lane to the north, Balcurris Park to the west, the Ballymun Road to the east, and Balcurris Gardens to the south-west,, Ballymun, Dublin 11, which will consist of the following
- Construction of 288 no. apartment/duplex and housing units across 5 sites (Sites 5, 15, 16, 17 and 18) ranging from 2 to 6 storeys containing 138 no one-bed, 87 no. 2-bed units, 61 no. 3-bed and 2 no. 4-bed dwellings.
- Site 5 consists of 132 no. apartment units (66 no. 1 bed, 44 no. 2 bed units and 22 no. 3 bed units) and ranges from 4 to 5 storeys including a new urban edge along Ballymun Road;
- Site 15 consists of 8 no. dwellings comprising 6 no. 1 bed own-door apartments and 2 no. 3 bed houses adjoining Balcurris Gardens
- Site 16 consists of 5 no. dwellings comprising 2 no. 1 bed own-door apartments, 1 no. 3 bed house and 2 no. 4 bed houses adjoining Balcurris Gardens
- Site 17 consists of 34 no. apartment units (17 no. 1 bed units, 9 no. 2 bed units and 8 no. 3 bed units) and ranges from 3 to 6 storeys forming an urban block with incomplete urban cell at the Linnbhla and Charter apartments;
- Site 18 consists of 109 no. apartments (47 no. 1 bed units, 34 no. 2 bed units and 28 no. 3 bed units) and ranges from 4 to 5 storeys with edges to Balcurris Road, Balcurris Park and a new edge to Balbutcher Lane;
- 70 no. car parking spaces, 4 no. loading bays and 4 no. motorbike parking spaces
- 551 no. long stay and 180 no. short stay bicycle parking spaces to serve the housing units.
- Provision of 1611 m² Retail/Commercial floor space at ground level facing Ballymun Road/St. Pappins Square (sites 5 and 17)
- Provision of a 324 m² childcare facility at ground floor in Site 5.
- Provision of 1,058 m² of community, cultural and arts space located at ground floor level in sites 5 and 17.
- Provision of 91 no bicycle spaces to serve the non-residential uses distributed across the site.

- The provision of a public open space in a new plaza at St Pappin's Square (1,953 m²) and additional areas of 979m², 496m² and 839 m² with 2,969 m² of communal open space
- Realignment of Balcurris Road, provision of two new vehicular accesses (one off the Balbutcher Lane and one off the Ballymun Road) and a dedicated pedestrian and cycle lane off the Balbutcher Lane
- Boundary treatments, public lighting, site drainage works, internal road surfacing and footpaths, ESB meter rooms, ESB substations, stores, bin and cycle storage, plant rooms, landscaping; and
- All ancillary site services and development works above and below ground.

Landscape Design Aims and Objectives

The landscape structure of the proposed residential development adopts the open space strategy of the Landscape Masterplan which provides for a varied accessible and permeable open space network for community use that as it matures will become a significant resource.

As the Covid pandemic has brought into sharp relief for people's health and well-being there is a community requirement for open, natural spaces, which facilitate exercise, recreation, and free play.

The proposed open space network provides for these flexible activities in a natural environment with inclusive access.

Varied habitats are created for ecological connections and landscape visual amenity;

- rain gardens
- tiny edible woodland planting
- wildflower meadow
- new tree planting,
- undergrowth woodland planting and edible fruit and nut trees and shrubs
- pollinator friendly sensory garden planting and vegetable gardens
- and flexible amenity lawn areas
- green roofs

Management Structure

The landscape areas will be managed by the development management company for a period of 25 years.

Bird Season Restrictions

Vegetation clearance will take place outside the breeding bird season (i.e. the start of September to the end of February, inclusive) to avoid any potential impact on breading birds. Where this seasonal restriction cannot be observed, a check for active nests will be carried out immediately prior to any site clearance and repeated as required to ensure compliance with Irish wildlife law. This will be carried out under the supervision of a qualified Ecologist.

Ecology

The open space landscape network has been designed to provide for ecological value in the area and this function will be enhanced in accordance with further recommendations from the Ecologist Consultant.

The two main design principles of landscape and biodiversity for this site are as follows.

1. Biodiversity enhancement in the landscaping scheme.
2. Biodiversity enhancement for fauna

These are outlined further in the biodiversity chapter below.

All Ireland Pollinator Plan 2021-2025

Planting and management of the landscape areas shall be undertaken in accordance with pollinator friendly management objectives as outlined in the "All Ireland Pollinator Plan 2021-2025 (Councils: Actions to Help Pollinators)" National Biodiversity Data Centre and will include interpretative signage highlighting the areas Managed for Wildlife.

SUDS integration for water management (are there nature-based suds solutions)

A coordinated approach within the landscape design has been taken to site services, in particular SUDS integration for water management and habitat creation.

Design criteria for swales and raingardens will include the following:

- Maximum side slopes will be 3:1. Slopes and depths should be minimised to the extent practical for aesthetic and safety reasons. The base width should be a minimum width of 2 feet.
- Check dams should be installed at regular intervals along the swales to promote ponding. Large rocks that are obvious and do not become concealed by vegetation should be used as check dams. Such rocks will create an attractive as well as effective check dam and will provide micro-habitat for species (e.g. basking sites for invertebrates etc.). Figure 3 provides examples of swales.
- Broadleaved trees should be planted along the filter strips

Standards of Care

High standards will be maintained in all areas of service delivery.

High standards of care will be achieved by:

- a landscape maintenance specification
- maintenance works to be undertaken by trained staff members, providing on-site supervision of trainees
- providing Health & Safety training for staff
- proactive maintenance of hard landscape areas, play elements and seating
- a programme of tree works
- monitoring of standards of care
- working with local interest groups to ensure community ownership of the site
- updating risk assessments for operations by the landscape staff
- periodic review of standards and procedures
- perceptions of safety will be increased, and vandalism and other anti-social behaviour discouraged with additional natural surveillance by increasing circulation, overlooking from the residential development and maintaining open views across the woodland area

Landscape design description

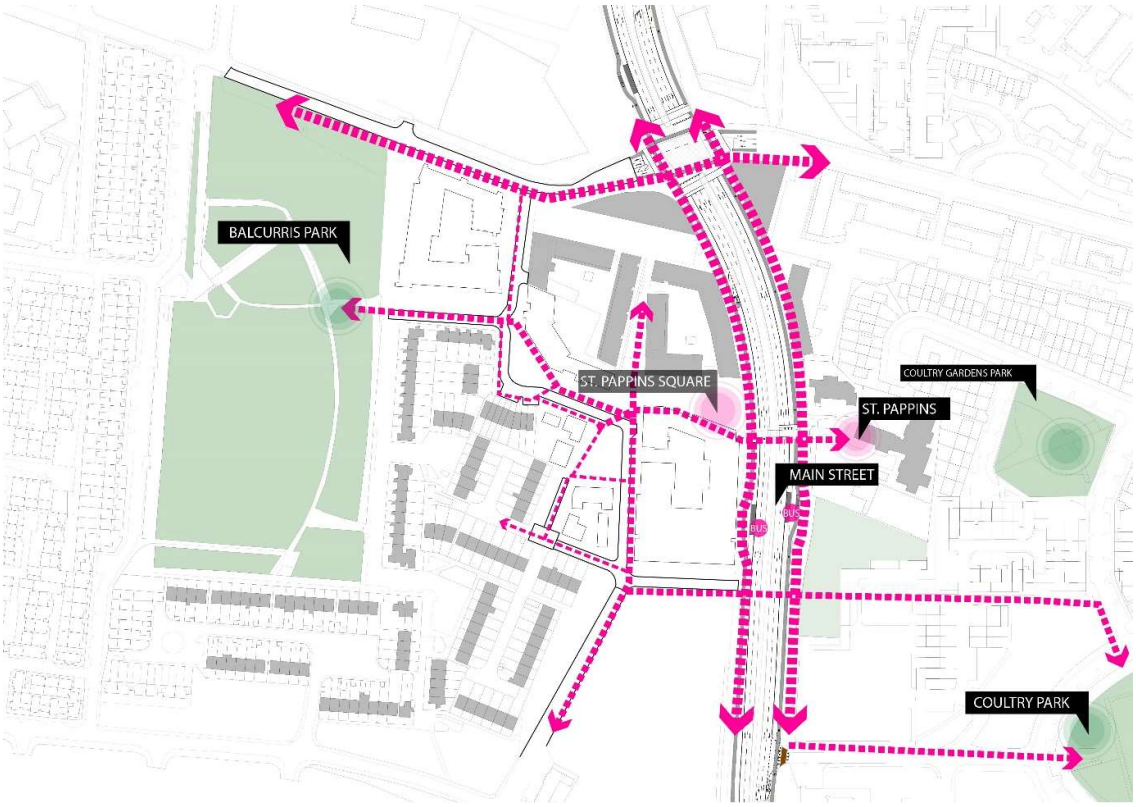
Connectivity

Ballymun Road is the most busy and important connection link for pedestrian and cyclists through Ballymun and to public transport (bus) - need for active facade, clear edge to the street.

Ballcuris road is an important local link together with the future East-West connection across the Main Street/Ballymun Road connecting the neighbourhoods of Balcurris and Coultry (LAP).

The Proposed St. Pappins square will create a new destination along the main street and address the historical St. Pappins Church on the other side of the Main Street. The square has to resolve a level difference between the Main Street and The Turnpike. This offers an opportunity for playful sculpting of the square.

The connection into the existing residential neighbourhoods and permeability through it is to be maintained with clear and direct routes.



Green infrastructure

The local parks in close proximity are The Coultry Park and Balcurris Park. These provide playground facilities, sports pitches, and a tree trail. A local pocket park for Coultry Gardens including playground facilities is also located nearby.

Currently there is a green connection between the two parks through a series of grass areas that are to be developed with housing and mixed use. The existing green link

between the Balcurris neighbourhood and Park and Coultry neighbourhood and Park is to be maintained through a green street link of Balcurris road and future East-West link into Coultry Park.

It is therefore important to reinforce Balcurris road with street tree planting and nature-based SUDS elements to create a green link between the two parks.

Temporary Muck and Magic Community Gardens are located across the main street from the site. Future development is proposed in this location in the LAP. An opportunity to incorporate fruit trees in the public space and herb or vegetable gardens in communal courtyards in site is explored in the design proposal.

St. Pappin's Square represent a new important green link between Ballymun road and Balcurris Park.

Proposal

The development at Ballymun will include four areas of landscape amenity space: the streetscape and green link along Balcurris Road and south side of site 5, a public pocket park in the centre of the development, St Pappin's Square, communal courtyards to sites 5, 17 and 18, and a crèche garden located in the courtyard of site 5.

The spaces are designed to maximise biodiversity, recreational amenity, permeability and incorporate nature-based SUDS.

Four main nature based solutions are proposed to be incorporated into the SUDS strategy:

- Permeable paving - to all car parking, communal courtyards and pedestrian footpaths in central pocket park
- Green roofs
- Rain gardens to attenuate excess water from the roofs

- Bioretention tree pits to streets
- Planted detention basins with native biodiversity planting, lawn and stepping stones to pocket parks and courtyards of sites 5 and 17.

Please refer to engineer's drainage drawings.


Above reference pictures for bioretention planting to Balcurris road in front of site 17 with a playful timber path through the planting.


Above reference pictures for raingardens and green roofs to buildings.

The amenities are designed to reach the DCC Park Department standards in terms of amenity space.

A privacy planting strip of min 1.5m is provided to ground floor apartments and patios to create a privacy buffer between private and communal/ and public space.

1. Streetscape and Pocket Park

As explained in the Green Infrastructure paragraph, the streets form part of the future East-West green link between Balcurris Park and Coultry Park.

Street tree planting, high quality planting of the incorporated SUDS features are of high importance to provide this green connection. On the South East side of the road, adjacent to the Balcurris Gardens, a small pocket park is proposed on this green connection. The Pocket Park consists of a 200sqm nature inclusive public playground with grass mounds and wildflower meadow and a row of fruit trees, a small island of edible woodland planting and detention basin with native biodiversity planting with playful stepping logs, overall creating a playful undulating and biodiverse landscape. Seating opportunities are incorporated. The play equipment includes an embankment slide from the grass mound, an agility trail, springers and stepping and balancing logs.

Above reference pictures for playful mounding with grass and wildflower meadow with play elements for the pocket park.

Another green pocket along Balcurris road is in front of site 17, where a wildflower meadow with a solitary feature tree and seating is proposed in front of the proposed building, and a wide bioretention swale area is proposed along Balcurris road with a playful timber pathway through the planting, see picture on previous page.

Pocket Park at Balcurris Gardens with large planted detention basin, playground and small edible woodland.

Small green pocket in front of site 17 with a wildflower meadow with feature tree and long seat facing the building. A wide swale area is proposed between the road and the cycle lane with a playful informal path through.

2. St. pappins Square

The Proposed St. Pappins square will create a new destination along the main street and address the historical St. Pappins Church on the other side of the Main Street. The square must resolve a large level difference between the Main Street and The Turnpike. This offers an opportunity for playful sculpting of the square. Ornamental planting and bioretention planting is incorporated into the sculptural resolution of the levels as well as seating and tree planting.

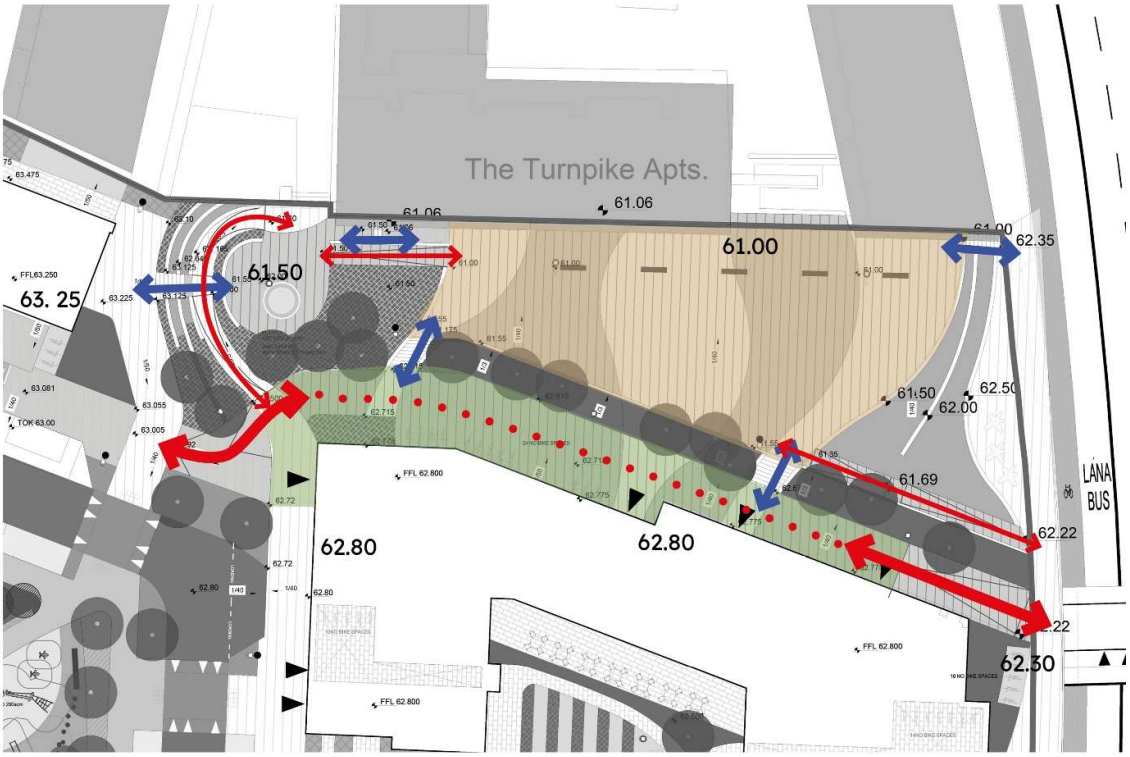
The plaza is proposed to be split in two levels: lower level adjoining the existing Turnpike development on the North side and upper level adjoining the proposed development on the South side. Each would have their own character with

ample seating opportunities on the open sunny lower plaza, and a woodlandy character at the upper plaza with entrances to commercial units and cycle parking spaces. Groundcover planting is proposed with birches to evoke a lush woodland atmosphere while keeping enough light coming through the tree canopy and brightening the atmosphere with white tree trunks.

The level difference between the sunken plaza and the higher level on both the Western and Eastern ends are dealt with through landscaped terracing, with amenity lawn on the Eastern side that can serve for sitting on the grass or on the raised kerbs, facing West. The Western highest part of the square is proposed as a landscaped amphitheatre with sensory planting facing onto a flat area that can serve as a stage or as informal playful space, as a playful and interactive art sculpture is proposed at its centre.

The forms chosen to create landscape terraces are repeated in the paving pattern and aim to bring interest into the square as well as unity and connection of the upper and lower plaza.

The commercial units are accessible from the upper part of the square and from Balcurris road, helping to animate the street. The shared cycle and pedestrian link is a direct route. The amphitheatre and sensory garden are free of cycle traffic.



Plaza lower level

Plaza upper level

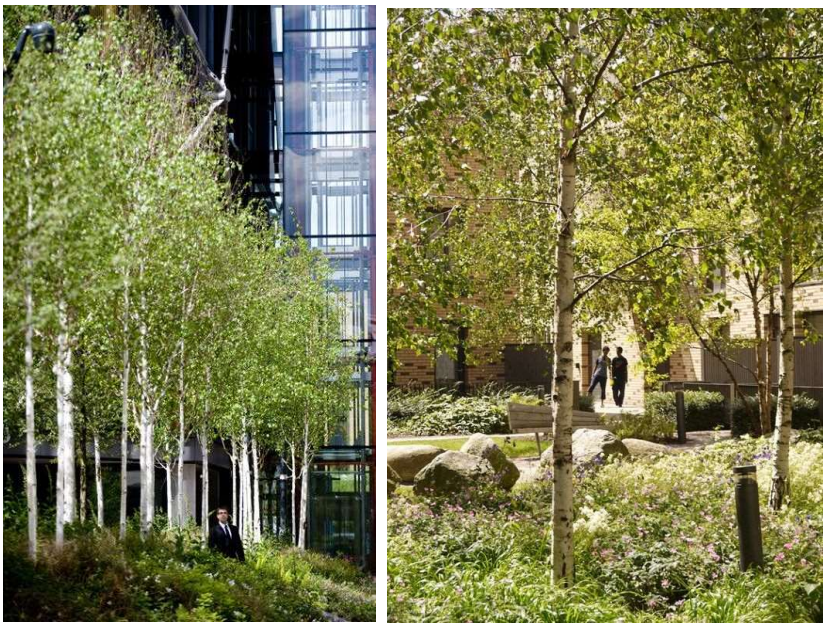
Gently sloping route - shared cycle and pedestrian

Gently sloping route - pedestrians

Stepped access

Access to building

St Pappins square, refer to landscape plan.



Above reference: Trees with light canopy to allow light to filter through the canopy, such as birches, are proposed to the shaded southern edge of the plaza. Bright trunks of birches can brighten up the space.




Above reference: Woodland planting with wildflowers and bulbs to bring seasonal interest while evoking a woodland atmosphere.



Above reference: Sensory garden planting. Plants for the sensory garden will comprise a variety of colours and textures and will include aromatic plants and herbs, as well as plants interesting to the touch. Pollinator friendly plants will attract the buzzing of bees and other insects, and grasses will rustle gently in the wind. Both sensory plants for shade and for sun are to be included.


Above reference: Soft grass terracing for seating and recreation and playful paving pattern reference.



Above references: Examples of interactive playful sculptures.

3. Community Courtyards and Crèche garden

The aim of the landscape proposal is to provide a space that can help in building strong communities, a space inviting for people to come, engage in activities, meet each other, participate in the creation of their communal space through engaging in community gardening, but also a place where one can retreat, relax, reconnect with nature, work or learn.

For that reason, the design seeks to provide a good balance between active spaces for meeting each other or play and more quiet spaces for nature experience and reflection, creating a space for physical and mental wellbeing:

Active spaces and community building:

- Play spaces for toddlers and smaller children and related seating for parents to meet each other are proposed to the courtyards of site 5 and site 18 with equipment including crawling pyramid, seesaw, springers or baby swing.
- Community gardens as a place to engage with the plants and soil but also with each other, as community gardens connect people of all age groups and backgrounds (located in the sunniest areas of the courtyards)
- Meeting spaces with large table with chairs or benches are linked to community gardens but are usable for any neighbours gathering events, as an opportunity to gather and spend time together

Creating and learning by doing: gardening

Quiet spaces for oneself

- seating in calmer areas further away from play spaces and gathering spaces, maximising nature experience
- maximising nature experience by including sensory planting

Learning by observing: pollinator friendly planting, integrated nature-based SUDS features etc.

A secure creche outdoor play space of 58sqm with safety surfacing is provided in the courtyard of site 5.

The community gardens can be planted with perennial vegetables and herbs and maintained as part of the overall planting or it can be planted and maintained by the residents themselves.

A privacy planting strip of min 1.5m is provided to ground floor apartments and patios to create a privacy buffer between private and communal/ and public space.

Pictures below: Sun facing seating with sensory planting to the back.

Community courtyard – Site 5

The secure communal courtyard of site 5 is enclosed by the proposed building and accessible from both Balcurris road and Ballymun road through a series of gated undercroft entrances and the gated opening by the creche. The communal courtyard of Site 5 has two levels – the ground floor level containing also terrace space for ground floor amenity in the building in the north and east, as well as the enclosed creche garden on the west. The upper-level courtyard in the south part is accessible through external steps or through elevator inside the building and is located on the first floor level, and is dedicated only for the residents and provides for toddler play and seating opportunities. A community garden with seating opportunities is proposed to the sunny northern end of the lower courtyard, while in the central part of the lower courtyard a grassed detention basin is proposed with incidental play such as stepping logs.

Community courtyard – Site 17

The communal courtyard of Site 17 is enclosed by the proposed building and the existing retaining wall of the existing apartment building to the north and is accessible through a series of undercroft gated entrance from Balcurris road as well as by the gated opening from the upper level of St Pappins square. A terrace serving the ground floor amenity is located on the south-western edge of the courtyard, while a community garden is proposed to the north-eastern sunny side of the courtyard. The central part of the courtyard with an amenity lawn area is lowered and stepped down from the community garden to serve as well as a detention basin.

Tree, shrub and ground cover planting is provided between the ground floor semi-public terrace and the communal part of the courtyard.

Courtyard Site 5

Courtyard Site 17

Community courtyard – Site 18

The communal courtyard of Site 18 is enclosed by the proposed building and accessible through the gated opening from Balcurris road as well as through a series of entrance lobbies from all sides of Site 18. The central part consist of a large lawn area with incidental play and a toddler play area in its northern sunny part. There is a small community garden proposed to the northern sunny side of the courtyards.

Courtyard Site 18

Planting Strategy

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

Throughout the scheme, the planting palette is uplifted with edible trees and shrubs and sensory planting as part of the amenities provided for the future residents.

The priority is given to locally sourced and native planting, when appropriate, to enhance biodiversity and support local biome. Native and naturalised tree species are to be planted within the amenity space to increase opportunities for native wildlife.

PUBLIC SPACE

The planting to the streetscape, carpark and green link consists of a variety of native planting, aiming to maximise biodiversity. This includes native edible forest planting and bioretention planting and native feature flowering mix for pollinators to the plaza both for enhancing biodiversity as well as visual amenity.

Note pollinator friendly planting is marked with an asterisk*

Native edible forest planting to Pocket Park

The planting consists of native species with focus on edible species. Non edible native species are also added in order to expand the flowering season, for sensory experience, as a food source for pollinators, and to add to winter aspects.

Low growing native fruit and nut trees and shrubs to avoid overshading apartment units:

Crab apple	*Malus sylvestris*
Elder	*Sambucus nigra* 'Laciniata'
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Raspberry	*Rubus idaeus*



Native herbaceous and groundcover planting

Common columbine*	*Aquilegia vulgaris*, added for flowering aspect
Babington leek*	*Allium ampeloprasum var. babingtonii,* edible
Bluebell	*Hyacinthoides non-scripta,* spring effect
Garlic mustard*	*Alliaria petiolata,* edible
Hard fern	*Blechnum spicant*, evergreen, winter aspect
Primrose*	*Primula vulgaris*, edible flowers
Ramsons*	*Allium ursinum*, edible, spring aspect
Scaly male fern	*Dryopteris affinis*, planted with ramsons to cover ground when ramsons finish blooming
Sweet violet	*Viola odorata*, edible, groundcover, evergreen
Wild strawberry	*Fragaria vesca*, edible, groundcover

Native bioretention and raingardens planting Streetscape

Alder	*Alnus glutinosa, Alnus x spaethii ,* clearstem
Birch	*Betula pubescens,* clearstem

Creeping Jenny*	*Lysimachia nummularia*
Cuckoo flower	*Cardamine pratensis*
Devil's bit scabious	*Succisa pratensis*
Flowering rush*	*Butomus umbelatus*
Greater pond sedge	*Carex riparia*
Hemp agrimony*	*Eupatorium cnabinum*
Large sedge	*Carex pendula*
Marsh marigold*	*Caltha palustris*
Meadowsweet*	*Filipendula ulmaria*
Oxeye Daisy*	*Leucanthemum vulgare*
Purple loosestrife*	*Lythrum salicaria*
Ragged robin*	*Silene flos-cuculi*
Red campion	*Silene dioica*

Reed sweet grass	*Glyceria maxima*
Sneezewort*	*Achillea ptarmica*
Soft rush	*Juncus effusus*
Square-stalked St John's wort	*Hypericum tetrapterum*
Tufted hair grass	*Deschampsia caespitosa*
Water avens*	*Geum rivale*
Water mint*	*Mentha aquatica*
Yellow iris*	*Iris pseudacorus*

ST.PAPPINS SQUARE

Evergreen planting with E and native planting N, pollinator friendly planting with asterisk *.

Sensory garden planting

Birch	*Betula pendula* 'Gracilis', sound of leaves in the wind
Locust	*Robinia* 'Pink Cascade', strongly scented flowers

Scented shrubs:

Laurustinus*	*Viburnum tinus*, scented winter/spring flowers, evergreen
Lilac	*Syringa v.* 'Charles Joly', scented spring flowers
Flowering quince*	*Chaenomeles japonica*, scented apples
Mexican Orange Blossom	*Choisya* 'Aztec Pearl', scented late spring flowers, often reflowers autumn, evergreen
Mahonia*	*Mahonia* 'Soft Caress', scented autumn flowers
Dwarf sweetbox*	*Sarcococca h. var. humilis*, scented winter flowers, evergreen

Scented flowers:

Abyssinian gladiolus	*Gladiolus murielae*
Coral lily	*Lilium pumilum*
Grape hyacinth*	*Muscari armeniacum*
Lamb's ear*	*Stachys byzantina*, interesting for touch
Jasmine tobacco*	*Nicotiana alata*
Pheasant's eye	*Narcissus poeticus*

Grasses - touch, sound:

Fountain grass	*Pennisetum alopecuroides* 'Fairy Tales'
Tufted hair grass, N	*Deschampsia cespitosa* 'Goldtau'

Scnted herbs and edibles:

Anise hyssop*	*Agastache officinalis*
Bay leaf*	*Laurus nobilis*
Chamomile, N	*Chamaemelum nobile*
Fennel*	*Foeniculum vulgare*
Hyssop*, E	*Hyssopus officinalis*
Lavander*, E	*Lavandula angustifolia*
Lemon balm	*Melissa officinalis*
Mint*	*Mentha piperita*
Oregano* ,N	*Origanum vulgare*
Purple coneflower*	*Echinacea purpurea*
Roses*	*Rosa villosa, Rosa rugosa* 'Blanc Double de Coubert'
Rosemary*, E	*Rosmarinus officinalis*
Sage*, E	*Salvia officinalis*
Saffron*	*Crocus sativus*, bulbs
Thyme *	*Thymus vulgaris*

Woodland planting to the southern edge of the square

Birch	*Betula pendula* 'Gracilis'
Bellflower*, N	*Campanula trachelium*
Bluebell, N	*Hyacinthoides non-scripta*
Common polypody, N, E	*Polypodium vulgare*
Great wood rush, N,E	*Luzula sylvatica*
Hard fern, N, E	*Blechnum spicant*
Hellebore*, E	*Helleborus niger*
Japanese anemone	*Anemone* 'Honorine Jobert'
Primrose*	*Primula vulgaris*
Snake's head fritillary	*Fritillaria meleagris*
Snowdrop* N	*Galanthus nivalis*
Snowflake	*Leucojum vernum*
Tulip clusian	*Tulipa clusiana*
Woodland tulip	*Tulipa sylvestris*

COMMUNAL COURTYARDS

The planting in the communal courtyards is based on maximising seasonal visual amenity, prioritising pollinator friendly planting. Plants interesting for all senses are prioritised as well as native species, although non-native species are added to the mix to extend the flowering season both for pollinators as well as sensory amenity.

Evergreen species, winter flowering species, and grasses are used in the mixes to extend the effect over winter months while also providing winter cover for invertebrates.

Edible herbs, edible flowers, and scented flowers are used in the communal courtyard to provide sensory experience.

Please see below indicative lists of proposed species. Note pollinator friendly planting is marked with an asterisk*, natives species marked N, and evergreen E.

Privacy planting strip to courtyards with trees

Predominantly native species with additional pollinator friendly flowering species to extend flowering seasons both for biodiversity and visual amenity.

SUN

Himalayan birch	*Betula utilis* var. *jacquemontii*
Camomile, N	*Chamaemelum nobile*
Common yarrow*, N	*Achillea millefolium*
Cowslip*, N	*Primula veris*
Field scabious*, N	*Knautia arvensis*
Fennel*	*Phoeniculum vulgare*
Great mullein*, N	*Verbascum thapsus*
Oxeye Daisy*, N	*Leucanthemum vulgare*
Purpletop*	*Verbena bonariensis*
Purple coneflower*	*Echinacea purpurea*
Sage*	*Salvia nemorosa*
White gaura*	*Gaura lindheimeri*
Wild carrot, N	*Daucus carrota*
Wild marjoran*, N	*Origanum vulgare*
Mexican feather grass	*Stipa* 'Pony tails'
Tufted hair grass, N	*Deschampsia cespitosa*

SHADE AND SEMI-SHADE

Cornelian cherry*	*Cornus mas*
Hawthorn*, N	*Crataegus monogyna*
Hazel ' Contort', N	*Corylus avellana* 'Contorta'
Rowan*. N	*Sorbus aucuparia*
Bellflower*, N	*Campanula trachelium*
Bluebell, N	*Hyacinthoides non-scripta*
Common columbine*	*Aquilegia vulgaris*
Common polypody, N, E	*Polypodium vulgare*
Geranium 'Rozanne'*	*Geranium*' Rozanne'
Guelder rose 'Compactum'*, N	*Viburnum opulus* 'Compactum'
Hard fern, N, E	*Blechnum spicant*
Hellebore*, E	Helleborus niger
Japanese anemoe*	*Anemone* 'Honorine Jobert'
Mahonia 'Soft Carress'*, E	Royal fern, N Osmuna *regalis*
Snowdrop*, N	*Galanthus nivalis*

Wood anemone*, N *Anemone nemorosa*

Food forest planting to courtyards

Mix of native and cultural planting of edible and medicinal species of trees, shrubs and herbaceous perennials, includes many pollinator friendly plants

Hazelnut, N *Corylus avellana*, native
Serviceberry* *Amelanchier alnifolia* 'Smokey'
Shrub layer:
Red currant* *Ribes rubrum*
Gooseberry *Ribes uva-crispa*
Raspberry *Rubus idaeus*, native, to forest edges
Undergrowth mix:
Chervil (Anthriscus cerefolium), Comfrey (*Symphytum officinale*), Forget-me-not* (*Myosotis sylvatica),* Lungwort* (*Pulmonaria officinalis*), Mint* (*Mentha piperita*), Musk mallow (*Malva moschata*), Primerose*, N *(Primula vulgaris,* native), St John's wort, N (*Hypericum perforatum*), Sorrel, N (*Rumex acetosa),* Sweet Cicely *(Myrrhis odorata),* Sweet woodruff* (*Galium odoratum),* Violet, N (*Viola odorata), Wild strawberry*, N (Fragaria vesca)*

Courtyards community garden planters – perennial option

Perennial edible and medicinal herbs and edible flowers planting mix. Alternatively residents can plant and maintain planters themselves.
Pollinator friedly plants marked by *.

Anise hyssop* *Agastache officinalis*
Bay leaf* *Laurus nobilis*
Cardoon* *Cynara cardunculus*
Chamomile, N *Chamaemelum nobile*
Chicory *Cichorium intybus*
Chives* *Allium schoenoprasum*
Daylilies *Hemerocallis*
Fennel* *Foeniculum vulgare*
Hyssop*, E *Hyssopus officinalis*
Lavander*, E *Lavandula angustifolia*
Leek, perennial*, N *Allium ampeloprasum* var *babingtonii*
Lemon balm *Melissa officinalis*
Lemon verbena *Aloyisia citriodora*
Mint* *Mentha piperita*
Oregano* ,N *Origanum vulgare*
Purple coneflower* *Echinacea purpurea*
Roses* *Rosa villosa, Rosa rugosa* 'Blanc Double de Coubert'
Rosemary*, E *Rosmarinus officinalis*
Sage*, E *Salvia officinalis*
Saffron* *Crocus sativus*, bulbs
Sea kale, N *Crambe maritima*
Straberry, wild*, N *Fragaria vesca*

St John's wort , N	*Hypericum perforatum*
Thyme *	*Thymus vulgaris*
Tree collard	*Brassica oleracea acephala*
Welsh onion*	*Allium fistulosum*
9 star broccoli	*Brassica oleracea botrytis*

Planting details are included on the following landscape details drawings:

- SHB5-BMD-DR-MAL-L-P-0200
- SHB5-BMD-DR-MAL-L-P-0201
- SHB5-BMD-DR-MAL-L-P-0202

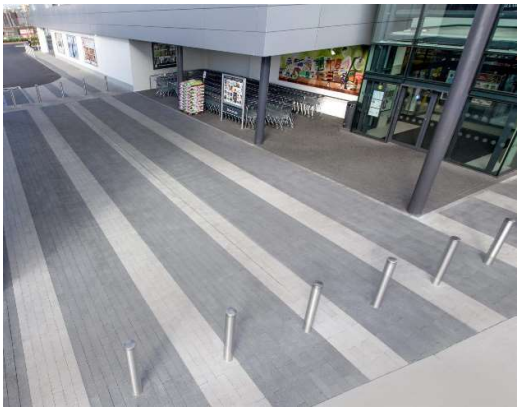
Furniture and Finishes

Proposed Furniture, play equipment and finishes are outlined on the landscape drawings and associated legends, and on the detail sheets.

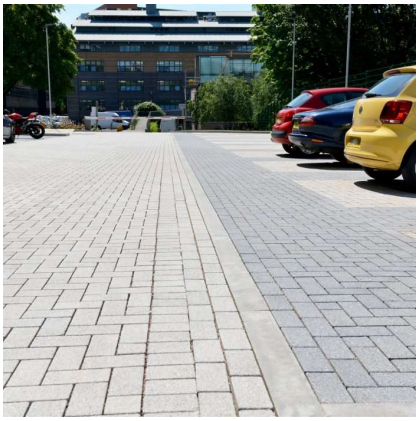
- SHB5-BMD-DR-MAL-L-P-0300
- SHB5-BMD-DR-MAL-L-D-0301
- SHB5-BMD-DR-MAL-L-D-0302

Finishes

Feature PC concrete paving with granite surface finish is proposed to public open space of St. Pappins square, along Ballymun road and site 5 and extending Westwards from St. Pappin's Square, with permeable paving proposed for St. pappins Square.



Permeable pre-cast concrete paving with granite finish is proposed for car parking and communal courtyards. Permeable paving chosen to benefit sustainable drainage in line with Dublin City Development plan and national guidelines.



Compacted gravel with a metal edge is proposed to bicycle parking space.

Wet pour safety surfacing and amenity grass where sufficient is proposed to play areas.

Furniture

Age friendly seating is proposed to the streetscape and to the communal courtyard with backrests and armrests. Sheffield type bicycle stands are provided to the front of the building as well as spaces for cargo bike parking.

Raised planters for gardening and sensory experience are proposed to the communal courtyards and stepped planters for sensory planting are proposed to St. Pappins square.


Play equipment

The following play equipment is proposed to the small children and toddler play space.

- crawling pyramid,
- baby swing,
- springers,
- fairytale throne
- seesaw,
- agility trail
- embankment slide
- stepping and balancing logs

Refer to play equipment details and plan drawings.



Maintenance should maximize the biodiversity potential of the site, providing new opportunities for expansion of (and cross-interaction between) habitats whilst also providing an attractive area of green open space with high amenity value. The open space network can be broken down into the following softworks planting types for maintenance:

Amenity Active Use Grassland

Objective: To produce a firm hard wearing sward with the appropriate cover of acceptable species, and adequate control of weeds, pests and diseases. The lawn is to be maintained to 40mm height to create a close mown turf for active and passive recreational use.

Operations: Grass maintenance strips to be cut at 2-week intervals to a height of 40mm during the growing season of April to October. Grass cuttings to be broken down and spread evenly across the area and remain on site. Lightly roll Amenity Grass areas in spring and autumn annually to consolidate the soil. Carry our when ground conditions are appropriate when soil is moist but not waterlogged. Any settlements or local depressions should be made good.

Woodland Planting Areas

Objective: Areas planted with trees and shrubs to promote and develop native deciduous and mixed woodland in the development. The woodland provides habitat and seasonal interest and provides an amenity space for community use.

Operations: Woodland planting areas to remain clear of weeds to a diameter of 1m circle around each plant planted. Achieved by a circle of mulch 75mm deep being maintained to the base of each tree planted. At all times, weed cover to be less than 5% and no weed to exceed 100 mm high. Check the condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Review presence of rabbits within the woodland area and if risk of damage to juvenile planting is low remove spiral rabbit guards after three years all other guards to be removed after five years. Gently firm loosened soil around trees. Straighten leaning trees/ shrubs.

Frequency of checks: Every month or after periods of strong winds. Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools. A two-meter strip of unmown grass will surround all areas of woodland planting to form a buffer zone and to increase species biodiversity.

Planting Seasons

- Bare Root Deciduous Stock: November to Mid March
- Rootballed Deciduous Stock: November to Mid March
- Rootballed Evergreens and Conifers: late September or October or between March and early May
- Container Grown Stock: Any time of the year
- Grass Seeding: Spring or Autumn – when the soil is still warm and there is the promise of rain.

No planting should take place during periods of frost, drought, cold drying winds or when soil in waterlogged, or when the moisture of the soil exceeds field capacity (the maximum amount of water that soil can hold).

Grass Seeding

Grass seeding should only be carried out in the correct season from late summer to mid autumn and in suitably calm but moist weather conditions. If the opportunity to sow grass in autumn is not possible sow seed in mid Spring, but only if there is the promise of rain as it is critical to provide the seed with sufficient water to prevent it from shriveling up and dying. Ideal growing conditions for grass seed to germinate is warm soil damp from rain. Seed should be cross sown in two directions at right angles to each other (half the seed to be used in each direction) to prevent stripping.

Replacements

In September or each year, the Landscape Maintenance Team shall provide a list of all trees and plants that are dead, dying, vandalised or not growing in a vigorous condition. These are to be replaced during November – December of the same year or for evergreens April/May of the following year. All plants shall be planted at the size as shown in the Planting Schedule.

All replacement planting shall be in accordance with the Specification/Planting Schedule.

Dead Plant Removal

Remove dead plants and dead parts of plants as soon as possible and replace plants within the appropriate planting seasons.

Topsoil

Topsoil should be clean, free from stones, perennial weeds, roots and other plant matter, sticks, sub soil or any waste, toxic, rotting or foreign matter. The soil should be fertile with a humus and fibre content and be of a medium texture having a pH value of between 6.0 and 7.5 (unless imported for specific wildflower meadow seeding

areas. Imported topsoil should not contain stones greater than 40mm in size, nor have a total stone content exceeding 10 per cent by mass.

Topsoil should be spread evenly on formation levels. Grass areas and shrub/groundcover areas should have a minimum of 150mm and 450mm respectively, after firming. Stones should be removed up to 40mm in diameter.

Plant Material

All plants should be well grown, sturdy and bushy, according to type, and free from all disease and defects. All plants should be adequately hardened off prior to planting, where frost or cold winds may be a problem. This is particularly relevant to planting at the Dublin foothills.

- Shrubs should be bushy, well established nursery stock with a good fibrous root system.
- All trees should be full and well-shaped; bark unmarked and have healthy root systems. Rootballed trees should be rootballed immediately when lifted at the nursery.
- The rootball should be suitable for the size of crown and the rootball should be flat bottomed.
- The rootball should be formed through regular transplanting; every 2-3 years minimum. The rootball should be wrapped in hessian and steel wire netting or other suitable and approved decomposable material. Trees should have a well defi ned, straight and upright central leader, with branches growing out of the stem with reasonable symmetry. The crown should be well shaped, balanced, of a form and habit natural for the species.
- All coniferous trees should be supplied rootballed or container grown, with a good fibrous root system. Trees should conform to specified height with well-developed uniform branching systems.

Planting Preparation

The proper preparation of the ground, the quality of plants and materials, and good planting techniques are essential for proper plant growth and establishment, ensuring minimal loss of plants and ease of maintenance. Where the project requires earthworks such as the formation of subsoil levels and topsoiling works it is important that it is done in the right way to avoid compaction, so that the best conditions are available for planting.

If topsoil is stockpiled on site it should be stored in mounds of maximum height 1.5m constructed so that they shall shed water and not puddle. Care should be taken that no trafficking of placed topsoil and no mixing of topsoil and subsoil take place. Any Topsoil stockpiles should be kept weed free.

The areas for planting should be prepared prior to planting by ensuring that the subsoil is free draining and well cultivated and suitable for topsoiling. The aim of cultivation is to produce a well-drained and textured soil suitable for plant growth.

All areas to be planted or seeded should be cultivated to a minimum depth of 450mm or deeper if needed. Areas where obvious compaction has occurred should be ripped to allow adequate drainage.

Subsoil should be placed in layers not exceeding 150mm in depth.

To create the best growing environment for the planting in subsoil a combination of actions were applied to each planting pit. Any future planting works into subsoil should follow the following these principles:

- The pits should be dug prior to delivery of plants so that the tees are out of the ground for as short a time as possible.
- Planting to be into pits which are excavated 200mm deeper and 300mm greater in diameter or 1/3 greater depth and diameter than the root size (whichever is greater)
- The plant must be planted to the same level relative to top of soil as that grown in the nursery.
- The sides and bottom of the planting pits are to be thoroughly broken up by forking to alleviate compaction and to facilitate drainage.
- When planting on slopes ensure that an area made by a 0.3m diameter circle from the centre of each plant is level (horizontal) at the ground surface upon completion of backfilling.
- The backfill or soil placed back in around the plant roots will comprise of broken up (to a loose friable state) soil removed to form the planting pit. Large solid soil / clay clods larger than 50mm will be rejected and deficiencies made up with topsoil.
- Bare root stock to be dipped in root dip gel containing sufficient species of mycorrhizae for the tree or shrub being planted, water holding gel and bio-stimulant.
- 100mm bark mulch to be applied to surface for weed suppression and water retention

Planting Seasons

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The Arboricultural Contractor will:

- Submit a full method statement containing machinery to be used, removal of wood etc to the CA.
- Carry out works to the most up to date arboricultural practices available e.g. BS 3998.
- Recommendations for tree work (as amended).
- Undertake work only with suitably qualified operatives in constant consultation with the Site Arborist.
- Trees identified for removal will be section felled in wooded areas so as not to damage remaining trees.

Control of dogs

It is recommended that dogs should be kept on a lead when walking the path network within the open spaces to prevent disturbance to wildlife. Signage should be erected to encourage public cooperation. This may help to reduce disturbance impacts to bird species.

Hard Surfaces including: Permeable and impermeable paved areas, Compacted Gravel and safety surfacing

Note: Paved areas that drain into grass areas/rain gardens, tree pits and planted areas avoid use of high concentrations of salt, detergent or soil-acting herbicides. Materials used in repairs should match the existing surface material specification and be laid to the same depth as originally specified and, where applicable, to a similar degree of compaction.

Objective: pathways and steps throughout the area are to provide a solid surface for users of the open space to circulate. Maintain clean, even, consistent surfaces, safe for use by normal traffic in all weather conditions.

Hard surfaces to be kept free from the following:

- litter including autumn leaf fall,
- dust and accumulated grit,
- stains, e.g. oil or paint spillage,
- graffiti,
- weeds, moss and algae
- standing water

Operations: Arisings or cuttings to be removed from pathways after maintenance of planting. Surface of tarmac pathways to be clean, not slippery, build up of algae etc to be removed.

Compacted Gravel

Ballylusk aggregate dust, well compacted on hardcore subbase.

If litter accumulates, remove by picking or sweeping.

If the surface is stained, replace it.

Where weeds colonise, remove.

Surfaces should be raked/rolled at least once a year in winter when wet.

Where the surface becomes uneven or there is a drainage problem, rake and roll when wet, and make up levels to falls.

Surfaces should be repaired by loosening, raking and making up with matching material to maintain profiles, levels and gradients, followed by rolling.

Furniture

Play Equipment

Objective: To provide opportunities to play and exercise within the open space network for individuals of all ages and abilities. Including opportunities for social interaction, physical activity, imaginative or intellectual stimulation, creative

achievement, emotional and educational development.

Operations: A visual inspection is to be carried out when on site carrying out other maintenance works or at 2-week intervals, whichever is more frequent, or immediately in response to reports or complaints from the public. This inspection must bring any defects to the immediate attention of the management company. As a general policy, equipment is repaired as soon as possible. Every twelve months a full ROSPA inspection shall take place using independent inspectors. This results in a full written report with a safety assessment and recommendations for action. The recommendations are acted upon immediately, or should they require large capital investment, they will be used as justification to support the application for funding.

Play equipment is repaired by the manufacturer/supplier other than routine replacements.

Introduction

The aim of this chapter is to describe aspects of the landscaping scheme that are intended specifically for biodiversity. It includes biodiversity enhancements included in the landscaping scheme and biodiversity enhancements for fauna.

Some features have been discussed in detail elsewhere in this report, in which case we will refer readers to relevant locations rather than repeating information.

This document should be read in combination with the Ecological Impact Assessment for the development, which provides information on the baseline condition of the site.

Green and Blue Infrastructure

The proposed landscape design aims to strengthen the value of the site as a place for delivering green/blue infrastructure whilst protecting and enhancing the natural/built and cultural assets of the site.

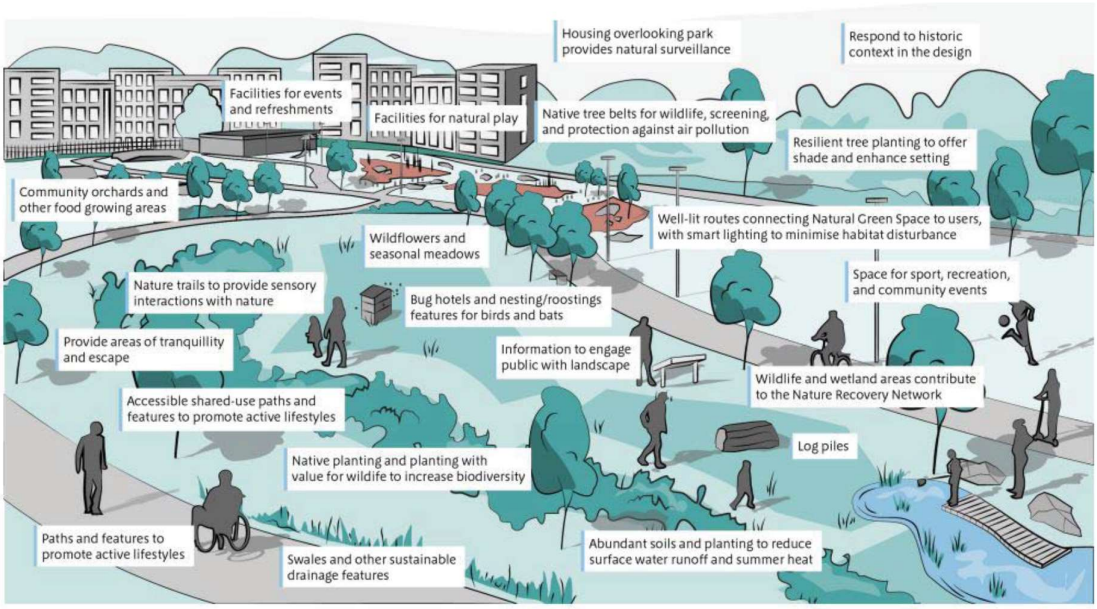

Figure 21: Parks and Green Space

Figure Extract from “Green Infrastructure Planning and Design Guide” published by Natural England

Green Infrastructure is designed and managed to provide and facilitate the following:

- High quality open spaces which provide health and social benefits for people through the provision of formal and informal nature-based play areas, safe and attractive areas and routes for meeting with a variety of seating areas for socialising and relaxing, accessible walking and cycling routes facilitated.
- Opportunities and space for contact with nature, which is considered essential for good health and wellbeing and to promote community cohesion. In the design there is access to nature with the retention of historic garden paths through the woodland boundaries.
- Adaptation to the impacts of climate change and flooding.

- Space for biodiversity (nature and wildlife) to flourish
- A sense of place and local distinctiveness.
- The design facilitates connections for people and wildlife; active travel routes are maintained through the site for neighbours and residents through green spaces, the network of open space is designed to connect with the existing surrounding movement/open space networks to access a number of adjacent neighbourhood amenities and facilities. Retention of ecological connectivity/ stepping stone function of the site to facilitate movement of fauna, to keep foraging and commuting routes, and as a nesting resource.
- Features are multifunctional, they are designed to benefit people and wildlife.

Biodiversity national guidance

National Biodiversity Action Plan 2017-2021

Ireland's Vision for Biodiversity:

"That biodiversity and ecosystems in Ireland are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to eff orts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally."

The Biodiversity Climate Change Sectoral Adaptation Plan. 2019. Department of Culture, Heritage and the Gaeltacht.

"The Goal of this Plan is to protect biodiversity from the impacts of climate change and to conserve and manage ecosystems so that they deliver services that increase the adaptive capacity of people and biodiversity while also contributing to climate change mitigation".

Action 4.4 "Co-design green spaces and wildlife refuges in cities and peri-urban areas with local communities to provide habitats for species under threat from climate change and to connect people to biodiversity".

All Ireland Pollinator Plan 2015-2020 (Councils: Actions to Help Pollinators) NBDC

There are 7 key actions in the guidance document – all of which inform the planting design within the site:

A: Identify and protect existing areas that are good for pollinators

B: Alter frequency of mowing of grassy areas to allow more native plants to flower

C: Pollinator friendly planting

D: Provide wild pollinator nesting habitat: hedgerows, earth banks and hotels

E: Reduce the use of pesticides

F: Raise public awareness of pollinators

G: Tracking progress and recognition for efforts

Protecting pollinators by planting and appropriately maintaining:

1. Flowering Native Hedgerows

2. Flowering margin of 0.5 to 2 metres around fi eld edges

3. Low to zero pesticide inputs

4. Pollinator friendly trees

5. Wildflower meadow, flower rich pasture, cover crop, herbal ley

Planting and management of the planted areas shall be undertaken in accordance with pollinator friendly management objectives as outlined in the “All Ireland Pollinator Plan 2021-2025 (Councils: Actions to Help Pollinators)” National Biodiversity Data Centre and will include interpretative signage highlighting the areas Managed for Wildlife.

Ecology design elements

Additional planting is proposed to strengthen areas within the site for wildlife and biodiversity and to reinstate green infrastructure across the site where feasible. The proposed trees and small edible woodland planting will provide connectivity between habitats, shelter and a food resource for nesting birds.

Birds

Breeding Bird Season Restrictions

Any removal of vegetation, including trees and hedges within the site will take place outside the breeding bird season (i.e. the start of September to the end of February, inclusive) to avoid any potential impact on breeding birds. Where this seasonal restriction cannot be observed, a check for active nests will be carried out immediately prior to any site clearance and repeated as required to ensure compliance with Irish wildlife law. This will be carried out under the supervision of a qualified Ecologist.

Biodiversity enhancement in the landscaping scheme.

Outlined above in the landscape proposals and the landscape masterplan submitted with this application.
The proposal aims to maximise the diversity of planting, prioritising native planting and pollinator friendly planting:

- rain gardens, planted detention basins and bioretention planting
- tiny edible forest
- wildflower meadow
- new tree planting,
- undergrowth woodland planting and edible fruit and nut trees and shrubs
- pollinator friendly sensory garden planting and vegetable gardens
- and flexible amenity lawn areas
- green roofs

Edible planting including berry bearing shrubs and fruit trees, as well as nuts are included and will provide interest and amenity for people as well as food resources for birds etc. Nature based solutions to SUDS are introduced to the site though a series of bioretention raingardens and swales.

These measures will partially compensate for some of the habitats removed during site clearance (trees, grass) and create some features that are not currently present at the site (pollinator friendly planting, raingardens, shrubs, etc.).

Biodiversity enhancement for fauna.

This would include swift / swallow nest boxes on the buildings (they need to be at least 5 m above ground level), other bird nesting boxes for finches, tits, etc.

- Bird nest boxes of a variety of sizes/typologies will be installed as per Ecologist recommendations.
- Swallow and Swift bricks to Apartment structure.
- House Martin nest structures to Apartment structure
- Ground nesting bird habitat to Living Roof to Apartment structure