2025

Carlisle
Residential Development

Dublin 12

Landscape Design Statement

LRD III

NMP LANDSCAPE ARCHITECTURE

bkdarchitects BURKE-KENNEDY DOYLE

Applicant: 1 Terenure Land Limited

CONTENT

Address: Site at “Carlisle”, Kimmage Road West, Terenure, Dublin 12. The site is accessed from Kimmage Road West. It is located to the north and east of Ben Dunne Gym, south of Captain’s Road, west of Brookfield Green and east of Park Crescent.

Description:

The proposed Large Scale Residential Development will consist of 145 no. apartments (70 no. 1 bed and 75 no. 2 bed apartments) within 5 no. blocks (with blocks 4 and 5 linked throughout), ranging in height up to 5 storeys.

All residential units have associated private balconies/terraces to the north/ south/ east/ west elevations. The proposal will also include provision of a creche, cultural/ community space along with 89 no. car parking spaces, 465 no. bicycle parking spaces and 6 no. motorcycle parking spaces located at undercroft and surface level. Vehicular/pedestrian/cyclist access is provided off Kimmage Road West via the existing road which currently serves the Ben Dunne Gym.

All associated site development works, public open spaces, podium and ground level communal open space, landscaping, boundary treatments, plant and waste management areas, and services provision (including ESB substations) will be provided. Upgrades to the Uisce Eireann network along Kimmage Road West are also accommodated.

Response to issues raised during the consultation process and the LRD meeting.

Requirement: 1 F). While the proposed provision of permeability through the site is welcomed, it is not considered necessary for all of the ground floor areas of communal open space to be publicly accessible as this can compromise their function as semi- private open space for use by residents of the proposed development. The applicant should note that the Planning Authority would not be in favour of a fully gated development and that the design should therefore incorporate measures to ensure privacy and security, where required, within the development. In this regard details should be submitted in relation to how it is proposed to delineate the areas of communal open space from the public open space, allowing each block to have one publicly accessible frontage to ensure that that access can be provided to residents and visitors without compromising the quality of the private spaces. The provision of privacy screening to ground floor apartments should also be considered.

Response: Communal open spaces will be defined with a low 1.1m railing with gated access for residents only. The railing will be set within 1.1m high hedge to screen its impact visually. The low railing provides delineation for residents but also offers visual permeability. The privacy buffer of 1.5m to private amenity spaces has been provided with hedge planting alongside the ground floor apartments for the privacy screening. (refer to p. 25 of the Ladnscape Design Statement and drawing L1-101)

Requirement: 4 (a) Public open space — the playground should be relocated within the public open space to be further from the boundary with existing residential units to avoid undue disturbance to residents.

Response: The play area within the public open space has been relocated further from the existing restidential units. (refer to drawings L1-103_1 and L1-103_2)

Requirement: 4 (b) indicate how drainage facilities in the public open space are finished/presented in the landscape.

Response: Drainage facilities are represented in the public open space as follows:

- Buried storm water attenuation tanks under lawn area with no tree planting above ref engineers drawings
- Filter / French drains capture runoff from paths adjacent to soft landscape areas
- General soft landscape area free draining percolation areas
- Surface water over hardscape areas, streets to gullys

(refer to drawings L1-103_1 and L1-103_2)

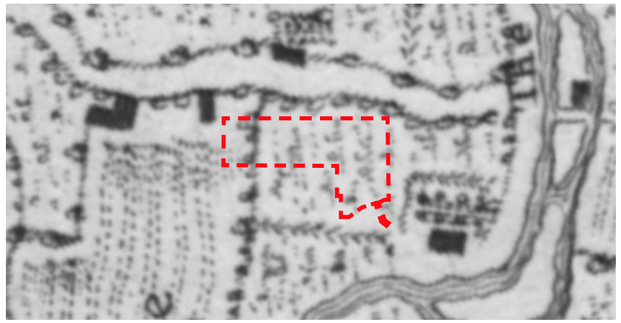
Requirement: 4 (f) A green roof plan indicating biodiverse planting is required to be submitted.

Response: The biodiverse planting mix has been proposed for the green roofs. (refer to drawing L1-002)

00. DEVELOPMENT DESCRIPTION

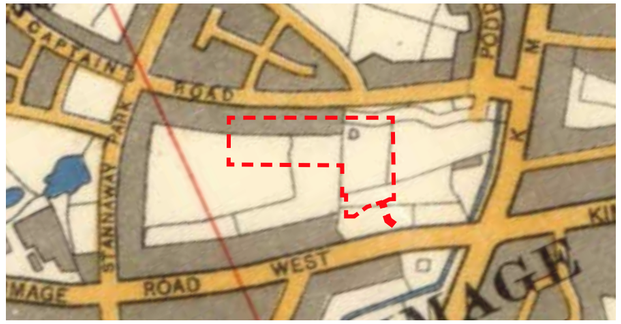
1.0 LANDSCAPE ANALYSIS

1.1 Landscape Analysis: Historical Context



1760

1910



1953

The project site is located in an area known as Kimmage, which was a predominantly agricultural region, home to farms, a mill, and expansive tracts of farmland. Historical maps from 1760 and 1910 illustrate the rural character of the area, showing a landscape primarily devoted to agriculture and local industry. This rural identity began to change significantly in the mid-20th century.

In the 1940s and 1950s, Kimmage underwent a major transformation as part of the suburbanization efforts of the growing city. The most striking feature of this redevelopment was the creation of a unique residential district designed in the shape of a Celtic cross. This design was an innovative approach to urban planning and remains a distinctive feature of the area, standing as a testament to the thoughtful urban development of that era. Over the decades, Kimmage continued to evolve, with additional residential expansions shaping its present-day character as a suburban neighborhood predominantly composed of single-family and terraced houses.

The Kimmage area is also home to several notable landmarks and sites of historical interest that enrich its cultural and architectural heritage. One of the most significant features is the previously mentioned Celtic cross-inspired layout of the residential district, a rare and innovative urban design that highlights the creative spirit of mid-20th century planning. To the northwest of the project site stands Drimnagh Castle, a magnificent medieval structure dating back to the 13th century. This castle is not only an important piece of local history but has also served as a filming location for various movies, adding to its cultural significance.

To the west of Kimmage is St. Agnes' Catholic Church building included in the Register of Protected Structures. The church is an important religious and community landmark and reflects the architectural and cultural values of the period in which it was built. To the south of the project area lies The Holy Ghost Missionary College, colloquially known as Kimmage Manor. This site features buildings that date back to the 19th century and serves as a historical reminder of the area's educational and missionary past.

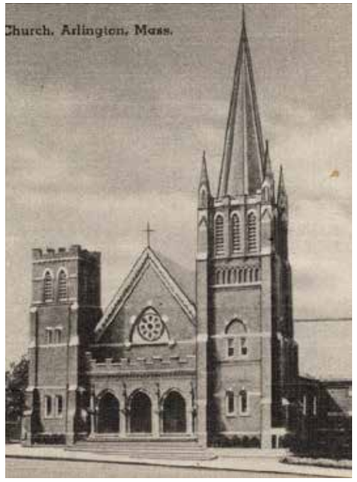
Together, these elements create a rich tapestry of history, architecture, and suburban life that defines Kimmage. The area's transformation from a rural landscape to a well-established suburban community, combined with its preserved historical landmarks, makes it a fascinating study in urban evolution and a valuable part of the city's broader historical and cultural context.

Drimnagh Castle

Site view to Kimmage district

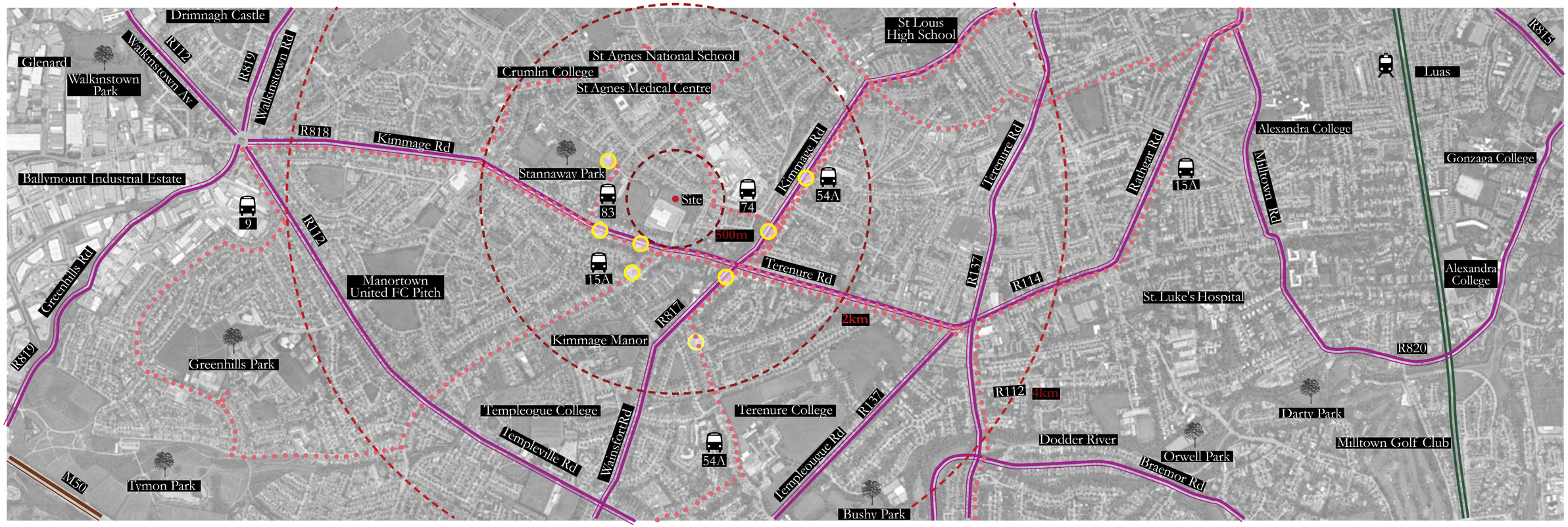
View to Kimmage district

Kimmage Manor



St. Agnes' Catholic Church

1.2 Landscape Analysis: Wider Context - Access & Amenity



LEGEND

- Motorway
- Primary Roads
- Luas
- Dublin Bus Route
- Dublin Bus Stops

The project site is situated in a well-connected area. Key routes like the R818 and R817 are easily accessible, and multiple bus services, including routes 9, 15, 15A, 54A, 83, and 74, operate in the vicinity. Additionally, the Green Line Luas and the M50 motorway are both located within a 5 km radius.

Drimnagh Medieval Castle

Stannaway Park

Terenure College

Terenure College

Bushy Park

1.3 Landscape Analysis: Site Context

The site is located in Dublin 12 at the northern end of existing Ben Dunne Carlisle gym complex. Access to the site is through the exisitng Gym car park with a legal right of way to Kimmage Road West. The site is enclosed on three sides by the rear gardens of two storey houses - Captains road to the north, Park Crescent to the west and Brookfield green to the east. There are number of existing mature trees on the site along the northern and western boundary.

Aerial Site view

Aerial Site View

1.4 Landscape Analysis: Local Context

The project site is located in Dublin 12, providing access to full urban infrastructure. This ensures that residents are close to essential amenities such as shops, services, and educational facilities. Additionally, the area offers various sports facilities, including a golf course and an athletic club, promoting an active lifestyle. The site is also well-connected to the rest of the city. Nearby are bus stops for lines 15A, 74 ad 83. Furthermore, the project site is situated near several key transport nodes, offering convenient access to different parts of the city. To the south it borders Kimmage Road / Terenure Road, providing easy access to nearby districts. Moreover, the proximity to the M50 motorway allows for quick connections to major routes.

Transport

Buses 74, 83. 9, 15A

Proximity to M50 Motorways

Nature

Buses 74, 83. 9, 15A

Historic Landscape

Leisure

Crumlin GAA

Golf Club

1.5 Landscape Analysis: Topography + Micro - climate

Micro - Climate - The Influence of Light + Seasonal Change

The site in particular along the southern boundary is exposed to strong westerly winds due to very little shelter with only a low lying hedgerow that runs along the southern periphery. .

The time of day and how the sun moves across the sky is very influential in how the character and feel of the site changes throughout the day and in turn throughout the seasons. The sun rises beyond the eastern boundary of the proposed site development.

The sun then moves higher in the sky in a westerly direction. The gradual and continuous change of the suns cycle creates opportunities for wonderful vistas in various areas of the site and at multiple times throughout the day and throughout the seasons.

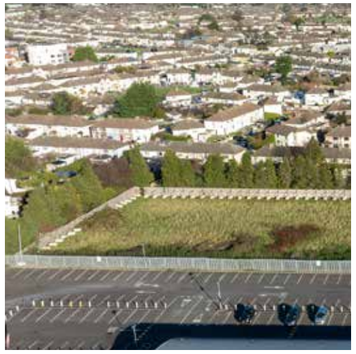
The influence of the sun also provides great contrast within the site in terms of the relationship between light and shadow. The suns cycle will greatly aid and inspire the landscape design rational in terms of creating multiple spaces with the suns pattern and influence on the site firmly in mind.

*Site boundary is indicative only

Topography

The site falls approximately 1.2m from west to east along the southern boundary with the gym car park.

Existing Vegetation



There are number of existing mature trees on the site along the northern and western boundary and lower existing hedgerow to the eastern site boundary.
Most of the existing trees are to be retained.

Access + Connections

Access to the site is through the exisitng Gym car park with a legal right of way to Kimmage Road West.

*Site boundary is indicative only

1.6 Landscape Analysis: Existing Site Views

*Site boundary is indicative only

View 1

View 2

View 3

View 4

View 5

View 6

View 7

View 8

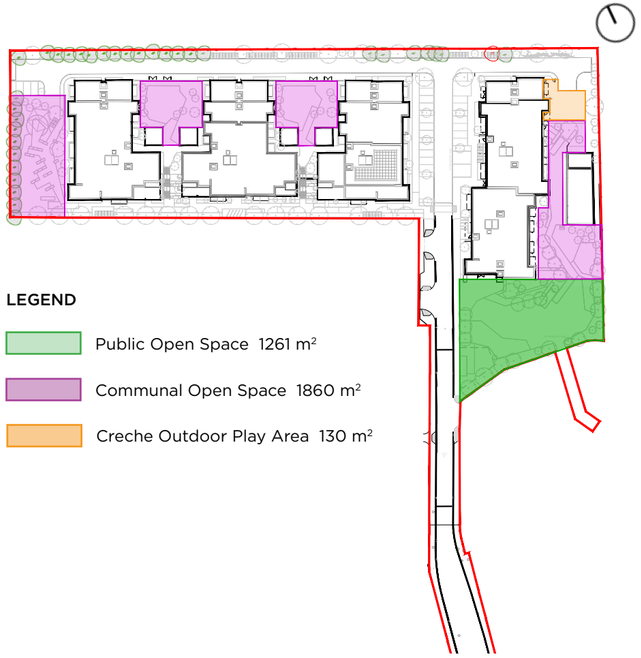
View 9

LANDSCAPE DESIGN STRATEGIES 2.0

2.1 Landscape Design Strategies: Open Space Quantum

Spatial quality is centered around strategies, policies, design and effective creation & use of spaces. This applies to buildings, landscapes and infrastructure. Effective design will have a higher spatial quality as functioning increases, use rises and a variety of needs for the user is met. A variety of spatial typologies and scale of spaces add to the overall landscape experience as users pass through, actively using and participating in the spatial experience. The more users encouraged into the space, the more successful the development will be, thereby creating active, engaging and fun communities.

The current landscape expression creates interest and allows for the creation of open spaces designed for interactions, crafting a sense and extension for the habitants with programme dotted within the open space to maxamise functionality and enjoyment.



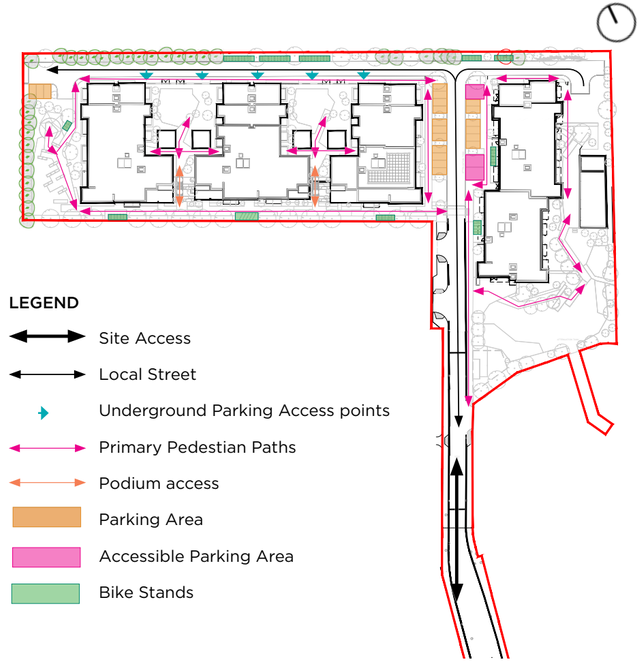
*Site boundary is indicative only



Reference Images

2.2 Landscape Design Strategies: Accessibility + Circulation

The site is accessed through the existing Gym car park with a legal right of way to Kimmage Road West. Public transport access to bus networks is within a short walking distance. Its positioning as a sustainable development lends itself to making use of public transport as well as non-mwotorised transport such as walking and cycling. The pedestrian routes within the public open space allow for leisurely meandering and enjoyment of the amenities.



*Site boundary is indicative only

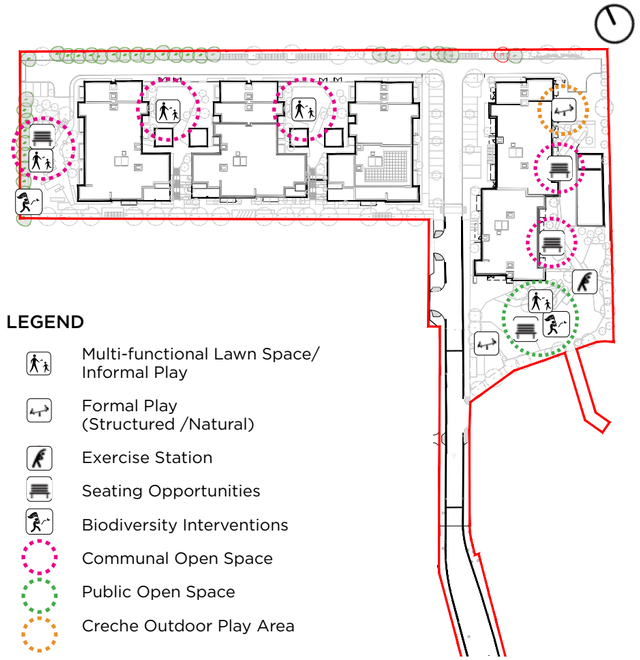


Reference Images

2.3 Landscape Design Strategies: Play + Exercise + Rest

The activity scheme is dotted within the overall open space arrangement. These will promote health & wellbeing, learning and social interactions which underpin creating a well-integrated community whilst encouraging greater use of the outdoor environment.

Flexible space and inclusive natural play spaces are provided throughout the masterplan and respond to age, context and ability, encouraging users to interact with each other. Multi-functional lawn provides space for flexible play and yoga / excercise. Bigger Public Open space in the south ot the development provides kickabout area / open exercise space with formal play.



*Site boundary is indicative only


Play Equipment


Kickabout Lawn


Ping Pong Table

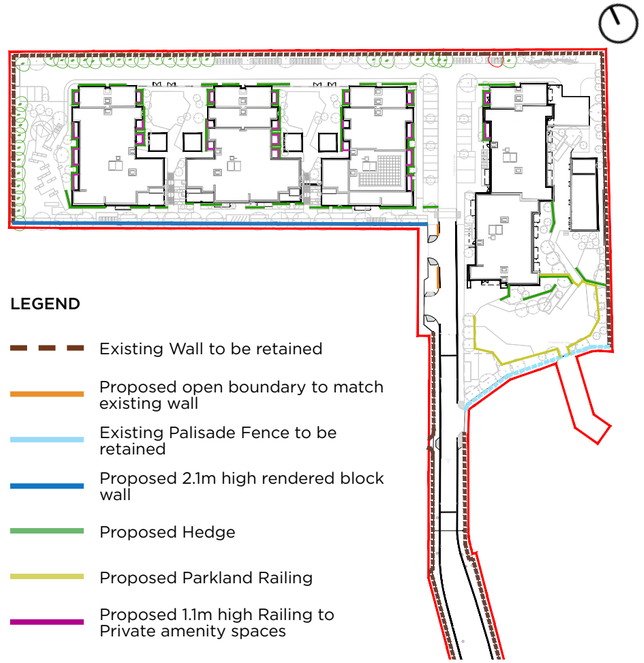
2.4 Landscape Strategies: Boundaries Plan

The proposed development will incorporate a significant array of boundaries to complement existing rear garden walls to three sides of development with existing and proposed planting to screen the walls.

New right of way will be created within existing parking lot of existing Ben Dunne Carlisle gym complex.

2.1m high rendered block is proposed to southern boundary with Ben Dunne Carlisle gum complex. Boundary hedging to the some units within the development will strongly aid privacy and protection for residents within the site. Hedging to dwellings will also soften buildings edges.

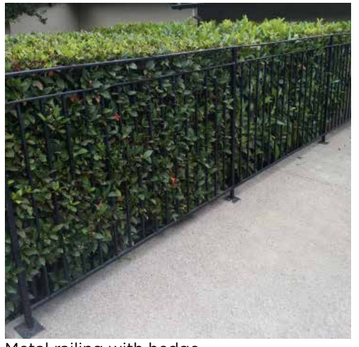
New open boundary to match the existing wall is proposed to the western boundary with the car park. Existing palisade fence is to be retained between the site and temporarily closed Nora Dunne Gallery with possible future opening in the existing fence. Most of the northern and western sides of the development will be bound by buffer planting.



*Site boundary is indicative only

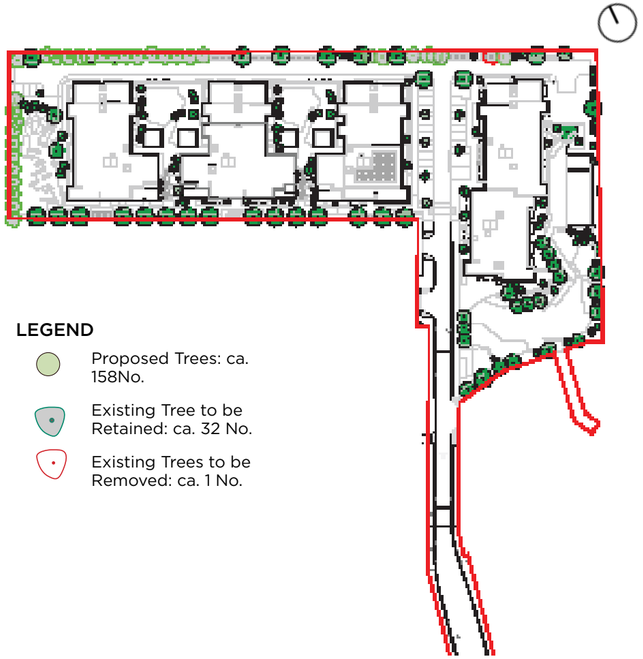

Existing Mature Trees


Existing Boundary wall to be retained


Metal railing with hedge

2.5 Landscape Strategies: Tree Plan

The masterplan has been envisaged to retain as many of the existing trees as possible of the 33 trees. Of the remaining trees, 1 tree has been identified for removal as a result of development or poor condition. The proposed new trees are intended to enhance the landscape character & aesthetic quality of the site as well as the biodiversity credentials (net gain in biodiversity) and will be located along streets and within public- & communal spaces with the intention of mitigating existing tree loss. The new trees will vary in specification of size and species. There will be a majority of trees selected from native tree species, which will be deciduous and evergreen, as well as having a variable habit. Clusters of trees rather than formal rows will dominate the landscape expression. There will be a total of 158 new trees planted.



*Site boundary is indicative only

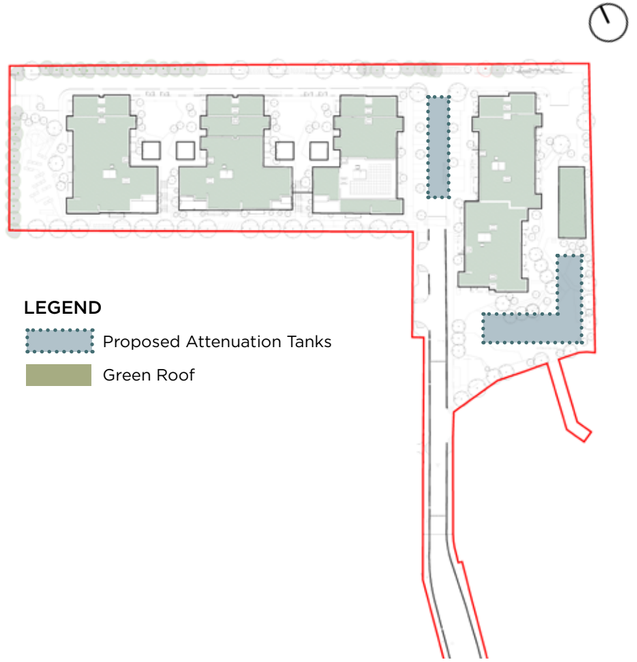

Acer palmatum 'Osakazuki'


Existing Trees


Trees with seasonal interest

2.6 Landscape Design Strategies: Water Story

Sustainable Drainage, or SuDS, is a way of managing rainfall that mimics the drainage processes found in nature and addresses the issues with conventional drainage. The landscape surface water drainage strategy incorporates SuDS features and has been designed in line with best practice. The soft landscape will allow water to drain freely to recharge the ground water if not captured by filter drains before release. Bio retention tree pits are proposed for streets and have been detailed in coordination and collaboration with engineers. In addition series of green roofs have been proposed.



*Site boundary is indicative only


Reference Images


Green Roof

3.0 LANDSCAPE CONCEPT DESIGN


*Site boundary is indicative only

3.1 Landscape Masterplan

Landscape design proposals for Carlisle Residential Development are driven by the proposed blocks and creating the best user experience for the habitants.

The landscape design has been planned in such a way so as to maximise the site's orientation and anticipated microclimate to create habitable, quality spaces which respond to human comfort, encouraging residents and public into a safe and surveilled space. Site is accessed through a single route to the south.

The open space area is to encourage the cultural and community use. To the sounth site is adjacent temporarly closed Nora Dunne Gallery. Landscapae proposal is taking in consideration possible future opening to Gallery public open space which will benefit the wider area.

In addition, it is anticipated that the development will offer a net gain to biodiversity through the development of additional habitat connecting existing smature trees to the northern and western boundary with proposed planting.

An increased number of trees coupled with best practice maintenance will ensure a sustainable landscape for the future. Edge conditions and relationships with neighboring developments are sensitively integrated and screened.

The primary objectives of the design are to encourage biodiversity through varied tree and shrub planting, create a series of interlinking spaces which 'blur' the boundaries and create 'moments' for interactions, crafting a sense and extension of the community for the wider neighbourhood.










Landscape Plans and schedules included in the application, prepared by NMP Landscape Architects includes a detailed schedule of proposed planting and illustrates the location and extent of mown grass, managed long grass, reinforced grass, low ground cover, hedge and tree planting as well as existing trees to be retained where applicable.

Tree species are selected for longevity, suitability to local soil conditions and micro-climate, biodiversity (native species) and where required suitability for proximity to residential buildings. Proposed tree sizes range from heavy standards and multi-stemmed trees to native whip and forestry transplants. There will be a net gain of individual trees in order to improve the species mix and the proportion of native species on site. Typical species are illustrated on the following pages.

Low planting is utilized to make and reinforce sub-spaces within the larger landscape spaces, for visual screening, defensible space, visual interest, ecological purposes and to guide or direct people's movement. The low planting is conceived as subtle layering of greens within the open spaces. The planting is layered as follows; lowest - bulb planting, ground cover planting, highest - clipped hedge planting.

The selection of hard landscape materials is determined by function but also to provide a cohesive palette of materials throughout. Materials are chosen for durability, but where practical are proposed to be constructed in a way which is sensitively integrated with lawn and soft landscape, in order to minimise the impact of hard landscape surfaces. Primary vehicular, pedestrian and cycle circulation are proposed as a durable, limited range of neutral materials with robust construction.

4.0 LANDSCAPE PALETTES

4.1 Indicative Hard Landscape Material Approach

SURFACE FINISHES

The hard materials palettes have been selected to represent and respond to use and character of specific spaces. They will be durable and of high quality with patterning developed in the latter stages to indicate moments and celebrate thresholds.

Block Paving

To Building Entrances

High Quality Permeable Paving

To Parking Spaces

Grass Crete

To Public Area's

Exposed Concrete Aggregate

To Open Spaces

Exposed Concrete Aggregate

To Public Area's

Soft Pour

To play + fitness zone

Self Binding Gravel

To Open Spaces

Self Binding Gravel

To Open Spaces

4.1 Indicative Hard Landscape Material Approach

Glasshouse

Play Area - Rope Pyramide

Play Area - Turning Tyre

Play Area - Rotating Beam

Play Area - High Twin Swing

Public Open Space - Ping Pong Table

Raised planters - to Communal Open Spaces

Benches - Open Space Areas

Bins - Open Space Areas

Bike Stands - Throughout the site

Reference Images

4.2 Indicative Soft Landscape Material Approach

TREE PLANTING

Informed by the existing and formative tree planting and a native palette the tree planting will bleed into the site and grade out from north to south. Specimen tree planting will provide year long interest and beauty - landmarks in the landscape, to celebrate and identify with.

Amelanchier lamarckii

Acer palmatum 'Osakazuki'

Corylus avellana

Fagus sylvatica

Pyrus calleryana

Platanus orientalis

Quercus petraea

GROUNDCOVER & HERBACEOUS PLANTING

To enhance bio-diverse credentials herbaceous planting will occupy edges and large swathes of the sites periphery along with shade tolerant understory planting including plant selection to encourage foraging.

Dianella nigra

Dryopteris filix-mas

Pulmonaria longifolia

Asplenium scolpendrium

Convallaria majalis

Geranium spp.

Echinacea purpurea

Hemerocalis sp.

Helleborus foetidus

HEDGE

Carpinus betulus Hedge

4.2 Indicative Soft Landscape Material Approach

GREEN ROOF

Rosmarinus officinalis 'Tuscan Blue'

Lavandula angustifolia

Pachysandra terminallis

Stipa tenuissima

Vinca minor

NATIVE ORIGIN IRISH WILDFLOWER SEED MIXTURES - ESKER RIDGE WILD FLORA EC08

Birdsfoot Trefoil, Black Meddick, Bladder Campion, Burdock, Burnet Saxifrage, Centaury, Corn Marigold, Corn Pansy, Corn Poppy, Corncockle, Cornflower, Cowslip, Eyebright, Field Poppy (long headed), Field Scabious, Greater Knapweed, Broadleaf Plantain, Kidney Vetch, Lady's Bedstraw, Lesser Knapweed, Marjoram, Scentless Mayweed, Mullein, Ox-eye Daisy, Red Bartsia, Red Clover, Ribwort Plantain, Rough Hawksbit, Selfheal, Shepherds Purse, Smooth Hawksbit, St Johnswort, Weld -Yellow weed, Wild Carrot, White Campion, Wood Avens, Yarrow, Yellow Agrimony, Yellow Rattle, White Stonecrop, Nottingham Catchfly, Fairy Foxglove, Primrose, Quaking Grass, Salad Burnet, Biting Stonecrop, Fairy Flax

Papaver rhoeas

Corn Marigold

White stonecrop - Sedum alba

Trifolium pratense - Red Clover

Yellow Agrimony - Agrimonia eupatoria

Erinus alpinus - Fairy foxglove

Quaking Grass - Briza maxima

Linum catharticum - Fairy Flax

Nottingham Catchfly - Silene nutans

Lesser Knapweed - Centaurea Nigra

Primula veris - Cowslip

Burnet-saxifrage - Pimpinella saxifraga

Anthyllis vulneraria - kidney vetch

Leucanthemum vulgare - Oxeye daisy

Prunella vulgaris - Selfheal

Geum urbanum - Wood avens

Centaurea cyanus - Cornflower

Hypericum perforatum - St John's wort

Silene vulgaris - Bladder campion

Medicago lupulina - Black medick

APPENDIX 5.0

Appendix 1 - Soft Landscape Outline Specification

1. Specifications for supply.

1.0 Schedule of supply:

The nursery stock material will be delivered following consultation between the Landscape Architect, landscape contractor and the selected nursery, and the Engineer. Delivery will be at all times by means of covered vehicles, and all plant material will be clearly labeled. The source of origin must be from the selected nursery as no other additional stock from other nurseries will be permitted without prior inspection and approval.

1.1 Programme of Works

The planting works shall be executed at the earliest opportunity.

1.2 Nursery stock:

All plant material shall be good quality nursery stock, free from fungal, bacterial or viral infection, aphids, red spider or other insect pests and any physical damage. It shall comply with the requirements of B.S. 3936: Parts 1-10: 1965 Specification for Nursery Stock, where applicable.

All plants shall have been nursery grown in accordance with good practice and shall be supplied through the normal channels of the wholesale nursery trade. They shall have the habit of growth that is normal for the species. Country of origin must be shown in all cases for species grown from seed.

Unless otherwise stated, the plant materials shall be supplied in accordance with the following codes where stated:

1+0	1 Year old seedling
1+1	1 Year old seedling lined out for 1 year
1+2	1 Year old seedling lined out for 2 years
1+1+1	1 Year old seedling lined out for 1 year, lifted and lined out for one further year
1u1	1 Year old seedling undercut then 1 more year in seedbed.
1u2	1 Year old seedling undercut then 2 more years in seedbed.
0/1	1 Year old Hardwood cutting
0/2	2 Year old Hardwood cutting
2X	Twice transplanted tree
3X	Three times transplanted tree
4X	Four times transplanted tree
P9	Containerised plant in 9cm pot

1.3 Species:
All plants supplied shall be exactly true to name as shown in the plant schedules. Unless stipulated, varieties with variegated and/or coloured leaves will not be accepted, and any plant found to be of this type upon leafing out shall be replaced by the contractor at his/her own expense.
Bundles of plants shall be marked in conformity with B.S. 3936: Part 1: 1965 and B.S. 3936: part 4: 1966. The nursery supplier shall replace any plants which, on leafing out, are found not to conform to the labels. Definitions of all terms used are in accordance with the following British Standards: -

B.S. No. 3936: Part 1: 1965 entitled “Nursery Stock- Trees and Shrubs”

B.S. No. 3936: Part 4: 1966 entitled “ Nursery Stock- Forest Trees”

2.0 Tree specifications:

Trees shall have a sturdy, reasonably straight stem, and a well-defined straight and upright central leader, with branches growing out of the stem with reasonable symmetry. The crown and root systems shall be well formed. Roots shall be in reasonable balance with the crown and shall be conductive to successful transplantation.

2.1 Standard trees shall have a clear stem 1.70m in height from ground level to the lowest branch, a minimum girth of 8cm measured at 1.00m above ground level and a total height of 2.75-3.00 m.

2.2 Light Standard trees have a clear stem 1.30m in height from ground level to the lowest branch, a minimum girth of 6cm measured at 1.00m above ground level and a total height of 1.80-2.40m.

2.3 Select standard trees shall have a clear stem 1.70 m in height from ground level to the lowest branch, a minimum girth of 10 cm. measured at 1.00.m. above ground level and a total height of 3.0 to 3.5 metres.

2.4 Heavy standard trees shall have a clear stem 1.80-1.90m in height from ground level to the lowest branch, a minimum girth of 14 cm. measured at 1.00.m. above ground level and a total height of 4.0 to 4.5 metres. All trees shall have been undercut a minimum of three times.

2.5 Extra Heavy standard trees shall have a clear stem 2.0m in height from ground level to the lowest branch, a minimum girth of 16 cm. measured at 1.00.m. above ground level and a total height of 4.5 to 5 metres. All trees shall have been undercut a minimum of three times.

2.6 Semi-mature trees shall have a clear stem 2.0m in height from ground level to the lowest branch, a minimum girth, as specified in the Bill of Quantities, measured at 1.00.m. above ground level and a total height of min. 5 metres. All trees shall have been undercut a minimum of three times.

All standards shall be clearly labeled.

2.7 Feathered Trees 180-240cm
Feathered trees shall be not less than four years old, and shall have been transplanted at least three times. Trees of species not listed in BS 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules.
Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labeled from the time of lifting until planting to conserve moisture.

2.8 Feathered Transplants 120-150cm
Transplants shall be not less than two years old, and shall have been transplanted at least once. Trees of species not listed in B.S. 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules.
Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labeled from the time of lifting until planting to conserve moisture.

2.9 Feathered Transplants 90-120 cms, 60-90 cm, 40-60 cm, 30-40 cm
Transplants shall be not less than one year old. Trees of species not listed in B.S. 3936: Part 4: shall be sturdy, with a balanced root and shoot development. Size shall conform to the schedules. Trees shall be well furnished with lateral fibrous roots, and shall be lifted without severance of major roots. Roots shall be of the habit normal for the species, without deformation. Transplants shall be wrapped in polythene in bundles of 50 no. and clearly labeled from the time of lifting until planting to conserve moisture.

2.10 Shrubs

(1) Containerised Shrubs shall be of the size specified in the schedules, with several stems originating from or near ground level and of reasonable bushiness, healthy, vigorous and with a sound root system. Pots or containers shall be appropriate to the size of shrub supplied and clearly labeled. Shrubs shall not be pot bound or with girdled or restricted roots.

(2) Bare Root Shrubs shall be of size specified in the schedules, with several stems originating from or near ground level, with reasonable bushiness, healthy, and vigorous. They shall be well furnished with fibrous roots and shall be lifted without severence of major roots. All bare root shrubs shall be wrapped in polythene in bundles of 50 no. and clearly labeled from the time of lifting until planting to conserve moisture.

2.11 Container Grown Conifers:
Conifers shall be of the size specified in the schedules, with one main stem originating from or near ground level and of reasonable bushiness and health, with a well-grown, root system. Pots or containers, where required, shall be appropriate to the size of plant supplied and clearly labeled. Plants shall not be pot bound, or with deformed or restricted roots.

Appendix 1 - Soft Landscape Outline Specification

2.12 Protection:
The interval between the lifting of stock at the nursery and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting transport shall be protected from the wind and frost and from drying out.
Protection shall include for the supply of stock to site to a suitable heeling-in/ storage area prior to planting. The landscape contractor shall allow for liaison with the site engineer to arrange the heeling-in area/ storage. The contractor shall continue to be entirely responsible for the maintenance of this stock to ensure that at the time of planting the stock complies with the requirements for the supply of nursery stock as per clause 1.0 thereof. No responsibility for the maintenance of the stock will attach to the site engineer whilst the stock is protected on site. No time limit shall attach to the period of protection.

In the event of the Landscape Architect being dissatisfied with the care and attention given to the stocks, following heeling-in, he shall notify the Landscape Contractor who shall take steps to ensure careful heeling-in procedures.

The preparation of the heeling-in area and its subsequent maintenance is the sole responsibility of the Landscape Contractor.

2.13 Damage
On completion of lifting of plants in the nursery, any broken shoots or severed roots shall be pruned, areas of damaged bark neatly pared back to sound tissue.

2.14 Inspections
The Landscape Architect will inspect the hardy nursery stock on the selected nursery during the execution of the works. Only plants selected and approved in the landscape contractors selected nursery will be accepted on the site.

2.15 Delivery and heeling in
All plants will be delivered on a phased basis as called up in advance in agreement with the Engineer, Landscape Architect and the appointed Landscape Contractor. In the event of the Landscape Architect being dissatisfied with the care and attention given to the stocks, following heeling-in, he shall notify the Landscape Contractor who shall take steps to ensure careful heeling-in procedures.

The preparation of the heeling-in area and its subsequent maintenance is the sole responsibility of the Landscape Contractor.

3.0 Specifications for site operations:

3.1 Setting out:
Setting out shall be in accordance with site meetings with the Landscape Architect, and the drawings listed in the preliminaries. No planting works shall take place when the soil /fill is in a waterlogged condition.

3.2 Finished grading:
All planting pits and topsoiled areas disturbed by the landscape contractor shall be left in an even state, with all soil clumps broken up and stones of greater than 50mm diameter shall be removed.

4.0 Specifications for Planting and Plant Materials

4.1.1 Stakes:
Round stakes shall be of peeled larch, pine or Douglas fir, preserved with a water-borne copper chrome arsenic composition in accordance with I.S. 131. For standard and select standards stakes shall be 1.8m long, 75mm in diameter. Stake all whips and transplants greater than 120cm in height. For all transplants exceeding 120cm height stakes shall be 1.2m long, 37mm x 37mm square. Stakes shall be pointed at the butt end. Set stakes vertically in the pit, to the western side of the tree station, and drive before planting. Drive stake with a wooden maul or cast-iron headed drive. Stakes shall be driven into the excavated planting pit to a depth of:

800mm for Standards/Light Standards/Feathered Trees
1000mm for Heavy Standards
500mm for Whips/Transplants

4.1.2 Canes:
Bamboo canes or similar approved shall be used to provide spot spraying location markers for small plants including Pinus, species. The canes are not to be attached to the plants.

4.2 Tree ties:
For standard and select standards, tree ties shall be of rubber, PVC or proprietary fabric laminate composition and shall be strong and durable enough to hold the tree securely in all weather conditions for a period of three years. They shall be flexible enough to allow proper tightening of the tie. Ties shall be min. 25mm wide for 120cms height trees and min. 38mm for larger sizes. They shall be fitted with a simple collar spacer to prevent chafing. Two ties per tree shall be applied to standards; for staked transplants, one tie per tree is required.
Ties shall be nailed to the stake with one galvanised nail.

4.3 Protection:
The interval between the lifting of stock at the heeling-in area and planting on site is to be kept to an absolute minimum. Plants shall be protected from drying out and from damage in transport. All stock awaiting planting on site shall be stored in a sheltered place protected from the wind and frost and from drying out.

All transplants shall be wrapped in polythene from the time of lifting to conserve moisture. Except when heeled-in, they shall be protected in polythene at all times until planted into their final position on site.

4.4 Damage:
On completion of planting any broken branches shall be pruned, areas of damaged bark neatly pared back to sound tissue.

4.5 Watering / Alginure / Fertilisers:
All bare rooted light standards and select standards shall be soaked in water overnight, on site, before planting in a liquid solution containing “Alginure” at the recommended dilution rate. Fertilisers shall conform to BS 5581: 1981. In the case of granular fertiliser being added to plantings, it must be mixed through and incorporated into the base of the planting hole and covered over in order to avoid roots of plants coming in direct contact.

4.6 Setting out:
Setting out shall be in accordance with site meetings with the Landscape Architect. Transplants in mixtures shall be planted in staggered rows. Species shall be planted in groups, as indicated in the planting drawings.
No planting shall take place until all planting holes (with ameliorants) have been inspected and approved by the Landscape Architect, or a person appointed by him as a representative, to ensure accordance with the specifications. No planting shall take place when ground conditions are frozen or waterlogged. All planting holes shall be opened and closed on the same day.

Be planted in the centre of the planting pit and planted upright. Stones or other rubbish over 75mm shall be removed. Supply and drive the stake 800mm into the ground for standards, 500mm for other transplants. Backfill planting hole 4.7 Tree planting:
Trees shall be planted at the same depth as in the nursery, indicated by the soil mark on the stem of the tree. They shall with excavated topsoil, and remove all stones and debris, firming plant into position

4.7.1.Select Standards
Excavate tree pits to 800mm x 800mm x 600mm deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m.(equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of fecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.7.2 Heavy and Extra Heavy Standards
Excavate tree pits to 1000mm x 1000mm x 800mm deep, or as approved. The base of the pit shall be broken up to a depth of 100mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of fecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.7.2 Semi-mature trees
Excavate tree pits to 1200mm x 1200mm x 1000mm deep, or as approved. The base of the pit shall be broken up to a depth of 200mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of fecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.7.3.Light Standard Trees
Excavate tree pits to 500mmx500mmx500xx deep, or as approved. The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. F.Y.M. at the rate of 0.047 cu.m. (equivalent to 60mm deep) and 100gms of 0.10.20 shall be applied to each tree pit prior to planting. Farm manure shall consist predominantly of fecal matter and shall be free of loose, dry straw and undigested hay. It shall be free of surplus liquid effluent. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

Appendix 1 - Soft Landscape Outline Specification

4.8 Feathered Trees 180-240cm, container grown conifers (>2l)
Excavate tree pits to 400mm x400mm x 400 mm deep, or as approved (slit or notch planting are not acceptable planting methods). The base of the pit shall be broken up to a depth of 80mm and glazed sides roughened. Trees shall be planted at the same depth as in the nursery and backfilled with compound fertiliser 0.10.20 at the rate of 50gm per tree and 0.020m3 of Mushroom Compost or similar approved. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.9 Feathered Whips 120-150 cm:
Excavate tree pit to depth of 300mm x 300mm x 300mm deep, or as approved (slit or notch planting are not acceptable planting methods). Excavation to be achieved by machine digging or auguring methods, approved by the Landscape Architect. The base to be broken up to a depth of 60mm and glazed sides roughened. Whips to be planted at same size as in the nursery. Apply 60gm 0.10.20 and 0.020m3 of Mushroom Compost or similar approved. Per tree pit to plants. Stakes 1.2m high x 37mm diam. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.10 Feathered Whips and Transplants 90-120cm, 60-90 cm, 40-60cm, 30-40cm, container grown conifers (<2l size) and container grown shrubs (<2l size):
Excavate planting hole to a depth of 300mm x 300mm x 300mm deep; the base to be broken to a depth of 50mm and glazed sides roughened (slit or notch planting are not acceptable planting methods). Excavation to be achieved by machine digging or auguring methods, approved by the Landscape Architect. Apply 30gm 0.10.20.per planting pit. Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.11 C. G. Shrubs / C. G. Wall Shrubs / C.G. Climbers:
Excavate planting hole to a depth of 300mm x 300mm x 300mm deep; the base to be broken to a depth of 50mm and glazed sides roughened. The following products are to be supplied and incorporated in to the bottom 100mm of topsoil at the base of the planting pit and in to the topsoil for backfilling around each plant: (1)Seanure soilbuilder as supplied by Farmura @ 1.5Kg per cu.m of topsoil, (2) clean and friable green waste compost @ 25 Kg per cu.m of topsoil and (3) Sierrablen Flora 15:9:9 slow release fertiliser @ 70 grams per m2 Backfill planting hole with excavated topsoil, and remove all stones and debris, firming plant into position.

4.12 Grassing
All grass areas to be ripped with a tractor mounted tine prior to rotovating. The contractor shall grade off all areas to smooth flowing contours, removing all stones greater than 10mm diameter and tip off site. All hollows to be filled in. Roll all areas with a roller as approved. Following the completion of final grading and raking, the area is to be left fallow for a period of 14 days. Spray with 'Basta' at recommended rates, and seed with fine grass mix at a rate of 35gr/Sq.m together with fertilizer 10:10:20 at a rate of 50gr/Sq.m use Coburns Irish premier low maintenance mixture or other as approved by the Landscape Architect.

4.12.1 Grass cutting
Grass cutting shall be carried out during the three year maintenance period and is defined into three categories:
4.12.2 Regular grass cutting
Shall be carried out to the frequencies indicated in the Bill of Quantities. Attention to neat and tidy cutting shall be required to all areas. Sightlines, as set out with the Engineer, at junctions and roundabouts must be kept clear of vegetation at all times.

GENERAL
Upon completion of planting, all pits shall be raked over lightly to leave an even surface and neat appearance. All stones greater than 50mm dia. to be removed. Provision should be made for the watering of light and select standards during periods of prolonged drought in the first year following planting.

4.13 Inspections:
The Landscape Architect will inspect the site with the Landscape Contractor during the execution of the works and following maintenance visits.

4.14 Presentation of certificates:
The Landscape Contractor shall present for the Landscape Architect's inspection, all seed and fertiliser bags, together with their markings. If requested, the contractor shall furnish the Landscape Architect with receipts of purchase for these respective materials.

4.15 Spraying:

1) Following planting of embankments, slopes etc., weed free circles to be formed around individual plants, as directed, using an approved broad-spectrum contact herbicide, as approved by the landscape architect, in mid-spring following planting. Herbicide to be applied using controlled drop applicator containing a dye to indicate areas sprayed. In areas where grass is excessively long, such grass will be strimmed off and collected prior to spraying. The contractor shall be responsible for keeping the ground (1m diameter circle) around all planted material weed free by means of herbicidal application, using approved sprays, during the course of the contract. Weeds to be removed include grasses ,broad-leaved annual and perennial weeds and all noxious weeds.

2) Selective spot spraying will be carried out to all grassed areas, whether planted or unplanted through the application of contact herbicide to control broad-leaved annual and perennial weeds, including thistle, dock and ragwort. Contact herbicide to be approved by the landscape architect prior to application. Herbicide to be applied using controlled drop applicator containing a dye to indicate areas sprayed. The contractor shall allow for the removal of gorse by cutting, as required prior to spraying to ensure its eradication from all grassed areas for the duration of the contract.

3) The boundary hedgerows shall be kept weed free by herbicidal application by forming a 300mm wide spayed strip along the full length of each respective hedgerow. Approved herbicide (broad-spectrum contact herbicide) to be applied using controlled drop applicator containing a dye to indicate areas sprayed. Spraying of planted areas on roundabouts is also included in this spraying application.

4) Such routine spraying (1, 2 and 3 above) shall be carried out during maintenance visits over the three-year period. No spraying shall take place during adverse weather conditions or at times not recommended by the manufacturer.

4.16 Cutting back:
Plants for cutting back/tip pruning shall be cut back after inspection by the Landscape Architect. This work to be carried out initially following planting for plants suffering from wind damage.

4.17 Mulching
Mulching may be considered as an optional factor that may be implemented. Mulch shall be from coniferous trees. It shall be shredded, but not pulverised, so that no dimension exceeds 75mm. Bark shall have been composted for a min. of 3mths. In the case of areas requiring mulch the depth of bark shall measure 30 mm.

4.18 Ground finish:
Upon completion of planting, all ground finish shall include for the removal of stones greater than 50mm excavated during the course of the digging for planting purposes.

Appendix 2 - Hard Landscape Outline Specification

PAVING & KERBS

FOOTPATHS

General: Public footpaths, roadways, kerbs etc. shall be constructed in accordance with the requirements of the Roads Maintenance Dun Laoghaire Rathdown County Council.

Accuracy of Levels and Alignment: The levels of paths and paving shall be carefully set out and frequently checked. All care shall be taken to ensure that the correct cross sections are maintained. The finished face of paths shall be formed so as to provide adequate fall and satisfactory run off to surface water outlets, gullies, etc. Cross-falls of paths shall be carried without break across verges and kerbs to prevent ponding of water between back of kerb and path.

Sub-Base: Granular material shall comply with Clause 804 of the D.o.E. Specification for Roadwork's and shall be spread uniformly over the formation and compacted by vibrator roller. Rolling shall continue until there is no movement under the roller. The finished surface of the compacted sub-base shall be parallel to the proposed finished surface of the footpath. The surface levels for each layer shall not deviate from the design levels by more than +15mm or –15mm.

For sub-base thickness in paved areas see area engineers spec. and attached following schedule. Each contractor shall do all necessary tests to ensure a well compacted, plain even surface on all areas with traffic movement. If paving shows settling after 1 year which normally is related to an insufficient depth and compaction of the sub-base the contractor shall rebuilt the failed area to his own cost.

Use of Surfaces by Construction Traffic:
Constructional traffic used on pavements under construction shall be suitable in relation to the courses it traverses so that damage is not caused to the sub-grade. Where damage is caused to the formation of the sub- grade in strength or level the damaged area shall be excavated for an area and depth which shall be determined by the Architect and this area shall be filled to the required levels with crushed rock of 50mm maximum size. The degree of compaction for this area shall be the same as that specified for the remainder of the formation. All this excavation and making good of damaged areas shall be carried out at the expense of the Contractor. Where damage is caused to the sub-base, the damaged area shall be made good as noted above, using the material of which the sub-base is composed. The wheels or tracks of plant moving over the various pavement courses shall be kept free from deleterious materials.

MODULAR PAVING

Concrete Pavers Precast concrete pavers shall conform to the requirements of BS 6717 Part 1.
Ensure that sub-bases are suitably accurate and to specified gradients before being laid.

Sample: Before placing orders submit representative samples for approval.
Ensure that delivered materials match sample.

Laying Generally:

1. Laying Specification

1.1 Paving blocks/bricks shall be laid to the requirements of Part 3: 1997, BS 7533, except that the lip onto gully gratings is modified to 5 - 6 mm.
Note, in particular, the following requirements of Part 3.
i. The difference in level between two adjacent blocks shall not exceed 2 mm.
ii. The finished pavement surface shall not deviate more than 10 mm under a 3m straight edge.
iii. The accuracy of cutting a block should be such that the resulting joint should not exceed 5 mm.
iv. The surface course should be between
(a) 3 - 6 mm above drainage channels
(b) 5 - 10 mm above gullies (*BRL modify this to 5 - 7 mm above gullies to reduce "trips")
v. The surface course should be inspected soon after completion and at regular intervals thereafter - additional sand should be brushed in where necessary.
1.2 The surface course for chamfered units should be 3 - 5 mm above the kerb to facilitate surface drainage. The surface course for non-chamfered units should be 2 mm above the kerb to facilitate surface drainage.
1.3 When paving units need to be trimmed, pieces with a dimension less than 50 mm should not be used.

2. Drainage Channels

2.1 Where paving blocks are used in a channel, they shall be laid on freshly mixed moist 3:1 sand-cement mortar. The mortar should have thickness between 10 mm and 40 mm. Vertical joints should be filled with 3:1 wet sand-cement mix.
2.2 Mortar, which has been mixed for over 2 hours, should be discarded.
2.3 The mortar should be laid on a previously prepared concrete base as per construction drawing detail. Select blocks/paviors vertically from at least 3 separate packs in rotation, or as recommended by manufacturer, to avoid colour banding. Lay blocks/paviors on a well graded sand bed and vibrate to produce a thoroughly interlocked paving of even overall appearance with sharp sand filled joints and accurate to line, level and profile. Refill joints once a week three weeks after first fill. Commencing from an edge restraint lay blocks/paviors hand tight with a joint width of 2-3mm for pedestrian use and 3-5 mm for areas with traffic. Maintain an open working face and do not use mechanical force to obtain tight joints. Place blocks/pavers squarely with minimum disturbance to bedding. Supply blocks/paviors to laying face over newly laid paving but stack at least 1 m back from laying face. Do not allow plant to traverse areas of uncompacted paving. Continually check alignment of pavers with string lines as work proceeds to ensure maintenance of accurate bond.Infill at edge restraints as work proceeds. Wherever the type of bond and angle of edging permit, avoid very small infill pieces at edges by breaking bond on the next course in from the edge, using cut blocks/pavers not less than 1/3 full size. Cut stones shall be rectangular or trapezoidal; the smallest point shall be a minimum of 35mm. (May be pavers have to be turned by 90 deg.)Half stones shall be cut at manufacture. Thoroughly compact blocks/pavers with vibrating plate compactor as laying proceeds but after infilling at edges. Apply the same compacting effort over the whole surface. Do not compact within 1 m of the working face. Do not leave uncompacted areas of paving at the end of working periods, except within 1 m of unrestrained edges. Checks paving after compacting first few metres, then at frequent intervals to ensure that surface levels are as specified; if they are not, lift blocks/pavers and relay. Brush sharp sand into joints, revibrate surface and repeat as required to completely fill joints. Make sure that paving is held by a kerb on both sides before vibration to avoid uneven joints. Avoid damaging kerb haunching and adjacent work during vibration. Do not begin vibration until kerbs have matured. The paving pattern will be stretcher bond, make sure that the joints will be in straight line after vibrating. Also ensure joints are off equal width. The block pavement shall have a surface regularity/ flatness tolerance of less than 10 mm under a 3 m straight edge.

Sample: Before placing orders submit representative samples for approval.
Ensure that delivered materials match sample.

PRECAST CONCRETE FLAGS
Pre-cast Concrete Flags:
1. Precast concrete flags shall be laid to the requirements of BS 7533 Part 4.
Note the following selected items from BS 7533, Part 4.
• The difference in level between two adjacent flags should not exceed 3 mm.
• The top surface of the paving units should stand 3 - 6 mm above the drainage channel.
• A 30 - 50 mm (compacted thickness) of the sand laying course is given as suitable (for narrow joints)
2. Flags should be laid with narrow joints (2 - 5 mm).Joints should be filled with dried sand (conforming to table 4 of the code), or as determined by the Landscape Architect.

KERBS
Kerbing General: Kerb radii shall be in accordance with Architects and Engineers drawings. Use radius kerbs for all new kerbs.

Laying Generally:
Natural stone and precast concrete kerbs shall meet the requirements of BS 435 and
BS 7263-1.

1. Precast concrete kerbs shall be laid to the requirements of BS 7533, Part 6.
2. Units shall be laid on fresh concrete or mortar bed and adjusted to line and level.
3. Concrete for foundations and haunching shall be to BS 5328.
4. Bedding mortar shall be freshly mixed, moist 3:1 sand-cement between 12 and 40 mm thick.
5. Kerbs shall be backed with concrete as per drawing.
6. Radius kerbs shall be used on radii of 12 m or less.
7. Kerbs should not deviate from the required level by more than 6mm.
8. Kerbs should not deviate by more than 3 mm under a 3 m straight edge.
9. Open-jointed kerbs should have joints of 2 - 4 mm wide.
Mortar jointed kerbs should have joints of 7 - 10 mm wide filled completely with 3:1
sand-cement mortar, and finished to give a smooth flush joint or as specified by the
Landscape Architect.

Appendix 3 - Programme For Implementation, Maintenance + Defects Period

5.0 Maintenance:

5.1 Period:

The Contractor shall be responsible for aftercare of the completed works for 1 Year from the date of completion of planting. Subject to satisfactory performance the maintenance contract may be extended for two further periods of 12 months. Maintenance in years 2 and 3 shall be provisional. Maintenance during years 2 and 3 may be assigned directly. This will include grass cutting, weed control of all planted areas, litter clearance and watering of Select Standard trees during dry weather.

5.2 Organisation:
The aftercare programme will be organised as follows:-
(1) Scheduled operations, in whose timing the contractor will be permitted some flexibility and which will be the basis of payment to the Contractor.
(2) Performance standards, which the Contractor is required to meet at all times, and on which his performance will be assessed.
(3) Critical dates, by which time scheduled operations, shall have been completed, and at which performance will be assessed.

5.3 Performance standards:
Shrub, woodland and hedgerow planting to be maintained in accordance with specifications e.g. spraying, firming, tree tie adjustment. Weeds shall not cover more than 20% of the ground surface within planting areas and the maintained 1m diameter weed free circles at any time, and neither shall they exceed 100mm in height. Weeds shall be treated before they establish.

Within grass areas noxious and competitive weeds shall not be allowed to establish and all perennial weeds shall be spot treated at each maintenance visit, 3 times per year.

5.4 Watering:
The contractor is responsible for the survival of all plants during the maintenance period. Apply water to moisten full depth of root run using proprietary irrigation system. Avoid washing or compaction of the soil surface. The Landscape Contractor is responsible for informing the Landscape Architect if the plants require watering. A minimum of 16 no. waterings year1, 8 no. year 2, 4 no. year 3. Prior notification to the landscape architect and a record of attendance will be requested for each visit. Spot checks will be made to ensure full compliance with this condition.

5.5 PROGRAMME
Year One (After Planting): Period of 12 months from date of practical completion

5.5.1 By end of May (Year One):
Application of herbicide agreed with Landscape Architect to all planting areas. Protect all plants. Hand weed all large weeds too close to nursery stock for safe treatment. Strim long grass prior to spray application. Provision for 1 no. visit for spot weed control application to areas where perennial weeds are apparent in the grass sward. Tip prune, firm plants. Grass cutting. All necessary cultural/husbandry methods to be completed in order to leave the sites in a clean, orderly and tidy manner. Water select standard trees.
Critical date: 30 May (Year One)

5.5.2 By end August (Year One):
Application of herbicide agreed with Landscape Architect to all planting areas. Protect all plants. Hand weed all large weeds too close to nursery stock for safe treatment. Provision for 1 no. visit for spot weed control application to areas where perennial weeds are apparent in the grass sward. All necessary cultural/husbandry methods to be completed in order to leave the sites in a clean, orderly and tidy manner. Grass cutting. All necessary cultural/husbandry methods to be completed in order to leave the sites in a clean, orderly and tidy manner. Water select standard trees.
Critical Date: 30 August (Year One)

5.5.3 October (Year One):
Remove dead plants after Landscape Architect's inspection.

5.5.4 November (Year One):
Replacement planting. Tree care shall mean pruning deciduous trees including those of hedgerow form when dormant to promote open frame works in the crown. Remove all suckers and dead branches, and branches that are encroaching on to footpaths should be cut back to point of branching.

5.5.5 By end December:
Application of herbicide agreed with Landscape Architect to all planting areas. Grass cutting. All necessary cultural/husbandry methods to be completed in order to leave the sites in a clean, orderly and tidy manner. Water extra heavy standard trees, standard trees.

Critical Date: 30 December (Year One).

5.5.6 Year 2

As year 1.

5.5.7 Year 3

As year 1 . Hedgerow to be fully pruned at end of season.

5.5.8 Sweeping and Cleaning

Sweeping shall mean sweeping of the footpaths, playing courts, car parks and the schools road network and removal of all grit rubbish moss and leaves, keeping the hard landscaped areas of the site in a neat and tidy manner. Number of sweepings per annum -12no.

Cleaning shall mean the removal of paper, plastic bags and all other rubbish from grassed areas, roads, car parks, playing courts, shrubbery's, hedging etc. or any part of the school grounds. This operation shall be carried out twice a month.
All dirt and rubbish to be removed off site to a tip to be provided by the Landscape contractor.
Autumn leaves shall be swept on a weekly basis from end of October to mid-November (three weeks). Any additional cleaning and sweeping deemed necessary, during the year, and requested will be paid for at a pro rata basis to the rates for the programmed maintenance schedule.

5.5.9 Other Maintenance Works
All grassed areas are to be edged 3 times a year using a machine and are not to be sprayed.

Carry out any other maintenance to ensure the works are kept in a satisfactory state during the defects liability period.

5.6 Grass Cutting

Grass cutting shall be deemed to include for:
[a] Removal of lodged grass.
[b] Removal and disposal of grass cuttings from adjoining roads and paving.
[c] Removal and disposal of stones and other obstructions from area of grass to be cut.

high profile grassed areas, eg. central gardens are to be Fine cut. Fine cutting shall mean mowing to 25mm high. This operation is to be carried out in each location shown on the landscape drawings and in locations as directed on site by a representative of the management team. A rough schedule is as follows-
March: 1cut
April: 3 cuts
May: 4 cuts
June: 4 cuts
July: 4 cuts
August: 4 cuts
September: 4 cuts
October: 4 cuts
November - February: 1 cut
Total 29 cuts

Fine cutting shall be deemed to include for grass cut to 25mm high evenly over the whole area, with cuttings left evenly spread over the surfaces. Grass not to exceed 50mm between cuts.
Other grass areas of which are less high profile are to be cut 16 times a year. These will include the grassed areas around the woodland areas etc.

Areas indicated as wildflower mix shall be cut three times per annum. Cuts shall be carried out at specified times as agreed with landscape architect and recommended by the wildflower seed producer. Remove cuttings after each cut and remove offsite to tip.

Leave cuttings evenly spread. This operation is to be carried out in each location shown on the landscape drawings and in locations as directed on site by a representative of the council.

At every second grass cut, grass shall be trimmed from around the base of walls and fences, back of footpaths and kerbs, litter bins, sluice valves and hydrant markers, trees, shrubberies poles and public lighting columns etc., and kept in a neat and tidy condition.

The contractor shall apply a broad spectrum weed killer, once a year, mid April, at the recommended application rate, to control weeds in the grassed areas during the growing season. In addition, 1 no. applications of herbicide to kill off clover in the grass areas shall be applied in April in line with approved herbicides under current legislation.

NMP
LANDSCAPE ARCHITECTURE